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Târgu Mureș, Romania
20th-24th of May 2026

BOOK OF ABSTRACTS

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A RAPID REVIEW OF IMAGING MODALITIES FOR THE RADIOLOGICAL ASSESSMENT OF PARTIAL ANOMALOUS PULMONARY VENOUS RETURN (PAPVR).

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Background: Partial anomalous pulmonary venous return (PAPVR) is a congenital anomaly in which one or more pulmonary veins drain into the right atrium or systemic venous circulation, resulting in a left-to-right shunt and potential right ventricular (RV) volume overload. Accurate anatomical and functional assessment is essential, but the optimal imaging modality remains uncertain. **Objective:** To conduct a rapid review of the literature to evaluate whether cardiovascular magnetic resonance (CMR) provides a more comprehensive radiological characterisation of PAPVR compared with computed tomography angiography (CTA) and transthoracic echocardiography (TTE). **Material and methods:** A rapid review was conducted in accordance with PRISMA principles. A structured search of PubMed was performed using predefined keywords related to PAPVR and imaging modalities (TTE, CTA, and CMR), limited to English-language studies published between 2000 and 2024. Studies were screened using predefined inclusion and exclusion criteria focusing on anatomical visualisation and/or functional assessment. Due to the rarity of PAPVR and the specificity of the inclusion criteria, eight studies were eligible for qualitative synthesis. **Results :** TTE commonly identified indirect indicators such as right heart enlargement but was limited in visualising extracardiac venous anatomy. CTA provided high-resolution anatomical detail of anomalous venous pathways but did not enable direct haemodynamic assessment. CMR consistently enabled three-dimensional anatomical classification alongside quantification of shunt fraction (Qp/Qs) and RV volumes within a single examination. **Conclusions:** Cardiovascular magnetic resonance (CMR) appears to provide the most comprehensive radiological assessment of PAPVR by integrating detailed anatomical visualisation with quantitative haemodynamic evaluation in a single, radiation-free examination. Based on the research currently available, CMR offers a broader and more complete characterisation compared with CTA and TTE, particularly in its ability to combine structural and functional assessment within one modality. Further research would help to expand and strengthen these findings.

Keywords: Partial anomalous pulmonary venous return (PAPVR), cardiovascular magnetic resonance (CMR), Ct angiography, Congenital heart disease

A RETROSPECTIVE ANALYSIS OF CONCORDANCE BETWEEN EMPIRICAL ANTIBIOTIC THERAPY AND BACTERIAL SENSITIVITY BASED ON ANTIBIOGRAMS AMONG INPATIENTS IN AN UNIVERSITY HOSPITAL.

Maria Magdalena Tudosă¹, Teodora-Gabriela Urzică¹, Oana Turjinschi¹, Alexandra Eugenia Virban, Mircea Stoian¹

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Background: Antimicrobial resistance is one if not the most feared aspects in medicine, even now with the rapid changes in practice standards. Even with these, adequate empirical antibiotic treatment can make a huge difference regarding patient outcome especially in the ICU where, infection susceptibility rises in accordance with the status of the convalescent. Therefore, evaluating the concordance between the initial medication and bacterial susceptibility is crucial for optimizing treatment strategies especially in an environment with increased chances of mortality and morbidity. **Objective:** The primary objective of this retrospective study was to determine the concordance between empirical antibiotic therapy and the susceptibility of the isolated pathogens for the patients admitted to the ICU in Targu Mures's county hospital between the years of 2023 and 2024 based on the antibiogram results. **Material and methods:** We conducted a retrospective observational cohort study including 265 adult patients admitted between January 2023 and December 2024. Inclusion criteria comprised age >18 years, initiation of empirical antibiotic therapy within the first 48 hours of admission, and availability of valid microbiological and antibiogram results. Data collected included demographic characteristics, clinical diagnoses, empirical antibiotic regimens, isolated pathogens, antimicrobial susceptibility profiles, treatment modifications, ICU admission, complications, and clinical outcomes. Concordance was defined as the presence of at least one empirically administered antibiotic to which the isolated pathogen was susceptible. **Results :** The mean age of patients was 70.7 years, with a slight male predominance (55.8%). Concordant empirical therapy was observed in 47.3% of cases, while 52.7% received discordant treatment. The average length of hospital stay was 11.6 days. A

high mortality rate (~52%) was observed, particularly among patients receiving discordant therapy. Complications were recorded in a subset of patients (n=20), and ICU admission was documented in 20 cases. Discordant therapy was associated with poorer clinical outcomes and a tendency toward longer hospitalization. **Conclusions:** More than half of the patients received discordant empirical antibiotic therapy, highlighting significant gaps in initial treatment adequacy. These findings underscore the need for continuous surveillance of local antimicrobial resistance patterns and the optimization of empirical treatment protocols. Updating institutional guidelines based on local microbiological data may improve patient outcomes and reduce mortality in critically ill populations.

Keywords: Antibioframe, Antibiotics, Empirical treatment, ICU

AI FOUNDATION MODELS FOR BREAST CANCER HISTOPATHOLOGY AND PROGNOSIS: A LITERATURE REVIEW

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Background: Routine histopathological evaluation of breast cancer is currently limited by several practical challenges, including inter-observer variability and an increasing pathology workload. In this context, artificial intelligence models may help by assisting pathologists in the evaluation process. **Objective:** This review examines the potential of integrating artificial intelligence (AI), specifically foundation models (FMs), into breast pathology to predict complex molecular biomarkers and guide treatment decisions using only routine H&E-stained slides. **Material and methods:** We analyzed six recent studies from the PubMed database utilizing ensemble deep learning and transformer-based foundation models (including CONCH). These models, often pre-trained on large-scale datasets (up to 171,189 whole-slide images), were validated across diverse international cohorts, including TAILORx and TCGA. The primary focus was on diagnostic and prognostic assessment, including biomarker prediction, survival analysis, and pathological complete response (pCR) estimation, integrated with interpretability tools like HIPPO. **Results :** Our analysis shows that AI models consistently reach high levels of diagnostic and predictive precision. Standard ensemble models achieved up to 98.43% accuracy in whole-slide image classification. Multimodal FMs successfully predicted pCR with an AUC of 0.994 and 4-year disease-free survival with an AUC of 0.885 in blinded test cohorts. Regarding genomic risk, a model designed to estimate Oncotype DX recurrence scores (RS ≥ 26) achieved an AUC of 0.898 within the TAILORx test set. This AI-based stratification proved to be a strong prognostic indicator for distant recurrence-free intervals (Hazard Ratio 2.88). External validation across six independent cohorts (n = 5,497) confirmed that these models maintain consistent performance, with AUCs ranging from 0.858 to 0.903. A particularly significant finding was that the AI identified a substantial group (31.3%) of postmenopausal patients who, despite being clinically classified as high-risk, showed low-risk profiles, suggesting they could safely bypass unnecessary chemotherapy. Additionally, models like CONCH accurately predicted continuous transcriptomic ROR-P scores, while explainable AI tools like HIPPO provided biological context by linking predictions directly to tumor microenvironment features. **Conclusions:** Foundation models have the potential to turn standard H&E slides into accessible tools for precision oncology. By reliably estimating genomic risk and predicting chemotherapy benefits without the need for additional expensive testing, AI offers a scalable and cost-effective way to reduce overtreatment and expand personalized medicine globally. Although molecular assays such as Oncotype DX and ROR-P are essential for personalizing therapy, their high costs and logistical requirements often limit their global accessibility.

Keywords: Breast cancer, Artificial Intelligence, Foundation Models, Digital Pathology

ALACTIC BASE EXCESS AS AN INDEPENDENT PREDICTOR OF MORTALITY IN TRAUMA ICU PATIENTS: RETROSPECTIVE COHORT ANALYSIS OF THE MIMIC-IV DATABASE

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Background: Rapid and accurate risk stratification in severe trauma remains a major clinical challenge. Alactic Base Excess (ABE), calculated as the sum of standard base excess (BE) and arterial lactate, was proposed to distinguish lactate-driven acidosis from other non-lactic metabolic derangements. Its prognostic value in trauma ICU patients has not been systematically evaluated. **Objective:** Determine if Alactic Base Excess, calculated upon hospital admission, is an independent predictor of in-hospital or 30-day mortality in severely injured trauma

patients. **Material and methods:** This retrospective, observational cohort study used the MIMIC-IV v3.1 database. Adult patients with an Injury Severity Score (ISS) ≥ 16 and an arterial blood gas (ABG) measurement within two hours of hospital admission were included. Co-primary outcomes were in-hospital and 30-day mortality. Discriminatory performance was assessed using ROC analysis with DeLong confidence intervals. Multivariate logistic regression was performed, adjusting for age, New Injury Severity Score (NISS), and mechanism of injury. A sensitivity analysis restricted the ABG sampling window to 60 minutes. **Results :** A total of 134 patients met inclusion criteria (median age 47 years, 75.4% male, 82.1% blunt trauma, median ISS 25). In-hospital and 30-day mortality were 29.1% and 31.3%, respectively. Non-survivors had significantly lower median ABE (-3.5 vs. -1.2 mmol/L; $p=0.010$). The optimal threshold was -1.45 mmol/L (sensitivity 76.9%, specificity 53.6%, NPV 84.7%). The best single discriminator was lactate (AUC 0.795), followed by BE (0.731), TRISS (0.717), NISS (0.675), ABE (0.643), and ISS (0.594). ABE remained an independent predictor of in-hospital mortality after multivariable adjustment (OR 0.840/mmol/L $p=0.004$), but lost significance when lactate was added to the model ($p=0.812$). The sensitivity analysis in patients with ABG within 60 minutes ($n=61$) yielded stronger results (AUC 0.764, OR 0.694, NPV 92.6%). **Conclusions:** ABE on admission is an independent predictor of mortality in severely injured trauma ICU patients, with discriminatory performance comparable to established anatomical scores. Its performance is diminished, however, as soon as lactate is introduced into the model, which suggests that ABE mainly reflects the lactate-attributable component of metabolic acidosis rather than a distinct physiological signal. Instead of replacing established markers in trauma prognostication, the findings suggest that ABE may offer additive value as part of a composite evaluation of metabolic function during the initial phase of resuscitation. Prospective multicentre validation is warranted.

Keywords: lactic base excess, trauma, intensive care, mortality prediction

ALCOHOL CONSUMPTION AMONG 9TH- AND 10TH-GRADE STUDENTS: A CROSS-SECTIONAL SCHOOL SURVEY

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Background: Adolescent alcohol use is often discussed together with smoking, because the two behaviors frequently appear in the same risk setting. In our prevention program, which focused on nicotine and alcohol use among students, we considered it important not only to address smoking, but also to examine alcohol-related habits in order to better understand associated addictive behaviors. **Objective:** The aim of the study was to describe alcohol consumption habits among 9th- and 10th-grade students and to identify those patterns that may require early preventive intervention at school level. **Material and methods:** We analyzed data from an anonymous questionnaire-based survey carried out during a school prevention program. The questionnaire included items related to alcohol use, episodes of drunkenness, access to alcohol, and risk-related screening items. For the present analysis, we selected students from grades IX and X, as this age interval appeared especially relevant for the early development of substance-related behaviors. Descriptive statistical analysis was performed, and the two grade groups were compared. **Results :** Alcohol use was already frequent in the studied population. Overall, 85.7% of respondents reported lifetime alcohol use, while 66.0% had consumed alcohol in the previous 30 days. More than one third (36.7%) reported at least one episode of drunkenness, and 33.1% reported consuming six or more drinks on one occasion at least occasionally. A marked difference was observed between the two grades. Compared with grade IX students, grade X students reported higher lifetime alcohol use (91.3% vs. 81.1%), more frequent alcohol use in the previous 30 days (79.0% vs. 55.0%), more episodes of drunkenness (53.2% vs. 22.9%), and more six-or-more-drink occasions (49.0% vs. 19.9%). These findings suggest a substantial increase in alcohol consumption patterns between the two school years. **Conclusions:** The results show that alcohol consumption is already common by grade IX and rises considerably by grade X. This difference is particularly important from a public health perspective, as it indicates a narrow window in which prevention may still have a strong impact. School-based programs should therefore start early and should address not only use itself, but also access, binge drinking, and the broader context of associated addictive behaviors.

Keywords: adolescents, alcohol consumption, binge drinking, AUDIT-C

ANALYSIS OF NEUTROPHIL-TO-LYMPHOCYTE RATIO AS A PROGNOSTIC FACTOR FOR PROGRESSION-FREE SURVIVAL IN BLADDER CANCER PATIENTS TREATED WITH RADICAL CYSTECTOMY

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Background: Systemic inflammation and the balance between pro-inflammatory and immune responses are critical factors in tumor progression and have been widely investigated across tumor types for their prognostic relevance. The neutrophil-to-lymphocyte ratio (NLR) is a marker reflecting systemic inflammatory status and immune competence. **Objective:** This study aimed to evaluate the dynamics of perioperative hematological profiles with a specific focus on NLR variation in patients undergoing radical cystectomy for bladder cancer (BC) and to determine their association with disease recurrence and progression-free survival (PFS). **Material and methods:** A total of 100 patients diagnosed with BC and treated with radical cystectomy were included. Perioperative blood analyses were performed according to institutional protocols at three distinct time points: preoperatively, on the first postoperative day, and on the seventh postoperative day. Univariable and multivariable Cox proportional hazards models were utilized to identify variables associated with PFS and overall survival. **Results :** Significant changes in NLR from the preoperative period to the first postoperative day were significantly associated with PFS (HR 95%CI: 1.08, 1.01-1.15; p = 0.02). Patients were classified into two groups based on the degree of NLR variation. NLR dynamics were significantly associated with worse progression rates during follow-up (median PFS 46.7 vs 15.2 months; log-rank p = 0.02). Other parameters with an impact on PFS were chemotherapy administration (HR 95%CI: 0.49, 0.29-0.84; p = 0.009), the presence of intratumoral lymphovascular space invasion (HR 95%CI: 2.46, 1.45-4.17; p = 0.001) and T and N stage (HR 95%CI: 7.32, 2.9-18.48; p <0.001 and 1.1, 1.02-1.19; p= 0.011, respectively). **Conclusions:** Perioperative NLR dynamics represent a readily available and non-invasive biomarker that can aid in early identification of patients at higher risk of disease recurrence. When used alongside established pathological factors (T and N stage), NLR variation may guide personalized clinical management in bladder cancer patients. Further prospective studies with larger cohorts are warranted to validate the utility of NLR dynamics in the clinical management of BC patients.

Keywords: bladder cancer, radical cystectomy, neutrophil-to-lymphocyte ratio, progression-free survival

ANATOMICAL VARIATIONS OF THE CIRCLE OF WILLIS AND THEIR CLINICAL IMPLICATIONS: A MORPHOLOGICAL AND FUNCTIONAL REVIEW

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Background: The Circle of Willis (CoW) is the fundamental arterial anastomosis at the base of the brain, facilitating collateral circulation between the internal carotid and vertebrobasilar systems. Although its primary role is to maintain constant cerebral perfusion, anatomical variations are remarkably frequent. The brain tissue is extremely sensitive to oxygen fluctuations, requiring 25% of the body's inspired oxygen despite representing only 2% of total body weight. Anatomical variations in this circuit are frequent and may act as silent precursors to cerebrovascular diseases or psychiatric conditions. **Objective:** This review aims to analyze the prevalence of CoW variations, evaluate their functional importance and clinical impact on patient health and correlate how these anatomical markers serve as clinical indicators for aneurysms and neuropsychiatric disorders. **Material and methods:** The study synthesizes data from two convergent sources: a morphological analysis of 150 human cadaveric brains (assessing vessel diameter and origin) and a clinical-radiological review of MRA and 3D-VR imaging from symptomatic patients. By correlating cadaveric structural data with clinical neuroimaging, we evaluated how vascular asymmetry creates turbulent flow, increasing the risk of aneurysms and influences cerebral perfusion, predisposing individuals to neuropsychiatric conditions. **Results :** A complete, classic CoW was identified in 60% of the analyzed cases, while the remaining 40% showed significant anatomical variations. Hemodynamic and biomechanical impact: Variations were most prevalent in the posterior segment (PCoA and P1) and the anterior communicating artery (ACoA). Asymmetry in these segments generates flow turbulence and increased wall shear stress, which triggers a pathological remodeling of the vascular wall's biomechanical

characteristics. This structural degradation of the internal elastic lamina is a primary driver for the formation and rupture of early-onset aneurysms. Neurobiological and psychiatric impact: Results indicate that asymmetrical vessels lead to chronic imbalances in regional cerebral perfusion. Specifically, a higher prevalence of the "azygos" anterior cerebral artery (ACA) variant was observed in patients with neuropsychiatric decline. This restricted collateral reserve predisposes the cerebral parenchyma to microvascular chronic ischemia, potentially accelerating the neurobiological changes and structural atrophy characteristic of dementia. **Conclusions:** Anatomical variations of the CoW might be clinical indicators of hemodynamic imbalance. This study suggests that neuroimaging screening for CoW polymorphism - particularly in patients with a family history of aneurysms or neuropsychiatric disorders - enables early preventive measures.

Keywords: Circle of Willis, Anatomical Variations, Cerebral Hemodynamics, Aneurysm

ANGIOGRAPHIC ASSESSMENT OF CORONARY VENOUS ANATOMY IN PATIENTS UNDERGOING CARDIAC RESYNCHRONIZATION THERAPY

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Background: The anatomy of the coronary venous system plays a critical role in cardiac resynchronization therapy (CRT), as optimal left ventricular lead placement depends on the anatomical characteristics of the coronary sinus (CS) and its tributaries. Variations in coronary venous anatomy may influence procedural success and the selection of the most suitable target vein for lead implantation. **Objective:** The aim of this study was to evaluate the anatomical characteristics of the coronary venous system and to identify the morphometric features of tributary veins suitable for left ventricular lead placement. **Material and methods:** A retrospective study was performed based on the analysis of coronary sinus angiographies obtained during CRT procedures between 2021 and 2025 at the Emergency Institute for Cardiovascular Diseases and Transplantation, Tîrgu Mureş. A total of 153 patients with an indication for CRT were initially evaluated. Five patients with inadequate angiographic visualization of the coronary venous system, eight patients with procedural failure, four cases in which the middle cardiac vein was used for left ventricular lead placement, and one case of persistent left superior vena cava were excluded. The CS diameter, the number and distribution of tributaries, their diameter at origin, and the drainage angle relative to the CS axis were evaluated. **Results :** The final study population included 135 patients. The mean CS diameter was 9.6 ± 3.2 mm at the ostium and 9 ± 3.1 mm at 1 cm distal to the ostium. A total of 189 tributaries with a diameter ≥ 2 mm were identified, with most patients presenting a single suitable tributary (64.4%). The mid-lateral vein was the most frequently used for left ventricular lead placement, in 57.7% of cases (78/135), followed by posterolateral veins (25.2%, 34/135) and anterolateral veins (17.1%, 23/135). Most tributaries exhibited an obtuse drainage angle relative to the CS axis. **Conclusions:** The coronary venous system demonstrates significant anatomical variability, which may influence the procedural strategy in CRT. A detailed understanding of the anatomical characteristics of the CS and its tributaries may facilitate identification of the optimal venous branch for left ventricular lead placement and may contribute to improved procedural success.

Keywords: coronary sinus, cardiac resynchronization therapy, coronary venous system, left ventricular lead

ANTIBIOTIC PRESCRIBING AND ACUTE RESPIRATORY INFECTIONS IN PRIMARY CARE: NAVIGATING THE GAP BETWEEN CLINICAL PRACTICE AND EVIDENCE-BASED GUIDELINES

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Background: Acute respiratory infections are a frequent reason for visits to family physicians. The lack of specific clinical guidelines hampers optimal treatment selection, particularly for rhinopharyngitis (AR), acute pharyngitis (AF), and upper respiratory tract infections (URTI). **Objective:** This study evaluates guideline adherence and antibiotic prescribing rationale in a Romanian family medicine practice compared with the guidelines of the French authorities, which developed a highly relevant clinical tool for citation is "Antibioticlic", a computerized clinical decision support system (CDSS) specifically designed for primary care practitioners and strictly aligned with the evidence-based guidelines. **Material and methods:** Patients diagnosed with respiratory infections were selected from a family medicine practice in Romania. Exclusion criteria included any other respiratory infection diagnosis

that didn't fall into one of these categories. The selection of French clinical guidelines (French Infectious Diseases Society, French National Authority for Health, National Agency for the Safety of Medicines and Health Products) as a benchmark for this comparative analysis is justified by the structural similarities of the Bismarckian healthcare models in both nations, the methodological rigor of their evidence-based protocols, and France's extensive expertise in implementing antibiotic stewardship strategies within the primary care setting. **Results :** Seventy-eight with AR, AF, or URTI were assessed. Investigations included chest X-rays, blood counts, influenza tests, and COVID tests. The following were prescribed: cefixime 200 mg, clarithromycin 500 mg, cefuroxime 500 mg, amoxicillin/clavulanic acid 875 mg/125 mg, azithromycin, amoxicillin, or no antibiotic. Reasons for prescribing antibiotics included: patient insistence, persistent symptoms, fever, and associated comorbidities (asthma, COPD). Statistical significance was evaluated across several parameters, most notably: the correlation of age with the prescribed antibiotic and treatment duration, as well as the correlation of antibiotic class with diagnostic investigations, duration of therapy, and symptom persistence. According to the French guidelines, in 80.77% of cases, the antibiotic prescription was inappropriate. **Conclusions:** The absence of clear legislation and standardized guidelines in Romania, applied to a family medicine practice, contributes to the inappropriate prescribing of antibiotics for most respiratory infections. Over time, this leads to the progressive development of antibiotic resistance and increases the risk of unjustified adverse reactions. The Romanian state's most significant attempt to curb the unjustified use of antibiotics was the adoption of Ministry of Health Order 63/10 in January 2024, which mandates that they be dispensed only with a medical prescription.

Keywords: upper respiratory tract infection, primary care, antibiotic resistance, adverse reactions

ASSESSING FUNCTIONAL OUTCOMES IN CRITICALLY ILL PATIENTS WITH MORBID OBESITY

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Background: Morbid obesity is associated with multiple comorbidities and increased vulnerability to functional decline during critical illness. Patients with severe obesity admitted to intensive care units often experience prolonged immobilization, organ dysfunction, and complex therapeutic interventions that may affect their physical autonomy and daily functioning. **Objective:** This study assessed functional limitations in critically ill patients, with attention to those with morbid obesity. **Material and methods:** This prospective observational study evaluated functional limitations occurring during intensive care hospitalization in patients with morbid obesity using the Sickness Impact Profile (SIP-68) and the Activities of Daily Living (ADL) scales. The study included 33 patients admitted to the Anesthesia and Intensive Care Clinic. Inclusion criteria were age over 18 years, presence of critical illness with organ or system dysfunction, classification according to body mass index (BMI), and hospitalization for more than 24 hours. **Results :** The body mass index in the study group ranged from 19.5 kg/m² to 46.3 kg/m², with a mean value of 29.55 kg/m². Morbid obesity was present in 15% of the patients. Arterial hypertension was identified in 26 patients and cardiovascular disease in 23, these being the most frequent comorbidities. Acute kidney disease was present in 11 patients and chronic kidney disease in 10 patients. Psychiatric disorders, diabetes mellitus, and chronic obstructive pulmonary disease were each present in 9 patients. Most subjects were classified as overweight (43%), followed by normal weight (27%). All patients with morbid obesity obtained high scores on the SIP-68 scale, indicating a strong impact of the disease on overall health status and a marked impairment of functional capacity. Similarly, all subjects with morbid obesity recorded high scores on the ADL scale, reflecting a very low level of functional independence during hospitalization. **Conclusions:** Critically ill patients with morbid obesity showed pronounced functional impairment during intensive care hospitalization. High scores on both SIP-68 and ADL scales suggest substantial limitations in daily functioning and reduced autonomy. These findings highlight the need for early functional assessment and tailored rehabilitation strategies in this patient population.

Keywords: ADL, SIP-68, Morbid Obesity, Critically ill Patients

ASSESSMENT OF PERCEPTION AND LEVEL OF INFORMATION ABOUT SEXUALLY TRANSMITTED DISEASES

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Background: Sexual health is an essential component of overall health, involving safe, respectful relationships free from violence or discrimination. **Objective:** The aim of the study was to assess the level of awareness among people in Romania regarding sexually transmitted diseases, to identify the main sources of information, and to analyze preventive behaviors. **Material and methods:** The study was based on an online questionnaire through which we evaluated participants' knowledge and attitudes toward sexually transmitted diseases, as well as preventive behaviors and associated risk factors. A total of 173 participants of different ages and educational levels, from both rural and urban areas and various professional fields, were included. Statistical data analysis was performed using the Statistical Package for Social Sciences, applying the Chi-Square test, and Microsoft Office Word was used for graphic design. **Results :** Out of a total of 173 participants, most respondents considered that the most appropriate sources for obtaining information about sexually transmitted diseases are doctors 84.4% and healthcare specialists 80.9%. The most frequent age category was 27 years 15.6%, and 67.1% were from urban areas. Additionally, 52.6% had undergone testing for sexually transmitted diseases. Meanwhile, only 48.6% considered sexually transmitted diseases to be dangerous, and only 59.5% generally use condoms as a contraceptive method. **Conclusions:** The results of the study indicate a moderate level of knowledge regarding sexually transmitted diseases among participants, along with an awareness of the importance of information and prevention. This is reflected both in the correct identification of information sources and in the persistence of gaps in risk perception and engagement in preventive behaviors. Accurate information and access to credible sources contribute to responsible behaviors, playing an important role in protecting both personal health and the health of partners. □

Keywords: sexually transmitted diseases, epidemiology, prevention, awareness

ASSOCIATION BETWEEN CALCIUM LEVELS AND CLINICAL OUTCOMES FOLLOWING ENDOVASCULAR PROCEDURES: A SYSTEMATIC REVIEW

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Background: Calcium is one of the most abundant and important minerals in the human body. Although it was initially associated with bone metabolism, it is now known to be involved in many other physiopathological mechanisms. **Objective:** Although endovascular interventions are generally preferred over open procedures, optimizing periprocedural factors remains crucial for improving patient outcomes. This systematic review aims to address a gap in the literature regarding the association between serum calcium levels and periprocedural outcomes in adult patients undergoing endovascular interventions. **Material and methods:** A literature search was performed across several databases (including PubMed, ScienceDirect, Embase, and Scopus) using keywords for calcium levels combined with endovascular interventions and outcomes. Reference lists of included studies were also manually screened. Eligible literature included clinical studies (randomized, non-randomized, and retrospective) assessing periprocedural outcomes correlated with serum or ionized calcium levels in adult patients (>18 years) undergoing endovascular interventions. The systematic review was conducted in accordance with the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines. Study quality was assessed using the Newcastle-Ottawa Scale (NOS), with scores ranging from 0 to 9. The certainty of evidence was evaluated using the GRADE framework. **Results :** Among patients with spontaneous subarachnoid hemorrhage (SAH) managed via endovascular coiling, hypocalcemia was independently associated with an unfavorable neurological outcome at discharge. Furthermore, hypocalcemia was associated with the development of early hydrocephalus requiring a cerebrospinal fluid drainage procedure. Both of these adverse outcomes were reported with a 95% confidence interval per 0.1 mmol/L decrease in ionized calcium levels. Similarly, in patients with type B aortic dissection (TBAD) undergoing thoracic endovascular aortic repair (TEVAR), hypocalcemia was associated with higher 5-year mortality and major adverse cardiovascular events (MACEs) compared to hypercalcemia. In studies evaluating patients who underwent mechanical thrombectomy for acute ischemic stroke

(AIS), poorer clinical outcomes were identified in cohorts with higher albumin-corrected calcium levels. Finally, in patients undergoing percutaneous coronary intervention, serum calcium is inversely associated with coronary artery disease and can independently predict both in-hospital and long-term mortality. **Conclusions:** Overall, calcium is known for its ability to compromise performances of endovascular procedures. In this context, hypocalcemia demonstrated statistically significant adverse neurological outcomes and hydrocephalus in patients with SAH, as well as increased long-term mortality in patients undergoing TEVAR for TBAD. Conversely, hypercalcemia is linked to poorer outcomes following AIS interventions and the exacerbation of cardiovascular disease.

Keywords: calcium, endovascular, outcomes

ASSOCIATION OF BMI Z-SCORE WITH LIVER FUNCTION AND SOCIO-DEMOGRAPHIC FACTORS IN PEDIATRIC OVERWEIGHT AND OBESE PATIENTS

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Background: Pediatric obesity is recognized as one of the most complex challenges confronting contemporary healthcare systems, witnessing an alarming global surge in case numbers over the last years. This pathology stands out as a chronic condition associated with early metabolic and organ dysfunction, including liver impairment. **Objective:** The aim of this study was to evaluate the relationship between Body Mass Index Z-score (BMI Z-score), liver function and socio-demographic parameters in children with overweight and obesity. **Material and methods:** We conducted a retrospective observational study on a group of 99 children, aged 2-18 years, diagnosed with overweight or obesity, hospitalized in the Pediatrics I Clinic of the County Clinical Hospital from Tîrgu Mureş, between July 2020 and December 2025. The following data were collected from the medical records: age, sex, residential environment (urban versus rural), anthropometric measurements (weight, height, BMI) and biochemical markers of liver function, including aspartate aminotransferase (AST), alanine aminotransferase (ALT) and gamma-glutamyl transferase (GGT). **Results :** The study population included 59.60% males and 40.40% females, with a balanced distribution between urban and rural areas. Higher BMI Z-scores were significantly correlated with increased ALT ($p=0.036$, $r=0.211$) and GGT levels ($p=0.032$, $r=0.268$), suggesting early hepatic involvement. No significant association was found between residential environment and BMI Z-score ($p > 0.05$). Female patients presented significantly higher BMI Z-scores ($p=0.025$) and elevated liver enzymes (AST, $p=0.005$; GGT, $p=0.028$) compared to males. **Conclusions:** Higher BMI Z-scores were associated with early alterations in liver function, indicating the presence of an early hepatic risk profile in pediatric patients with obesity. These findings support the role of BMI Z-score as a useful indicator of hepatic involvement, independent of residential environment, with notable sex-related differences.

Keywords: pediatric obesity, BMI Z-score, hepatic risk profile, liver enzymes

ASSOCIATIONS BETWEEN ANTIRETROVIRAL THERAPY, HIV DURATION AND METABOLIC PROFILES IN PEOPLE LIVING WITH HIV

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Background: Metabolic disturbances remain a concern in people living with HIV (PLWH) receiving antiretroviral therapy (ART). Differences in metabolic profiles across integrase strand transfer inhibitor (INSTI) and non-nucleoside reverse transcriptase inhibitor (NNRTI)-based combinations, as well as between specific INSTI agents, are not fully characterized. **Objective:** We aim to characterise the metabolic profiles of PLWH in relation to different ART regimens by assessing key metabolic parameters. **Material and methods:** We conducted a cross-sectional analysis of 188 PLWH receiving stable ART at a regional HIV center. Inclusion criteria included age ≥ 18 years, undetectable viral load, and treatment with a single-tablet regimen for >1 year. Participants were stratified into four groups based on ART composition: bictegravir-based INSTI + 2 NRTI/NtRTI ($n=90$), dolutegravir-based INSTI + 2 NRTI/NtRTI ($n=13$), dolutegravir-based INSTI + 1 NRTI ($n=48$), and NNRTI + 2 NRTI/NtRTI ($n=37$). Metabolic parameters included body mass index (BMI), fasting glucose, total cholesterol, LDL, HDL, triglycerides, and metabolic syndrome defined according to modified NCEP ATP III criteria (due to the unknown waist circumference of participants, we replaced this criterion with the presence/absence of arterial hypertension). Group

comparisons were performed using non-parametric tests such as Kruskal-Wallis test for continuous variables. **Results :** No statistically significant differences were observed between groups for BMI ($p=0.244$), fasting glucose ($p=0.312$), total cholesterol ($p=0.406$), LDL cholesterol ($p=0.216$), HDL cholesterol ($p=0.490$), or triglycerides ($p=0.798$). The prevalence of metabolic syndrome did not differ significantly across groups ($p=0.675$). **Conclusions:** In this cohort of virologically suppressed PLWH on stable single-tablet regimens, metabolic parameters were comparable across ART combinations, including between bicitgravir- and dolutegravir-based INSTI regimens. These findings suggest similar metabolic profiles among contemporary INSTI- and NNRTI-based therapies in this setting, with lifestyle factors and adiposity, likely representing more important drivers of metabolic risk in this cohort. Larger and longitudinal studies are warranted.

Keywords: HIV, Metabolic syndrome, ART, Adverse reactions

ASTROCYTIC EAAT2 TRANSPORT FAILURE AND EXCITOTOXICITY

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Background: Glutamate is the predominant excitatory neurotransmitter in the central nervous system, playing critical roles in cognitive functions. To maintain a balance, the astrocytic glutamate transporter EAAT2 is responsible for over 90% of glutamate clearance. Key functions of EAAT2 include reducing extracellular glutamate concentration and suppressing oxidative stress. The dysregulation of EAAT2 leads to increased synaptic glutamate, causing excessive signaling and the subsequent death of post-synaptic neurons. **Objective:** This study will focus on reviewing the importance of EAAT2 expression and analysing the consequences of its dysfunction in epilepsy and amyotrophic lateral sclerosis (ALS). Furthermore, we will evaluate specific classes of EAAT2-targeting compounds, acknowledging both their therapeutic potential and current pharmacological limitations. **Material and methods:** The research was accomplished by performing a thorough literature search on PubMed and ScienceDirect, covering the past seven years, using the keywords "astrocyte", "EAAT2", "excitotoxicity", and "glutamate". The information for this study was selected from literature reviews, systematic reviews and in vitro and in vivo studies. Exclusion criteria involved non-peer-reviewed studies, those not specifically addressing excitotoxicity caused by EAAT2 dysregulation and studies with limited therapeutic relevance. A total of 13 articles were finally selected based on the search criteria. **Results :** Because EAAT2 clears synaptic glutamate - which is then recycled or metabolized in the Krebs cycle - it plays a major role in reducing hyperexcitability and preventing neurodegeneration. Multiple studies have shown that in both epilepsy and ALS, impaired glutamate clearance by EAAT2 promotes sustained post-synaptic depolarization, allowing a massive calcium influx into neurons that activates enzymes involved in neuronal apoptosis. To counteract these cascades, our pharmacological analysis evaluated three major EAAT2-targeting compounds: β -lactam antibiotics (Ceftriaxone, Ampicillin) - which activate EAAT2's gene promoter and enhance astrocytic clearance capacity, though limited by poor blood-brain barrier penetration; Riluzole - an FDA-approved ALS treatment, offering modest efficacy due to high first-pass metabolism and limited (60%) oral bioavailability; Natural ginsenosides - which enhance both mRNA and protein expression of EAAT2. **Conclusions:** The glutamate transporter EAAT2 is a promising target for the treatment of epilepsy and ALS, both characterized by excessive synaptic glutamate and its impaired clearance. To address the root of neurotoxicity, future treatments should focus on improving drug delivery, blood-brain barrier penetration, and bioavailability for EAAT2-targeting compounds, while simultaneously enhancing glutamate reuptake by increasing EAAT2 protein expression.

Keywords: astrocyte, EAAT2, excitotoxicity, glutamate

AWARENESS AND PREPAREDNESS OF STUDENTS IN PAEDIATRIC FRACTURES: AN ANONYMOUS SURVEY FOR MEDICAL AND NON-MEDICAL STUDENTS IN HEALTH-RELATED STUDY PROGRAMS.

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Background: It is common to see children in the emergency room because of a fracture. Most of the time things are working out smoothly, but there are moments where every minute counts. A small pin-sized wound at the injury site may be an open fracture that has pierced the skin. A swollen elbow can hide a neurovascular problem even if

it looks hyperaemic and warm. There are also suspicions of abuse in which the fracture doesn't correlate with the cause of the trauma told by the patient's guardian. The child's safety depends on recognizing quickly the signs, symptoms and acting accordingly. It is not just about the doctors. Nurses and physiotherapists working in the paediatric department reassess the patients frequently and may quickly notice any changes. Healthcare economists and managers influence protocols and resources that can speed up the care. **Objective:** Although paediatric fractures are frequently encountered, students' awareness, emergency recognition and confidence in this field remains unclear. The aim was to analyse three groups: clinical medical students, preclinical medical students and non-medical students in healthcare (general medical assistance, physical therapy and rehabilitation, healthcare economy and healthcare management) in the context of the SCJU Târgu-Mureş data. **Material and methods:** A transversal study using an anonymous online Yes/No questionnaire with a performance score (0-13) and confidence questions was performed to 182 students. As a clinical anchor discharges from 01.01.2020 - 15.12.2025 were retrospectively extracted for paediatric fractures of humerus, forearm, femur and tibia/lower leg. Comparisons between the groups used χ^2 for ratio and Kruskal-Wallis for total score (threshold $p < 0,05$). **Results :** The performance differed between the groups ($H=50,65$; $p < 0,001$) with higher scores in clinical, followed by preclinical and non-medical students (median score 11 vs 9 vs 6). A similar result is seen in the confidence score: clinical students (83,8%), preclinical students (40%), and non-medical students (37,3%) ($\chi^2 p=0,001$). An increased confidence with lower performance 28,6% in preclinical and 14,5% in non-medical students, compared to 0% in clinical students was noticed ($\chi^2 p=0,002$). Hospital data confirmed a great and constant burden: 5.138 cases associated with paediatric long bone fractures validates the practical relevance of the questionnaire. **Conclusions:** In a sustained clinical demand, the results advocates earlier and structured training in paediatric traumatology with focusing on alarm signs, symptoms and triage not just for medical but also other non-medical healthcare students.

Keywords: paediatrics, fractures, students

BACTERIAL ADAPTATION FOLLOWING REAPETED EXPOSURE TO EXTREME TEMPERATURES

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Background: Bacteria are responsible for a wide range of community-acquired and healthcare-association infections. Environmental factors, particularly temperature variations, play a critical role in modulating bacterial growth behavior. **Objective:** This study aimed to investigate the effects of different incubation temperatures on growth characteristics of clinically relevant bacterial species. **Material and methods:** Four bacterial species (Salmonella spp. ATCC 160523, E. coli ATCC 13846, S. aureus ATCC 29213, E. faecalis ATCC29212) were revived from -70°C stocks and adjusted to 0.5 McFarland standard. A 1:1000 dilution was prepared in Tryptic Soy Broth. For each species, three replicate aliquots were incubated at 21°C, 37°C, and 39°C. Optical density (OD₆₀₀) was measured after 24 and 48 hours using the spectrophotometer Eppendorf BioPhotometer® D30 (Eppendorf, Austria) at a wavelength of 600 nm. Two independent series were performed on different days to assess reproducibility. Mean OD values were calculated for each incubation condition and time point. **Results :** E. coli showed optimal growth at 39°C after 24 hours (Mean OD 1.086 ± 0.512) and at 37°C after 48 hours (Mean OD 0.619). S. aureus showed optimal growth at 37°C both after 24hours (Mean OD 0.816 ± 0.070) and after 48 hours (Mean OD 0.866). E. faecalis showed optimal growth at 37°C after 24 hours (Mean OD 0.299 ± 0.017) and after 48 hours (Mean OD 0.268). No growth was recorded at 39°C after either 24 hours (Mean OD -0.012 ± 0.017) or 48 hours (Mean OD -0.012). Salmonella spp. grew at 37°C after 24 hours (Mean OD 0.637 ± 0.021) and after 48 hours (Mean OD 1.027), and at 39°C after 24 hours (Mean OD 0.619) and after 48 hours (Mean OD 0.914). **Conclusions:** The effect of temperature on bacterial growth is species-related. While S. aureus and E. faecalis exhibit optimal growth at 37 °C, the Gram-negative Enterobacterales (E. coli, Salmonella) showed growth at both 37°C and 39 °C (febrile range). Small temperature variations (the shift from normal to febrile human body temperature) inhibited S. aureus and E. faecalis.

Keywords: bacterial adaptation, extreme temperatures, repeated exposure, thermal stress

BACTERIOPHAGE THERAPY IN THE ERA OF ANTIMICROBIAL RESISTANCE: CLINICAL RESULTS AND IMPLEMENTATION CHALLENGES

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Background: Originally developed in the early 20th century, phage therapy was largely displaced by the advent of antibiotics and is now being reevaluated as an adjuvant salvage therapy option in multidrug-resistant (MDR/XDR) systemic infections, especially in critically ill human patients (adults and pediatric patients) and in complex osteoarticular infections. Although clinical use has increased in recent years, large-scale implementation remains limited by logistical constraints, manufacturing standards (Good Manufacturing Practice, GMP), and heterogeneous regulatory frameworks. **Objective:** To systematically evaluate the clinical efficacy, safety profile, and mechanisms of antibiotic susceptibility restoration associated with phage therapy, as well as to analyze manufacturing barriers and emerging regulatory strategies. **Material and methods:** A systematic review of interventional studies, multicenter observational cohorts, and compassionate use programs (2019-2026) was performed using PubMed, Embase, and ClinicalTrials.gov, according to predefined eligibility criteria. The primary endpoints included clinical response, bacteriological eradication, biofilm breakdown, adverse events (AEs), and pharmacokinetic considerations. **Results :** The pooled data included over 1100 patients from 38 studies, indicating an overall clinical response rate of approximately 71%. The subgroup analysis was based on the largest recent standardized multicenter cohort (n=100 consecutive cases), in which personalized phage therapy was linked to a clinical success rate of approximately 77%. Strict bacteriological eradication was achieved in 61% of cases, indicating a discrepancy between microbiological clearance and clinical response, supporting symptomatic resolution and implant retention despite incomplete eradication. In deep osteoarticular infections, combined administration (systemic and intraoperative topical) has been frequently used and associated with favorable outcomes, facilitating penetration into bacterial biofilms. Development of bacterial resistance in vivo, including the emergence of small colony variants, has been reported; however, an evolutionary "trade-off" phenomenon resulting in mechanisms of antibiotic susceptibility restoration was observed in over 40% of pan-resistant strains. Recent meta-analyses have reported an incidence of severe AEs below 2%. To address the limitations of GMP-compliant commercial production and the instability of liquid suspensions, specialized centers have implemented advanced delivery systems (liposomes, hydrogels) and used the magistral regulatory framework, a legal exemption authorizing pharmacists to custom-compound unlicensed phage formulations based on direct prescriptions for individual patients. **Conclusions:** Available data suggest that personalized phage therapy is a promising adjuvant intervention in refractory MDR/XDR infections, including complex osteoarticular forms, with a favorable safety profile. However, most of the evidence comes from observational studies with methodological heterogeneity. The transition to routine practice requires standardization of clinical monitoring protocols, optimization of GMP-compliant manufacturing processes, and confirmation of efficacy through randomized phase III trials.

Keywords: Bacteriophage therapy, MDR/XDR, Antibiotic restoration, Magistral preparations

BIOCHEMICAL MARKERS IN EARLY DETECTION OF CARDIOVASCULAR DISEASES

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Background: Cardiovascular diseases (CVDs) remain the leading cause of mortality worldwide and represent a major public health concern. Many cardiovascular conditions develop progressively and may remain clinically undetected until significant damage has occurred, hence, early detection is essential for improving patient outcomes. Biochemical markers have become important tools in cardiovascular medicine because they provide measurable indicators of pathological changes occurring during disease development. Advances in laboratory diagnostics have improved the sensitivity of these markers, enabling earlier identification of cardiovascular risk and supporting timely clinical intervention. **Objective:** The objective of this study was to evaluate the role of biochemical markers in the early detection of cardiovascular diseases and to highlight their diagnostic and prognostic value in clinical practice. **Material and methods:** This study examined literature describing the clinical application of biochemical markers used in the detection of cardiovascular diseases. Published and experimental

studies investigating biomarkers associated with myocardial injury were analysed. The reviewed material included research evaluating biochemical indicators of myocardial damage and cardiovascular dysfunction. In addition, a case illustrating the diagnostic limitations of biomarkers was examined. The case involved a patient presenting with elevated creatine kinase-MB (CK-MB) activity in the absence of evidence of myocardial infarction. Laboratory investigation demonstrated that the increased CK-MB activity was associated with rhabdomyolysis, a condition characterized by skeletal muscle breakdown. Enzymatic activity assays with measurements of CK-MB protein concentration were considered during interpretation of the biochemical findings. **Results** : Evaluation of the reviewed literature confirmed that cardiac troponins remain the most sensitive and specific biomarkers for detecting myocardial injury, particularly with high-sensitivity assays capable of identifying minimal myocardial damage. High-sensitivity C-reactive protein was identified as an indicator of vascular inflammation and has been associated with increased cardiovascular risk. Natriuretic peptides were also shown to correlate with early cardiac dysfunction. The analysed clinical case demonstrated the diagnostic limitations of CK-MB activity measurements. Elevated CK-MB activity initially suggested myocardial infarction; however, the absence of clinical and electrocardiographic evidence of cardiac ischemia indicated an alternative origin. Further investigation showed that skeletal muscle injury caused by rhabdomyolysis can increase CK-MB activity. Measurement of CK-MB enzyme protein concentration, with a normal reference range of 0-5 ng/ml, provided a more reliable indicator for distinguishing myocardial injury from non-cardiac muscle damage. **Conclusions**: Biochemical markers play an essential role in the early detection and management of cardiovascular diseases. Their integration into clinical practice can improve diagnostic accuracy as well as support early therapeutic interventions.

Keywords: Cardiovascular diseases, Biomarkers, Troponins, C-reactive protein

BIOCHEMICAL MECHANISMS OF DRUG INDUCED HEPATOTOXICITY

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Background: Drug-induced hepatotoxicity is a major cause of liver injury and reflects the sensitivity of hepatocytes to alterations in cellular metabolism. Since the liver is the primary site of xenobiotic biotransformation, many pharmacological compounds undergo enzymatic modification within hepatocytes. During these reactions, intermediate metabolites may be generated that possess a higher chemical reactivity than the parent compound. Such metabolites can interact with intracellular macromolecules and alter the normal biochemical activity within the cell. When these metabolic disturbances persist, they may disrupt hepatocellular homeostasis and contribute to the development of toxic liver injury. For this reason, investigation of the biochemical events associated with hepatic drug metabolism remains essential for understanding the molecular basis of hepatocyte damage. **Objective:** The objective of this study was to examine the biochemical processes associated with drug-induced hepatotoxicity, with particular emphasis on molecular alterations occurring during hepatic drug metabolism. **Material and methods:** This study examined scientific literature describing biochemical alterations in hepatocytes during drug-induced liver injury. The reviewed material included experimental and biochemical investigations addressing hepatic drug metabolism and the intracellular consequences of these reactions. Particular consideration was given to studies investigating reactive metabolite formation, disturbances in cellular redox balance, and changes in mitochondrial metabolic activity. In addition, a clinical case of hepatotoxicity associated with anti-tuberculosis antibiotic therapy was examined to illustrate these biochemical mechanisms. The patient received a standard regimen including rifampicin, isoniazid, pyrazinamide, and ethambutol. Hepatic transaminase levels were periodically monitored during treatment to evaluate possible hepatotoxicity related to drug metabolism. **Results** : Analysis of the reviewed studies indicates that hepatotoxicity frequently develops during metabolic activation of drugs within hepatocytes. Reactive metabolites may bind covalently to cellular proteins, producing structural and functional alterations within the cell. Disturbances in mitochondrial metabolism were also described, associated with impaired oxidative phosphorylation and reduced energy production. Alterations in intracellular redox status contribute to accumulation of reactive oxygen species and oxidative damage to cellular components. The analysed clinical case further illustrates these biochemical processes, elevated hepatic transaminase levels were also observed during antitubercular therapy, suggesting hepatocellular stress associated with metabolic activation of the administered drugs. **Conclusions:** Drug-induced hepatotoxicity arises from biochemical alterations occurring during hepatic metabolism of pharmacological compounds. Understanding these molecular processes provides important insight into the mechanisms underlying hepatocellular damage and contributes to improved evaluation of drug safety.

Keywords: Hepatotoxicity, Drug metabolism, Reactive metabolites, Oxidative stress

BIOLOGICAL THERAPIES IN ASTHMA: A PRECISION MEDICINE APPROACH TO ENDOTYPE-DRIVEN TREATMENT

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Background: Asthma is a heterogeneous chronic inflammatory airway disease that significantly impacts patients' quality of life and imposes a substantial burden on healthcare systems. It is characterized by variable airflow limitation and bronchial hyperresponsiveness, leading to recurrent episodes of wheezing, dyspnea, chest tightness, and cough, often triggered by allergens, irritants, physical exertion, climatic changes, or viral infections. Despite the availability of standard therapies, including inhaled corticosteroids (ICS), approximately 5-10% of patients exhibit inadequate disease control and require prolonged or high-dose systemic corticosteroids, which are associated with significant adverse effects. Recent advances, as outlined by the Global Initiative for Asthma 2025 guidelines, emphasize the role of biological therapies in severe asthma. **Objective:** To critically assess the role of inflammatory biomarkers and asthma endotypes in guiding the selection and clinical use of current biological therapies in severe asthma, within the framework of personalized medicine. **Material and methods:** A narrative review was conducted based on current international guidelines and recent high-impact clinical trials. Data were collected from GINA 2025 and key randomized controlled trials investigating biological therapies in severe asthma. The analysis focused on the identification of inflammatory biomarkers, classification of asthma phenotypes and endotypes, and their correlation with targeted therapeutic strategies. **Results :** According to GINA 2025, severe asthma requires systematic reassessment following optimization of modifiable factors, including incorrect inhaler technique, poor adherence, comorbidities, trigger exposure, excessive use of short-acting β 2-agonists (SABA), and treatment-related adverse effects. Advances in the understanding of asthma immunopathology have enabled the development of targeted biological therapies, predominantly directed against type 2 (T2) inflammation pathways. These include anti-immunoglobulin E (IgE) (omalizumab), anti-interleukin-5 (IL-5) and IL-5 receptor agents (mepolizumab, reslizumab, benralizumab), anti-IL-4/IL-13 (dupilumab), and anti-thymic stromal lymphopoietin (TSLP) (tezepelumab). Clinical trials have demonstrated that these therapies reduce exacerbation rates by approximately 25-50%, improve lung function, and decrease oral corticosteroid dependence. Notably, tezepelumab has shown efficacy across a broad range of phenotypes, including non-T2 asthma. Selection of first-line biological therapy is guided by biomarker assessment, including blood eosinophil count, fractional exhaled nitric oxide (FeNO), and serum IgE levels, alongside considerations such as cost, dosing frequency, route of administration, and patient preference. **Conclusions:** Biological therapies have transformed the management of severe asthma by enabling a precision medicine approach based on inflammatory endotypes. Their appropriate use leads to improved disease control, reduced corticosteroid exposure, and decreased exacerbation burden, with significant implications for long-term outcomes and healthcare resource utilization.

Keywords: Asthma, Biological Therapy, Type 2 Inflammation, Personalized Medicine

BIOMECHANICAL RESPONSE OF PORCINE CORONARY ARTERIES TO OVERSTRETCH: IMPLICATIONS FOR CORONARY STENT DESIGN

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Background: Cardiovascular disease remains the leading cause of mortality worldwide, with coronary artery disease (CAD) representing its most prevalent form. Advances in endovascular technologies for CAD management have significantly lowered the mortality and morbidity traditionally associated with open-heart surgery. Nevertheless, as cardiovascular therapies continue to evolve rapidly, the development and validation of appropriate animal models remain essential for advancing research and translating innovative treatments into clinical practice. **Objective:** The objective of this study was to comprehensively characterize the biomechanical response of porcine coronary arteries to controlled overstretch conditions and to determine regional and inter-vessel variations relevant to coronary stent design. **Material and methods:** Six porcine hearts were obtained from a local slaughterhouse and processed within six hours of harvest to preserve tissue integrity. Through meticulous

dissection, the left anterior descending (LAD), right coronary artery (RCA), and left circumflex (LCx) arteries were isolated along their length. From each heart, 2-4 specimens (8×5 mm) were prepared, depending on vessel length, for uniaxial biomechanical testing to evaluate radial compliance variations. Mechanical characterization was performed using the CellScale 5000 Biotester. Samples were subjected to progressive strain levels of 15%, 25%, and 50% to assess coronary wall behavior under increasing stress conditions. This work was supported by the "George Emil Palade" University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș, Research Grant number 170/2/09.01.2024. **Results** : At 15% strain, LCx specimens demonstrated significantly lower Cauchy stress than both LAD ($p=0.017$) and RCA ($p=0.024$). At 25% strain, a significant difference was observed only between the LAD and LCx, with the LCx again exhibiting lower Cauchy stress values ($p=0.029$). No significant differences were detected among the groups at 50% strain. Regarding specimen rigidity, no significant differences were observed among the three coronary arteries at 15% or 50% strain. However, at 25% strain, the LAD exhibited significantly greater rigidity compared with the LCx ($p=0.041$). No significant regional variation in Cauchy stress or stiffness was observed along the length of the RCA and LCx, indicating homogeneous mechanical behavior across its four segments under the tested strain levels. At 15% and 25% strain, both the Cauchy stress and stiffness decreased progressively along the vessel's longitudinal axis, with distal segments demonstrating significantly lower values than proximal regions. **Conclusions**: Porcine coronary arteries demonstrate vessel-specific and regional biomechanical heterogeneity under overstretch conditions. These findings underscore the importance of incorporating anatomical and mechanical variability into coronary stent design to optimize deployment strategies and minimize vascular injury.

Keywords: Coronary Arteries, LAD, RCA, LCx

BOUVERET SYNDROME DIAGNOSTIC AND THERAPEUTIC CHALLENGES – A RETROSPECTIVE CASE SERIES

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Background: Bouveret syndrome represents a rare form of gastric outlet obstruction that occurs when a gallstone migrates through a bilioenteric fistula and becomes impacted in the pylorus or proximal duodenum. Due to its rarity and nonspecific clinical presentation, the diagnosis can be challenging, and delayed treatment may lead to severe complications such as dehydration, malnutrition, or intestinal perforation. **Objective:** The aim of this study was to analyze the clinical presentation, diagnostic strategies, and therapeutic management of patients diagnosed with Bouveret syndrome in a tertiary surgical center. **Material and methods:** We conducted a retrospective observational study including all patients diagnosed with Bouveret syndrome between January 2018 and December 2024 at the Emergency County Hospital Târgu Mureș, Department of General Surgery I. Diagnosis was established preoperatively using imaging and/or upper gastrointestinal endoscopy, or intraoperatively during surgical intervention. Data were collected from medical records, operative reports, and imaging archives. The analyzed variables included demographic characteristics, clinical presentation, laboratory findings, diagnostic methods, and treatment strategies. The primary outcome was therapeutic success. Secondary outcomes included postoperative morbidity, length of hospital stay, intensive care unit admission, in-hospital mortality, 30-day mortality, and failure of the initial treatment. Statistical analysis was descriptive, using medians (IQR) and counts (%). **Results** : Seven patients with Bouveret syndrome were identified during the study period. The cohort consisted predominantly of elderly patients (median age 73 years) and females (71.4%). All patients presented with symptoms of gastric outlet obstruction. Computed tomography played a key role in diagnosis, identifying Rigler's triad in 71.4% of cases and a cholecystoenteric fistula in 85.7%. Endoscopic treatment was initially attempted in most patients but demonstrated a low success rate (20%). Surgical treatment was required in 85.7% of cases. Postoperative outcomes reflected the high-risk profile of this patient population, with frequent ICU admissions, significant complication rates, and a 30-day mortality of 42.9%. **Conclusions:** Bouveret syndrome is a rare but severe cause of gastric outlet obstruction, typically affecting elderly patients with significant comorbidities. Computed tomography plays a central role in diagnosis, while surgical intervention remains the main therapeutic option in most cases.

Keywords: Bouveret syndrome, Gallstone ileus, Cholecystoenteric fistula, Surgical management

BREAST CANCER IN THE ERA OF PRECISION ONCOLOGY: EVOLUTION OF GENETIC TESTING AND MOLECULAR PROFILING IN CLINICAL GUIDELINES

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Background: Breast cancer remains the most frequently diagnosed malignancy among women worldwide and a leading cause of cancer-related mortality. Over recent decades, advances in molecular oncology and oncogenetics have reshaped its diagnostic and therapeutic landscape, shifting from traditional clinicopathological assessment toward precision oncology approaches integrating genetic testing and molecular profiling. **Objective:** To analyse the evolution of international breast cancer clinical guidelines, focusing on the expanding role of genetic testing and molecular biomarkers in contemporary oncological practice. **Material and methods:** A comparative analysis of major international guidelines (ESMO, NCCN, and ASCO) was conducted. Recommendations regarding genetic testing, molecular biomarkers, and targeted therapies were evaluated to assess the transition from traditional clinicopathological approaches to modern precision oncology strategies. **Results :** Breast cancer management has historically relied on clinicopathological parameters, including tumour size, lymph node involvement, and TNM staging. Early-stage disease (stage 0-II) accounts for approximately 60-70% of newly diagnosed cases and has traditionally been managed with surgery, followed by adjuvant radiotherapy and systemic therapy. Breast cancer is a biologically heterogeneous disease. Hormone receptor-positive tumours account for approximately 70% of cases, while HER2 overexpression is observed in 15-20%, and 10-15% are classified as triple-negative breast cancer (TNBC), a subtype associated with more aggressive behaviour. Contemporary guidelines increasingly emphasize molecular characterization, including assessment of ER, PgR, HER2, and Ki-67, enabling classification into clinically relevant molecular subtypes. Germline BRCA1/2 mutations are identified in approximately 5-10% of all cases and up to 25% of hereditary breast cancers, supporting expanded indications for genetic testing beyond strong family history, including high-risk clinical subgroups such as TNBC. Targeted therapies have significantly transformed treatment strategies. Anti-HER2 agents, CDK4/6 inhibitors, and PARP inhibitors have demonstrated substantial improvements in clinical outcomes in selected patient populations. These advances have been associated with improved survival outcomes and more tailored therapeutic decision-making. Notably, guideline comparisons reveal a progressive expansion in biomarker integration and earlier adoption of broader genetic testing criteria, particularly in NCCN recommendations. **Conclusions:** The integration of genetic testing and molecular profiling into breast cancer guidelines reflects a fundamental paradigm shift toward precision oncology. These advances enable more accurate risk stratification and personalized therapeutic strategies, while emphasizing the need for broader implementation in clinical practice.

Keywords: Precision oncology, BRCA, Targeted therapy, Molecular profiling

CAN PAIN ASSESSMENT USING THE EQ-5D SCALE CAPTURE CLINICAL EVOLUTION IN DISC HERNIATION PATIENTS AT 30-DAY FOLLOW-UP?

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Background: Lumbar disc herniation frequently presents with acute and severe pain, requiring prompt evaluation and monitoring. Accurate pain assessment is essential for guiding treatment decisions and tracking response. The EQ-5D scale, designed for rapid clinical use, may provide a practical alternative to more complex instruments, though evidence supporting its use in this context is limited. It measures aspects related to quality of life beyond pain, such as mobility and anxiety or depression levels. **Objective:** The objective of this study was to evaluate changes in pain intensity using the EQ-5D scale in a case series of adult patients with disc herniation, comparing scores obtained preoperatively with those recorded 30 days after neurosurgical intervention. **Material and methods:** A case series of adult patients with disc herniation scheduled for neurosurgery was conducted. The EQ-5D, EQ-VAS and the numeric rating scale were used to assess pain prior to surgery and at a 30-day follow-up. Demographic and clinical information was collected from patient records and in patient interviews. Pain score variation over time was examined descriptively. **Results :** The case-series group included patients (mean age 50.7 years; 51.6% males) with normal body mass index, commonly smokers with associated hypertension or coronary artery disease. Baseline use of opioids, gabapentinoids, and NSAIDs/ACAP was 35.5%, 38.7%, and

64.5% respectively. Despite multimodal preoperative management, patients continued to exhibit neurological deficits involving both motor and sensory function. Baseline pain was severe, with NRS values of 7-8 and EQ-5D scores between 9 and 15. All patients underwent neurosurgery. Following surgery, treatment included multimodal approaches during their stay in hospital. At the 30-day evaluation, in patients who completed the follow up (n=7) pain (NRS) improved from baseline by -3.4 ± 3.1 points, EQ-VAS increased by 26 ± 29.7 points, indicating improved perceived health status. EQ-5D sum decreased by -3.2 ± 3.3 (median -3. IQR -4 to -2). Neurological findings showed partial improvement, and the EQ-5D scale reflected changes in patient status over time.

Conclusions: The observed trends support the role of the EQ-5D scale in pain assessment. However, conclusions remain limited, and studies involving more patients are needed to strengthen the evidence

Keywords: disc hernia, neurosurgery, EQ-5D, pain medicine

CAPTURE II HYBRIDIZATION IN CERVICAL CANCER SCREENING

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Background: After breast cancer, cervical cancer is the second most common cause of death among women worldwide, with an incidence of 6%. The main triggering factor is persistent infection with human papillomavirus (HPV), which affects normal genital cytology. Hybrid Capture II (HC2), a widely used technique for the identification of high-risk HPV genotypes (H-SIL) DNA, helps detect high-grade cervical intraepithelial neoplasia (CIN2+), increasing the accuracy as well as the efficiency of early detection in regular screening programs. **Objective:** The goals of screening involve the early detection of precancerous cervical lesions and cervical cancer, the referral of patients with positive results to specialized services for evaluation and treatment strategies, the education of citizens about health issues, as well as the encouragement of them to undergo screening tests. **Material and methods:** HC2 uses a hybridization method that develops RNA-DNA hybrids by binding to target DNA using HPV-specific RNA markers followed by chemiluminescence (CH) analysis. With a high sensitivity (90.5%), it can be used as a complementary test to the Babes-Papanicolau (PAP) test or as a "triage" in women whose PAP smear is abnormal to determine whether or not colposcopy is necessary. In 2023, a screening program in Mureş County included 999 participants who benefited from HPV screening using the HC2 method and were subsequently evaluated by PAP. Statistically, the association between HPV status and cytological characteristics was assessed using the Chi-square test and prevalence estimates. **Results :** Statistical analysis revealed a prevalence of 6.49%, while 93.39% of participants had a negative HPV result. Most confirmed HPV cases were identified in women who participated in the mobile screening (37 cases), followed by women who presented to the Tîrgu-Mureş County Emergency Clinical Hospital (8 cases). Only 3.3% had a positive PAP test and of these, 2% had both altered tests: cytological changes and positive HPV test. The results of the PAP test suggest a statistically significant association with HPV (Chi-square=118.4; $p<0.0001$), confirming that HPV has a key role in the development of cervical lesions. **Conclusions:** Despite the low prevalence, the significance of HPV infection and its strong correlation with cytological changes are highlighted by the analysis of current data. Screening involve the early detection of precancerous cervical lesions and cervical cancer, the referral of patients with positive results to specialized services for evaluation and treatment strategies.

Keywords: Cervical cancer, Screening, capture II hybridization

CARDIOVASCULAR OF ENERGY DRINK CONSUMPTION: ACUTE HEMODYNAMIC RESPONSES AND HEALTH RISKS

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Background: Energy Drinks are usually carbonated beverages containing mostly sugar and caffeine, used by many people to enhance physical activity or boost concentration in certain periods. There has been a significant recent increase in the consumption of Energy Drinks by young people and athletes and accompanied with a risk with potential health risk in case of excessive consumption. There might be effects from acute or chronic consumption of Energy Dinks, negatively affecting the Cardiovascular System, Nervous System as well as a possibility for addiction. Furthermore, in an analysis nine cases of cardiac arrest were found including three fatal ones. **Objective:** The objective of this paper is the identification and clarification of cardiovascular effects of

energy drink consumption in individuals with emphasis on biologic parameters such as blood pressure, heart rate, cardiac workload, and cerebral blood flow velocity, to clearly understand the potential acute and chronic risks associated with these widely consumed beverages. **Material and methods:** Multiple clinical and experimental studies were analyzed, collecting data on blood pressure, heart rate, and cerebral blood flow velocity after energy drink consumption in seated or supine resting positions. The methodology specifically accounts for group heterogeneity, including variations in caffeine habituation and baseline physical training levels among participants, with comparisons across different brands and volumes. **Results :** The clinical findings indicate that consuming doses between 250 ml and 750 ml of energy drinks, such as Red Bull or Monster, leads to acute increases in systolic blood pressure by up to 10 mmHg and diastolic blood pressure by approximately 7 mmHg. In certain trials, heart rate elevations of 5-20 beats per minute were observed, accompanied by a significant reduction in cerebral blood flow velocity of nearly 7-10%. In rare cases dangerous arrhythmias might occur. These changes demonstrate a substantial increase in cardiac workload and systemic vascular resistance, highlighting the potential risk of developing adverse hemodynamic effects, particularly in young adults and individuals with predisposing cardiovascular conditions. **Conclusions:** Energy drink consumption negatively impacts cardiovascular and, contrary to expectations, even cerebrovascular function, emphasizing the need for cautious consumption and public health awareness.

Keywords: energy drinks, cardiovascular effects, cerebral blood flow, heart rate

CASE SERIES: EVALUATION OF THE QUALITY OF POSTOPERATIVE CARE IN INTENSIVE CARE UNIT.

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Background: Evaluation of the quality of care from the viewpoint of the patient is now a crucial part in critical care. The assessment of therapeutic management and communication is especially pertinent for postoperative patients referred to critical care units since they undergo intricate medical procedures and constant observation. Patients' opinions on the standard of postoperative care in an intensive care and anesthesia department were evaluated in this study. **Objective:** To assess the quality of postoperative care in the intensive care unit from the patients' perspective using standardized satisfaction questionnaires. **Material and methods:** Ten adult postoperative critically ill patients hospitalized to the Anesthesia and Intensive Care Clinic of the Targu Mures County Emergency Clinical Hospital were included in this observational case-series study with an intention-to-treat design. The EURO Q2 and EURO FS-ICU questionnaires were used to assess patient satisfaction and the perceived of postoperative care. Both closed-ended and open-ended questions were included in the physical questionnaires that were given to patients at their bedsides. Male and female patients over the age of 18 who needed postoperative critical care monitoring composed the study population. **Results :** Of the patients, half thought the therapy management was of outstanding quality overall, and the other half thought it was of very high quality. Sixty percent of interviewees said the atmosphere in the critical care unit was excellent. In terms of how well patients' requirements were attended to, 40% of respondents said that their needs were heard, and 10% thought the response was adequate. 30% of patients thought the explanations about their condition and therapy were good, while 10% thought they were satisfactory. **Conclusions:** Patients had a favorable opinion of the care they received in the intensive care unit post-surgery. They valued the promptness of interventions, the professionalism of the medical team, and the lucidity of the explanations given about the treatments carried out and their health.

Keywords: postoperative, quality of care, intention-to-treat

CHANGES IN CLIMACTERIC-LIKE SYMPTOMS AFTER HYSTERECTOMY WITH OPPORTUNISTIC SALPINGECTOMY AND OVARIAN PRESERVATION: A PRE- AND POSTOPERATIVE WHQ-BASED STUDY

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Background: Hysterectomy with bilateral salpingectomy and ovarian preservation is a surgical procedure often performed on premenopausal women with benign uterine conditions. Given the partial vascularization of the ovary from the tubal arch, disruption of this pathway through salpingectomy, has raised concerns regarding its potential

impact on ovarian function and climacteric-like symptoms. **Objective:** This study aimed to evaluate changes in menopausal-like symptoms before and after hysterectomy with opportunistic salpingectomy. We used the Women's Health Questionnaire (WHQ) for this purpose, under license from the Mapi Research Trust. **Material and methods:** We conducted a prospective observational study including women undergoing hysterectomy with opportunistic salpingectomy and ovarian preservation for benign uterine issues. Participants completed the WHQ before their surgery and three months after. The questionnaire assessed somatic, vasomotor, psychological, sexual symptoms, and sleep disturbances. We performed statistical analysis using IBM SPSS Statistics. Paired t-tests and Wilcoxon signed-rank tests were used, with $p < 0.05$ considered significant. **Results :** A total of 31 women were analyzed, aged between 34-50 years. Paired analysis showed significant postoperative changes in several categories. Depression, somatic symptoms, anxiety, sexual dysfunction and perceived attractiveness indicated significant increases following surgery ($p < 0.05$). On the other hand, menstrual symptoms showed a marked and significant decrease ($p < 0.001$). Sleep disturbances did not reveal a significant postoperative change. **Conclusions:** After hysterectomy with ovarian preservation and opportunistic salpingectomy, menstrual symptoms have improved, whereas somatic, vasomotor, psychological, and sexual domains showed mild to moderate changes, consistent with commonly reported short-term climacteric-like changes in the literature. Also, this finding could reflect the psycho-emotional impact of surgery in relation to body image and self-perception after uterine removal. Sleep patterns were not significantly affected. *This research was funded by the George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Târgu Mures, Research, Grant number 171/09.01.2024.*

Keywords: hysterectomy, opportunistic salpingectomy, ovarian preservation, menopausal symptoms

CHARACTERISTICS OF PATIENTS WITH PARKINSON'S DISEASE 10 YEARS AFTER DIAGNOSIS

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Background: Neurodegenerative diseases and especially Parkinson's disease (PD) have recently returned to the attention of researchers due to the increase in the number of cases diagnosed in recent years, on the one hand, and, on the other hand, due to the increasingly younger age of onset. If at diagnosis, motor symptoms are more evident, over the years, non-motor symptoms become more important. **Objective:** Analysis of the clinical profile of patients with Parkinson's disease diagnosed for over 10 years, highlighting motor and non-motor symptoms, complications associated with the underlying disease or comorbidities, and treatment. **Material and methods:** I bring to your attention a study conducted on a group of 30 patients diagnosed with Parkinson's disease for over 10 years. During this period, patients associate, in addition to bradykinesia, tremor, and rigidity, postural instability, falls, dysphagia, psychotic symptoms, and dysautonomia, in addition to motor fluctuations such as dyskinesia and blockage. Demographic characteristics, mode of onset, clinical form of the disease, evolution, motor complications associated with the evolution of the disease, those associated with treatment, and non-motor manifestations evaluated in dynamics were evaluated. **Results :** After 10 years from diagnosis, most patients with PD were in the mid-advanced stages (stage 3 or 4 on the Hoehn and Yahr scale), characterized by a significant decrease in physical independence and by the appearance of significant motor and non-motor complications. Only 8 patients (out of 30) were diagnosed with PD stage 3 H&Y, presenting postural instability and phenomena of short-term motor blockage and dyskinesias. These 8 patients were on oral levodopa combined with a dopaminergic agonist and/or MAO-B (monoamine oxidase inhibitor type B), and 4 were on Apomorphine PEN. 22 patients in the study group were diagnosed with PD standard 4 H&Y and were on device-assisted therapy (1 patient apomorphine subcutaneous, 9 patients Duodopa, and 12 patients Lecigon). 7 of the patients were diagnosed with dementia, and one patient had severe swallowing disorders and pulmonary aspiration. **Conclusions:** Patients with Parkinson's disease presented a heterogeneous clinical profile and an increased frequency of complications. After 10 years from the diagnosis of Parkinson's disease, the patient's clinical profile is complex and multi-symptomatic, requiring a multidisciplinary approach. The major challenge for patients with long-term Parkinson's disease remains the recognition and management of non-motor complications (bulbar, psychiatric) that can greatly worsen the prognosis of these patients.

Keywords: Neurodegenerative diseases, Parkinson's disease, Dyskinesia, non-motor symptoms

CHEMICAL REPROGRAMMING OF HUMAN DERMAL AND UMBILICAL FIBROBLASTS AND EPIGENETIC CHARACTERIZATION OF PARTIAL INDUCTION TOWARD INDUCED PLURIPOTENT STEM CELLS (IPSCS)

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Background: Partial cellular reprogramming is a promising field in regenerative medicine, enabling somatic cells to revert to a younger state without fully returning to pluripotency. Chemical reprogramming offers a safer and more controllable alternative compared to genetic methods. In addition to adult dermal fibroblasts, umbilical fibroblasts represent a biologically younger cell source, potentially exhibiting higher plasticity and reprogramming efficiency. Comparing these two cell types provides insight into how cellular origin and age influence chemically induced pluripotency. **Objective:** To document the development and efficiency of chemically induced pluripotent states and to compare reprogramming dynamics between adult dermal fibroblasts and umbilical fibroblasts. **Material and methods:** Adult human dermal fibroblasts and human umbilical fibroblasts were isolated and cultured under identical conditions. Both cell types were subjected to the same 21-day chemical reprogramming protocol to induce pluripotency. The experiment was divided into three one-week cycles. During the first four days of each cycle, the cells were treated with an induction cocktail consisting of: • valproic acid • TGF- β inhibitor • DNMT inhibitor • tranylcypromine • forskolin • GSK3 β inhibitor • ROCK inhibitor • ascorbic acid This treatment was performed in a culture medium composed of: DMEM/F12 + 20% KSR + 1% NEAA + GlutaMAX + 1 mM β -mercaptoethanol. The remaining three days of each cycle served as a stabilization phase, during which the cells were incubated in mTeSR1 medium at 5% CO₂ and 37°C. After each cycle, fibroblast samples from both dermal and umbilical cultures were collected and frozen in TRIzol reagent for subsequent epigenetic and gene expression analyses. **Results :** During the 21-day induction period, both dermal and umbilical fibroblasts exhibited gradual morphological changes, starting to form colony-like structures resembling embryonic stem cells. Gene expression analyses aimed to observe the gradual activation of pluripotency-associated markers (OCT4, NANOG, SOX2, MTOR). Across all three cycles, both cell types demonstrated stepwise and cumulative reprogramming, though the efficiency and kinetics differed, suggesting that cellular age and origin significantly influence reprogramming potential. Gene expression analyses revealed a progressive upregulation of pluripotency-associated markers (OCT4, NANOG, SOX2) over successive cycles, while alterations in MTOR expression suggested ongoing epigenetic reprogramming. Overall, the findings support the conclusion that chemical induction is an effective approach for driving cells toward a pluripotent state. **Conclusions:** Chemical induction is an effective and controllable method for reprogramming both adult dermal and umbilical fibroblasts into pluripotent stem-like cells. Partial reprogramming-where cells retain their identity but undergo measurable epigenetic rejuvenation-is achievable in both cell types.

Keywords: Chemically induced pluripotent stem cells (CiPSCs), dermal fibroblasts, umbilical fibroblasts, epigenetic reprogramming

CLINICAL OUTCOMES OF AUTOLOGOUS HEMATOPOIETIC STEM CELL TRANSPLANTATION: A SINGLE-CENTER RETROSPECTIVE STUDY

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Background: Autologous hematopoietic stem cell transplantation (ASCT) remains a key therapeutic approach in several malignant hematologic disorders, contributing to improved disease control, prolonged survival, and better quality of life. **Objective:** This study aimed to assess the clinical outcomes of ASCT performed at the Hematology and Transplantation Center in Tîrgu Mureş, Romania. **Material and methods:** A retrospective analysis was conducted on 97 consecutive patients who underwent ASCT between January 2021 and December 2024. Evaluated parameters included the underlying diagnosis, the number of infused CD34+ cells, neutrophil and platelet engraftment times, and post-transplant complications. Statistical analyses were performed to assess associations between variables, with statistical significance defined as $p < 0.05$. **Results :** The mean patient age was 49.4 years. The most frequent indications for transplantation were multiple myeloma ($n = 52$), Hodgkin lymphoma ($n = 21$), and non-Hodgkin lymphoma ($n = 17$). The overall survival (OS) rate was 90.72%. No

statistically significant differences were observed between survivors and deceased patients regarding the number of infused CD34+ cells (4.37×10^6 vs. 4.51×10^6 cells/kg; $p = 0.832$) or neutrophil engraftment time (13.01 vs. 13.11 days; $p = 0.898$). Platelet engraftment occurred significantly later compared to neutrophil engraftment (15.09 vs. 13.02 days; $p < 0.001$). The most frequent complications included *Clostridioides difficile* infection and urinary tract infections, while common adverse events were diarrhea, febrile neutropenia, and deep vein thrombosis. These complications were not significantly associated with OS. In contrast, the presence of cardiovascular disease, dyslipidemia, and diabetes was associated with a significantly increased risk of complications and poorer survival outcomes. **Conclusions:** Autologous stem cell transplantation represents a safe and effective treatment modality, with favorable survival outcomes observed in our cohort. Our findings underscore the significant impact of comorbidities on post-transplant complications and survival, emphasizing the importance of careful patient selection and risk stratification.

Keywords: Autologous hematopoietic stem cell transplantation, Multiple myeloma, Engraftment, Overall survival

CLINICAL OUTCOMES OF CAROTID ENDARTERECTOMY VERSUS STENTING IN CAROTID ARTERY STENOSIS

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Background: Stroke remains a leading cause of mortality globally, with carotid artery stenosis significantly contributing to the occurrence of ischemic strokes. Symptomatic patients often undergo treatment through carotid endarterectomy (CEA) or carotid artery stenting (CAS). For asymptomatic individuals, both CEA and CAS are viable treatment options, considered among the most effective pharmacological interventions. **Objective:** This study aimed to review current guidelines and large-scale studies, while critically analyzing their findings when comparing CEA and CAS. **Material and methods:** We performed an extensive literature search on PubMed using the precise terms "carotid artery stenting", "carotid endarterectomy", "stroke and carotid artery stenting", and "stroke and carotid endarterectomy". The selection criteria were restricted to free full-text English-language publications and randomised clinical trials that included individuals aged 18 and above. Only articles published between January 2009 and June 2024 were considered for this evaluation. After database screening, 589 studies were initially identified. After removing duplicates and records that did not meet the search criteria, 186 articles remained. Subsequent screening of abstracts and full texts led to the exclusion of studies that did not address the investigated topic, had unavailable full text, involved an inappropriate age group, or were published in languages other than English. Ultimately, 10 studies met all inclusion criteria and were included in the final analysis. **Results :** This comprehensive study provides a robust comparison of CAS and CEA across multiple high-quality trials, focusing on key outcomes such as stroke rates, death rates, myocardial infarction rates, and long-term survival. The synthesized data indicate that CEA consistently demonstrates lower stroke and death rates compared to CAS, reinforcing its safety profile. Based on the included papers, CEA is the preferred surgical procedure for many patients with CAS. This is mostly because it has the capacity to greatly decrease the immediate and long-term dangers of stroke and mortality. While CAS may still be appropriate in specific contexts, such as for patients with certain anatomical considerations or higher surgical risks, CEA generally offers a superior safety profile. **Conclusions:** CEA demonstrates superior safety outcomes compared with CAS in most patients with carotid stenosis, although stenting remains an appropriate option in selected high-risk cases, supporting a patient-tailored therapeutic approach.

Keywords: carotid stenosis, carotid endarterectomy, carotid artery stenting, vascular surgery

CLINICAL UTILITY OF DUAL-ENERGY CT FOR DETECTION, CHARACTERIZATION, AND STAGING OF LUNG TUMORS: A RAPID REVIEW

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Background: Lung cancer is one of the leading causes of cancer-related mortality worldwide. Conventional computed tomography (CT) is the preferred method for evaluating pulmonary nodules because of its high-resolution imaging. However, it mainly provides morphological information, such as size, shape, and density. Dual-energy CT (DECT), a newer technique, uses two energy levels, enabling material decomposition and the

measurement of quantitative parameters. These parameters may provide additional information about tumor perfusion, vascularization, and tissue composition. **Objective:** This rapid review aimed to evaluate the clinical utility of DECT for the detection, characterization, and staging of lung tumors. **Material and methods:** This rapid review was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. A literature search was performed in the PubMed and Cochrane Library databases for studies published between 2005 and 2025. Studies were included if they evaluated detection, characterization, or staging of lung tumors using quantitative DECT parameters. Case reports, editorials, duplicate studies, and studies without quantitative DECT data were excluded. Descriptive data analysis was performed using Microsoft Excel. **Results :** This rapid review included 24 studies, containing 17 retrospective (70.83%) and 7 prospective studies (29.17%). Among them, one study (4.17%) used DECT for detection of lung tumors, demonstrating its utility in improving detection of mixed ground-glass nodules and invasive adenocarcinoma. A total of 22 studies (91.67%) focused on tumor characterization, showing a significant correlation between iodine uptake and perfusion, and demonstrating the utility of DECT in improving differentiation between malignant and benign lesions. They also provided complementary metabolic information regarding malignancy and reported correlations between DECT parameters and Ki-67 expression in non-small cell lung cancer, the prediction of EGFR mutation, PD-L1 status and treatment response. Furthermore, these studies showed an association between iodine volume and degree of tumor differentiation, as well as correlation of iodine uptake and fluorodeoxyglucose (FDG) parameters. One study (4.17%) demonstrated DECT utility in staging of lung tumors by prediction of mediastinal lymph node metastasis. Across all included studies, iodine (50%), radiomics (16.67%), and spectral attenuation (12.50%) were the most frequently investigated DECT parameters. **Conclusions:** Based on the existing literature, DECT appears to complement conventional imaging techniques by providing additional information on tumor function and biological behavior. However, the current evidence varies considerably, and most studies are retrospective with relatively small study populations. Thus, it is necessary to conduct larger prospective studies with standardized scanning protocols to evaluate the clinical utility of DECT in lung tumors.

Keywords: Dual-energy CT, lung cancer, spectral CT, pulmonary nodule

COMPARATIVE ANALYSIS OF SERUM 25(OH)D LEVELS IN PREMENOPAUSAL AND POSTMENOPAUSAL WOMEN: A CROSS-SECTIONAL STUDY

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Background: The essential role of vitamin D in human physiology is well-known. However, despite advances in preventive medicine, vitamin D deficiency continues to affect a significant portion of the global population, with main screening policies focusing on postmenopausal women to prevent the risks of osteoporosis and fractures. **Objective:** Considering this fact, we aimed to evaluate and compare 25-hydroxy vitamin D [25-(OH)D] levels between women of reproductive age and postmenopausal women. **Material and methods:** This monocentric, cross-sectional study based its retrospective analysis on the serum levels of 25-(OH)D collected from January 1st to December 31st, 2024, as part of the national screening programme at the Endocrinology Clinic. Patients receiving vitamin D supplementation, male subjects, premenarchal females, and individuals with incomplete reproductive histories were excluded, resulting in a final study group of 378 patients. They were divided into groups based on their reproductive status: premenopausal women (n = 205) and postmenopausal women (n = 173). The mean 25(OH)D levels of the two groups were then compared. **Results :** The mean level of 25(OH)D was 20.31 ± 7.33 ng/ml in the premenopausal group, and 24.57 ± 9.61 ng/ml in the postmenopausal group, indicating that the women of reproductive age had significantly lower levels compared to the postmenopausal women ($p < 0.001$). **Conclusions:** These results challenge the hypothesis that postmenopausal women are the primary risk group for vitamin D deficiency and emphasize necessity of screening among younger populations. Further prospective interventional studies on working-age indoor populations are needed to assess the efficacy of targeted occupational screening programmes and determine optimal supplementation strategies.

Keywords: vitamin D deficiency, 25-hydroxy vitamin D, premenopausal women, postmenopausal women

COMPARATIVE EVALUATION OF STATIN-INDUCED HEPATOTOXICITY IN LIVER DISEASES: A NARRATIVE REVIEW

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Background: Statins are the primary pharmacological intervention for dyslipidemia and cardiovascular prevention. Despite their widespread use, concerns regarding statin-induced hepatotoxicity often limit their prescription in patients with underlying liver conditions. Understanding the actual risk-benefit ratio is essential for optimizing clinical management in these vulnerable populations. **Objective:** The study provides a comparative evaluation of the hepatotoxic potential of various statins in the context of pre-existing liver diseases, while also assessing their potential pleiotropic benefits on hepatic outcomes. **Material and methods:** The aim of this paper is to highlight the hepatotoxic effects of statins in patients with pre-existing liver disease by selecting and analyzing all articles on this topic written exclusively in English and available in the Medline database. The analysis compared different statin classes (lipophilic vs. hydrophilic) and their specific metabolic pathways (notably CYP3A4) in relation to drug-induced liver injury (DILI). **Results :** The comparative analysis shows that while statins can trigger idiosyncratic liver injury, severe hepatotoxicity is rare. Atorvastatin and Simvastatin were more frequently associated with mild-to-moderate elevations in transaminases, often following a cholestatic or autoimmune-like pattern. However, the data also reveal a significant protective effect: statin use was associated with reduced fibrosis progression and a lower incidence of hepatocellular carcinoma (HCC). Notably, lipophilic statins demonstrated a stronger correlation with improved recurrence-free survival in post-resection HCC patients. **Conclusions:** Statin therapy is clinically justified in patients with chronic liver disease, as the cardiovascular and cancer-prevention benefits far outweigh the low risk of hepatotoxicity. While DILI can occur, it is usually rare, mild, and reversible by adjusting the dose or switching the medication. In addition to lowering cholesterol, statins offer important protective effects, such as slowing the progression of liver fibrosis and reducing the risk of hepatocellular carcinoma. Consequently, clinical practice should shift from avoiding these drugs to a more proactive approach, recognizing statins as safe and essential tools in the long-term management of chronic liver dysfunction.

Keywords: Statins, Hepatotoxicity, Comparative Analysis, DILI

COMPARATIVE STUDY OF DRINKING WATER QUALITY IN CENTRALISED DISTRIBUTION SYSTEMS IN SFÂNTU GHEORGHE AND TÂRGU MUREŞ

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Background: The quality of centrally distributed drinking water is a key concern in public health. Continuous monitoring of physicochemical and microbiological parameters is required to ensure safety and regulatory compliance. **Objective:** The aim of the study was to evaluate and compare the differences in the quality of centrally distributed water from two distinct water treatment plants in Târgu Mureş (Mureş County) and Sfântu Gheorghe (Covasna County). **Material and methods:** A comparative, observational, cross-sectional study was conducted in 2025. Evaluated parameters included free chlorine concentration, microbiological indicators, electrical conductivity, hardness, pH, organic substances, ammonium and nitrites. Data were collected monthly from each county's local public health authority, resulting in a total of 12 samples per parameter for each location. Statistical analysis was performed using the Mann-Whitney U test for all comparisons to maintain consistency across the study. This non-parametric test was chosen because it is suitable for non-normally distributed data, and $p < 0.05$ was considered statistically significant. **Results :** The mean free chlorine concentration was significantly higher in Târgu Mureş compared to Sfântu Gheorghe (0.707 vs. 0.291 mg/L, $p < 0.001$). Microbiological parameters showed no contamination in either location. The median electrical conductivity and water hardness were substantially higher in Sfântu Gheorghe (681 $\mu\text{S}/\text{cm}$ vs. 224 $\mu\text{S}/\text{cm}$; 18 $^\circ\text{dH}$ vs. 4.81 $^\circ\text{dH}$), indicating elevated mineral content. Turbidity was greater in Sfântu Gheorghe (0.300 vs. 0.192 NTU, $p < 0.001$), whereas pH values were similar (7.51 vs. 7.34, $p > 0.05$). Organic substances were significantly higher in Târgu Mureş (1.19 vs. 0.346 mg O_2/L , $p < 0.001$), suggesting more oxidisable matter. Ammonium levels were low in both locations, but slightly elevated in Târgu Mureş (0.006 mg/L vs. 0.004 mg/L). Nitrite concentrations were negligible in Sfântu Gheorghe (0.000 mg/L) and remained very low in Târgu Mureş (0.004 mg/L). All parameters complied with the limits established by

Romanian legislation (Government Ordinance no. 7/2023). **Conclusions:** The study revealed notable differences in drinking water composition. Higher free chlorine and organic substance levels in Târgu Mureş may enhance microbiological safety, but contribute to disinfection by-products and affect taste and odour. Elevated conductivity and hardness in Sfântu Gheorghe indicate higher mineral content, influencing pipe scaling and appliance performance without microbiological risk. Greater turbidity emphasises the need for effective filtration, while similar pH values suggest chemical stability. Low ammonium and nitrites indicate minimal chemical contamination. These findings underscore the importance of continuous monitoring and tailored treatment strategies to ensure safe, high-quality drinking water.

Keywords: water quality, physicochemical parameters, free chlorine, drinking water

COMPARISON OF ULTRASOUND, CAPNOGRAPHY, AND AUSCULTATION FOR ENDOTRACHEAL TUBE CONFIRMATION IN PERIOPERATIVE AIRWAY MANAGEMENT: A PROSPECTIVE OBSERVATIONAL STUDY

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Background: Effective airway control and accurate confirmation of endotracheal tube (ETT) positioning are fundamental in general anesthesia, with increased relevance in laparoscopic surgery due to the impact of pneumoperitoneum and positioning on respiratory mechanics. Standard techniques such as capnography and auscultation may be less reliable in unstable patients. Ultrasound offers a fast, point-of-care alternative. **Objective:** This study aimed to evaluate the role of ultrasound in confirming correct endotracheal tube placement in patients undergoing elective laparoscopic surgery and to compare the time required for confirmation using ultrasound, capnography, and auscultation. **Material and methods:** This prospective, cross-sectional clinical study was conducted between November 2025 and January 2026 in the Anesthesia and Intensive Care Clinic of Targu Mures County Emergency Clinical Hospital. Twenty adult patients undergoing elective laparoscopic surgery were included. After orotracheal intubation, confirmation of ETT placement was performed using three methods: capnography (3-wave and 5-wave), auscultation, and transtracheal ultrasonography. Time to confirmation was measured. Statistical analysis included the Shapiro-Wilk test, Mann-Whitney U test, independent t-test, and Friedman test with post hoc Wilcoxon comparisons. **Results :** Ultrasound was the fastest method for confirming ETT placement, with a mean time of 13.10 ± 4.01 seconds, significantly shorter than capnography (3-wave: 26.80 ± 7.91 seconds; 5-wave: 31.70 ± 7.78 seconds) and auscultation (34.45 ± 8.30 seconds) ($\chi^2(3)=49.02$, $p<0.001$). Post hoc analysis confirmed statistically significant differences between ultrasound and all other methods ($p<0.0083$). Ultrasound also showed the lowest variability. No significant differences were found between male and female patients for any method. Due to the low number of difficult airway cases, subgroup analysis based on airway difficulty was not feasible. **Conclusions:** Ultrasound offers quick and reproducible confirmation of ETT placement, independent of pulmonary perfusion, which may affect the accuracy of capnography. In addition, it provides real-time visualization of the airway, facilitating use in both routine practice and difficult airway management. These findings are in line with recent evidence supporting ultrasound as a reliable option alongside or instead of standard methods. Ultrasound represents a fast and dependable method for confirming correct endotracheal tube positioning during laparoscopic interventions. Its independence from physiological factors enhances its utility in perioperative airway management.

Keywords: airway management, ultrasound, capnography, endotracheal intubation

COMPLEX DIAGNOSIS AND TREATMENT IN PATIENTS WITH SEVERE BRONCHIAL ASTHMA

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Background: Severe bronchial asthma (SBA) is the phenotype of asthma that remains uncontrolled, despite optimal treatment with inhaled corticosteroids in high-dose (ICS), and long-acting beta-agonists (LABA) and supplementary controllers (anticholinergic inhalers) despite eliminating risk factors (allergens, smoking, gastroesophageal reflux, overweight or infections) and optimization of the technique of inhalation. Association of

the biologic therapy with monoclonal antibodies will allow better symptom control exacerbation prevention and decrease complications. **Objective:** The present study evaluates the clinical profile and advanced therapy of patients with SBA. **Material and methods:** The study had a retrospective, observational, descriptive and analytical design, based on 21 patients diagnosed with SBA admitted to the Pneumology Clinic between 2020-2025. The study analyzed demographic data, comorbidities, spirometry at two moments (T1, T2), biomarkers (eosinophils and IgE), symptoms (dyspnea, wheezing, respiratory insufficiency) and clinical control, using ACT. The statistical analysis was performed in Microsoft Excel using descriptive statistics, T-test, Mann-Whitney, chi-square test, Pearson/Spearman and pivot. **Results :** The study revealed a female predominance (76,2%), with a mean age of 57 years. Dyspnea was the main symptom (90,5%) and 19% respiratory insufficiency, followed by wheezing. The risk factors, such as smoking and occupational exposure were correlated with frequent and severe symptoms and reduced pulmonary function ($p<0,05$). The main phenotype was allergic asthma, 47,6% and 76,2% classified like SBA. 71,4% underwent biological therapy and they showed improvement in control of symptoms (ACT average 18 comparing with previous 16) and pulmonary function (higher FVC after 6-month treatment). **Conclusions:** SBA is a complex phenotype that requires individualized diagnosis and advanced treatment. The role of risk factors in disease control is crucial since they can be modified and can significantly improve the pulmonary function and result in better disease management.

Keywords: SEVERE ASTHMA, DISEASE CONTROL, BIOLOGIC TREATMENT, RISK FACTORS

CONDUCTION DISTURBANCES AND PACEMAKER REQUIREMENT AFTER TRANSCATHETER AORTIC VALVE IMPLANTATION: SELF-EXPANDING VS BALLOON-EXPANDABLE VALVES

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Background:

The transcatheter Aortic Valve Implantation (TAVI) procedure is a minimally invasive method used in selected patients as an alternative to open heart surgery for severe aortic stenosis, which involves the implantation of a bioprosthesis in the aortic position on top of the native valve. As advances in the medical technique and valve structure have lately expanded the indications for TAVI, the limited lifespan of a bioprosthetic valve is a source of limitations. Thus, elderly, more frail patients with comorbidities are usually the selected candidates for TAVI. Considering the anatomical proximity of the conduction system to the aortic valve, the fact that fibrosis at this level develops with age and the likelihood of a degenerative aetiology of the aortic stenosis increases, with a high calcium accumulation, implanting a device that exerts pressure on neighbouring structure could result in complications at multiple levels. **Objective:** The objective of this study was to review the existing appropriate literature and investigate potential links between valve type and post-interventional complications with the main focus on complications requiring pacemaker implantation. **Material and methods:** The research included articles in English, indexed in the "Pubmed" platform. Twenty-five articles were part of the initial selection and after curation, only fifteen articles were part of the final data-base. The articles were included based on the following operators: "Transcatheter Aortic Valve Implantation", "Severe aortic stenosis", "Low surgical risks". A case report of a patient with a self-expanding prosthesis was used as an example of such complications. **Results :** The life expectancy of the subjects increased significantly, pacemaker implantation being more frequent in patients who had pre-existing right bundle branch block reported in their medical history regardless of valve type. A pacemaker was also required more frequently in patients with no pre-existing manifest conduction disturbance, but had a self-expanding valve implanted, due to a higher degree of compression of the interventricular septum, thus affecting the fibres of the His bundle. Self-expanding prosthetics can exert continuous pressure on the interventricular septum, compressing the cardiac conduction system and increasing the risk of conduction disorders compared to the balloon-expandable valves. **Conclusions:** Patients who have had a self-expanding valve implanted have an increased risk of complications, because it affects both the electrical impulse conduction system along the ventricular myocardium. Less commonly, there may be a risk of embolism, as calcified fragments located at the aortic valve annulus can migrate and lead to medical emergencies, such as stroke.

Keywords: Transcatheter Aortic Valve Implantation, Severe aortic stenosis, Low surgical risks

CORRELATION BETWEEN SERUM LEVELS OF 25-HYDROXYVITAMIN D AND BODY WEIGHT IN THE ADULT POPULATION

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Background: Vitamin D (cholecalciferol) is a fat-soluble vitamin essential for the proper functioning of the human body, playing a complex role in maintaining bone health, as well as supporting mineral balance and muscular and immune functions, including involvement in cardiovascular and metabolic regulation. The relationship between serum levels of 25-hydroxyvitamin D and body weight represents a topic of current interest, given the role of vitamin D in regulating metabolic processes. **Objective:** The aim of this study was to analyze the relationship between serum levels of 25-hydroxyvitamin D and body weight, in order to identify possible associations between vitamin D status and variations in body mass, as well as its role in metabolic processes. **Material and methods:** In this retrospective, monocentric study, 460 adult patients hospitalized in the Endocrinology Clinic in 2024 were included. All patients had their serum 25-hydroxyvitamin D levels measured the National Program for the Evaluation of Vitamin D Status and underwent a complete clinical assessment. **Results :** The results showed no statistically significant correlation between serum vitamin D levels and body weight ($\rho = -0.044$; $p = 0.342$), suggesting that, in the studied sample, vitamin D is not a major determinant of anthropometric parameters. A subanalysis excluding patients receiving vitamin D supplementation yielded similar results ($\rho = 0.019$; $p = 0.744$), further confirming that serum vitamin D levels do not significantly influence body weight. **Conclusions:** The absence of an association highlights the complex nature of the relationship between vitamin D and anthropometric parameters, which may be influenced by multiple factors such as sun exposure, lifestyle, level of physical activity, and vitamin D supplementation, all of which can modulate both vitamin D status and body composition.

Keywords: Vitamin D, body weight, adults

CORRELATION OF THE TRIGLYCERIDE–GLYCATED HAEMOGLOBIN INDEX WITH METABOLIC PHENOTYPE IN HEART FAILURE WITH PRESERVED EJECTION FRACTION PATIENTS

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Background: Heart failure with preserved ejection fraction (HFpEF) is a syndrome defined by impaired ventricular filling despite normal systolic function ($EF \geq 50\%$), with metabolic impairment contributing to its pathophysiology, driving cardiac remodelling and functional impairment. **Objective:** This study aims to characterize the impact of triglyceride-glycated haemoglobin index (TyHi) in HFpEF by investigating the correlation of TyHi with metabolic parameters and disease severity in patients with HFpEF. **Material and methods:** This retrospective study included 86 adult patients diagnosed with HFpEF admitted to the Internal Medicine II Clinic from the Emergency Clinical County Hospital of Tîrgu-Mureș between 2022 and 2025 and who offered informed consent. HFpEF diagnosis was established based on the 2021 ESC Guidelines. The demographic and clinical data were collected and subsequently analyzed using descriptive and statistical methods. TyHi was calculated as $\ln[HbA1C(\%)*TG(md/dL)/2]$. NT-proBNP served as a reference biomarker for HFpEF severity. Statistical significance for p was set to 0.05. **Results :** In our cohort, 54.1% of patients were female, with a median age of 69.5 years (IQR 66-76). NYHA class II was present in 57% of cases, followed by 34% with NYHA III, and 9% of the patients had NYHA classes I or IV. Correlation analyses were performed between the TyHi and NT-proBNP, body mass index (BMI), and low-density lipoprotein (LDL) cholesterol. TyHi showed a weak, non-significant correlation with NT-proBNP ($r = 0.11$, $p = 0.32$). Further analysis of metabolic parameters revealed no significant correlation between the TyHi and BMI ($r = -0.01$, $p = 0.93$), suggesting no association with obesity in this cohort. LDL-cholesterol had a non-significant weak positive correlation with TyHi ($r = 0.18$, $p = 0.096$). **Conclusions:** Our cohort did not reveal a correlation between TyHi and HFpEF functional severity, but the findings suggest that TyHi may have a role in characterizing metabolic phenotypes in HFpEF rather than reflecting disease severity. Further studies on larger cohorts should be performed.

Keywords: Heart failure with preserved ejection fraction, cardiometabolic, TyH index, NTproBNP

DESIGN AND BIOMECHANICAL EVALUATION OF 3D-PRINTED SILICONE VASCULAR MODELS FOR SURGICAL SIMULATION

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Background: In open vascular surgery, a high degree of technical accuracy and refined manual dexterity is required to ensure favorable outcomes. Traditional training pathways, however, are often constrained by limited operative exposure and increasing trainee demands, necessitating more accessible simulation tools. **Objective:** The objective of this study was to develop vessels using 3D printing and silicone modelling techniques that closely replicate the tactile feel and mechanical behaviour of native human arteries. **Material and methods:** To identify a compound that closely replicates the elasticity and shear properties of real vascular tissue while allowing incision and suturing without structural failure, we selected ZA TT 1240 (Zhermack), an addition-type silicone that, when mixed in a 1:1 ratio with its activator solution (measurement error of $\pm 3\%$), exhibits mechanical properties suitable for vascular simulation after 24 hours of curing at 23 °C. The cured material has a Shore A hardness of 12 (ASTM D2240), a tensile strength of 2.6 N/mm² (ASTM D412), an elongation at break of 550% (ASTM D412), and a tear strength of 17 N/mm (ASTM D624), values that closely approximate the compliance and durability required for surgical practice models. Custom pouring molds were designed in Blender, consisting of a central cylindrical core sized to the median internal diameter of the target artery and two diagonally split outer wall components, which together formed a cavity for silicone casting. The molds were fabricated using PLA (polylactic acid) 3D printing, chosen for its chemical inertness toward silicone, ensuring dimensional stability during curing and allowing easy demolding without damaging the cast structure. **Results :** Ten silicone vessels were produced using 3D-printed molds, each replicating the internal diameter and wall thickness of the human aorta. Biomechanical characterization demonstrated comparable Cauchy stress to human aorta (183.5 kPa vs. 190.5 kPa, $p=0.443$) and similar Young's modulus values (941.5 kPa vs. 1034.6 kPa, $p=0.458$). Realism was identified as the key feature of an ideal training model for an ideal vessel. While biological vessels were considered the most realistic option, they posed challenges in preparation, hygiene, and storage. Silicone models were less realistic but more practical, cost-effective, and reusable, making them the preferred option for frequent training despite minor structural limitations. **Conclusions:** The developed silicone vascular model demonstrated biomechanical properties comparable to native vessels while offering superior practicality, hygiene, and reusability. Although biological models remain more realistic, the silicone model proved to be a reliable, cost-effective, and accessible alternative suitable for repeated vascular training.

Keywords: Training models, Silicone vessels, 3D printing, Vascular surgery

DETERMINANTS OF PROLONGED HOSPITAL STAY IN EMERGENCY ABDOMINAL SURGERY A THREE-YEAR RETROSPECTIVE STUDY.

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Background: Emergency abdominal surgery has substantial morbidity and resource utilization. The lengthy hospital stay is a considerable burden for both the patient and the healthcare system. Recognizing changeable and unchangeable indicators of a prolonged length of stay (LOS) helps optimize perioperative management and outcomes. **Objective:** To determine the clinical, operative, and postoperative factors that affected a longer hospital stay following emergency surgery. **Material and methods:** Our study was a retrospective observational study enrolling 100 adults having emergency abdominal surgery over a period of 3 years (2023-2025) at a tertiary surgical unit. Data collection was extracted from the hospital's electronic system (Hypocrate). Thus, the measurements consisted of demographic characteristics; comorbidities (Charlson Comorbidity Index); preoperative status (asa score, sepsis); intraoperative (surgical approach, operative time, blood loss); and postoperative (complications, admission in ICU). A prolonged length of stay (LOS) was defined as more than 10 days in the hospital. The utilization of Chi-square and Mann-Whitney U tests on Univariate analysis, followed by multivariate logistic regression for independent predictors. Results were expressed as odds ratios (OR) at 95% confidence interval. **Results :** The average age of the patients was 64.2 ± 13.5 years. The most common ASA status was III

(58%). In 32 percent of cases, LOS was Prolonged. Complications after surgery were present in 38% of patients. They were strongly associated with prolonged LOS (68.7% versus 14.7%; $p < 0.001$). Admission to the ICU was more prevalent among patients with prolonged LOS (56.2% vs 18.0%, $p = 0.002$). The results showed that the independent predictors of significantly prolonged LOS on multivariate analysis were postoperative complications (OR=5.8, 95% CI: 2.4-13.9, $p < 0.001$), ICU admission (OR=3.1, 95% CI: 1.2-7.9, $p = 0.01$), and operative time >120 minutes (OR=2.6, 95% CI: 1.1-6.3, $p = 0.03$). Increase in ASA score ($\geq$ III) was trending towards significance ($p = 0.06$). The mortality rate at 30 days was observed to be 6% among those with serious complications (Clavien-Dindo grade IV-V) only. **Conclusions:** The postoperative complications and perioperative severity are the main reasons for prolonged hospital stays following emergency abdominal surgeries. The identification of high-risk patients as well as the optimization of surgical and postoperative management strategies may reduce length of stay and associated clinical outcomes.

Keywords: Emergency surgery, Length of stay, Postoperative complications, Abdominal surgery

DEVELOPMENT AND BIOMECHANICAL OPTIMIZATION OF LARGE-DIAMETER TISSUE-ENGINEERED VASCULAR GRAFTS FROM PORCINE AORTA

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Background: Decellularized xenogeneic scaffolds have emerged as a promising strategy for developing tissue-engineered vascular grafts (TEVG). However, a major limitation of this approach is the alteration of the native mechanical properties following decellularization. Therefore, the implementation of appropriate crosslinking techniques is necessary to reinforce the extracellular matrix and restore the mechanical integrity of the scaffold, thereby ensuring optimal functional performance. **Objective:** This study aims to develop, optimize, and validate a rapid decellularization protocol, together with a glutaraldehyde (GA)-based crosslinking strategy, for porcine aorta (PA) to generate large-diameter TEVG suitable for preclinical applications. **Material and methods:** Twelve PA specimens were harvested and processed within 6 hours of collection. Segments measuring 4-5 cm were subjected to a rapid decellularization protocol comprising saline washes followed by sequential perfusion with 1% Triton X-100 and 1% sodium dodecyl sulfate (SDS). Following decellularization, selected samples were crosslinked using GA. Native, decellularized, and crosslinked specimens were evaluated by uniaxial biomechanical testing to assess changes in mechanical properties. This work was supported by the "George Emil Palade" University of Medicine, Pharmacy, Science, and Technology of Târgu Mureş, Research Grant number 5955/1/17.06.2024. **Results :** Decellularized samples showed decreased thickness (1.37 $\pm$ 0.15 mm vs 1.51 $\pm$ 0.15 mm, $p=0.0366$), ultimate stress (US) (4.09 $\pm$ 0.25 MPa vs 5.34 $\pm$ 0.41 MPa, $p<0.0001$), and rigidity (4.12 $\pm$ 0.25 MPa vs 4.96 $\pm$ 0.42 MPa, $p<0.0001$), indicating lower extensibility compared to native tissue. Glutaraldehyde crosslinking significantly increased US relative to the decellularized specimens (5.16 $\pm$ 0.71 MPa vs 4.09 $\pm$ 0.25 MPa, $p=0.0008$) and enhanced rigidity compared to both the native (5.93 $\pm$ 0.84 MPa vs 4.96 $\pm$ 0.42 MPa, $p=0.0005$) and decellularized groups (5.93 $\pm$ 0.84 MPa vs 4.11 $\pm$ 0.25 MPa, $p<0.0001$), demonstrating improved matrix stiffness and mechanical strength. However, crosslinked samples exhibited a reduced strain capacity, indicating less compliance than native controls. **Conclusions:** Decellularization of PA reduces native mechanical strength, while glutaraldehyde crosslinking effectively restores and enhances scaffold stiffness and resistance. This combined approach shows promise for developing a mechanically suitable large-diameter TEVG for preclinical applications

Keywords: TEVG, Vascular Surgery, Crosslinking, Biomechanical Properties

DEVELOPMENT AND VALIDATION OF A NEW AUTOMATED METHOD FOR THE PRODUCTION OF PATIENT SPECIFIC, 3D-PRINTED DRILL GUIDES

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Background: Patient-specific, 3D-printed pedicle drill guides are becoming increasingly widespread in spine surgery. They increase the accuracy of implantation, make the insertion of pedicle screws safer, and reduce surgical radiation exposure. However, the segmentation and manual design process required to design the guides

is time-consuming, significantly increases human resource requirements, and thereby limits clinical adoption. **Objective:** The aim of our research is the development and validation of an innovative, script- and artificial intelligence-based automation solution for the production of 3D-printed drill guides, which significantly reduces the time required for design. **Material and methods:** In our study, we created drill guides for a total of 101 pedicle screws in 10 clinical cases. We performed the entire design process twice: using manual and automated methods. For automatic segmentation, we used the built-in, AI-based algorithm of Materialise Mimics. We integrated a custom-developed Python script into the Materialise 3-matic software, which automated the steps of the guide design. Following this, we performed test drillings with the guides created by the automated and manual methods. The drilled holes were marked with metal rods and then rescanned with CT. Drilling accuracy was evaluated based on the distance between the entry points of the planned and actual drill axes, as well as the angle enclosed by the two axes. **Results :** The AI-based segmentation and the script significantly reduced the time of segmentation and design compared to the manual method. The drilling accuracy achieved with the guides designed by the automated method did not fall short of the accuracy of the manually designed guides. **Conclusions:** Based on our results, the automation of guide design significantly reduces the time requirement of the design, while maintaining the drilling accuracy achievable with the manual procedure.

Keywords: Automation, Pedicle screws, Artificial Intelligence, Printing, Three dimensional

DIAGNOSIS AND STAGING OF SQUAMOUS CELL LUNG CANCER: EXPERIENCE AT THE PULMONOLOGY CLINIC IN TÂRGU-MUREȘ

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Background: Lung cancer remains the leading cause of cancer-related mortality worldwide, with an estimated 2.5 million new cases diagnosed in 2022. Non-small cell lung cancer (NSCLC) accounts for approximately 85% of cases, with squamous cell carcinoma as the second most frequent subtype, closely associated with cumulative tobacco exposure, advancing age and marked male predominance. Across Europe, notable disparities persist in incidence, stage at time of diagnosis, and access to advanced diagnostic modalities. While Western Europe countries benefit from structured screening programs and improved outcomes, Romania continues to face disproportionately high mortality rates, likely reflecting ongoing challenges in healthcare infrastructure and access to modern oncologic care. **Objective:** Evaluation of the epidemiologic profile, diagnosis and staging of squamous cell lung cancer at the pulmonology clinic in Târgu-Mureș and comparing the results with other national and European data. **Material and methods:** A retrospective study including 51 patients with confirmed histopathological diagnosis of squamous cell lung cancer, admitted to the Pneumology Clinic in Târgu-Mureș during the period of 2020-2025 was performed. The data of the patients was collected from the informatic system Hipocrate and the histopathological results from the archive of the clinic. For the statistical analysis chi square test was performed with a threshold of significance ($p < 0,05$). **Results :** My cohort includes 46 males and 5 women, 34 coming from rural and 17 from urban environment with a mean age of 66,7 years. 48 patients were smokers, with an average of 38,1 pack/year. Out of the 32 patients with documented TNM staging, T4 was predominant (26), with lymph node spreading N2 in 17 cases, Stage III being the most common (17 cases), followed by Stage IV (5 cases). The association analysis between origin and clinico-epidemiological factors revealed 4 statistically important associations. Alcohol consumption ($p=0,04$) and respiratory diseases ($p=0,031$) were increased in rural environments, while diabetes ($p=0,018$) and cardiovascular pathology ($p=0,010$) being significant in urban environments. **Conclusions:** The study confirms that Romania is following the Eastern European pattern, where the absence of a pulmonary screening is directly reflected by the late staging at the time of diagnosis.

Keywords: SCLC, Romania, Europe

DIAGNOSTIC PERFORMANCE OF CT ANGIOGRAPHY COMPARED WITH MRI IN NUTCRACKER SYNDROME: A SYSTEMATIC REVIEW

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Background: Nutcracker syndrome (NCS) is a condition in which the left renal vein (LRV) is compressed, usually between the aorta and the superior mesenteric artery. This causes renal venous hypertension, which can lead to

haematuria, flank or abdominal pain, orthostatic proteinuria, and/or pelvic venous congestion. Because "nutcracker anatomy" may be incidental, imaging must be interpreted in a clinical context, and invasive testing (contrast venography with renocaval pressure gradient) is often employed prior to intervention. Cross-sectional imaging using computed tomography angiography/venography (CTA/CTV) and magnetic resonance angiography/venography (MRA/MRV) is prevalent; however, the superiority of one method for diagnosis is still contested. **Objective:** To systematically review evidence comparing CTA/CTV versus MRI/MRA for diagnosing NCS, focusing on diagnostic accuracy and clinically important trade-offs. **Material and methods:** Design: PRISMA-guided systematic review (structured abstract). Data sources: PubMed and Google Scholar (searched for 2011-March 2026) using terms related to "nutcracker syndrome," "left renal vein," "CT angiography/venography," "MRI/MRA/MRV," "beak sign," "aortomesenteric angle," and "diagnostic accuracy." Eligibility: Human studies (2011-2026) evaluating CTA/CTV and/or MRI/MRA/MRV diagnostic findings or performance in suspected NCS; studies with a reference standard (venography/pressure gradient, intravascular ultrasound) were prioritized. Synthesis: Narrative synthesis (heterogeneous criteria and reference standards; insufficient head-to-head data for meta-analysis). **Results :** Direct comparisons between CT and MRI were rare; most validated morphologic parameters, including the CT "beak sign" and LRV compression ratios, were derived from CT-based studies. A venography-correlated CT study showed that the axial CT "beak sign" distinguished non-compensated NCS (renocaval gradient ≥ 3 mmHg) from controls, with 91.7% sensitivity and 88.9% specificity. Another CT cohort reported that an LRV compression ratio >2.25 achieved about 91% sensitivity and specificity. A paediatric study (2011-2026) identified the MRI "beak sign" as the most effective MRI parameter (77.6% sensitivity, 93.8% specificity). Combining MRI criteria increased specificity (up to $\sim 97.9\%$) but reduced sensitivity. A 2022 systematic review identified CT and ultrasound as the most commonly used imaging modalities and highlighted variability in diagnostic thresholds. **Conclusions:** In the last 10-15 years, CTA/CTV has shown the most reliable venography-based diagnostic accuracy, especially for the CT beak sign and compression ratios. MRI/MRA provides comparable anatomical evaluation without ionising radiation and may be preferred in paediatric or young adult populations, or when repeated imaging is anticipated; however, high-quality reference-standard validated accuracy data remain limited. Overall, CT is the most practical confirmatory cross-sectional test, while MRI is a good alternative when avoiding radiation or obtaining more physiologic information. Imaging findings should always be interpreted in conjunction with clinical presentation.

Keywords: Nutcracker syndrome, Left renal vein compression, Computed tomography angiography, Venography

DIETARY HABITS AND NUTRITIONAL STATUS AS DETERMINANTS OF MATERNAL AND FETAL OUTCOMES

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Background: Elevated pregestational body mass index (BMI) is associated with metabolic dysregulation, chronic inflammation, and endothelial dysfunction, contributing to hypertensive disorders, gestational diabetes mellitus, and adverse perinatal outcomes. Dietary patterns during pregnancy, including the frequency of consumption of different food groups, play a critical role in gestational metabolic homeostasis. **Objective:** To evaluate the association between BMI, dietary habits, nutritional supplementation on perinatal outcomes. **Material and methods:** A prospective study enrolled 170 pregnant women from 22+0 weeks of gestation until delivery. Data were collected using a structured questionnaire comprising: sociodemographic data, obstetric history, anthropometric measurements, self-perceived dietary balance. Dietary habits were assessed through a Food Frequency Questionnaire (FFQ) organized into several food groups: proteins, dairy products, carbohydrates, vitamin C-rich foods and cruciferous vegetables, micronutrient-dense foods, fruits and other vegetables; consumption of fats, processed foods, and sugary beverages. Statistical analysis was performed using SPSS 21. **Results :** The mean maternal age was 29.3 ± 5.1 years. Before pregnancy, 64.3% of participants had a normal BMI (mean 24.5 ± 4.1 kg/m²), while 24.2% were overweight and 11.5% obese. Gestational weight gain ranged from 4 to 30 kg (mean 11.0 ± 5.3 kg). Analysis of dietary habits revealed heterogeneous nutritional patterns: a relevant proportion of women reported suboptimal consumption of protein-rich and micronutrient-dense foods, while processed foods, sugary beverages, and high-fat items were frequently consumed. Self-perceived dietary balance was variable, with a considerable proportion of participants expressing uncertainty or acknowledging poor dietary habits. Pregnancy-induced hypertension occurred in 39.1% of women with elevated BMI vs. 7.5% with normal BMI;

gestational diabetes mellitus was more frequent in the overweight/obese group (12.7% vs. 8.1%); and c-section rates were substantially higher (35.1% vs. 5.7%). Adverse neonatal outcomes - including macrosomia (9 cases), prematurity (6 cases), and fetal trauma (3 cases) - were more prevalent among women with excess weight and poor dietary profiles. **Conclusions:** Excessive gestational weight gain and suboptimal dietary patterns were associated with increased maternal morbidity and adverse neonatal outcomes. The integration of a structured FFQ enabled a granular characterization of nutritional habits across multiple food groups, highlighting areas for targeted intervention. These results underscore the importance of preconception weight optimization, individualized nutritional counseling addressing all major food groups, adequate supplementation, and close gestational monitoring to mitigate obstetric risk and improve both short- and long-term health trajectories for mother and child.

Keywords: gestational weight gain, maternal obesity, food frequency questionnaire, neonatal morbidity

DIVERSIFICATION PERIOD IN BABIES-TRUTH OR DARE FOR THE NEW MOTHERS

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Background: The diversification period in babies represents a very important step in development and growth. Nowadays, mothers face challenges in choosing the right food for their children because there is a large amount of information from social media, online websites, TV, and other sources, information that is not always true. Our study focused on mother's habits during the diversification period, especially on the deviations from the recommendations of specialized societies. **Objective:** The purpose of this study is to highlight the impact of the mother's residential environment on infant complementary feeding practices. **Material and methods:** We conducted a descriptive, transversal study, with an online questionnaire realised in Google Forms, and the data were analyzed using GraphPad Prism 10, applying Fisher's exact test and the chi-square test, with a significance level set at $p < 0.05$. The mothers of infants aged 6 to 24 months who provided informed consent by completing the questionnaire represented the inclusion criteria. Also, the exclusion criteria were applied to infants with chronic conditions or mothers with incomplete responses to the questionnaire. **Results :** We involved 127 mothers in the study, coming from Alba, Maramureş, Mureş, and Vrancea counties. Of these 85,8% (109) come from urban areas, and 14,2% (18) come from rural areas. Significant correlations were found between the mothers' residential environment and their practices regarding complementary feeding ($p < 0.001$). Concerning sources of information, mothers in urban areas primarily consulted medical specialists ($n=56$), while mothers in rural areas were significantly less likely to contact a medical specialist ($n=10$). A significant association was found with cow's milk consumption; in rural areas, most mothers ($n=10$) introduced cow's milk before 12 months of age, compared to the urban group, where most ($n=70$) delayed its introduction. Moreover, the urban environment is associated with a higher prevalence of consumption of sweetened juices and foods containing added salt and sugar. Mothers in urban areas were more likely to introduce sweetened juices ($n=41$) and salt/sugar ($n=41$) than mothers in rural areas ($n=4$ for juices; $n=8$ for salt/sugar). **Conclusions:** This study demonstrated a statistically significant correlation between the mothers' residential environment and the following variables: sources of information regarding diversification, the introduction of cow's milk before 12 months of age, and the consumption of foods containing added sugar and salt.

Keywords: diversification, residential environment, mothers

DUAL INCRETIN AGONISM COMPARED WITH SELECTIVE GLP-1 RECEPTOR AGONISM: TIRZEPATIDE VERSUS SEMAGLUTIDE

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Background: Type 2 diabetes mellitus and obesity are major contributors to cardiovascular morbidity and mortality. Selective glucagon-like peptide-1 receptor agonists improve glycemic control, induce weight loss, and reduce major adverse cardiovascular events. Tirzepatide, a dual glucose-dependent insulinotropic polypeptide (GIP) and GLP-1 receptor agonist, represents a novel pharmacological strategy that may offer enhanced metabolic efficacy. A structured comparison of dual versus selective incretin receptor agonism is clinically relevant for therapeutic positioning statement. **Objective:** To compare glycemic efficacy, weight reduction, and cardiovascular outcomes between Tirzepatide and Semaglutide based on evidence on pivotal phase III clinical trial programs. **Material and methods:**

A structured comparative analysis was conducted based on published data from randomized controlled phase III trials. Tirzepatide data were extracted from the SURPASS and SURMOUNT programs; Semaglutide data were obtained from the SUSTAIN, STEP, and SELECT trials. Primary endpoints included mean reduction in glycated haemoglobin (HbA1c), percentage change in body weight, and the incidence of major adverse cardiovascular events (MACE). Reported between-group differences and statistical significance were analysed as described in the original trials. **Results** : Tirzepatide achieved mean HbA1c reductions of up to 2.4% in patients with T2DM, compared with 1.5-1.8% observed with Semaglutide across SUSTAIN trials ($p < 0.001$ in head-to-head comparisons). In obesity trials, Tirzepatide induced mean weight reductions of 20-22%, significantly greater than the ~15% reduction reported with Semaglutide ($p < 0.001$). Semaglutide demonstrated a 20% relative risk reduction in MACE among high-risk patients in the SELECT trial (hazard ratio, 0.80; 95% CI, 0.72-0.90). based on data from pivotal phase III clinical trial programs (SURPASS, SUSTAIN, SURMOUNT, STEP, SELECT) Cardiovascular outcome data for Tirzepatide are still being investigated. Gastrointestinal adverse events were the most common side effects in both treatment groups and were dose-dependent. **Conclusions:** Dual GIP/GLP-1 receptor agonism provides superior glycemic and weight reduction efficacy compared with selective GLP-1 receptor agonism. However, Semaglutide currently has more robust cardiovascular outcome evidence. Phenotype-based therapeutic strategies selection may improve metabolic and cardiovascular risk management in patients with T2DM and obesity.

Keywords: Tirzepatide;, glycemic index;, Semaglutide;

DUPUYTREN'S DISEASE – CURRENT INSIGHTS INTO EPIDEMIOLOGY, CLINICAL MANIFESTATIONS, DIAGNOSTIC METHODS, AND TREATMENT: A CASE PRESENTATION AND LITERATURE REVIEW

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Background: Dupuytren's disease is a chronic fibroproliferative disorder of the palmar fascia, leading to progressive flexion contractures of the fingers, particularly affecting the fourth and fifth digits. Despite being documented for over two centuries, its etiopathogenesis remains incompletely understood. **Objective:** To analyze current data regarding the epidemiology, clinical presentation, diagnostic methods, and therapeutic options for Dupuytren's disease, supplemented by the presentation of a surgical clinical case. **Material and methods:** A review of scientific literature (2015-2024) was conducted by searching databases such as PubMed, NCBI, JAMA, and Google Scholar. A clinical case involving a Grade III contracture treated via limited fasciectomy was included. Clinical, imaging, and surgical data were analyzed. A review of scientific literature (2015-2024) was conducted by searching databases such as PubMed, NCBI, JAMA, and Google Scholar. A clinical case involving a Grade III contracture treated via limited fasciectomy was included. Clinical, imaging, and surgical data were analyzed. **Results** : The disease is more prevalent in men (with a ratio of up to 9:1), especially among populations of Northern European descent. Diagnosis is based on clinical examination (Hueston's tabletop test), ultrasound, and MRI. Treatment ranges from conservative options (collagenase injection, physiotherapy, local corticosteroid therapy) to surgical interventions. Limited fasciectomy remains the therapeutic gold standard for advanced stages, yielding good functional outcomes in well-selected cases. **Conclusions:** Early diagnosis and accurate staging are essential for selecting optimal treatment. Surgical intervention is recommended in advanced stages. Further studies are required regarding emerging therapies (PRP, gene therapies, early-stage radiotherapy).

Keywords: Surgical treatment, fasciectomy, collagenase injection, functional rehabilitation

ECG MARKERS OF A “LOWINJURY” PATTERN AS PREDICTORS OF MINOCA IN YOUNG STEMI PATIENTS

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Background: Myocardial infarction with nonobstructive coronary arteries (MINOCA) represents a heterogeneous

entity, increasingly recognized in younger patients presenting with STelevation myocardial infarction (STEMI), yet simple ECGbased predictors remain poorly defined. Identifying ECG characteristics associated with MINOCA could facilitate early risk stratification and tailored diagnostic pathways. **Objective:** To evaluate surface ECG parameters as predictors of MINOCA in patients under 60 years presenting with STEMI and sinus rhythm. **Material and methods:** We conducted a prospective, singlecentre study including 98 consecutive patients aged <60 years, without prior coronary artery disease, admitted to the emergency department with a diagnosis of STEMI and in sinus rhythm at presentation. All patients underwent urgent coronary angiography and were classified into two groups: obstructive coronary artery disease (CAD group, n=83) and MINOCA (n=15), defined as the absence of $\geq 50\%$ stenosis in any major epicardial vessel. Standard 12lead ECGs at admission were analysed for Pwave duration and amplitude, PR interval, QRS duration, Rwave amplitude in infarctrelated leads, STsegment elevation magnitude, presence of STsegment depression in reciprocal leads, and corrected QT interval (QTc). Mean values from three consecutive beats were measured manually. Clinical variables and peak high sensitivity troponin I were also recorded. Univariable and multivariable logistic regression were used to identify independent ECG predictors of MINOCA. **Results :** MINOCA patients were more often female (53% vs. 19%, $p=0.01$) and had lower peak troponin levels (3.8 ± 1.6 vs. 8.9 ± 3.4 ng/mL, $p<0.001$). Admission ECGs in the MINOCA group showed significantly lower sum STsegment elevation in infarctrelated leads (6.2 ± 3.1 vs. 11.4 ± 4.8 mm, $p<0.001$) and less frequent reciprocal STsegment depression (27% vs. 61%, $p=0.02$). QRS duration was shorter in MINOCA patients (86 ± 9 vs. 95 ± 11 ms, $p=0.004$), whereas QTc did not differ significantly between groups (443 ± 24 vs. 447 ± 28 ms, $p=0.48$). Pwave duration and amplitude were similar in both cohorts (all $p>0.05$). **Conclusions:** In young STEMI patients without prior coronary artery disease, a "lowinjury" ECG pattern characterized by modest STsegment elevation and absent reciprocal changes is independently associated with MINOCA. Simple admission ECG indices may help clinicians suspect MINOCA early and guide further etiological workup beyond obstructive CAD.

Keywords: MINOCA, electrocardiogram, STsegment elevation, reciprocal changes

ECG MARKERS OF VENTRICULAR REPOLARIZATION AS PREDICTORS OF EARLY VT/VF IN ACUTE STEMI PATIENTS

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Background: Ventricular arrhythmias remain a major cause of early mortality in patients with ST elevation myocardial infarction (STEMI), despite advances in reperfusion therapy. Simple electrocardiographic markers that identify patients at higher risk for ventricular tachycardia (VT) or ventricular fibrillation (VF) in the acute phase could improve monitoring strategies and guide preventive interventions. **Objective:** To assess surface ECG parameters as predictors of acute VT/VF in patients with STEMI presenting in sinus rhythm. **Material and methods:** We conducted a prospective study including 145 consecutive patients admitted to the E.R. with a diagnosis of STEMI and in sinus rhythm at presentation. Patients were divided into two groups according to the occurrence of sustained VT/VF within the first 48 hours: VT/VF group (n=16) and no VT/VF group (n=129). Standard 12 lead ECGs obtained on admission were analyzed for heart rate, P wave duration and amplitude, PR interval, QRS duration, R wave amplitude in infarct related leads, sum ST segment elevation, presence of reciprocal ST segment depression, T wave amplitude, corrected QT interval (QTc) and QT dispersion (QTd). Mean values from three consecutive beats were measured manually. Clinical variables, infarct location and peak high sensitivity troponin I were recorded. Univariable and multivariable logistic regression were used to identify independent ECG predictors of VT/VF. **Results :** VT/VF occurred in 11.0% of patients (n=16). Compared with the no VT/VF group, patients with VT/VF had higher heart rate (92 ± 15 vs. 79 ± 13 bpm, $p<0.001$) and more frequently anterior STEMI (69% vs. 38%, $p=0.02$). Admission QTc was significantly longer in the VT/VF group (468 ± 28 vs. 441 ± 24 ms, $p<0.001$), and QTd was increased (78 ± 16 vs. 54 ± 14 ms, $p<0.001$). QRS duration was also greater in patients with VT/VF (104 ± 12 vs. 94 ± 11 ms, $p=0.002$). Sum ST segment elevation was higher in the VT/VF group (13.1 ± 5.2 vs. 9.4 ± 4.3 mm, $p=0.004$), whereas P wave indices and PR interval did not differ significantly between groups (all $p>0.05$). In multivariable analysis, QTc ≥ 460 ms (OR 3.7, 95% CI 1.4-9.9, $p=0.008$) and QTd ≥ 70 ms (OR 3.1, 95% CI 1.1-8.6, $p=0.03$) emerged as independent ECG predictors of acute VT/VF. **Conclusions:** In patients with acute STEMI, ECG markers of increased ventricular repolarization heterogeneity, particularly prolonged QTc and increased QT dispersion on admission, are independently associated with the occurrence of early VT/VF. Incorporating these simple ECG indices into bedside assessment may help identify high risk patients who warrant intensified monitoring and early preventive strategies against malignant ventricular arrhythmias.

Keywords: ST elevation, myocardial infarction, ventricular arrhythmias, QT dispersion

ECONOMIC BURDEN AND CLINICAL IMPLICATIONS OF ARTERIOVENOUS FISTULA CREATION IN THE OUTPATIENT SETTING

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Background: Patients with end-stage kidney disease (ESKD) need vascular access (VA) for hemodialysis (HD), and creating an arteriovenous fistula (AVF) is recommended by KDOQI guidelines as the primary treatment choice, regarded as the gold standard. **Objective:** The primary objective of this study is to compare the cost-effectiveness and clinical impact of different types of arteriovenous fistulas used for hemodialysis, to identify optimal strategies from the perspectives of patient outcomes and healthcare resource utilization. **Material and methods:** This retrospective study includes all patients with ESKD admitted as outpatients to the Vascular Surgery Department at Emergency County Hospital in Târgu Mureș, Romania, who underwent surgical AVF creation from January 2023 to December 2025 included. The primary endpoint of the study was to evaluate the cost-effectiveness and clinical impact of surgically creating AVFs. All the information regarding the clinical status, laboratory parameters, as well as the surgical planning, was extracted from the electronic hospital database. Post-operatively, patients were followed up until 1 March 2026 or until AVF failure. **Results :** A total of 79 patients were included, with a male predominance. The distribution of AVF types was as follows: 50.63% radio-cephalic AVF (RC-AVF), 36.71% brachio-cephalic AVF (BC-AVF), and the remaining cases brachio-basilic AVF (BB-AVF). Postoperative local complications occurred in 9 patients, while maturation failure at 6 weeks was observed in 15 patients and long-term primary patency failure in 22 patients. Cost analysis showed no significant differences between AVF types regarding laboratory investigations, surgical consumables, or total hospitalization expenses. However, BB-AVF, performed as a two-stage procedure, resulted in significantly higher total costs due to the need for two hospital admissions ($p < 0.001$). Laboratory costs were comparable across groups ($p=0.916$), whereas consumable costs were higher in BC-AVF and first-stage BB-AVF, but did not reach statistical significance compared to RC-AVF. **Conclusions:** Outpatient AVF creation is a safe and cost-effective approach, with similar clinical outcomes across AVF types. However, BB-AVF is associated with higher total costs due to the need for staged procedures, which should be considered when planning vascular access strategies.

Keywords: arteriovenous fistula, radio-cephalic AVF, brachio-cephalic AVF, hemodialysis

ECONOMIC EVALUATION OF RADIOFREQUENCY ABLATION VERSUS HIGH LIGATION AND STRIPPING FOR GREAT SAPHENOUS VEIN INCOMPETENCE

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Background: Great saphenous vein (GSV) incompetence is a common condition that often affects young patients and is associated with significant impairment in quality of life (QoL). Various treatment methods are currently used, including radiofrequency ablation (RA), high ligation with stripping (HLS), and endovenous ablation, with comparable short-term efficacy. However, long-term results reported in the literature remain contradictory, despite similar improvements in QoL. Furthermore, few studies have assessed the cost-effectiveness of these therapeutic approaches. **Objective:** The objective of this study was to evaluate the economic impact of RA with HLS for the treatment of GSV incompetence. **Material and methods:** This study included all patients diagnosed with CVI who were admitted for surgical treatment to the Department of Vascular Surgery, Emergency Clinical County Hospital Târgu Mureș, between 2019 and 2025. Clinical and demographic data were retrospectively obtained from the hospital electronic medical records database. Data regarding procedural costs, hospitalization expenses, laboratory investigations, and total cost per patient were also collected. Patients were classified into two groups based on the treatment method: the RA group and the HSL group. This work was supported by the "George Emil Palade" University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș, Research Grant no. 170/2/09.01.2024. **Results :** A total of 710 patients were enrolled, with a mean age of 54.02 ± 13.17 years; 441 patients (62.1%) were female. Regarding the treatment used, 633 patients (89.2%) underwent HSL, and 77 patients (10.8%) benefited from RA. The HSL-Group has a higher incidence of male ($p=0.001$), hypertension

($p=0.004$), ischemic heart disease ($p=0.018$), chronic heart failure ($p=0.006$), and obesity ($p=0.008$). A higher prevalence of previous thrombophlebitis ($p=0.003$) and venous ulcers ($p=0.002$) was observed in the same group. The HSL group had a significantly longer hospital stay ($p=0.007$), resulting in higher hospitalization costs ($p<0.001$). Although procedural costs were lower in the HSL group ($p=0.024$), total costs per patient were higher than in the RA group ($p=0.007$), mainly due to longer hospitalization. The short-term improvement in QoL was comparable between the two groups. **Conclusions:** Both methods provide comparable short-term clinical outcomes in patients with GSV incompetence. However, RA is associated with shorter hospitalization and lower overall costs despite higher procedural expenses. These findings suggest that minimally invasive techniques may represent a more cost-effective option, particularly in patients suitable for early discharge.

Keywords: Chronic venous insufficiency, CVI, Varicose vein, Venous ulcers, Vascular surgery

ECONOMIC VIABILITY OF UNIVERSAL HEPATITIS C SCREENING IN ROMANIA: A COST-EFFECTIVENESS PATH TOWARD THE 2030 ELIMINATION GOALS

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Background: Chronic Hepatitis C virus (HCV) infection remains a primary driver of liver-related morbidity, often progressing silently toward cirrhosis and hepatocellular carcinoma (HCC). In Romania, conservative estimates indicate a prevalence of approximately 362,000 infected adults, of whom an alarming 271,500 (75%) remain undiagnosed. This detection gap results in a critical treatment and diagnosis gap as the vast majority of patients remain outside the care continuum until the onset of advanced, high-cost complications. **Objective:** To evaluate the economic and clinical impact of the absence of a universal screening program compared to the costs associated with treating advanced HCV complications in the Romanian adult population. **Material and methods:** An economic modeling study was conducted using epidemiological data from the published literature (SRGH 2024, Eurosurveillance 2024). Two main strategies were compared: universal screening and treatment of positive cases vs. symptomatic treatment (status quo). The net benefit was estimated as a difference between the costs generated by these scenarios (screening vs. no screening). The model incorporated the prevalence and treatment of the five most important complications as cost drivers from a clinical point of view: compensated cirrhosis (prevalence: 20%), type 2 diabetes (15%), neuro-psychiatric manifestations (75%), decompensated cirrhosis (4.5%), and HCC (3.5%). Societal costs were also considered (productivity loss generated by absenteeism and premature death). **Results :** The lack of screening maintains a massive clinical burden. According to our estimations this would result in 72,400 cases of compensated cirrhosis, 54,300 cases of diabetes, 271,500 patients with neuro-physiatric manifestations, 3,258 cases with decompensated cirrhosis, and 1,086 cases of HCC. The total economic burden of the disease considering direct medical (tests, treatment and medical consults), and indirect losses (absenteeism and premature death) sums up to EUR 3,715,763,634. The main cost drivers were compensated cirrhosis and diabetes because of the high incidence and treatment costs. While the implementation of this screening strategy results in a net loss of EUR 4,935,312,365 in the first year, it generates a net benefit of EUR 18,488,318,170 in 5 years after implementation. **Conclusions:** Universal HCV screening in Romania is a highly cost-effective strategy and is essential for achieving the WHO 2030 elimination goals. The savings generated from the second year of implementation-driven by the reduction in length of stay (LoS) and treatment-associated costs with terminal liver disease-substantially outweigh the initial costs of detection. The implementation of such a screening program could mitigate the impact of this public health issue and could also result in considerable cost savings.

Keywords: Hepatitis C, universal screening, cost-effectiveness, economic burden

EFFICACY, GENOTYPIC DETERMINANTS, AND MICROENVIRONMENTAL MODULATION OF THE PAN-RAS(ON) INHIBITOR RMC-7977 IN ACUTE MYELOID LEUKEMIA

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Background: Hyperactivated RAS signaling represents a foundational oncogenic driver and primary conduit for therapeutic resistance in Acute Myeloid Leukemia (AML). Historically considered pharmacologically intractable,

neomorphic tri-complex inhibitors like the pan-RAS(ON) inhibitor RMC-7977 offer a direct mechanism to silence this pathway. However, terminal cellular fate induced by inhibition, specifically the bifurcation between apoptotic execution and cytostatic cell cycle arrest, remains poorly defined, heavily dependent on intrinsic leukemic clone genetic architecture and protective bone marrow microenvironment influences. **Objective:** To systematically evaluate the pharmacodynamic efficacy, phenotypic outcomes, and microenvironmental modulation of RMC-7977 across a panel of four genetically distinct AML cell lines (THP1, OCI-AML3, NOMO1, and SKM1), examining both isolated suspension cultures and co-cultures with primary bone marrow stromal cells (BMSC). **Material and methods:** The selected AML cell lines represented diverse mutational profiles: THP1 (NRAS-mutant, TP53-null), OCI-AML3 (NRAS-mutant, TP53-wildtype), NOMO1 (KRAS-mutant, TP53-null), and SKM1 (KRAS-mutant, TP53 functionally active/missense). Cells were exposed to a 9-log serial dilution of RMC-7977 (descending from 10 nM, or 5 nM for SKM1) for 72 hours in technical triplicates. Flow cytometry quantified intact viability (PI), early and late apoptosis (PI/PO-Pro), cell cycle distribution (PI/RNase), and macrophage differentiation (CD11b/CD14). Parallel assays were conducted in direct co-culture with BMSC to assess microenvironmental protection, utilizing CD45 to delineate leukemic blasts. **Results :** In suspension, RMC-7977 exhibited profound picomolar to low-nanomolar potency. OCI-AML3 (IC₅₀ 0.00345-0.0045 nM) and SKM1 (IC₅₀ 0.0013-0.006 nM) demonstrated a concurrent, dose-dependent induction of both apoptosis and cell cycle arrest. Conversely, NOMO1 (IC₅₀ 0.002-0.0022 nM) exhibited exclusively apoptotic cell death with the cell cycle remaining completely unaffected. Co-culture with BMSCs significantly attenuated the drug's efficacy. In SKM1 cells, BMSC interaction shifted the IC₅₀ from 0.0013 nM to 0.0035 nM, decreased maximal late apoptosis and reduced peak G0/G1 arrest. In THP1 cells, BMSC co-culture elevated the IC₅₀ (e.g., 0.0011 nM to 0.0041 nM) and actively drove macrophage differentiation, evidenced by elevated CD11b and CD14 mean fluorescence scaling with drug concentration. **Conclusions:** RMC-7977 displays robust anti-leukemic activity. However, the final cellular response remains heavily dependent on the interplay between TP53 functionality and the specific RAS isoform. Moreover, the bone marrow stroma acts as a protective shield that weakens the drug's cytotoxic and cytostatic effects, concurrently driving the cells toward monocytic and macrophage maturation. Given that this microenvironment-driven differentiation fosters therapeutic resistance, it is crucial to deploy pan-RAS(ON) inhibitors within strategic, combination-based treatment regimens to ensure complete eradication of the leukemic clones.

Keywords: Acute Myeloid Leukemia, RMC-7977, Pan-RAS(ON) Inhibition, Bone Marrow Microenvironment

EPIDEMIOLOGICAL AND HISTOPATHOLOGICAL PATTERNS OF CHRONIC CHOLECYSTITIS

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Background: Chronic cholecystitis is one of the most common inflammatory diseases of the gallbladder. Most often, it occurs in the context of lithiasis, an important reason for which people present to the doctor. This pathology is characterized by chronic irritation of the gallbladder mucosa due to stones that cause inflammation, then fibrosis and thickening of the bladder wall. Therefore, an updated epidemiological analysis can provide an overview of the distribution of the disease. **Objective:** The aim of the study was to evaluate the main epidemiological and histopathological characteristics of patients with histopathological diagnoses of chronic cholecystitis during 2023-2025. **Material and methods:** We performed a retrospective study which included patients with the histopathological diagnosis of chronic cholecystitis during the mentioned period, within the Clinical Pathology Department, Mures Clinical County Hospital. Patients with other acute biliary pathologies, those with previous surgical interventions or with insufficient data in the observation sheet were excluded from the study. Patient data were taken from histopathological reports and included information related to gender, age and place of residence. **Results :** A total of 500 patients diagnosed with chronic cholecystitis were included in the analysis. Analysis by gender resulted in a significant predominance of female patients (77.20%), compared to male patients (22.80%) ($p < 0.0001$), meaning a higher prevalence among women. Regarding the environment, no statistically significant differences were observed between patients from rural and urban areas ($p = 0.4108$). The median age of patients was 54 years (IQR: 42.25-64), male patients having a higher median age (56.5 years, IQR: 48-67) compared to women (54 years, IQR: 40.75-64), this difference being statistically significant ($p = 0.0212$). In addition, the analysis of the environment of origin highlighted a median age of 56 years (IQR: 45-65) for patients coming from urban areas and 51 years (IQR: 39-64) for those from rural areas, the difference being statistically significant ($p = 0.0389$). **Conclusions:** The results show that chronic cholecystitis occurs more frequently in women and is found especially in middle-aged adults. The age differences observed at diagnosis may suggest the existence of

particularities related to access to medical services or the time of presentation to the doctor. In this study, no significant differences in the distribution of cases were observed between urban and rural patients, but a statistically significant difference was observed in terms of age. These results demonstrate the influence of demographic factors in the diagnosis of chronic cholecystitis.

Keywords: chronic cholecystitis, gallstone disease, retrospective study

EPIDEMIOLOGICAL PROFILE AND HISTOPATHOLOGICAL DISTRIBUTION OF BONE LESIONS DIAGNOSED BY BIOPSY: A SINGLE-CENTER EXPERIENCE IN 2024

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Background: Bone biopsy represents the gold standard for the definitive diagnosis of bone tumors and metastatic lesions. This study aimed to evaluate the anatomical and histopathological distribution of bone lesions diagnosed by biopsy in a single center during 2024. **Objective:** To assess the epidemiological profile, anatomical distribution, and histopathological spectrum of bone lesions diagnosed through biopsy in a single-center setting. **Material and methods:** A retrospective analysis of 116 bone biopsies performed in 2024 was conducted. Data regarding patient sex, anatomical location of the lesion, and histopathological diagnosis were recorded. **Results :** Of all cases, 56% were female and 44% male, with an estimated mean age of 55 years. The most frequent locations were the spine (25.9%), pelvis (22.4%), and femur (12.9%). Histopathological diagnoses included bone metastases (37.1%), multiple myeloma and plasmacytoma (18.1%), benign tumors (chondroma, enchondroma, bone cyst, fibrous dysplasia - 25.0%), primary malignant tumors (chondrosarcoma, sarcoma NOS, giant cell tumor - 9.5%), and other lesions (trabecular, fibrotic, or sclerotic bone tissue - 10.3%). The most common metastases originated from adenocarcinomas (over 50% of metastatic cases), followed by breast, renal, lung, and prostate cancers. **Conclusions:** The study highlights the high prevalence of metastatic lesions in the analyzed population, with a predominance in the axial skeleton, confirming the importance of bone biopsy as an essential tool for establishing diagnosis and guiding treatment. The results emphasize the need for multidisciplinary collaboration in the management of patients with suspected bone lesions.

Keywords: bone biopsies, histopathological distribution, malignant tumors, adenocarcinomas

ESTABLISHING AND VALIDATING READY-TO-USE (CD8) AND CONCENTRATED (FOXP3) IMMUNOHISTOCHEMICAL PROTOCOLS FOR TUMOR MICROENVIRONMENT PROFILING IN GASTROINTESTINAL CANCER

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Background: Evaluating a tumor's TIL (tumor-infiltrating lymphocyte) population, with regards to spatial distribution and composition, is a determinative component in gastrointestinal cancer immunotherapeutic matching and prognosis. Distinguishing "hot" immune-active tumors from "cold" immune-suppressed counterparts serves as a foundation and requires high technical accuracy, especially when it comes to IHC (immunohistochemical) procedures. **Objective:** Our study aimed to optimize and consequently validate two technically varying automated IHC protocols for RTU(ready-to-use) (CD8) and concentrated (FOXP3) antibodies, respectively, in gastric adenocarcinoma cases. **Material and methods:** A retrospective analysis has been carried out on a 20-case lot of formalin-fixed and paraffin-embedded gastric adenocarcinoma specimens. Deploying the Leica BOND-MAX automated platform for staining procedures, we evaluated the results and methodology for both the RTU and concentrated antibodies. Positive TIL count of the invasive front has been assessed manually across five non-overlapping high-power fields (HPF, x400). **Results :** The Ready-to-use CD8 protocol, under standard parameters, achieved quick reliability in producing optimal results. Contrastingly, the concentrated antibody (FOXP3) required procedural calibration. Initial dilution of 1:500 was unable to produce satisfactory nuclear labeling, necessitating an adjustment in the dilution ratio. A 1:400 dilution produced intense, satisfactory staining. Quantitative assessment proved a significantly higher population of cytotoxic T-cells infiltrating, when compared with regulatory T-cells ($p < 0.0001$). Mean densities for the cytotoxic lineage (CD8) were slightly over double compared to that of the

regulatory subsets positive for FOXP3 labeling. **Conclusions:** The optimization process of the concentrated FOXP3 antibody highlights the laborious nature of rigorous IHC calibration, contrasting with RTU variants. Significant predominance in CD8 effector cell populations over FOXP3 regulatory lineages specifies an active tumor microenvironment of the invasive fronts, revealing "hot" tumors, providing a reliable foundation for predictive immunotherapeutic modeling.

Keywords: Gastric Adenocarcinoma, FOXP3, Immunohistochemical staining, CD8

EVALUATION OF FRACTURE DETECTION ON CONVENTIONAL RADIOGRAPHS USING THE ARTIFICIAL INTELLIGENCE SOFTWARE BONEVIEW (GLEAMER)

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Background: Fractures result from forces exceeding bone strength and occur most commonly after traumatic injury. When not diagnosed promptly and accurately, they may lead to complications such as malunion, delayed union, osteonecrosis and, in pediatric patients, growth plate disturbances. Conventional radiography remains the first-line imaging method for fracture detection because of its wide availability, low radiation dose and cost-effectiveness. Recently, artificial intelligence (AI)-assisted software tools such as BoneView (GLEAMER) have been introduced to support radiographic interpretation and may help radiologists improve diagnostic accuracy and workflow efficiency. **Objective:** This study aimed to assess the diagnostic performance of the AI-based software BoneView (GLEAMER) in detecting fractures on conventional radiographs by comparing its automatically generated outputs with the radiologist's interpretation. **Material and methods:** This prospective study included 158 paediatric patients presenting with traumatic injuries who underwent radiography of the arm and forearm in the Emergency Department of Tîrgu Mureş Emergency Clinical County Hospital between December 2025 and January 2026. These anatomical regions were selected because of the high frequency of traumatic lesions and the diagnostic challenges that may arise in routine radiological practice. Ethical approval was obtained from the institutional Ethics Committee. All included patients underwent conventional radiography as part of the standard diagnostic work-up. A strict analysis was conducted, which included fracture diagnosis by both human and software, followed by an inclusive analysis that included possible fracture diagnosis. **Results :** The sex distribution of the patients was 72 (45.6%) female and 86 (54.5%) male, with an average age of 11.25 ± 3.96 . 57 (35.8%) of the patients were clinically diagnosed with a fracture. The strict analysis identified a 56.1% sensitivity and a 100% specificity for the human evaluator, while the software obtained a 78.9% sensitivity and a 97% specificity. The inclusive analysis boosted the human evaluator's sensitivity to 89.5% and specificity to 84.2%, with the software obtaining a 93% sensitivity and an 89.1% specificity. We applied the McNemar test to compare the AI results with the human evaluator's results, obtaining a p value of 0.023, indicating that the AI predicted the diagnosis correctly more often than the human evaluator. **Conclusions:** The AI software has higher precision in detecting bone fractures than a human evaluator and can be used as a reliable second reader.

Keywords: Fractures, Artificial intelligence, Radiography, BoneView

EVALUATION OF THE READABILITY OF ONLINE MEDICAL INFORMATION: A COMPARATIVE ANALYSIS OF TEXTS IN ROMANIAN AND ENGLISH

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Background: Thanks to the internet, medical information is accessible to anyone, but this does not guarantee that the information is understood by the reader. Medical texts have a readability score, which indicates the level of comprehension of a text. There is limited systematic data on the readability of online medical content in Romanian, and especially on direct comparisons with similar texts in English, across a large and thematically diverse corpus (multiple diseases, multiple sources, extended time frame). **Objective:** The aim of the study was to compare the readability of medical web pages in Romanian and English. Additionally, it sought to correlate the credibility indicators of each website with the readability of the corresponding text. **Material and methods:** The study had an observational, cross-sectional design, based on secondary analysis of data from previous research conducted at the George Emil Palade University of Medicine, Pharmacy, Science, and Technology of Tîrgu Mureş between 2018 and 2025. Eligible websites were identified using the Google search engine, along with individual credibility

criteria for each site. To be eligible the websites were included in the research if there were for general population, relevant to the subject and minimum 300 words. These data were processed using a Python program to calculate readability scores. **Results** : A total of 2,134 web pages from 909 unique websites were analyzed, with a similar distribution between English and Romanian. Only 21.8% were HON (Health On the Net Foundation) accredited, and most pages ranked beyond the top 10 Google results. Credibility criteria were variably met. Mean scores were 5.3 for credibility, 5.0 for completeness and 6.4 for accuracy. The English texts had a mean LIX (Läsbarhetsindex) readability score of 46.8 and an ARI (Automated Readability Index) of 11.4, while the Romanian texts had a mean LIX of 60.8 and an ARI of 15.8. HON-accredited and higher quality pages showed significantly better readability ($p < 0.0001$). Weak, but significant correlations were observed between readability and quality indicators. **Conclusions**: The readability of online medical information was moderate to low, particularly in Romanian. HON-accredited pages and those meeting quality criteria demonstrated better readability. These findings highlight the need to optimize medical content to improve comprehension and usability, thereby facilitating access to health information for the general public.

Keywords: Readability, Quality of information, Online

FIBROBLAST HETEROGENEITY IN WOUND HEALING: MOLECULAR DETERMINANTS OF REGENERATION VERSUS SCAR FORMATION

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Background: Cutaneous wound healing is a coordinated physiological process involving dynamic interactions among epidermal and dermal cells and extracellular matrix remodelling. Despite advances in regenerative medicine, surgical, traumatic, and burn wounds remain a significant clinical challenge, contributing to substantial morbidity and healthcare pressure worldwide. Increasing evidence indicates that fibroblast populations exhibit significant transcriptional and functional heterogeneity during cutaneous wound healing. Distinct fibroblast subsets contribute differentially to extracellular matrix deposition, tissue remodelling, and the development of fibrotic scars. Advances in single-cell transcriptomics have enabled a new angle in identifying and tracking fibroblast subpopulations within healing skin. These approaches provide valuable molecular insights into the gene regulatory programs and cellular interactions that drive fibroblast-mediated tissue repair and scar formation. **Objective:** This study aims to explore the molecular heterogeneity of fibroblast populations during cutaneous wound healing, focusing on the transcriptional regulatory networks that govern fibroblast activation and their contribution to scar formation. **Material and methods:** This narrative review synthesises recent transcriptomic studies (2015-2025) on fibroblast heterogeneity in cutaneous wound healing, identified through a structured PubMed search with full-text articles accessed via PubMed Central (PMC), focusing on single-cell and spatial transcriptomic analyses. Relevant literature and publicly available transcriptomic datasets, including single-cell and spatial transcriptomic analyses, were examined to investigate fibroblast subpopulations involved in tissue repair and fibrotic scar formation. Selection criteria included original research and review articles focusing on gene expression profiling, transcriptional regulatory networks, extracellular matrix remodelling, and molecular pathways associated with fibroblast activation and fibrosis in skin wound healing. **Results** : The analysis highlights significant heterogeneity among fibroblast populations involved in cutaneous wound healing. Distinct fibroblast subtypes were associated with differential transcriptional programs regulating extracellular matrix deposition and fibrotic tissue formation. Evidence from transcriptomic studies suggests that pro-fibrotic fibroblast populations, including Engrailed-1 (EN1)-positive fibroblasts, are strongly associated with scar formation. Mechanotransduction pathways, particularly those involving Yes-associated protein (YAP), appear to contribute to fibroblast activation and fibrotic remodelling. Together, these findings emphasise the role of fibroblast lineage specification and molecular signalling networks in determining regenerative versus scar-forming healing outcomes. **Conclusions:** Understanding the molecular programs that govern fibroblast heterogeneity is essential for deciphering how skin repair progresses toward regeneration or fibrotic scar formation. These insights may guide the development of targeted therapeutic strategies aimed at modulating fibroblast activity to improve healing outcomes and reduce pathological scarring.

Keywords: fibroblast heterogeneity, wound healing, fibrosis, skin regeneration

FOOTSTEPS INTO THE FUTURE: LOWER EXTREMITY TRANSPLANTATION USING VASCULARIZED COMPOSITE ALLOGRAFT - LITERATURE REVIEW

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Background: Vascularized composite allotransplantation (VCA) has become an established surgical approach for restoring anatomical integrity and functional capacity in patients with complex tissue loss, particularly in hand reconstruction. For patients with transfemoral amputations failing to achieve functional outcomes with prosthetic rehabilitation, lower extremity transplantation (LET) has been proposed as a potential intervention to restore ambulation and improve quality of life. The advantages of the procedure would include providing the patient with a cerebrally integrated limb which preserves functional mobility, remains permanently attached, offers a more natural aesthetic than a prosthesis, and reduces concerns of phantom limb pain. **Objective:** This review aims to assess the current status, risks and benefits of LET via VCA, based on the interventions performed to date. **Material and methods:** We conducted research on PubMed and ScienceDirect databases using the keywords: "Lower Extremity", "Transplantation" and "Vascularized Composite Allotransplantation". The included articles consisted of case reports and literature reviews, published over a period of 20 years. A total of 13 articles were selected based on the search criteria. **Results :** Thus far, only five cases of LET have been reported. In the first one, a limb from a sacrificed ischiopagus twin was transplanted to the surviving twin. Six-year follow-up showed favourable outcomes, although the patient continued to use an orthosis for long-distance ambulation. The second case involved bilateral transfemoral LET, which failed two years postoperatively due to a cerebral lymphoma caused by a latent EBV infection and immunosuppression. The third and fourth interventions involved quadruple and triple extremity transplantations, both patients dying shortly thereafter from intraoperative cardiac arrest due to metabolic derangement and from infection, respectively. In the fifth case, the recipient experienced incomplete motor and sensory recovery and recurrent episodes of lymphangitis and lymphedema, attributed to noncompliance with compression stockings use. **Conclusions:** Based on the results obtained thus far, LET cannot be considered sufficiently safe to become a standard clinical practice. The patient is subjected to a significant intraoperative risk, prolonged rehabilitation process -primarily due to delayed nerve regeneration, which may exceed two years- and lifelong immunosuppressive therapy. However, considering the successful cases and the avoidable causes of some of the failures, we believe that, if all necessary precautions are implemented and the procedure is further refined, LET could be used in the future as an alternative treatment option for patients in whom prosthetic replacement cannot be done or proves unsuccessful.

Keywords: Lower extremity, Transplantation, Vascularized Composite Allograft, Reconstructive surgery

FROM HOSPITAL WARDS TO PRE-HOSPITAL REALITY: HOW INTEGRATED EMERGENCY VOLUNTEERING ACCELERATES THE CLINICAL LEARNING CURVE FOR MEDICAL STUDENTS

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Background: Medical education is fundamentally enhanced by early clinical immersion and structured hands-on experience. In Târgu Mureș, a well-established integrated emergency volunteering framework provides a unique platform for professional development. This program serves as a defining formative experience, allowing medical students to complement their academic training through active involvement in both the Emergency Department (ED) and Mobile Intensive Care Units. **Objective:** The primary objective of this study was to quantify the impact of volunteering volume and the diversity of the clinical setting (hospital-based ED vs. pre-hospital setting) on the professional development of medical students. We specifically aimed to identify a "proficiency threshold" where students transition from passive observers to confident responders in acute care scenarios. **Material and methods:** A cross-sectional study was conducted on a cohort of 350 medical students and resident doctors (all former student volunteers). The research utilized a 36-item structured questionnaire using Likert scales to assess perceived clinical competence, technical skills, and career prospects. Statistical analysis was performed using Chi-square tests ($p < 0.05$), correlating the cumulative number of shifts (categories: 10-20, 20-50, 50-100, >100) and

the environment of activity (ED-only vs. Integrated ED and prehospital shifts) with professional confidence levels. **Results :** The data revealed a highly significant correlation between the volume of clinical activity and professional self-efficacy ($p < 0.001$). A critical threshold was identified at the 100-shift mark, strongly confirming our hypothesis. Students exceeding this volume reported a 94.7% rate of maximum confidence (score 5/5) in managing acute situations, compared to significantly lower scores in lower-volume groups. Furthermore, the study highlighted a "pre-hospital catalyst effect": volunteers who integrated prehospital activity ($n=294$) demonstrated superior scores in emergency triage and technical skills acquisition compared to those with exclusive ED exposure ($n=55$). This integrated exposure also acted as a powerful professional filter; 88% of high-volume volunteers expressed a definitive desire to pursue careers in Emergency Medicine or Anesthesiology and Intensive Care, suggesting that long-term volunteering serves as a reliable mechanism for career path definition. **Conclusions:** Integrated emergency volunteering represents a strong pillar in medical training. Our findings suggest that clinical development is a product of both consistency (the 100-shift threshold) and environmental complexity (pre-hospital immersion). The transition from the more structured ED environment to the unpredictable pre-hospital reality significantly accelerates both critical thinking and hands-on capacities. We conclude that such integrated volunteering programs are essential components of the modern medical curriculum to better prepare future physicians for the demands of acute care specialties in particular.

Keywords: Emergency Medicine, Pre-hospital Care, Clinical development, Medical volunteering

FROM LESION LOCALIZATION TO NETWORK DYSFUNCTION: NEUROANATOMICAL BASES OF POST-STROKE NEUROBEHAVIORAL CHANGES

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Background: Stroke remains one of the leading causes of disability worldwide and is frequently associated with a wide spectrum of neurobehavioral disturbances, including emotional, behavioral, and cognitive impairments. Growing evidence suggests that the development and severity of these manifestations are influenced not only by lesion localization but also by disruptions of large-scale brain networks involved in emotional regulation, executive functioning, and cognitive processing. Therefore, understanding the relationship between lesion topography, network dysfunction, and neurobehavioral symptoms may facilitate early identification of high-risk patients and improve post-stroke assessment and rehabilitation strategies. **Objective:** The aim of this narrative review was to synthesize recent evidence regarding the relationship between brain lesion localization, neural network dysfunction, and the development of neurobehavioral changes following stroke. **Material and methods:** A narrative literature review was conducted using the PubMed and ScienceDirect databases. Studies published between 2020 and 2025 were identified using keywords including stroke, lesion localization, neurobehavioral changes, neuropsychiatric symptoms, voxel-based lesion-symptom mapping and post-stroke depression. Articles examining the association between brain lesion localization and post-stroke neurobehavioral disturbances were included. **Results :** Analysis of the included studies indicates that post-stroke neurobehavioral disturbances are closely associated with lesion localization. Lesions involving limbic and prefrontal regions, including the anterior cingulate cortex, hippocampus, and prefrontal cortex, were frequently linked to post-stroke depression, affective disturbances, executive and behavioral dysregulation. Thalamic lesions were associated with cognitive deficits and impaired emotional regulation, whereas disruption of fronto-subcortical circuits was commonly related to apathy and executive dysfunction. Furthermore, several studies reported alterations in emotional processing and social cognition in patients with insular lesions. Hemispheric differences were also reported, with left-sided lesions more frequently associated with affective symptoms, while right-sided lesions were linked to more polymorphic cognitive and behavioral deficits. Importantly, recent evidence suggests that these manifestations may reflect not only focal lesion effects but also disruptions of large-scale brain networks, including the default mode network (DMN), frontoparietal network (FPN), and salience network (SN), which are critical for emotional regulation, executive functioning, and cognitive control. **Conclusions:** Brain lesion localization plays a key role in the development of post-stroke neurobehavioral disturbances, including emotional, cognitive, and behavioral impairments. However, emerging evidence indicates that these manifestations are also driven by disruptions of large-scale neural networks involved in emotional regulation and executive control. A better understanding of these relationships may facilitate earlier identification of high-risk patients and contribute to the development of more targeted post-stroke assessment and rehabilitation strategies.

Keywords: stroke, lesion localization, neurobehavioral changes, voxel-based lesion-symptom mapping

FUNCTIONAL DIVERSITY OF 5-HT RECEPTORS: MAPPING MOLECULAR TARGETS FOR ANTIDEPRESSANT INNOVATION

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Background: Depressive disorder, commonly referred to as depression, is a widespread mental health condition primarily associated with altered serotonin metabolism and neurotransmission. **Objective:** This paper aims to provide a comprehensive overview of human serotonin receptors, ranging from their molecular mechanisms to their use as pharmacological targets for antidepressant effects. **Material and methods:** A literature review was conducted using major biomedical databases, including PubMed, Scopus, and Web of Science. The search strategy included a combination of the keywords relevant to the subject and Boolean operators in order to maximize the relevance of the used studies. Articles published in English in the last five years were considered, particularly those evaluating pharmacological modulation of serotonergic receptors and their impact on depressive symptoms. **Results :** Serotonin is a biogenic amine that exerts its effects across the central and peripheral nervous systems through a series of G-protein-coupled receptors (5-HT₁₋₇) apart from a single ionotropic receptor subtype, 5-HT₃. These receptors are divided into 15 identified subtypes. Among them, 5-HT_{1A} and 5-HT_{2A/C} are well studied, as they modulate serotonin neurotransmission and post-synaptic signaling, being closely linked to depression symptoms, particularly anhedonia, cognitive dysfunction, and sleep disturbances. Recent studies suggest that other 5-HT receptors, such as 5-HT₃ and 5-HT₇, may also serve as therapeutic targets in the treatment of depressive disorders. **Conclusions:** Continuous involvement in the development of novel therapies for depressive syndrome, grounded in the results of experimental research and in an increasingly detailed understanding of the molecular mechanisms underlying depression, is of paramount importance. Through the classification and systematic presentation of serotonergic receptor subtypes and the overview of their effects, it is a key clinical feature to establish a correlation between the therapies currently used in depressive syndrome and the molecular targets involved in the therapeutic process.

Keywords: Serotonin receptors, Major depressive disorder, Antidepressants, Depression pharmacotherapy

FUNCTIONAL IMPACT OF USUAL INTERSTITIAL PNEUMONIA PATTERN IN INTERSTITIAL LUNG DISEASES

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Background: Interstitial lung diseases are defined as a cluster of conditions that cause inflammation of the lung parenchyma, with or without fibrosis, primarily affecting gas exchange, and are characterized by symptoms such as progressive dyspnea, reduced exercise tolerance, and reduced quality of life. Although rare, they represent a clinically significant group of disorders, with an incidence varying substantially by geographical context, ranging from 1 to 31.5 cases per 100,000 person-years. Usual Interstitial Pneumonia is not a pathology by itself, but rather a specter which describes the radiological and histopathologic pattern for ILD, mostly seen in Idiopathic Pulmonary Fibrosis, but also appearing in connective tissue diseases, chronic hypersensitivity pneumonitis, sarcoidosis, drug-induced lung injury, and nonspecific interstitial pneumonia variants. **Objective:** To evaluate longitudinal changes in pulmonary function among patients with interstitial lung disease presenting the pattern of Usual Interstitial Pneumonia treated with antifibrotic agents. Secondary objectives involved comparing the evolution between idiopathic pulmonary fibrosis and non-IPF progressive fibrosing Interstitial Lung Diseases and assessing the prognostic value of the Gender, Age, Physiology score in relation to baseline functional parameters. **Material and methods:** A retrospective observational study was conducted between June 2021 and September 2025 at the Pneumology Clinic of Mureş County Clinical Hospital that included 15 patients. Demographic data, high-resolution Computer Tomography findings, Forced Vital Capacity, Diffusing Capacity for Carbon Monoxide, and GAP scores were analyzed before and after treatment initiation. Data was assessed using Shapiro Wilk distribution test and paired t-tests. **Results :** The study group consisted in 11 IPF and 4 non-IPF patients, with a mean baseline Gap score of 3.83 ± 1.69 . Under antifibrotic therapy, FVC showed numerical stabilization ($83.50 \pm 22.09\%$ to $94.00 \pm 16.09\%$; $p = 0.94$), while DLCO suggested a non-significant, controlled decline ($43.86 \pm 13.23\%$ to $40.90 \pm 16.15\%$; $p = 0.26$). IPF patients had greater baseline functional impairment and a more pronounced DLCO decline

evolution. Gap score negatively correlated with baseline DLCO. **Conclusions:** Nintedanib was associated with clinically relevant functional stabilization in UIP-pattern ILDs. Baseline functional impairment and the GAP score were revealed to be valuable variables in terms of risk stratification. Larger prospective studies are needed to confirm long-term outcomes.

Keywords: Interstitial Lung Diseases, Functional Tests, Antifibrotic threathment

GASTROINTESTINAL DYSFUNCTION AND NEUROCOGNITIVE PERFORMANCE: A CROSS-SECTIONAL STUDY IN YOUNG ADULTS

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Background: Gastrointestinal dysfunction is increasingly recognised as a contributor to systemic and neurocognitive disturbances through gut-brain axis pathways. Young adults frequently exhibit lifestyle patterns: low fibre intake, irregular sleep, and high processed food consumption, that predispose to dysbiosis and functional GI disorders. Despite rising public interest in gut health, the extent to which awareness translates into protective behaviour or influences neurocognitive outcomes remains unclear. **Objective:** To characterise gastrointestinal dysfunction and related lifestyle patterns in young adults, and investigate the association between gastrointestinal symptoms and changes in neurocognitive performance, specifically attentional functioning, to clarify how gut-brain axis disruption may influence cognitive processes relevant to daily academic and occupational performance. **Material and methods:** A cross sectional questionnaire was completed by 27 participants. Data included dietary intake, hydration, sleep, exercise, GI symptoms, extra intestinal manifestations, and perceived gut health understanding. Symptom frequency was categorised as ≥ 3 symptoms or 1-2 symptoms. Neurocognitive performance was assessed through self reported changes in attentional functioning over the past six months. A chi square test ($P < 0.05$) evaluated the association between symptom category and attentional decline. **Results :** Twenty seven participants completed the questionnaire (88.9% female; mean age 22.4 years). Lifestyle patterns demonstrated several risk factors for dysbiosis: 66.7% consumed only 2-3 servings of fruit/vegetables daily, and 74.1% were unaware of recommended fibre intake, indicating no correlation between awareness and evidence based dietary behaviour. Sleep averaged 6.3 hours/night, and 66.7% exercised 1-2 times/week, patterns associated with impaired autonomic regulation and GI motility. GI symptoms were common: 59.3% reported monthly abdominal pain, 40.7% experienced weekly or daily bloating, and 26.9% had abnormal bowel habits. Extra intestinal manifestations-including low energy (40.7%), tiredness despite sleep (59.3%), mood changes (33.3%), and dermatological issues (48.1%)-demonstrated a negative correlation between symptom frequency and perceived vitality. A chi square test showed a significant association between GI symptom category and attentional decline [$\chi^2(1, N=27) = 8.47, P=0.0036$] indicating a positive correlation between gastrointestinal dysfunction and reduced neurocognitive performance. **Conclusions:** The association between gastrointestinal dysfunction and reduced neurocognitive performance suggests that GI symptoms may represent early peripheral markers of central dysregulation along the gut-brain axis rather than isolated digestive complaints. The clustering of attentional decline among those with multiple symptoms raises the possibility that chronic visceral signalling and low grade inflammation influence cognitive domains before overt neurological symptoms appear. Clinically, these findings support early lifestyle intervention as a strategy for both symptom management and preservation of cognitive functioning during a critical developmental stage.

Keywords: Dysbiosis,, Gastrointestinal Dysfunction,, Gut-Brain axis,, Neurocognitive Performabce

GENDER-RELATED DIFFERENCES IN LONG-TERM PATENCY OF RADIO-CEPHALIC ARTERIOVENOUS FISTULAS

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Background: The autologous radiocephalic arteriovenous fistula (RC-AVF) is the preferred first-line vascular access for hemodialysis in patients with end-stage kidney disease (ESKD) when the forearm vessels are at least 2 mm in diameter on preoperative vascular mapping. However, the long-term performance of RC-AVFs remains suboptimal and appears to vary significantly according to patient sex. **Objective:** This study aims to analyse the

long-term performance of the RC-AVF according to the patient's sex. **Material and methods:** In the present study, all patients diagnosed with ESKD who were admitted to the Vascular Surgery Department of the Emergency Clinical County Hospital Târgu Mureș and underwent RC-AVF creation were included. Demographic data, comorbidities, and risk factors were collected retrospectively from the hospital's electronic database. Postoperatively, RC-AVF patency was assessed by contacting chronic dialysis centers or during routine postoperative follow-up visits. Patients were subsequently divided into two groups according to sex: male and female. This work was supported by the "George Emil Palade" University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș, Research Grant number 171/2/09.01.2024. **Results :** In the present study, 110 patients were included, with a mean age of 62.71 years. Among them, 62 patients (56.36%) were male, and 48 patients (43.64%) were female. Regarding comorbidities, male patients had a higher prevalence of a history of myocardial infarction ($p=0.042$) and a higher rate of long-term arteriovenous fistula (AVF) failure ($p=0.014$). In terms of laboratory parameters, male patients had lower platelet counts ($p = 0.020$) and a larger radial artery diameter ($p=0.015$). Kaplan-Meier survival analysis demonstrated that female patients had lower primary patency rates compared with male patients (log-rank $p=0.012$). In the univariate analysis, male sex was associated with a lower risk of long-term AVF failure (OR: 0.37, $p=0.015$). **Conclusions:** Male patients demonstrated better long-term primary patency of RC-AVF compared with female patients, suggesting that sex may influence vascular access outcomes in individuals with ESKD.

Keywords: vascular surgery, vascular access, arteriovenous fistula, ESKD

GLP-1 MODULATION IN PATIENTS WITH OBESITY AND CARDIAC FIBROSIS - A SYSTEMATIC REVIEW

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Background: Heart Failure with Preserved Ejection Fraction (HFpEF) represents a major challenge in the field of cardiology, marked by diastolic dysfunction and a chronic pro-inflammatory state. Boosted visceral and epicardial adipose tissue in obese individuals causes paracrine coronary microvascular dysfunction, adipocyte dysfunction, and systemic inflammation. Interstitial fibrosis and elevated myocardial fat content are the final results of this cascade. Beyond glycemic control, glucagon-like peptide-1 (GLP-1) receptor agonists have been demonstrated to have a variety of cardioprotective qualities that specifically target oxidative stress, inflammation, and myocardial fibrosis. **Objective:** This review aims to systematically examine the specific molecular and pathophysiologic mechanisms by which GLP-1 modulation exerts anti-fibrotic effects and prevents adverse myocardial remodeling in the context of obesity and HFpEF. **Material and methods:** Using the PubMed database, a comprehensive review of the literature was carried out, examining 13 papers that had been released in the previous five years. The inclusion criteria were centered on in vivo pre-clinical models required to clarify the underlying molecular pathways of GLP-1 receptor agonists and dual GLP-1/glucagon agonists, as well as human clinical trials (such as STEP-HFpEF) evaluating structural outcomes. Research mainly concentrated on other pharmacological classes and isolated in vitro cellular studies were strictly excluded. **Results :** There is evidence that GLP-1 modulation specifically reduces visceral and epicardial fat, as well as pro-inflammatory adipokines and circulating inflammatory markers like C-Reactive Protein (CRP). Pro-fibrotic signals are disrupted at the molecular level by the pharmacodynamics of GLP-1 receptor activation via two main mechanisms. First, the Angiotensin II-mediated TGF- β 1/Smad3 pathway is downregulated as a result of incretin modulation, which significantly lowers the expression of cardiac TGF- β 1, α -SMA (alpha-smooth muscle actin), and COL1A1 (Type I collagen). Consequently, these therapies decrease interstitial and perivascular fibrosis and prevent myofibroblast proliferation. Second, GLP-1 reduces cardiomyocyte hypertrophy and excessive extracellular matrix deposition by concurrently stimulating the protective AMPK/mTOR pathways. In clinical settings, these anti-fibrotic mechanisms result in better structural outcomes that considerably lessen remodeling associated with fibrosis. **Conclusions:** Targeting the GLP-1 receptor provides a crucial structural benefit in obesity-related heart failure by acting as a direct disease-modifying therapy. By specifically inhibiting the pro-fibrotic TGF- β 1/Smad3 pathway and activating AMPK/mTOR signaling, these therapies actively mitigate cardiac fibrosis. Incorporating GLP-1 targeted therapies is essential for preventing adverse structural remodeling and improving the prognosis for patients with HFpEF.

Keywords: GLP-1 receptor agonists, cardiac fibrosis, HFpEF, myocardial remodeling

HEALTH-RELATED QUALITY OF LIFE IN ADULTS WITH EPILEPSY: A SYNTHESIS OF INTERNATIONAL PRACTICES IN CLINICAL AND INTEGRATED CARE

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Background: Epilepsy remains a major public health concern whose burden extends well beyond seizure frequency and control. In adults, the condition may compromise psychological well-being, functional autonomy, social participation, and overall quality of life. Consequently, health-related quality of life (HRQoL) has emerged as a key outcome in contemporary epilepsy care, reflecting the recognition that seizure control alone is insufficient to capture the full impact of the disorder. This broader perspective is particularly relevant in the context of integrated care, where clinical management is increasingly expected to address the medical, psychological, and social dimensions of living with epilepsy. **Objective:** To synthesize international approaches to HRQoL in adults with epilepsy and to examine their implications for routine clinical practice and integrated care models. **Material and methods:** We performed a narrative review of the literature, complemented by an analysis of documents issued by international organizations and studies addressing HRQoL assessment, stigma, family support, psychosocial burden, and multidisciplinary care in adults with epilepsy. Relevant publications were identified through searches of PubMed, Web of Science, and the Cochrane Library. The selected evidence was examined to identify recurring themes related to determinants of HRQoL, psychosocial vulnerability, and the organizational characteristics of effective care delivery. **Results :** International evidence increasingly supports the routine incorporation of HRQoL assessment into epilepsy care, alongside systematic screening for depression, anxiety, and other psychological comorbidities, evaluation of perceived stigma, and targeted educational interventions for patients, families, and communities. Effective models of care are consistently characterized by close collaboration among neurologists, psychiatrists, psychologists, social workers, and community support services, with the aim of reducing the treatment gap, improving treatment adherence, strengthening self-management, and enhancing social functioning. The available literature further suggests that limited access to reliable information, fear of disclosure, discriminatory experiences, and insufficient family support are associated with poorer HRQoL, greater emotional distress, and increased psychosocial vulnerability. Taken together, these findings indicate that the burden of epilepsy is shaped not only by clinical variables, but also by the broader social and relational environment in which the disorder is experienced. **Conclusions:** Improving HRQoL in adults with epilepsy requires the systematic integration of psychosocial assessment into routine care, implementation of anti-stigma strategies, and development of patient- and family-centered integrated care models. Adapting these internationally supported approaches to the national context may contribute to better clinical outcomes, improved engagement with care, and fuller social participation.

Keywords: epilepsy, health-related quality of life, integrated care, stigma

HIDDEN RESERVOIRS: BACTERIAL CONTAMINATION OF MEDICAL STUDENTS' MOBILE PHONES

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Background: Mobile phones used by medical students in both personal and clinical settings may act as reservoirs and vectors for the transmission of bacteria. In the context of a global increase in antimicrobial resistance, evaluating these potential sources of contamination can be relevant from an epidemiological and educational standpoint. In Romania, information regarding this subject remains scarce. **Objective:** To determine bacterial contamination with *Staphylococcus* spp. and Gram negative bacilli of mobile phones belonging to medical students in preclinical and clinical years. **Material and methods:** A cross-sectional observational study was conducted among medical students of the Faculty of Medicine at the University of Medicine, Pharmacy, Sciences, and Technology "George Emil Palade" in Târgu Mureş (years I-VI). After consenting to take part in the study, participants completed an anonymous questionnaire regarding phone hygiene practices. Bacterial samples were collected from mobile phone surfaces using sterile swabs and inoculated on Mannitol Salt Agar and Lactose Agar, followed by incubation for 24 hours at 37°C, in aerobiosis. Bacteria were identified using routine microbiological methods (e.g. colony characteristics, biochemical patterns, agglutination). Data were analyzed using descriptive

statistics and chi-square tests (Pearson and likelihood ratio), with linear-by-linear association for trend analysis; $p < 0.05$ was considered significant. **Results :** A total of 118 students (15-23 / year of study) participated in the study. Bacterial growth was detected in 92.4% (109/118) of samples. The majority of isolates were consistent with commensal flora, all of which presented coagulase-negative staphylococci; however, 18.6% (22/118) samples also exhibited suggestive colony morphologies of other commensal bacteria (*Bacillus* spp.). Although lactose agar was used to screen for Gram-negative bacteria, no significant growth was observed. Samples without bacterial growth were identified exclusively among first- and second-year students, whereas all samples from students with clinical activity showed bacterial contamination. No statistically significant relationship was found between the frequency or method of phone cleaning and the presence of general bacterial growth. Cleaning frequency was significantly associated with the presence of more diverse bacterial isolates ($p = 0.005$). A potential association was also observed between cleaning methods and the presence of diverse bacterial flora ($p = 0.035$), although this was not confirmed by likelihood ratio testing ($p = 0.085$). **Conclusions:** Mobile phones of medical students are often contaminated with bacteria that are part of the normal skin flora (mostly coagulase-negative staphylococci). Frequency and method of cleaning can influence the diversity of bacterial flora.

Keywords: mobile phones, bacterial contamination, coagulase-negative staphylococci, medical students

ICU SEPSIS CASE SERIES: OUTCOME DIFFERENCES BETWEEN GRAM-NEGATIVE AND GRAM-POSITIVE INFECTIONS.

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Background: Sepsis is a major complication and cause of death in intensive care units all around the world. Determining the pathogen via blood cultures is an essential part of diagnosing sepsis and specifying treatment. But which type of bacteria presents worse outcomes and has a higher mortality? **Objective:** This Study aims to show the severity and mortality of sepsis categorized by Gram-positive or Gram-negative bacteria in a case series of critically ill patients. **Material and methods:** The study is a case series presentation including all patients with a diagnosed primary or secondary sepsis who have a positive blood culture. Data collection took place bedside, using a patient sheet that focused on patient demographics, laboratory values (pH, lactate), scores (SOFA), organ dysfunction (AKI, DIC, etc.), antibiotic treatment, and vasopressive treatment. **Results :** A total of 9 ICU patients were included in the preliminary analysis. The cohort comprises 4 males and 5 females, with an average age of 72.9 years. The average SOFA score was 9.39, and the mean lactate was 1.94 mmol/l (mean lactate in gram-positive 1,825 mmol/l, gram-negative 2,2 mmol/l), and the average pH was 7.33 (mean pH in gram-positive 7,284, gram-negative 7,416). 4 patients had gram-positive infections and 5 gram negative infections. Gram-negative sepsis was associated with a 100% mortality, and gram-positive sepsis with a 50% mortality. Organ dysfunction was observed commonly with a predominance in AKI (n=7 AKI positive). ARDS and hepatic failure were observed less commonly (ARDS n=1, Hepatic Failure n=3). Septic shock was diagnosed in 66% (n=6). Noradrenaline was administered in 7 patients (5 deaths, 2 survivals) and dobutamine in 4 patients (3 deaths, 1 survival). The most common observed pathogens have been *Acinetobacter Baumanii*, *Enterococcus faecalis*, and *Pseudomonas aeruginosa*. Overall, a predominance of gram-negative multidrug-resistant bacteria. **Conclusions:** In the preliminary analysis, Gram-negative infections showed markedly higher mortality and higher mean lactate levels. The burden of organ dysfunction is evenly distributed alongside the vasopressor use. The predominance of multidrug-resistant gram-negative pathogens might contribute to the poorer outcomes due to increased virulence and therapy resistance. Overall, the sample size is still too small to aim to generate a hypothesis.

Keywords: Sepsis, Organ dysfunction, mortality, ICU

IMPLEMENTATION OF ROBOTIC UROLOGIC SURGERY PROGRAM: INITIAL OUTCOMES FROM ROBOT-ASSISTED PROCEDURES

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Background: Robot-assisted surgery has become an important component of modern urologic treatment, offering advantages in complex procedures. Evaluating early outcomes from recently founded robotic programs is important for assessing feasibility, safety, and oncological relevance. **Objective:** Our early results demonstrate

that the implementation of a robotic program is implementable and low-risk, with perioperative outcomes comparable to those reported during the learning phase in other centers. The study also aims to analyze perioperative parameters, pathological outcomes, and early complication rates across different robotic procedures to inform best practices for newly implemented programs. **Material and methods:** We analysed the robot-assisted urologic procedures performed between September 2025 and March 2026 at the Department of Urology, Bihor County Emergency Clinical Hospital. Demographic, perioperative, and pathological parameters were evaluated. The robotic program included Robotic Assisted Radical Prostatectomy (RALP), radical and partial nephrectomy, and radical cystectomy with orthotopic neobladder. RALP procedures followed standard techniques including selective (DVC) ligation, bladder neck preservation, posterior reconstruction, and ureterovesical anastomosis. For RALP procedures, the standardized surgical technique included selective dorsal venous complex (DVC) ligation, bladder neck preservation when feasible, posterior reconstruction (Rocco stitch), and ureterovesical anastomosis using the Van Velthoven technique. **Results :** A total of 40 procedures were performed during the study period. Among patients undergoing RALP, the median age was 67 (53-75) years, with a median preoperative PSA of 11.4 ng/mL (3.1-17) and a median prostate volume of 45 mL (25-80). Conversion to open surgery occurred in one case. Bladder neck preservation was achieved in 80% of patients, while selective DVC control was performed in 91%. Posterior reconstruction and ureterovesical anastomosis were completed in 100% of procedures. The median operative time was 200 minutes and the median estimated blood loss was 200 mL. Only one patient required perioperative blood transfusion. The median duration of urinary catheterization was 14 days (7-21) and the median postoperative hospital stay was 3 days (2-7). Pathological staging showed pT2-pT3b disease, with most patients ISUP grade 2-3. Upgrading occurred in 12 patients, downgrading in 4; overall positive surgical margin rate was 10%. Major complications (Clavien-Dindo III-IV) occurred in two patients (hematuria and ureterovesical anastomotic stricture). The additional robotic procedures (radical nephrectomy, partial nephrectomy, and radical cystectomy with neobladder) were completed successfully without intraoperative conversion. **Conclusions:** Robot-assisted surgery can be safely implemented in a newly established urologic robotic program, with favorable early perioperative and oncological outcomes. Long-term follow-up is required.

Keywords: RALP, Rocco stitch, DVC, Van Velthoven technique

INCIDENTAL PARATHYROIDECTOMY IN THE CONTEXT OF EXTENSIVE THYROID SURGERY: PREDICTIVE FACTORS AND PARACLINICAL CONFIRMATION

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Background: Injury to the parathyroid glands is one of the most common complications of thyroid surgery, most often resulting from incidental parathyroidectomy (IP). Despite technical advances, the risk cannot be completely eliminated, especially in extensive procedures. The anatomical variability of the parathyroid glands and the complexity of lymph node dissections make intraoperative identification difficult and may contribute to the development of postoperative hypocalcemia. **Objective:** The aim of this study is to assess the incidence of IP in thyroid surgery and to identify predictive factors. The focus will be on the extent of the surgical procedure and the type of thyroid pathology. **Material and methods:** We conducted a retrospective, single-center, observational cohort study that included patients who underwent surgery for thyroid disease between 2023-2025. All procedures were performed by the same surgeon, ensuring technical uniformity. We analyzed demographic data, the surgical indication (benign or malignant), the type of procedure, the presence and extensiveness of lymphadenectomy, as well as the histopathological identification of parathyroid tissue. To complement the statistical analysis, a clinical case was selected from the study group and used for illustrative purposes. **Results :** A total of 440 patients were included, of whom 358 women(81.36%) and 82 men(18.64%), with a mean age of 52.7 years. Benign pathology was mainly represented by nodular goiter(48.64%) and Graves' disease(2.5%), while malignant pathology was represented by papillary(38.64%), follicular(11.82%), and medullary thyroid carcinoma(12.73%). The overall incidence of IP was 26.4%, significantly higher in malignant cases compared to benign ones (30.7%vs.21.5%, p=0.031). The presence of lymphadenectomy was associated with a marked increase in the incidence of IP(41.6%vs.22.4%, p **Conclusions:** IP remains a significant complication in thyroid surgery, particularly in cases of malignant disease and extensive procedures. The extensive nature of the surgical dissection is a key determining factor. The correlation between intraoperative data and histopathological findings is essential for understanding the underlying mechanisms and for preventing postoperative metabolic complications.

Keywords: Incidental Parathyroidectomy, Lymphadenectomy, Thyroidectomy, Hypocalcemia

INFLAMMATORY PROFILE OF TYPE 2 DIABETIC PATIENTS WITH POOR GLYCEMIC CONTROL

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Background: Chronic inflammation plays a central role in the pathophysiology of Type 2 Diabetes Mellitus. The neutrophil-to-lymphocyte ratio (NLR) represents a readily available and cost-effective marker of systemic inflammation. **Objective:** The objective of this study was to investigate a possible association between neutrophil-to-lymphocyte ratio and glycemic control, and to explore its relationship with metabolic and inflammatory parameters in patients with type 2 Diabetes Mellitus. **Material and methods:** A retrospective analysis was conducted on 56 patients with type 2 Diabetes Mellitus, hospitalized in Mures County Clinical Hospital between 1st of January 2024 and 31st December 2025. Collected data consisted of clinical data such as body mass index (BMI), as well as laboratory workout results, including complete blood count analysis with derived NLR calculation, inflammation markers such as C-reactive protein (CRP), a jeun glucose levels, and glycosylated hemoglobin (HbA1c) where available. NLR values were compared across various groups, and correlation analysis was used to examine the relationship between NLR and metabolic parameters. **Results :** The distribution of participants by sex was balanced, with 27 males and 29 females. The mean age was 65 ± 10 years. Mean BMI was 33 ± 7.3 kg/m², and mean NLR was 2.38 ± 0.75 . NLR did not vary significantly between patients with good glycemic control (a jeun glucose level < 130 mg/dl) and patients with uncontrolled Diabetes Mellitus, respectively between obese patients (BMI $\geq$ 30) versus normoponderal or overweight patients (BMI<30). In the full cohort, no significant association could be established between NLR and BMI, NLR and CRP, NLR and glucose levels ($p > 0.05$). Among patients with available HbA1c, NLR demonstrated a moderately positive but not statistically significant correlation with HbA1c ($r = 0.32$, $p = 0.09$). **Conclusions:** The present study does not give supportive evidence that diabetic patients with poorer glycemic control have significantly higher NLR values. However, the low availability of HbA1c in the studied group poses a significant limitation in correctly assessing the glycemic control. Further research involving larger cohorts is warranted to better assess the dynamic of NLR and possible association with glycemic control in Diabetes Mellitus patients.

Keywords: Type 2 Diabetes Mellitus, Neutrophil-to-lymphocyte ratio, Systemic inflammation, Glycemic control

INFLUENCE OF SEASONAL, MONTHLY, AND DAY VARIATION ON ABDOMINAL AORTIC ANEURYSM RUPTURE

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Background: Ruptured abdominal aortic aneurysm (rAAA) is associated with a high mortality rate, even in high-volume vascular centers. Recent studies have reported a potential association between meteorological factors, including weather conditions and atmospheric pressure, and the incidence of aneurysm rupture. However, no multinational analyses have been performed to date, and because of geographical variability, the existing data cannot be generalized. **Objective:** The objective of this study was to evaluate the influence of seasonal, monthly, and day-of-the-week variations on the incidence of rAAA and to determine whether temporal factors are associated with postoperative mortality. **Material and methods:** In the present study, all patients diagnosed with rAAA admitted to the Department of Vascular Surgery at the Emergency Clinical County Hospital Târgu Mureş between 2019 and 2025 were included. All clinical and demographic data were retrospectively retrieved from the hospital electronic database. In addition, the date of presentation, type of treatment, and postoperative outcomes were recorded. This work was supported by the "George Emil Palade" University of Medicine, Pharmacy, Science, and Technology of Târgu Mureş, Research Grant no. 170/2/09.01.2024. **Results :** A total of 73 patients were included in the study, with a mean age of 73.67 ± 8.04 years, of whom 58 (79.5%) were male. Regarding seasonal distribution, the highest incidence of rAAA presentations to the emergency department was observed in autumn ($n=22$, 30.1%), followed by spring ($n=19$, 26%), winter ($n=17$, 23.3%), and summer, which had the lowest number of cases ($n=15$, 20.5%). In terms of monthly distribution, the highest incidence was recorded in March ($n=10$, 13.7%), followed by August ($n=9$, 12.3%), while October and September had the same number of cases ($n=8$, 11%

each). The lowest number of cases was observed in July (n=2, 2.7%). Analysis of the day of presentation showed that Thursday and Sunday had the highest number of admissions (n=14, 19.2% each), followed by Wednesday (n=11, 15.1%). Friday, Saturday, and Tuesday each accounted for 9 cases (12.3%), while the fewest presentations occurred on Monday (n=7, 9.6%). All the patients underwent open repair, and post-operatively, within 30 days, 46 patients (63.01%) died. The patients presented in the autumn were associated with a higher risk of mortality (p=0.049) **Conclusions:** The incidence of AAA rupture varied over time, with more cases occurring in autumn and higher mortality rates among patients presenting during this season. This indicates that seasonal factors may influence the occurrence and outcome of rAAA.

Keywords: Abdominal aortic aneurysm, AAA, risk factors, open repair, EVAR, vascular surgery

INTEGRATED ASSESSMENT OF CLINICAL AND ENDOCRINE EXPRESSION IN POLYCYSTIC OVARY SYNDROME IN ADOLESCENTS

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Background: Globally, the burden of polycystic ovary syndrome (PCOS) is increasing, with significant variations depending on age, phenotype, and geographical region (6-20%). PCOS is the most common endocrine disorder in adolescents and represents one of the leading causes of menstrual dysfunction. It is characterized by hyperandrogenism and ovulatory dysfunction, and is frequently associated with insulin resistance, obesity, and dyslipidemia. These metabolic disturbances may contribute to early cardiometabolic risk. PCOS exhibits a heterogeneous phenotypic spectrum, including complete and incomplete forms, with clinical expression evolving over time. According to ESHRE, diagnosis requires persistent ovulatory dysfunction in association with clinical and/or biochemical hyperandrogenism, while ultrasound should not be used as a standalone diagnostic criterion in the early postmenarcheal years. **Objective:** To evaluate PCOS phenotypes in adolescents, the concordance between clinical and biochemical hyperandrogenism, and the relationship between endocrine profile and metabolic status. **Material and methods:** A retrospective observational study was conducted on a cohort of 41 adolescents. Clinical variables (body mass index, Tanner staging) and hormonal parameters (LH, FSH, LH/FSH ratio, total testosterone) were analyzed. Clinical hyperandrogenism was defined by a Ferriman-Gallwey score ≥ 8 and/or moderate-to-severe acne, while biochemical hyperandrogenism was defined by elevated total testosterone levels. Ovulatory dysfunction was defined by persistent menstrual irregularities. Statistical analysis included descriptive statistics and correlation analysis, with a significance threshold set at $p < 0.05$. **Results :** The mean age of the patients was 14.9 years. Menstrual disturbances were present in 65.9% of cases, confirming that ovulatory dysfunction represents the dominant clinical feature in adolescence. In 34.1% of cases, the association of biochemical hyperandrogenism with ovulatory dysfunction was identified. In 48.8% of cases, the association of hyperandrogenism with ovulatory dysfunction was observed, corresponding to a phenotypic pattern similar to phenotype B. The majority of patients (71.8%) presented incomplete phenotypes, predominantly represented by isolated ovulatory dysfunction or isolated hyperandrogenism. These findings support the concept of a transitional and evolving clinical expression during adolescence. Overweight or obesity was identified in 31.7% of patients, and metabolic parameters showed significant associations with increased BMI ($p < 0.05$). **Conclusions:** PCOS in adolescents demonstrates predominantly incomplete phenotypes and a dynamic clinical expression. The moderate concordance between clinical and biochemical manifestations highlights the need for an integrated, age-specific diagnostic approach. Longitudinal monitoring of "at-risk" individuals is essential for early intervention and prevention of long-term metabolic and reproductive complications.

Keywords: polycystic ovary syndrome, adolescents, hyperandrogenism, phenotype

INTIMAL NEOVASCULARIZATION CORRELATES WITH SYSTEMIC INFLAMMATORY STATUS AND LONG-TERM ARTERIOVENOUS FISTULA FAILURE

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Background: The autologous arteriovenous fistula (AVF) represents the first-line vascular access (VA) for hemodialysis. Despite its advantages, long-term outcomes remain limited due to relatively low primary and secondary patency rates. **Objective:** The aim of this study is to investigate the impact of pre-existing vascular abnormalities within venous specimens on long-term AVF failure. **Material and methods:** This retrospective observational study included 50 patients with ESKD who were admitted to the Vascular Surgery Department for the creation of AVFs between 2020 and 2022. During the AVF procedure, a 5-10 mm segment of the venous wall was collected for histological analysis. The specimens were processed using hematoxylin and eosin (H&E), Masson's trichrome, and von Kossa staining. In addition, CD31 immunohistochemistry was performed to evaluate neovascularization in the intimal and medial layers. Based on AVF outcomes during follow-up, patients were categorized into two groups: functional AVF and AVF failure. Patient outcomes were assessed through review of medical records, telephone interviews, or direct clinical follow-up. This work was supported by the "George Emil Palade" University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș, Research Grant number 170/2/09.01.2024. **Results :** During the follow-up period, 14 patients (28%) experienced AVF failure. No statistically significant differences were observed between the two groups regarding demographic characteristics, comorbidities, or AVF types. However, patients with AVF failure demonstrated significantly higher CD31-positive relative surface area ($p=0.020$) and interleukin-6 (IL-6) levels ($p<0.001$). Receiver operating characteristic (ROC) curve analysis revealed a significant association between CD31-positive relative surface area and AVF failure (AUC: 0.713, $p=0.012$). A positive correlation was also identified between intimal neovascularization and IL-6 levels ($r=0.411$, $p=0.004$). Kaplan-Meier survival analysis showed that patients with elevated CD31-positive relative surface values had a higher incidence of AVF failure ($p=0.027$). Furthermore, Cox regression analysis indicated that increased CD31-positive relative surface area was independently associated with long-term AVF failure (HR:1.81, $p=0.004$). **Conclusions:** In this preliminary study, our findings suggest that increased intimal CD31-positive relative surface area is associated with systemic inflammatory status and may contribute to long-term AVF failure.

Keywords: arteriovenous fistula, AVF, vascular access, ESKD

IS ANKLE-BRACHIAL INDEX STILL RELEVANT? A STUDY ABOUT ABI FROM REVOLUTION - TO DOGMA - TO REFINEMENT

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Background: The most used non-invasive vascular test, the ABI has been considered the preferred frontline diagnostic tool for peripheral artery disease (PAD) since the early 2000s. But it was invented in 1950, an year long preceded by our contemporary rise of diabetes prevalence. **Objective:** The objective of this study is to analyse the current position of the ankle-brachial index in modern medicine and to juxtapose it with its history and its prospect for the future. **Material and methods:** There were reviewed and compared 16 studies published in specialty journals, as well as AHA, ACC, ESC and IWGDF guidelines. **Results :** Seven decades ago, ABI revolutionized peripheral arterial stenosis screening, by providing a straightforward and time-efficient diagnostic tool. Today it still represents the cornerstone of non-invasive vascular investigations. But it has been proven that the number of Mönckeberg sclerosis cases is increasing alarmingly. The calcification will inevitably prompt low compressibility of the arteries resulting in numerous false negatives of the ABI test. Recent studies such as "Accuracy of ankle-brachial index in screening for peripheral arterial disease among individuals with diabetes mellitus" (October 2024) discuss the fact that ankle-brachial index's sensitivity is concerningly low regarding diabetic patients. Guidelines have changed, dimming ABI's spotlight and introducing TBI (toe-brachial index) as a possibly more accurate assessment alongside evaluating Pedal Doppler waveforms, Pulse Wave Velocity (PWV) and measuring transcutaneous pressure of oxygen (T_{cp}O₂). **Conclusions:** ABI's sensitivity has declined as the risk factors for peripheral artery disease have changed. Even though its specificity persists at a high threshold and its contribution in diagnosing is still substantial, the ankle-brachial index should not be the sole leading factor in formulating a PAD diagnosis.

Keywords: peripheral artery disease, Mönckeberg sclerosis, IWGDF guidelines

IS DIPPER STATUS CORRELATED WITH PHYSIOLOGICAL RESTING BLOOD PRESSURE LEVELS IN HEALTHY SUBJECTS?

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Background: The dipper status is defined as a physiological decrease in blood pressure of 10-20% during nighttime. Its prevalence varies among different studies, ranging between 70% and 85% in healthy normotensive adults, and it is associated with reduced cardiovascular risk. In the last decade, the definition and classification of "normal" blood pressure levels have changed, and differences have been noted between European and American guidelines. Currently, the European Society of Cardiology defines "non-elevated blood pressure" as values below 120/70 mmHg. **Objective:** The aim of our study is to determine whether dipper status is preserved in individuals with naturally low blood pressure levels. **Material and methods:** This was a retrospective observational study including 66 patients from the Mediconsult Center and the County Emergency Clinical Hospital of Tîrgu Mureş, all of whom had blood pressure values below 110/70 mmHg and no known medical conditions that could lower blood pressure. Blood pressure was measured using 24-hour ambulatory blood pressure monitoring (ABPM), with ABPM-50 Contec devices. The results were compared with literature data using a one-sample Z-test for proportions. **Results :** Our results suggest that, out of 66 patients, 50.8% were dippers, 42% were non-dippers, and 7.2% were reverse dippers. Compared with literature data, we observed a 24.2% reduction in dipper status in the low blood pressure group ($Z = -4.5$, $p < 0.005$). **Conclusions:** Dipper status appears to be less prevalent in individuals with naturally low blood pressure. However, it is not yet established whether this reduction in dipper status is associated with an increased cardiovascular risk in this group.

Keywords: Dipper status, Low blood pressure, ABPM, Cardiovascular risk

KLINTRUP-MÄKINEN SCORE REFLECTS CD8+ T-CELL INFILTRATION AND IS ASSOCIATED WITH NODAL STATUS IN COLORECTAL ADENOCARCINOMA

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Background: The interaction between tumor cells and the host immune response plays a key role in the progression of colorectal adenocarcinoma. The Klintrop-Mäkinen (KM) score represents a simple histological method for evaluating the inflammatory reaction at the invasive tumor front, but its relationship with specific T-cell populations remains incompletely defined. **Objective:** This study aimed to investigate the association between the KM score and T-cell infiltration, assessed by CD3, CD4, and CD8 immunohistochemical markers, as well as its correlation with clinicopathological parameters. **Material and methods:** A total of 150 patients diagnosed with colorectal adenocarcinoma between 2022 and 2025 were included. Cases were stratified into low KM (scores 0-1) and high KM (scores 2-3) groups. Immunohistochemical staining for CD3, CD4, and CD8 was performed and evaluated at the invasive front. Associations between KM score, immunohistochemical markers, and clinicopathological variables were analyzed using Chi-square or Fisher's exact test, while age was assessed using the Mann-Whitney U test. **Results :** High KM scores were significantly associated with increased expression of CD3 ($p < 0.001$), CD4 ($p = 0.032$), and particularly CD8 ($p < 0.001$). Low KM scores were more frequently associated with lymph node metastasis ($p < 0.001$) and poor tumor differentiation ($p = 0.010$). No significant differences were observed in relation to age, gender, pT stage, lymphovascular invasion, perineural invasion, tumor budding, necrosis, or distant metastasis. CD8 expression was significantly associated with lymph node status ($p = 0.021$), but not with other markers of tumor aggressiveness. **Conclusions:** The KM score correlates with the density of tumor-infiltrating T lymphocytes, particularly CD8-positive cells, and is associated with relevant pathological features such as nodal status and tumor differentiation. These findings support its role as a simple histological indicator of the tumor immune microenvironment in colorectal adenocarcinoma.

Keywords: colorectal adenocarcinoma, Klintrop-Mäkinen score, tumor-infiltrating lymphocytes, tumor immune microenvironment

KNOWLEDGE, ATTITUDES AND MOTIVATIONS TOWARDS COVID-19 AND INFLUENZA VACCINE

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Background: Although vaccination against influenza and COVID-19 is essential for collective protection, population reluctance remains a major barrier, with vaccination rates below the threshold necessary for optimal protection. **Objective:** This paper investigates the motivations and barriers perceived by individuals, highlighting knowledge and perceptions that shape attitudes towards influenza and COVID-19 vaccination. **Material and methods:** A cross-sectional observational study was conducted on a sample of 200 subjects, recruited through convenience sampling. Data collection was carried out through an online questionnaire (Google Forms), structured to assess the demographic profile, level of knowledge (True/False/ Don't know items), participants' perspectives (Likert scale) and direct experience with the vaccination process. **Results :** The sample (N=200) included 76,5% men and 23,5% women, mostly consisting of high school graduates (48%). 51.5% of the entire cohort reported frequent exposure to negative information about vaccination on social media. Regarding anti-COVID-19 status, 67.5% of vaccinated subjects and 32.5% unvaccinated were identified. In the case of influenza, 87,5% did not get vaccinated last season. To the statement "I have never been vaccinated against influenza and I do not think I need to." 34% answered "yes". A total of 82% participants were not invited by their family physician for either the influenza or COVID vaccination. Statistical analysis revealed significant associations between the perception of lack of need for vaccination and medical profile (students: $p=0.045$; employees: $p=0.014$), as well as between age and awareness of the severity of influenza ($p=0.033$). **Conclusions:** Despite negative exposure on social media, the population showed a relatively high willingness to get vaccinated against COVID-19. Medical students revealed a lower rate of perception of the uselessness of vaccination compared to the rest of the group, while medical staff recorded a higher proportion of this perception. Young people demonstrated a higher level of awareness of the severity of influenza compared to the elderly.

Keywords: vaccination, influenza, COVID-19

LINKING PHYTOCHEMISTRY TO PHARMACOLOGICAL EFFECTS: A SYSTEMATIC REVIEW OF ONONIS SPINOSA

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Background: *Ononis spinosa*, also known as spiny restharrow, is a perennial plant from the Fabaceae family. It has long been used in traditional medicine across Europe and Asia, mainly for urinary tract problems, inflammation, and skin conditions. Despite its long history in ethnopharmacology, available scientific information about its phytochemical composition and pharmacological effects is scattered and sometimes inconsistent, making it hard to clearly assess its therapeutic potential. **Objective:** To systematically review and integrate current evidence on the phytochemical constituents and experimentally validated biological activities of *O. spinosa*, and to assess its potential clinical relevance. **Material and methods:** A systematic review was conducted following PRISMA guidelines. Literature searches were performed in PubMed, Scopus, Web of Science, and SpringerLink for studies published between 1997 and 2024 using predefined keywords related to phytochemistry, pharmacology, and bioactivity. Eligible studies reported chemical analysis, in vitro, in vivo, or clinical biological effects of *O. spinosa*. After removing the duplicates and gradual screening of titles, abstracts, and full texts, studies that didn't meet the inclusion criteria were excluded. Of 308 records initially identified, 55 duplicates were removed, 183 articles achieved full-text evaluation, and 40 studies were included in the qualitative synthesis. **Results :** Phytochemical analyses identified a complex profile dominated by isoflavonoids (ononin, formononetin and biochanin A derivatives), triterpenes, flavonoids, phenolic acids, and saponins. These compounds have been associated with multiple pharmacological activities. The most consistently documented effects concerned the urinary system, where diuretic activity, anti-adhesive action against uropathogenic *Escherichia coli*, and reduced urinary inflammation supported its traditional use in lower urinary tract disorders. Anti-inflammatory effects were observed through inhibition of cytosolic phospholipase A2 α , suppression of pro-inflammatory cytokines, and modulation of toll-like receptor pathways. Antimicrobial and anti-adhesive activities were demonstrated against

Gram-positive bacteria and *Candida* species. Antioxidant and dermatological benefits included radical-scavenging activity, enhanced wound healing, and hyaluronidase inhibition. Additional activities, including analgesic, antiproliferative, anti-adipogenic, and neurotrophic effects, were reported in preclinical models. **Conclusions:** *O. spinosa* contains a variety of bioactive secondary metabolites that support its traditional uses, especially in urological, inflammatory, and dermatological conditions. In the absence of well-designed clinical trials, current evidence remains primarily preclinical. However, the confluence of historical medicinal use and consistent preclinical evidence highlights its potential for further translational and clinical research.

Keywords: *Ononis spinosa*, phytochemistry, pharmacological activity, medicinal plants

LONG-TERM OUTCOMES FOLLOWING AORTO-BIFEMORAL BYPASS FOR AORTOILIAC OCCLUSIVE DISEASE: A SINGLE-CENTER EXPERIENCE

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Background: Aortoiliac occlusive disease (AOD) requires revascularization to relieve symptoms and prevent limb loss. When endovascular treatment is not feasible or fails, aorto-bifemoral (Ao-BiF) bypass remains the gold standard due to its superior long-term patency. **Objective:** The aim of this study was to evaluate the long-term outcomes of aorto-bifemoral bypass in patients with AOD based on real-world experience from a single vascular surgery center. **Material and methods:** We conducted a retrospective study including 74 patients treated for AOD between 2020 and 2023. Patients underwent either anatomical reconstruction with aorto-bifemoral bypass using classic technique with an anterior transperitoneal approach. All the patients with active malignancy, autoimmune disorders, or previous traumatic arterial lesions were excluded. Postoperative follow-up consisted of regular clinical evaluation combined with duplex ultrasound or computed tomography angiography to assess graft patency and limb status. **Results :** In the current study, we included 74 patients with a mean age of 65.2 ± 7.9 years, of whom 63 were male. The most common comorbidities were cardiovascular, with hypertension present in 64 patients, followed by ischemic heart disease in 32 patients, and chronic heart failure in 23 patients. Additionally, 21 patients were diagnosed with diabetes at the time of admission, and 25 patients were active smokers. Regarding the outflow, 15 patients had severe stenosis of the superficial femoral artery, and 10 patients had it at the level of the common femoral artery. During follow-up, 13 patients required major amputation, and 17 patients experienced at least one occlusion of the aorto-bifemoral bypass. In univariate analysis, male sex was associated with long-term major amputation (HR: 2.95, $p=0.040$). **Conclusions:** Aorto-bifemoral bypass demonstrates durable long-term results and remains the gold-standard surgical option for patients with AOD, despite the presence of significant comorbidities and advanced arterial lesions, when endovascular therapy is not suitable.

Keywords: AOD, Aorto-bifemoral bypass, open surgery, vascular surgery

LONG-TERM PERFORMANCE OF BRACHIOCEPHALIC ARTERIOVENOUS FISTULAS: A SINGLE TERTIARY CENTER EXPERIENCE

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Background: According to the guidelines of the European Society of Vascular Surgery, the gold standard vascular access (VA) for hemodialysis is the autologous arteriovenous fistula (AVF). The preferred initial option is the radiocephalic AVF; however, its long-term performance is frequently suboptimal. Consequently, a more proximal access, such as a brachiocephalic AVF (BC-AVF), is often recommended as an alternative. Nevertheless, the long-term outcomes of BC-AVF remain variable across studies and are influenced by several factors, including preoperative vessel diameter, vessel quality, and patient comorbidities. **Objective:** The objective of this study was to analyze the long-term performance of BC-AVF and the risk factors associated with AVF failure. **Material and methods:** In the present study, all patients diagnosed with end-stage kidney disease (ESKD) who were admitted to the Vascular Surgery Department of the Emergency Clinical County Hospital Tîrgu Mureș and underwent BC-AVF creation were included. Demographic data, comorbidities, and risk factors were retrospectively collected from the hospital's electronic database. Postoperatively, BC-AVF patency was assessed by communicating with chronic

dialysis centers or during routine postoperative follow-up visits. Patients were subsequently categorized into two groups based on long-term AVF outcomes: functional AVF and AVF failure. This work was supported by the "George Emil Palade" University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș, Research Grant number 170/3/09.01.2024. **Results** : This study included 116 patients who underwent creation of a BC-AVF, with a mean age of 61.5 ± 13.73 years. Among them, 69 patients (59.5%) were male. Patients were followed for a mean period of 2.86 ± 1.62 years, during which 31 patients (26.72%) developed AVF failure. Patients with long-term AVF failure had a higher prevalence of diabetes mellitus (DM) ($p=0.009$) and were more likely to initiate dialysis using a central venous catheter ($p=0.002$). The primary patency rate of BC-AVF was 85.1% at 12 months, approximately 80% at 2 years, and over 68% at 5 years. At the Kaplan-Meier survival curve, the patients with DM have a higher risk of long-term AVF failure (long-rank $p=0.021$). **Conclusions**: BC-AVF demonstrates favorable long-term performance with satisfactory patency rates, supporting its role as a reliable VA option for hemodialysis in patients with ESKD. However, DM and dialysis initiation via a central venous catheter were associated with a higher risk of AVF failure, underscoring the importance of careful patient evaluation and timely vascular access planning to improve long-term outcomes.

Keywords: Vascular access, arteriovenous fistula, vascular surgery, ESKD

LONG-TERM PERFORMANCE OF THE BRESCIA-CIMINO ARTERIO-VEIN FISTULA: SINGLE CENTER EXPERIENCE

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Background: The Brescia-Cimino arteriovenous fistula (AVF), first described in 1966, is created by an anastomosis between the radial artery and the cephalic vein at the distal forearm. It remains the gold standard for hemodialysis vascular access and is recommended as the first-line option in the European Society for Vascular Surgery (ESVS) guidelines. Despite these recommendations, the long-term patency and functional performance of the Brescia-Cimino AVF are often suboptimal. **Objective:** The objective of this study was to analyze the long-term performance of Brescia-Cimino AVF and the risk factors associated with AVF failure. **Material and methods:** All patients with end-stage kidney disease who underwent Brescia-Cimino AVF creation in the Department of Vascular Surgery, Emergency Clinical County Hospital, Târgu Mureș, between 2019 and 2025 were included in the present study. Demographic characteristics, comorbidities, and risk factors were retrospectively retrieved from the hospital electronic database. Postoperative AVF patency was assessed through follow-up visits or by contacting the chronic dialysis centers where the patients were monitored. This work was supported by the "George Emil Palade" University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș, Research Grant no. 170/3/09.01.2024. **Results** : Of the 558 patients admitted for AVF creation, 168 were suitable for Brescia-Cimino AVF, and 81 satisfied all inclusion criteria for the present analysis. The mean age of the cohort was over 60 years, with a predominance of male patients. Cardiovascular comorbidities were highly prevalent, including arterial hypertension ($n=66$), coronary artery disease ($n=45$), and type II diabetes mellitus ($n=32$). Regarding long-term patency, female sex, type II diabetes mellitus, and initiation of hemodialysis through a central venous catheter (CVC) were identified as significant risk factors for long-term AVF failure. One-year primary patency was 69.3%, followed by 60.2% at 2 years, and 54% at 3 years. **Conclusions:** In this single-center experience, female sex, type II diabetes mellitus, and initiation of hemodialysis via CVC were associated with a higher risk of Brescia-Cimino AVF failure, while overall patency rates showed a gradual decline over time. Careful patient selection and early vascular access planning may improve long-term outcomes.

Keywords: Arteriovenous fistula, Brescia-Cimino AVF, ESKD, Vascular surgery

MANAGEMENT OF INFECTIVE ENDOCARDITIS IN PEOPLE WHO INJECT DRUGS: A SYSTEMATIC REVIEW

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Background: Hazardous injection practices among intravenous drug users have significantly contributed to the rising incidence of infective endocarditis (IE) in this rapidly growing patient population. Distinct morphological and

microbiological features, combined with recurrent exposure to risk factors, make the management of IE in people who inject drugs (PWID) particularly challenging. Conventional treatment strategies often fail to achieve optimal outcomes, emphasizing the need for individualized, addiction-focused therapeutic approaches delivered within a multidisciplinary care framework. **Objective:** This review aims to analyze the clinical presentation, microbiological profile, therapeutic strategies, and outcomes of IE in PWID, while identifying key factors influencing prognosis and management. **Material and methods:** This systematic review was conducted in accordance with PRISMA 2020 guidelines. A literature search was performed in PubMed/MEDLINE and Google Scholar, supplemented by manual reference screening, for studies published between 2000 and 2025. Eligible studies included clinical and observational research on IE in PWID, reporting on clinical characteristics, microbiology, management strategies, and outcomes. Of 36 identified articles, 19 met inclusion criteria. Data on patient characteristics, microbiology, treatment, and outcomes were extracted. Risk of bias was assessed using validated tools, and due to study heterogeneity, results were synthesized narratively. **Results :** Patients with IE who inject drugs were predominantly young (25-55 years), mostly male, and frequently presented with comorbidities such as HIV (0-64.7%) and HCV infection (18.8-98.1%). *Staphylococcus aureus* was the leading etiological agent (29.8-100%), with a predominance of right-sided involvement, particularly of the tricuspid valve (25.2-98%). Diagnosis was primarily based on modified Duke criteria, with emerging imaging modalities such as PET-CT proposed in selected cases. Antibiotic therapy remained the first-line treatment, while surgical intervention rates varied widely (5-100%), often performed urgently. Valve repair or bioprosthetic replacement was preferred due to reduced need for long-term anticoagulation. Short-term mortality was generally low and comparable to non-PWID patients; however, 1-year mortality ranged from 3.45% to 29%. Reinfection rates were high (11.39-42.27%), largely driven by continued injection drug use. High relapse rates (up to 46.18%) further emphasized the negative impact of poor adherence and the need for integrated multidisciplinary and addiction-focused care. **Conclusions:** IE in PWIDs usually affects a younger population, with higher risks of reinfection and reintervention. This study supports clinical decision-making and future guidelines while identifying key gaps in prevention, adherence, and surgical timing, emphasizing the need for tailored strategies in this high-risk population.

Keywords: Infective endocarditis, Intravenous drug users, Treatment strategies, Prevention

MANAGEMENT STRATEGIES FOR HUMMAN PAPILLOMA VIRUS(HPV)-POSITIVE CASES IN CERVICAL CANCER SCREENING

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Background: As an element of secondary prevention, cervical cancer screening seeks to minimize the malignant transformation of precancerous lesions caused by HPV and lower women's mortality from this type of cancer by identifying risk factors for individuals at high risk of developing cervical cancer. However, a precise triage and therapy protocol based on genotyping, cervical cytology, colposcopy, and histological confirmation is necessary for the therapeutic value of an HPV-positive result. **Objective:** . An efficient screening program should incorporate HPV testing as a means of timely triage for positive patients, appropriate colposcopy indication, and stage-specific treatment. **Material and methods:** A retrospective analysis of 989 HPV tests performed in Mures County in 2022 showed 39 HPV-positive results (6.49%) for whom cervical cytology was performed, of which 21 had abnormal PAP results (3.3%). These findings support the viability of a rapid triage pathway, but they also indicate that a negative PAP does not rule out the risk due to 46.2% of HPV-positive patients had negative cytology. Colposcopy with targeted biopsy and, if needed, conization are necessary for HPV-positive serotyping followed by positive PAP. **Results :** While the FIGO classification can be inaccurate, cervical cancer requires precise staging, which is carried out clinically and by imaging utilizing the TNM approach. Cystoscopy is required because bladder involvement may occur in stages IIB, III, and IVA. Cervical conization is advised in lesions with endocervical extension, probable microinvasion, and suspect colposcopies linked to cytology. Conization has a diagnostic and therapeutic function for CIN III or cancer in situ, and positive margins necessitate reexcision or hysterectomy in patients who no longer want to get pregnant. Adenocarcinoma in situ, which is frequently multicentric, necessitates a hysterectomy or, if fertility must be maintained, conization followed by careful monitoring. **Conclusions:** Instead of merely confirming infection, management of HPV-positive cases should be differentiated by risk and stage. Fertility, obstetric risk following excisional surgeries, post-radiation urinary and digestive toxicity, sexual dysfunction, lymphedema, and the requirement for rigorous recurrence monitoring must all be taken into account when choosing a long-term course of treatment for intraepithelial lesions.

Keywords: HPV, Management, Prevention, Cytology

MICROSTRUCTURAL CHARACTERIZATION OF NATIVE BOVINE PERICARDIUM FOR IDENTIFYING OPTIMAL REGIONS FOR BIOMEDICAL SCAFFOLD DEVELOPMENT

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Background: Native bovine pericardium (NBP) is one of the most widely used biomaterials in contemporary vascular and cardiovascular surgery. It is used in a wide range of clinical settings, from the fabrication of cardiac valve prostheses to the production of vascular patches used after femoral or carotid endarterectomy. These applications, however, involve markedly different hemodynamic and biomechanical environments. Therefore, identifying the optimal microstructural and biomechanical characteristics of NBP is essential to ensure its appropriate use in different surgical contexts. **Objective:** This study aims to characterize the microstructural and biomechanical properties of NBP and to identify the regions most suitable for the development of biomedical scaffolds. **Material and methods:** In the present study, 10 (NBP) were harvested from a local slaughterhouse and analyzed within 6 hours of collection. The NBP was separated from the heart by performing an axial incision above the center of the left ventricle, extending from the base toward the apex, followed by a circular incision around the base of the heart. The thickness of each NBP specimen was measured at approximately 200-220 locations using a digital thickness gauge (Mitutoyo 547-500S). The microstructural characteristics were assessed using second harmonic generation (SHG) microscopy. For biomechanical characterization, a CellScale BioTester 5000 was used. This work was supported by the "George Emil Palade" University of Medicine, Pharmacy, Science, and Technology of Tîrgu Mureș, Research Grant number 171/2/09.01.2024. **Results :** Thickness mapping of native bovine pericardium (NBP) revealed a heterogeneous spatial distribution along the base-apex axis, with values ranging from approximately 0.28 mm to 0.64 mm. Thicker regions were predominantly observed in the basal and central areas, whereas thinner regions were more frequently found toward the periphery and apex. Only a limited portion of the pericardium exhibited a homogeneous and clinically suitable thickness. Furthermore, mechanical testing demonstrated that only two of the analyzed regions showed homogeneous tensile strength. In terms of microstructure, only one region displayed bidirectionally oriented collagen fibers. **Conclusions:** NBP demonstrates marked regional variability in thickness, mechanical properties, and collagen fiber orientation. Only specific areas present the structural and biomechanical characteristics required for biomedical scaffold development.

Keywords: biomedical applications, bioengineering, biomechanical testing, NBP

MICROSTRUCTURAL REMODELING OF BOVINE PERICARDIUM INDUCED BY UVA-RIBOFLAVIN CROSSLINKING AT DIFFERENT RIBOFLAVIN CONCENTRATIONS

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Background: Chemical crosslinking is commonly employed to enhance the stability of biomaterials used in cardiovascular applications. Among the emerging approaches, ultraviolet A-riboflavin (UVA/R) crosslinking has recently been investigated and validated in vascular tissues. Nevertheless, differences in collagen fiber density and spatial organization across vascular tissues may influence riboflavin diffusion, necessitating the use of varying riboflavin concentrations to ensure adequate penetration and effective crosslinking. **Objective:** The objective of this study was to evaluate the microstructural changes in bovine pericardium following UVA-riboflavin-mediated crosslinking and to assess how different riboflavin concentrations influence the remodeling of collagen architecture. **Material and methods:** From the homogeneous region of the bovine pericardium, 15 specimens measuring 10 × 10 mm were prepared for further analysis. For the irradiation protocol, an OmniCure S1500 was used, delivering an intensity of 3 mW for 30 minutes. The riboflavin concentrations evaluated in the present study were 0.05%, 0.1%, 0.25%, and 0.5%, with corresponding soaking times of 10, 20, and 30 minutes. Both fresh and UVA/riboflavin (UVA/R)- crosslinked specimens were subsequently analyzed using second-harmonic generation (SHG) microscopy. Specimen thickness was measured using a digital thickness gauge (Mitutoyo 547-500S). This work was supported by the "George Emil Palade" University of Medicine, Pharmacy, Science, and Technology of Tîrgu Mureș, Research Grant number 170/2/09.01.2024. **Results :** UVA/R crosslinking induced noticeable

microstructural changes in bovine pericardium compared with fresh samples. SHG microscopy demonstrated a progressive increase in collagen fiber organization and packing density in crosslinked specimens. The collagen bundles appeared more compact and aligned after UVA/R treatment, particularly in samples treated with higher riboflavin concentrations (0.25% and 0.5%) and longer soaking times (30 minutes). Lower riboflavin concentrations (0.05% and 0.1%) produced only moderate alterations in collagen architecture, with partial fiber compaction and limited reorganization. In contrast, higher concentrations led to more pronounced crosslinking, characterized by increased collagen fiber aggregation and reduced interfibrillar spacing. The penetration of riboflavin within the pericardial tissue appeared to be influenced by both concentration and soaking time. Specimens exposed to longer soaking periods demonstrated a more homogeneous distribution of collagen crosslinking throughout the tissue thickness. **Conclusions:** Overall, the UVA/R-treated specimens exhibited improved structural stability compared with untreated controls, suggesting that higher riboflavin concentrations combined with longer incubation times may enhance the efficiency of collagen crosslinking in bovine pericardium.

Keywords: Biomaterials, Vascular Surgery, UVA/R, Biomechanical Properties

MICROVASCULAR FIBULA FLAP FOR PEDIATRIC RECONSTRUCTION

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Background: The presence of significant defects in the pediatric population, such as those caused by oncological resections, congenital pseudarthrosis, and high-energy trauma, poses a reconstructive challenge that must provide structural stability and biological integration to support the growing skeleton of the child. Non-vascularized grafts have been found to be unsuccessful in these complex situations, thereby making vascularized bone transfer an essential procedure to ensure success in these reconstructions and prevent complications such as non-union.

Objective: The objective of the present study is to assess the clinical results, safety, and efficacy of the free vascularized fibula flap for the reconstruction of varied bone defects in pediatric patients. **Material and methods:**

A retrospective study was carried out on pediatric patients (0 to 18 years of age) who underwent microvascular fibula flap reconstruction at the American University of Beirut Medical Center between 2010 and 2021. Data points were patient demographics, type of pathology (tumor, trauma, or congenital), defect type, type of reconstruction (osseous or osteocutaneous), and complications. **Results :** Nine patients were identified in this study, and their mean age was found to be 10.7 years. The age range of the patients was between 3 and 17 years. The indications for the procedure included oncological resection in five patients, congenital pseudarthrosis of the tibia in two patients, and traumatic defects in two patients. The most common site for free flaps was the mandible in five patients. The tibia and femur received free flaps in three and one patient, respectively. Osteocutaneous flaps were used in six patients, and osseous flaps were used in three patients. The mean follow-up period was found to be 31 months. The study had a 100% survival rate for the free flaps. The complications in this study were minimal. The complications included partial skin paddle necrosis and donor site wound dehiscence. All the patients had a successful bony union and had a high degree of satisfaction. **Conclusions:** The free vascularized fibula flap is a highly reliable "workhorse" for pediatric reconstruction. The reliability of this procedure in providing long lengths of vascularized bone along with a reliable vascular pedicle has made it an ideal solution for restoring function and form in children. The current study suggests that with meticulous microsurgical technique, FVFF has an exceptional success rate and remains the gold standard for treating pediatric skeletal defects.

Keywords: Pediatric reconstruction, Microsurgery, Free vascularized fibula flap, Mandibular reconstruction

MINIMALLY INVASIVE EXTENDED HEPATECTOMY IN ADOLESCENTS: A ROBOTIC APPROACH TO MULTIPLE HNF-1A-MUTATED HEPATOCELLULAR ADENOMAS -CASE REPORT WITH LITERATURE UPDATE

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Background: Hepatocellular adenomas (HCAs) represent rare benign liver tumors typically associated with oral

contraceptive use in adult women. Their occurrence in pediatric patients without hormonal exposure is exceptional. The HNF-1 α -mutated subtype, characterized by steatotic MRI appearance, multifocal distribution, and lowest malignant potential presents a particular therapeutic challenge in this age group. While robotic hepatectomy has demonstrated lower blood loss, reduced morbidity, and shorter hospital stay versus open resection in adults, its application in children remains critically limited, with robotic approaches accounting for fewer than 6% of published pediatric liver surgery cases. **Objective:** To describe the feasibility and safety of robotic-assisted extended right hepatectomy in an adolescent with multiple HNF-1 α -mutated HCAs, and to contextualize this approach within current evidence on minimally invasive major hepatectomy in the pediatric population. **Material and methods:** A 15-year-old female presented with an incidental finding of multiple right-hemiliver nodules on routine ultrasound, without hormonal exposure. MRI confirmed multiple lesions with a dominant 6 cm nodule; percutaneous biopsy established HNF-1 α -mutated HCA. AFP was normal (2.76 IU/mL). Following MDT review and CT volumetry confirming sufficient future liver remnant, the patient underwent robotic-assisted extended right hepatectomy inclusive of the caudate lobe using the da Vinci Xi system. For contextualisation, a literature search was performed across PubMed, Scopus, and Google Scholar using terms including "robotic hepatectomy," "minimally invasive liver surgery," "pediatric hepatectomy," and "HNF-1 α adenoma," with no language or date restrictions. Case reports, series, database analyses, meta-analyses, and consensus guidelines were reviewed. **Results :** The procedure was completed robotically without conversion. Key steps included IOUS-confirmed disease distribution, ICG fluorescence-guided ischemia verification, liver-hanging maneuver, parenchymal transection along Cantlie's line, and division of the right hepatic vein and a middle hepatic vein branch using 35 mm powered vascular staplers. Specimen extraction was performed via Pfannenstiel incision. The postoperative course was uneventful with no complications. Pathology confirmed R0 resection with no malignant transformation. Literature review found no prior reports of robotic extended hepatectomy in a pediatric patient. **Conclusions:** Robotic extended right hepatectomy is technically feasible and safe in a carefully selected adolescent with major hepatic adenoma burden. The da Vinci Xi platform enables precise hilar dissection, ICG-guided vascular control, and safe parenchymal transection within the confined peritoneal domain of a pediatric patient, contributing meaningful evidence to a critically sparse literature.

Keywords: DaVinciXi, Pediatric, Hepatic Surgery, Minimally Invasive

MINIMALLY INVASIVE SPINAL STABILIZATION IN THE TREATMENT OF METASTATIC VERTEBRAL TUMORS: CLINICAL EXPERIENCE AND POSTOPERATIVE OUTCOMES

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Background: Recent advances in cancer treatment, including targeted therapies, immunotherapy, and bone-modifying agents, have significantly improved survival in oncologic patients. In cases of spinal metastases, severe skeletal-related events (fractures, paralysis) profoundly impair daily activities and quality of life, limiting access to systemic therapies. Conventional spinal surgery is invasive and requires prolonged hospitalization, whereas minimally invasive spinal stabilization with percutaneous pedicle screws offers an effective alternative for patients with reduced systemic reserves. **Objective:** The aim of this study was to evaluate the clinical and functional outcomes of minimally invasive spinal stabilization in patients with spinal metastases. **Material and methods:** This retrospective study included 51 patients with spinal metastases operated on between 2020 and 2024. Surgical indication was based on the SINS score (≥ 13 or 7-12 with radiological signs of collapse/osteolysis and severe pain) and prognosis assessed using the Tokuhashi and New Katagiri scores. The MIST procedure involved fixation spanning three vertebrae cranially and two caudally relative to the lesion level, avoiding tumor-involved vertebral bodies; decompression was performed in cases with significant spinal cord compression. **Results :** The mean operative time was 160 minutes, with an average blood loss of 116 mL. Mobilization was achieved at a mean of 3.2 days postoperatively. Functional status (PS) improved significantly ($2.5 \rightarrow 1.7$; $p < 0.01$). No postoperative neurological deterioration was recorded, and 6 patients showed improvement of at least one Frankel grade. Median survival was 22 months. **Conclusions:** Minimally invasive spinal stabilization represents a safe and effective surgical option for patients with axial metastases and limited prognosis, allowing early mobilization, pain reduction, and rapid access to adjuvant therapies. Appropriate timing of intervention and careful patient selection have a significant impact on quality of life and survival.

Keywords: Minimally invasive spinal stabilization, Spinal metastases, SINS score, Percutaneous pedicle screws

MIXED ETIOLOGY COLITIS (ISCHEMIC AND NSAID-INDUCED) PRESENTING AS LOWER GASTROINTESTINAL BLEEDING IN AN ELDERLY PATIENT

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Background: Lower gastrointestinal bleeding in elderly patients is a frequent clinical challenge with multiple potential etiologies, including ischemic and drug-induced colitis. Chronic use of NSAIDs (nonsteroidal anti-inflammatory drugs) is a recognized risk factor for colonic mucosal injury, especially in patients with comorbidities.

Objective: To present a case of lower gastrointestinal bleeding caused by colitis of probable mixed etiology (ischemic and NSAID-induced) and to highlight the role of imaging and endoscopy in diagnosis and management.

Material and methods: We report the case of an 85 year old female with a history of bronchial asthma, hypertension, chronic ischemic heart disease, and prolonged NSAIDs use, admitted for rectorrhagia and significant weight loss. Clinical evaluation, laboratory tests, abdominal computed tomography (CT), and colonoscopy were performed. The patient received conservative medical treatment, including antibiotics, anti-inflammatory therapy, anticoagulation and supportive care. **Results :** Laboratory findings showed leukocytosis with neutrophilia and markedly elevated inflammatory markers. CT imaging revealed segmental thickening of the colonic wall at the splenic flexors, descending colon and sigmoid colon, with pericolic fat infiltration suggestive of inflammation. Colonoscopy identified edematous and ulcerated mucosa with fibrin deposits and multiple diverticula, confirming colitis with associated diverticular disease. The clinical picture supported a mixed etiology, including ischemic and NSAID-induced mechanisms. Under treatment, the patient showed progressive clinical and biological improvement, with normalization of inflammatory markers. **Conclusions:** Colitis in elderly patients often has a multifactorial origin, requiring careful evaluation of risk factors such as vascular insufficiency and chronic NSAID use. Imaging and endoscopic assessment are essential for accurate diagnosis. Early recognition and appropriate conservative management can lead to favorable outcomes and prevent complications.

Keywords: Lower gastrointestinal bleeding, Ischemic colitis, NSAID-induced colitis, Elderly patient

MOLECULAR SIGNATURES OF B-LACTAM RESISTANCE: TRANSPEPTIDASE DOMAIN MOTIF ALTERATIONS IN INVASIVE STREPTOCOCCUS PNEUMONIAE ISOLATES (2017–2025)

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Background: Alterations in penicillin-binding proteins (PBPs) represent the mechanism of β -lactam resistance in *Streptococcus pneumoniae*. Conserved catalytic motifs within the transpeptidase domain-STMK, SRNVP/SNNT, and KTG/LKSG-form the active site responsible for β -lactam binding and cross-linking. **Objective:** To investigate mutations within PBP transpeptidase motifs and evaluate their association with β -lactam susceptibility in invasive pneumococcal disease (IPD) isolates. **Material and methods:** A total of 60 *S. pneumoniae* isolates collected from IPD cases during 2017-2025 at the Mureş County Clinical Emergency Hospital were retrospectively analyzed. Antimicrobial susceptibility to penicillin was determined using gradient diffusion testing, and the Vitek2C automated system. Oxacillin screening was conducted using disc diffusion testing. Results were interpreted using EUCAST standards, and isolates were classified as susceptible (S), susceptible increased exposure (I), or resistant (R). WGS was performed at the "Cantacuzino" National Institute for Medical-Military Research and Development (Bucharest) using Illumina technology . Reference PBP sequences from the *S. pneumoniae* R6 strain were obtained from NCBI. Genome assembly and variant calling were performed in Galaxy using minimap2 and bcftools. Target *pbp* genes were identified using BLAST; alignment and translation were conducted in SnapGene. Linear and logistic regression models were used to evaluate associations between mutation burden, resistance phenotype, and temporal trends. **Results :** Analyzed PBP lengths were 719 aa, 685 aa, and 750 aa for PBP1a, PBP2b and PBP2x respectively. The highest variability was observed in PBP2x, 173 mutation sites, compared with 114 in PBP1a and 88 in PBP2b. Reduced penicillin susceptibility (I or R phenotype) occurred in 27/60 (44.3%) isolates. Mutations in PBP2x STMK(337-340) motif were present in 19/27 (70.4%) I/R isolates but only 2/33 (6.1%) susceptible isolates. Substitutions in LKSG (546-549) occurred in 15/27 (55.6%) of I/R isolates and were absent in susceptible isolates. In PBP1a, SRNVP(428-432) mutations were detected in 18/27 (66.7%) I/R isolates, while

STMK(370-373) alterations occurred in 14/27 (51.9%). PBP2b SNNT(448-451) mutations were present in 17/27 (63.0%) I/R isolates and in 1/33 (3.0%) susceptible isolates. Number of mutations ranged 0-8 per isolate, with resistant isolates accumulating mutations across PBPs. Regression analysis demonstrated a positive association between mutation burden and reduced penicillin susceptibility, while temporal analysis indicated stable resistance frequencies despite declining mutation counts in recent isolates. **Conclusions:** Mutations in conserved PBP transpeptidase motifs, particularly in PBP2x, are strongly associated with reduced β -lactam susceptibility in invasive *S. pneumoniae* strains. Continued genomic and phenotypic surveillance is important to monitor resistance.

Keywords: Streptococcus pneumoniae, penicillin-binding protein, transpeptidase domain, motif

MORBIDITY AND MORTALITY IN ELDERLY PATIENTS (≥ 75 YEARS) UNDERGOING EMERGENCY ABDOMINAL SURGERY: A THREE-YEAR RETROSPECTIVE COHORT STUDY

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Background: Emergency abdominal surgery in older patients induces significantly greater morbidity and mortality rates due to less physiological reserve, extensive co-morbidity, and presence of advanced disease. Identifying independent prognostic factors is critical to enhance perioperative decision-making and outcomes. **Objective:** The study intended to analyse morbidity and mortality in elderly patients who underwent emergency abdominal surgery and independent predictors of in-hospital mortality. **Material and methods:** We retrospectively analysed a cohort of 148 patients aged seventy-five years and older, who underwent emergency surgery for an abdominal surgical condition within three years in a tertiary surgical centre. Data was obtained from the hospital information system, which included: demographic features, co-morbidities, preoperative clinical and laboratory parameters, intraoperative findings, and postoperative outcomes. Statistical analyses included univariate comparison as well as multivariate logistic regression for mortality predictors. **Results :** The mean age was 81.2 ± 4.4 years. The overall in-hospital mortality rate was 19.6% (29/148). Hemodynamic instability at admission was strongly associated with mortality ($p < 0.001$), while the need for bowel resection significantly increased mortality risk ($p = 0.0037$). In multivariate logistic regression analysis, ASA score (American Society of Anesthesiologists) emerged as an independent predictor of mortality (OR 2.95, 95% CI 1.36-6.43, $p = 0.006$). Bowel resection showed a non-significant trend toward increased mortality (OR 2.17, 95% CI 0.68-6.87, $p = 0.188$). Preoperative sepsis demonstrated a strong association with mortality but could not be reliably modeled due to statistical separation. **Conclusions:** Elderly patients undergoing emergency abdominal surgery have an elevated mortality risk, largely due to the preoperative physiological status. The ASA scoring is a good independent predictor while markers of clinical severity, namely hemodynamic instability and need for bowel resection, further stratify the risk.

Keywords: elderly patients, emergency abdominal surgery, morbidity, mortality

MRNA VACCINES IN ONCOLOGY: FROM AGGREGATED EVIDENCE TO CLINICAL VALIDATION IN PIVOTAL TRIALS

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Background: mRNA vaccines represent an emerging active immunotherapy platform capable of inducing cytotoxic T-cell responses targeting individual tumor neoantigens. Lipid nanoparticle delivery technologies and algorithm-assisted selection enable clinical application in solid tumors refractory to PD-1/PD-L1 inhibitors. **Objective:** To synthesize the clinical evidence on mRNA vaccines in solid tumors by integrating published meta-analyses and recent randomized trials, with a focus on personalized and off-the-shelf vaccines, to assess the efficacy and safety. **Material and methods:** An analysis of phase I-III clinical trials from PubMed, Embase, and ClinicalTrials.gov (2020-2026), and dedicated meta-analyses. Endpoints included objective response rate (ORR), overall survival (OS), disease-free survival (DFS), and hazard ratio (HR). **Results :** A global meta-analysis of advanced solid tumors (melanoma, non-small cell lung cancer, prostate cancer) included 32 trials ($n=984$ patients) with personalized and off-the-shelf mRNA vaccines, reporting a pooled ORR of 10%, a 1-year OS of 75.3%, and

grade ≥ 3 adverse events below 1%, underscoring a favorable safety profile. A recent meta-analysis focused strictly on personalized mRNA vaccines for solid tumors (melanoma, NSCLC, pancreatic tumors), as well as in refractory disease settings, estimated a pooled HR of 0.64 (95% CI 0.40-1.00), suggesting an approximately 36% reduction in the risk of death compared with standard therapies. The randomized phase IIb study KEYNOTE-942 demonstrated that the personalized mRNA-4157 vaccine, combined with pembrolizumab, reduced the risk of recurrence or death by 44% at 3 years (HR 0.56; 95% CI 0.34-0.92), maintaining the benefit at an extended 5-year follow-up (HR 0.51; 95% CI 0.29-0.89). These findings led to the pivotal phase III trials INTERpath-001 (melanoma) and INTERpath-002 (NSCLC). In advanced disease, the off-the-shelf vaccine BNT111 demonstrated an ORR of approximately 18% in melanoma refractory to PD-1 inhibitors, and BNT113 (AHEAD-MERIT), administered in recurrent/metastatic HPV16-positive head and neck squamous cell carcinoma, reported an ORR of up to 47% in the safety cohort. Autogene cevumeran (BNT122) induced neoantigen-specific T responses in approximately 50% of patients with resected pancreatic adenocarcinoma, and was exploratorily associated with delayed recurrence.

Conclusions: Cumulative evidence indicates that mRNA vaccines have progressed from immunological proof-of-concept to consistent clinical signals across personalized and off-the-shelf approaches. Meta-analyses and randomized trials support their safety and efficacy, while ongoing phase III studies will define their role within standard oncology practice.

Keywords: mRNA vaccines, Personalized immunotherapy, KEYNOTE-942, Cevumeran

MULTIREGIONAL CBCT ASSESSMENT OF TEMPORAL BONE PNEUMATIZATION AND BONY COVERAGE ACROSS THE GENICULATE GANGLION FOSSA, JUGULAR BULB, AND INTERNAL ACOUSTIC MEATUS

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Background: The geniculate ganglion fossa (GGF), jugular bulb (JB), and internal acoustic meatus (IAM) are surgically critical temporal bone landmarks where variations in pneumatization and bony coverage directly influence operative risk. Dehiscence or extensive pneumatization may predispose to iatrogenic facial paralysis, cerebrospinal fluid leakage, or vascular injury. Despite this, no study has simultaneously assessed these features across all three regions in a single cohort, precluding identification of inter-regional anatomical associations relevant to preoperative planning. **Objective:** To evaluate the pneumatization patterns, tegmen thickness, and bony dehiscence of the GGF, JB, and IAM using cone-beam computed tomography (CBCT), and to identify inter-regional correlations in pneumatization extent. **Material and methods:** Ninety adult CBCT scans (180 sides; 32 males, 58 females) were retrospectively analyzed. GGF pneumatization was assessed within a 2-mm radius in two predefined coronal planes corresponding to previously described histologic levels; tegmen dehiscence was classified into five types. JB wall pneumatization was categorized into eight patterns; the IAM-JB distance was measured coronally. IAM pneumatization was evaluated across three segments (porus, proper IAM, fundus) for four walls. Tegmen thickness was compared between pneumatized and non-pneumatized groups. Statistical analyses included chi-squared tests, independent-samples t-tests, one-way ANOVA with Games-Howell post hoc comparisons, and multivariate logistic regression. Inter-rater reliability was confirmed using Cohen's kappa ($\kappa \geq 0.60$) and intraclass correlation coefficients (ICC ≥ 0.75). **Results :** GGF lateral pneumatization predominated (93.3%, 168/180 sides). Superior GGF pneumatization (36.1%, 130/360 assessments) correlated with significantly greater tegmen thickness (2.8 ± 1.2 mm vs. 1.1 ± 0.6 mm; $p < 0.001$). Intact GGF tegmen (Type 1) was found in 44.4% (80/180) of sides; complete dehiscence (Type 5) in 13.9% (25/180). JB lateral-wall deep petrosal cells were dominant (47.8%, 86/180); hypotympanic pneumatization significantly increased the IAM-JB distance by 4.83 mm ($p = 0.011$). IAM superior-wall pneumatization was present in 55.0% (99/180) of sides, with pneumatized regions demonstrating significantly greater tegmen thickness ($p < 0.001$). Extensive GGF pneumatization was associated with greater IAM superior-wall pneumatization ($p = 0.028$). No significant association was found between GGF tegmen and tegmen tympani dehiscence (70.0%, 63/90 individuals; $p = 0.208$). **Conclusions:** This multi-regional analysis demonstrates distinct yet partially correlated pneumatization patterns across the GGF, JB, and IAM. The significant associations between pneumatization and bony coverage support the use of systematic, multi-landmark preoperative CBCT assessment to anticipate anatomical variations and reduce surgical complications in skull-base procedures.

Keywords: Temporal bone, Pneumatization, Cone-beam computed tomography, Skull base surgery

NEONATAL EBSTEIN'S ANOMALY WITH ABSENT RIGHT VENTRICULAR FORWARD FLOW: CLINICAL AND ECHOCARDIOGRAPHIC FEATURES

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Background: Neonatal Ebstein's anomaly (EA) with absent right ventricular forward flow (RVFF) is a rare and critical condition marked by severe hemodynamic instability and variable early postnatal adaptation. The influence of pulmonary valve (PV) morphology on flow restoration and myocardial mechanics remains insufficiently defined. **Objective:** We aim to describe the early hemodynamic course, management, and echocardiographic features of a case series of neonates with EA with absent RVFF, stratified according to PV morphology. **Material and methods:** We conducted a retrospective case series including 14 neonates with EA and absent RVFF on first-day echocardiography, managed at a tertiary pediatric cardiology center (2020-2025). Cases were stratified by PV morphology into normal PV group (NPV, n=7) and abnormal PV group (APV, n=7; pulmonary atresia n=4, critical stenosis n=3). Clinical course, management, and conventional and speckle-tracking echocardiographic parameters were analyzed descriptively, with 20 healthy neonates as reference. **Results :** Baseline characteristics were similar between subgroups, although both EA groups had lower anthropometric parameters than controls. At presentation, neonates exhibited hemodynamic compromise with tachycardia, hypotension, and elevated NT-proBNP. Distinct trajectories were observed according to PV morphology: early restoration of right ventricular forward flow occurred in most NPV cases, whereas APV cases remained duct-dependent and required intervention. The APV phenotype was associated with more intensive therapy and prolonged hospitalization. One neonatal death occurred in the NPV group. Echocardiography demonstrated severe right ventricular dysfunction in all cases, with reduced left ventricular function in NPV but preserved in APV (p=0.004). Speckle-tracking showed uniformly impaired right ventricular and bi-atrial strain, with selective reduction of left ventricular deformation in NPV. **Conclusions:** This case series highlights PV morphology as a key determinant of early postnatal adaptation in neonatal EA with absent RVFF. APV was associated with a more severe clinical course and need for intervention, whereas NPV allowed recovery of antegrade flow but with greater impairment of left ventricular mechanics. Combined conventional and speckle-tracking echocardiography may enhance early phenotypic characterization and risk stratification.

Keywords: Ebstein's anomaly, neonate, right ventricular forward flow, speckle-tracking echocardiography

NON-CONTRAST MRI TECHNIQUES AS ALTERNATIVES TO GADOLINIUM: A SYSTEMATIC REVIEW

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Background: Magnetic resonance imaging (MRI) often uses gadolinium-based contrast agents (GBCAs) to improve lesion detection and tissue characterization. However, safety concerns such as nephrogenic systemic fibrosis (NSF) in patients with kidney disease and gadolinium deposition in tissues have increased interest in non-contrast MRI methods. Therefore, reliable imaging techniques that avoid contrast agents while maintaining diagnostic accuracy are increasingly needed. **Objective:** To systematically review current evidence on non-contrast MRI techniques as alternatives to gadolinium-enhanced MRI and evaluate their diagnostic performance and clinical applicability. **Material and methods:** In accordance with PRISMA guidelines, a comprehensive literature search was conducted utilising the PubMed and Google Scholar databases. Research articles published between 2005 and 2025 evaluating non-contrast MRI techniques as alternatives to gadolinium-enhanced MRI were included. The search terms included non-contrast MRI, gadolinium substitutes, arterial spin labelling, and diffusion-weighted imaging. Eligible studies included original research articles and systematic reviews that compared non-contrast and contrast-enhanced MRI techniques in neurological, vascular, and oncological imaging. The techniques that were studied include arterial spin labelling (ASL), diffusion-weighted imaging (DWI), susceptibility-weighted imaging (SWI), time-of-flight (TOF) angiography, magnetic resonance spectroscopy (MRS), and phase-contrast imaging. The extracted data encompassed the study design, imaging modality, diagnostic performance metrics, and clinical indications. A qualitative synthesis was conducted due to heterogeneity in outcome measures. **Results :** A total of 42 studies met the inclusion criteria. Arterial spin labelling showed that it

was possible to reliably measure perfusion without contrast, and performed comparably to dynamic susceptibility contrast imaging for certain neurological conditions. ASL uses magnetically labelled blood water as an internal tracer, allowing measurement of cerebral blood flow without invasive procedures. Diffusion-weighted imaging was very good at finding acute ischaemia and characterising tumours, while susceptibility-weighted imaging was better at finding haemorrhage and microvascular pathology. Time-of-flight and phase-contrast techniques made it possible to obtain high-quality images of blood vessels without using contrast. In patients who were unsuitable candidates for GBCAs, non-contrast MRI showed the same diagnostic accuracy as contrast-enhanced MRI in a number of clinical situations, such as intracranial vascular disease, arterial stenosis, and cerebrovascular abnormalities. **Conclusions:** Non-contrast MRI techniques are suitable alternatives to gadolinium-enhanced imaging for particular clinical indications. ASL, DWI, and TOF angiography are examples of methods that can provide useful diagnostic information without the risks associated with contrast use. Patients, particularly those with kidney disease or those who require repeated imaging, may benefit from the increased use of these methods.

Keywords: Non-contrast MRI, Nephrogenic systemic fibrosis, Gadolinium, Diffusion-weighted imaging

NT-PROBNP DYNAMICS AFTER PACEMAKER IMPLANTATION IN PATIENTS WITH CONDUCTION DISTURBANCES

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Background: N-terminal pro-B-type natriuretic peptide (NT-proBNP) is a key biomarker of myocardial wall stress and heart failure severity. In patients with bradyarrhythmias and atrioventricular (AV) conduction disorders, pacemaker implantation may substantially modify cardiac loading conditions and neurohormonal activation; however, data on NT-proBNP dynamics in this setting are limited. **Objective:** To evaluate the impact of pacemaker implantation on NT-proBNP levels in patients with conduction disturbances and to explore its potential role as a marker of hemodynamic improvement after device implantation. **Material and methods:** We conducted a retrospective analysis of 80 consecutive patients who underwent permanent pacemaker implantation for symptomatic conduction disturbances. NT-proBNP concentrations were measured before implantation and at early follow-up after the procedure. Descriptive statistics were used to characterize baseline and post-procedural NT-proBNP levels, and absolute changes were calculated at the individual and group level. Paired comparisons between pre and post implantation values were performed using the paired t test or Wilcoxon signed-rank test, with a two-sided $p < 0.05$ considered statistically significant. **Results :** Mean NT-proBNP levels decreased from 6008 ± 280 pg/mL prior to pacemaker implantation to 1626 ± 190 pg/mL after the procedure ($p < 0.001$). Median values declined from 1470 pg/mL (IQR 1320-1600 pg/mL) to 543 pg/mL (IQR 420-650 pg/mL; $p < 0.001$). The mean absolute reduction was 4382 ± 260 pg/mL, with a median decrease of 1200 pg/mL. The majority of patients demonstrated a clear downward trend in NT-proBNP following correction of bradyarrhythmia and AV dyssynchrony, whereas a small subset exhibited persistently elevated levels, most likely reflecting concomitant structural cardiac pathology or advanced myocardial dysfunction. **Conclusions:** Pacemaker implantation in patients with conduction disturbances is associated with a statistically and clinically significant reduction in NT-proBNP levels, suggesting an improvement in hemodynamic status after restoration of an adequate heart rate and AV synchrony. These findings support the potential utility of NT-proBNP as a complementary biomarker for monitoring therapeutic response and residual risk in pacemaker recipients. Prospective studies with standardized sampling times, control groups and detailed echocardiographic characterization are warranted to define the prognostic significance of NT-proBNP in this population.

Keywords: NT-proBNP, pacemaker implantation, conduction disturbances

OPTIMIZATION AND VALIDATION OF A TIME-EFFICIENT DECELLULARIZATION PROTOCOL FOR PORCINE CAROTID ARTERY

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Background: Multiple strategies have been explored in the development of tissue-engineered vascular grafts (TEVG). Among these, decellularized xenogeneic scaffolds have emerged as a promising approach, as they preserve the native vascular wall microarchitecture and enhance the potential for in vivo recellularization following

implantation. However, numerous decellularization protocols have been reported in the literature, employing various detergents and spanning a wide range of processing times. **Objective:** This study aims to develop, optimize, and validate a rapid decellularization protocol for the porcine carotid artery (PCA) to improve efficiency while preserving tissue integrity. **Material and methods:** Ten PCA specimens were harvested from a local slaughterhouse and transported to the laboratory on ice. From each artery, a 4-5 cm segment was prepared for decellularization. Additionally, a 1.5×0.5 cm specimen was excised along the circumferential axis for uniaxial biomechanical testing, and a 5-mm segment was collected for histological evaluation. The decellularization protocol began with four 15-minute washing cycles using physiological saline, delivered via a Masterflex™-L/S™ peristaltic pump. This step was followed by two consecutive perfusion cycles of 1% Triton X-100 solution, each lasting 1 hour. Subsequently, two additional 1-hour perfusion cycles with 1% sodium dodecyl sulfate were performed. At the conclusion of the procedure, the decellularized vessel was removed from the perfusion system. A 5-mm segment was harvested for histological evaluation, and an additional 1.5×0.5 cm circumferential specimen was collected for biomechanical testing using the CellScale 5000 Biotester. This work was supported by the "George Emil Palade" University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș, Research Grant no. 170/2/09.01.2024. **Results :** Both native PCA (NPCA) and decellularized PCA (decell-PCA) samples underwent uniaxial biomechanical testing to failure. Thickness measurements demonstrated a significant reduction in the decell-PCA group compared to PCA ($p=0.018$). Hematoxylin-eosin staining confirmed the complete absence of cellular nuclei in the decellularized samples, indicating the effective removal of cellular components and validating the protocol's efficiency. Biomechanical analysis revealed that, as expected, decell-PCA specimens exhibited significantly lower ultimate stress ($p=0.0002$) and reduced rigidity ($p=0.0002$), along with significantly increased strain at failure ($p=0.0004$), compared to native tissues. **Conclusions:** The proposed decellularization protocol effectively removed cellular components from PCA specimens, as confirmed by the absence of nuclei on histological evaluation. However, the process resulted in a significant reduction in wall thickness and altered biomechanical properties, characterized by decreased ultimate stress and rigidity, along with increased strain at failure.

Keywords: Vascular Surgery, Decellularisation, TEGV, Biomechanical Properties

P WAVE DISPERSION AS AN EARLY ECG PREDICTOR OF NEW-ONSET ATRIAL FIBRILLATION AFTER PRIMARY PCI FOR STEMI

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Background: New-onset atrial fibrillation (AF) in the early period after primary reperfusion for ST-elevation myocardial infarction (STEMI) is associated with haemodynamic instability, thromboembolic risk and worse prognosis, yet simple ECG-based predictors are not fully defined. **Objective:** To evaluate surface ECG parameters as predictors of new-onset AF within 72 hours after revascularization in patients presenting with STEMI in sinus rhythm. **Material and methods:** We conducted a prospective, single-centre study including 110 consecutive STEMI patients admitted in sinus rhythm and treated with primary PCI. Continuous rhythm monitoring and serial 12-lead ECGs were performed during the first 72 hours. Patients were divided into two groups: those who developed AF (AF group, $n=27$) and those who remained in sinus rhythm (SR group, $n=83$). On baseline ECG (prior to PCI), P-wave duration (maximum, minimum), P-wave dispersion (Pd), P-wave amplitude in lead II and V1, PR interval, QRS duration and corrected QT interval (QTc) were measured manually in all 12 leads. Mean values from three consecutive beats were used. Clinical and echocardiographic data were also collected. Univariable and multivariable logistic regression were applied to identify independent ECG predictors of early AF. **Results :** New-onset AF occurred in 24.5% of patients within 72 hours. Compared with the SR group, AF patients were older (67 ± 9 vs. 59 ± 11 years, $p=0.003$) and had larger left atrial diameter (42 ± 5 vs. 38 ± 4 mm, $p<0.001$). On baseline ECG, maximum P-wave duration was longer in the AF group (132 ± 14 vs. 118 ± 13 ms, $p<0.001$), and P-wave dispersion was significantly increased (48 ± 11 vs. 32 ± 9 ms, $p<0.001$). PR interval and QRS duration did not differ significantly between groups (both $p>0.05$). QTc was mildly but significantly prolonged in AF patients (452 ± 22 vs. 438 ± 20 ms, $p=0.01$). In multivariable analysis, independent predictors of early AF were P-wave dispersion ≥ 40 ms (OR 3.6, 95% CI 1.5-8.5, $p=0.004$) and age ≥ 65 years (OR 2.7, 95% CI 1.1-6.4, $p=0.03$). **Conclusions:** In STEMI patients revascularized by primary PCI, increased P-wave dispersion on the admission ECG independently predicts new-onset AF during the first 72 hours, especially in older patients. Simple ECG indices may help identify individuals who require closer rhythm monitoring and early preventive strategies.

Keywords: ST elevation myocardial infarction, atrial fibrillation, P-wave dispersion, electrocardiogram

PAN-RAS(ON) INHIBITION BY RMC-7977 IN NRAS-MUTATED, TP53-NULL ACUTE MYELOID LEUKEMIA: A MECHANISTIC ANALYSIS OF CYTOSTASIS, DIFFERENTIATION, AND REVERSIBLE QUIESCENCE

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Background: The RAS signaling pathway represents a critical, ubiquitously hyperactivated node in Acute Myeloid Leukemia (AML) pathogenesis. While historically considered intractable, the active, GTP-bound conformation of RAS can now be targeted by neomorphic tri-complex inhibitors. However, the exact cellular fate dictated by such pan-RAS(ON) inhibition, specifically the bifurcation between terminal apoptosis and transient cell cycle arrest remains poorly defined and heavily reliant on the intrinsic genomic architecture of the leukemic cell, particularly the functional status of the TP53 tumor suppressor gene. **Objective:** This investigation aimed to delineate the mechanistic action, effective dosing thresholds, and phenotypic outcomes of the pan-RAS(ON) inhibitor RMC-7977 within the THP1 human AML model, characterized by an NRAS G12D driver mutation and TP53-null genotype. **Material and methods:** THP1 cells were cultured and plated in 96-well arrays in technical triplicates. Initial dosing at 10, 3, and 1 nM demonstrated excessive toxicity. The protocol was refined to a 9-log serial dilution descending from 10 nM. Following 72-hour continuous exposure, cells underwent flow cytometry. Propidium Iodide (PI) identified live cells, while PI/PO-Pro assessed early and late apoptosis. CD14 and CD11b were monitored to evaluate macrophage differentiation, and PI/RNase determined cell cycle phase distribution. Reversibility was evaluated via wash-out assay (72-hour treatment, 72-hour drug-free incubation) and validated utilizing 14-day Colony-Forming Unit (CFU) assays. **Results :** Initial 10 nM exposure reduced relative viability to 25%. The refined 9-concentration titration revealed a precipitous, dose-dependent viability decline between 10^{-4} and 10^{-2} nM, yielding calculated IC_{50} values of 0.00026, 0.00047, and 0.0011 nM across independent replicates. Early and late apoptosis markers did not correlate with this survival depletion slope. Instead, cellular reduction was perfectly mirrored by G0/G1 (2n) cell cycle accumulation, escalating from baseline at 10^{-4} nM to over 90% at 10^{-2} nM. Concurrently, analysis of CD11b and CD14 markers showed no significant change in mean fluorescence, while their percentage relative to the control decreased. Following the wash-out period, cells previously arrested by 10^{-4} and 10^{-3} nM RMC-7977 reverted to a normal cell cycle distribution (~50% G0/G1) and retained robust colony-forming capacity. **Conclusions:** In the TP53-null THP1 model, RMC-7977 functions as a profound, sub-picomolar cytostatic agent rather than a primary cytotoxic one. The suppression of RAS signaling induces a reversible state of quiescence (G0/G1 arrest) without triggering terminal differentiation, irreversible senescence, or apoptosis. Ultimately, overcoming this reversible cytostatic ceiling to achieve curative eradication in specific AML genomic subtypes necessitates the deployment of RAS(ON) inhibitors in synergistic combinations with pro-apoptotic therapeutics.

Keywords: Acute Myeloid Leukemia, RMC-7977, Pan-RAS(ON) Inhibition

PATHOLOGICAL FEATURES OF PAPILLARY THYROID CARCINOMA ASSOCIATED WITH CHRONIC LYMPHOCYTIC THYROIDITIS

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Background: Papillary thyroid carcinoma (PTC) is the most common malignant neoplasm of the thyroid gland. A frequent histopathological association between PTC and chronic lymphocytic thyroiditis (CLT) has been reported in numerous studies. However, pathological relevance of this coexistence remains insufficiently clarified, particularly with regard to histological subtypes, tumor focality, laterality, capsular invasion, and TNM staging. **Objective:** To evaluate whether papillary thyroid carcinoma (PTC) occurring in the presence of chronic lymphocytic thyroiditis (CLT) exhibits distinct pathological and cytological characteristics, with particular attention to tumor size, focality, and histological subtypes. **Material and methods:** A retrospective single-center study was conducted, focusing on papillary thyroid carcinoma (PTC) and comparing cases associated with chronic lymphocytic thyroiditis (CLT) with those occurring in the absence of CLT. For each patient, the following pathological parameters were recorded: maximum tumor diameter, tumor extension (classified as intrathyroidal or extrathyroidal), capsular invasion, focality

(unifocal or multifocal), laterality, and histological subtype. The study was designed mainly as a descriptive analysis, with the purpose of possible associations between the two study groups. Statistical analysis was performed using SPSS software, version 26.0. Categorical variables were summarized as absolute numbers and percentages. Comparisons between groups were performed using Chi-square test, while Fisher's exact test was applied in cases with low expected frequencies. A p-value < 0.05 was considered statistically significant. **Results :** Chronic lymphocytic thyroiditis (CLT) was identified in approximately 40% of the analysed cases. Tumor multifocality was significantly more frequent in CLT-associated group compared to cases without CLT (68.7% vs. 37.5%, p=0.01). Tumors associated with CLT showed a reduced maximum diameter compared with those occurring without CLT (p=0.03). Analysis of histological subtype demonstrated a significant association between CLT and Warthin-like variant of papillary thyroid carcinoma (p=0.02). In contrast, aggressive variants were more frequent observed in cases without CLT, although this difference did not reach statistical significance (p > 0.05).

Conclusions: Papillary thyroid carcinoma (PTC) associated with chronic lymphocytic thyroiditis (CLT) was characterized by smaller tumor size, a higher frequency of multifocality, and a significant association with the Warthin-like variant, supporting the presence of a distinct pathological profile. Overall, the coexistence of CLT appeared to be associated with a less aggressive tumor pattern.

Keywords: Papillary Thyroid Carcinoma, Chronic Lymphocytic Thyroiditis, Pathological Correlation

PATHOPHYSIOLOGICAL MECHANISMS UNDERLYING VISUAL SNOW SYNDROME

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Background: Visual Snow Syndrome (VSS) is a neurological condition characterized by small flickering dots appearing on the visual field. The specific neural mechanisms are not yet well understood, but it is currently thought to be associated with hyperexcitability of the visual cortex. **Objective:** The aim of this review is to synthesize recent discoveries in order to provide a clearer understanding of the underlying mechanisms of VSS.

Material and methods: We searched the PubMed database for studies published in the last 5 years involving human participants, including neuroimaging, electrophysiological and neurobiological investigations. **Results :** Our search yielded 82 articles on VSS, of which 20 addressed its pathophysiology in human subjects within the last 5 years. Following screening for relevant, 15 studies met the inclusion criteria. We found that the most frequent associated neurological disorder was migraine which demonstrated multisensory hypersensitivity even during the interictal phase, with fluctuations throughout the disease cycle. Some patients with migraine show VSS-like symptoms, but only episodically. Neuroimaging and electrophysiological studies indicate involvement of both sensory networks and large-scale circuits responsible for attention and emotional processing. While it is characterized by multisensory network dysfunction, cortical hyperexcitability and aberrant perceptual processing, it does not appear to directly affect somatosensory perception. Pareidolia, palinopsia and certain ophthalmic procedures (refractive surgery and bright-light examinations) may act as potential triggers in susceptible individuals. **Conclusions:** Although VSS shares overlapping pathophysiological features with pareidolia, palinopsia and migraine, it seems to be distinct from these disorder. Further investigations are needed to elucidate its pathophysiology.

Keywords: Visual Snow Syndrome, Hyperexcitability, Migraine, Pathophysiology

PEDIATRIC IMMUNE THROMBOCYTOPENIC PURPURA: PLATELET NORMALIZATION KINETICS AND EARLY RISK STRATIFICATION

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Background: Immune thrombocytopenic purpura (ITP) is the most common cause of isolated thrombocytopenia in children, characterized by autoimmune platelet destruction with a highly variable clinical course. While most pediatric patients achieve rapid platelet recovery following first-line intravenous immunoglobulin (IVIG) therapy, a clinically relevant subset experiences delayed normalization requiring therapeutic escalation and prolonged monitoring. Early identification of these high-risk patients at presentation remains an unmet clinical need, as no validated routine markers are currently available for this purpose. **Objective:** To evaluate early platelet

normalization kinetics in pediatric ITP and to determine whether simple, routinely available parameters - patient age and baseline mean platelet volume (MPV) - can stratify the risk of delayed normalization at the time of presentation. **Material and methods:** Retrospective observational cohort study conducted at Pediatric Department I, SCJU Targu Mures, Romania, including 18 consecutive pediatric patients (age 0-18 years) with primary ITP diagnosed between January 2020 and the present. The primary outcome was time to platelet normalization, defined as days from diagnosis to the first documented platelet count $\geq 150 \times 10^9/L$. Patients were classified as rapid normalizers (≤ 7 days) or delayed normalizers (> 7 days/no normalization). A two-parameter additive risk score was constructed: age ≥ 7 years (1 point) and baseline MPV ≥ 11.5 fL (1 point), yielding scores of 0-2. Statistical analysis employed Fisher's exact test, Mann-Whitney U test, and odds ratio (OR) estimation; significance was set at $p < 0.05$. **Results :** Rapid normalization was achieved by 13 patients (72.2%), while 5 (27.8%) showed delayed normalization. Median cohort age was 5.12 years (range: 0.33-15.75); mean baseline MPV was 11.04 ± 0.95 fL. Age ≥ 7 years was associated with delayed normalization (OR 5.0; $p \sim 0.05$). Median baseline MPV was higher in the delayed group (11.50 fL vs. 11.00 fL; $p \sim 0.05-0.10$). The risk score demonstrated a stepwise gradient: 12.5% delayed in score 0, 33.3% in score 1, and 50.0% in score 2 ($p < 0.05$). Initial platelet count and sex were not predictive of recovery kinetics. **Conclusions:** Age ≥ 7 years and elevated baseline MPV are independently associated with delayed platelet normalization in pediatric ITP. The combined Age-MPV risk score offers a simple, cost-free tool for early clinical risk stratification at presentation, potentially guiding individualized monitoring strategies. Validation in larger prospective multicenter studies is warranted.

Keywords: Immune thrombocytopenic purpura,, Mean platelet volume,, Risk stratification,, IVIG response.

PERIOPERATIVE ANALYSIS OF GAS EXCHANGE AND ALVEOLAR DEAD SPACE IN THYROIDECTOMY PATIENTS UNDER GENERAL ANESTHESIA: A PROTOCOL BASED ON SERIAL ABG AND RESPIRATORY MONITORING

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Background: General anesthesia impacts lung physiology by increasing ventilation-perfusion mismatch and dead space. In the context of thyroidectomy, detailed evaluation of airway management and perioperative respiratory patterns is necessary. This study proposes a prospective observational framework to assess gas exchange and estimate alveolar dead space across the perioperative course. **Objective:** Adult patients scheduled for elective thyroidectomy under general anesthesia are enrolled in a prospective observational protocol. To assess gas exchange and estimate alveolar dead space. **Material and methods:** Preoxygenation is performed using standardized techniques, including either tight-fitting face mask with 100% oxygen for 3-5 minutes or tidal volume breathing with end-tidal oxygen monitoring, according to institutional practice. Intraoperative monitoring includes continuous pulse oximetry, capnography and hemodynamic variables. Arterial blood gas (ABG) analysis and respiratory monitoring are obtained at two defined time points: (1) 5 minutes after induction of anesthesia and establishment of controlled ventilation, and (2) 5 minutes before planned extubation during spontaneous or assisted ventilation. The following parameters are recorded: PaO_2 , $PaCO_2$, SaO_2 , P/F ratio, alveolar-arterial oxygen gradient ($A-aDO_2$), respiratory index (RI), and shunt fraction (Q_s/Q_t). Alveolar dead space is estimated using physiologic indices derived from $PaCO_2$ and end-tidal CO_2 . **Results :** The method supports dynamic monitoring of ventilation and oxygenation shortly after induction and prior to extubation. Alterations in $A-aDO_2$, RI, and Q_s/Q_t are expected to mirror intraoperative V/Q mismatch, and the $PaCO_2$ and $EtCO_2$ provides an estimate of alveolar dead space. **Conclusions:** This systematic observational method allows measurement of perioperative gas exchange abnormalities and indirect estimation of alveolar dead space in patients undergoing thyroidectomy. It may help detect those with increased risk of respiratory impairment and inform ventilatory strategy adjustments.

Keywords: elective thyroidectomy, general anesthesia, perioperative respiratory monitoring, alveolar dead space

PHARMACOLOGICAL INDUCTION OF LABOR : SUCCESS VERSUS FAILURE

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Background: Labor induction is a medical procedure used in obstetrics for the benefit of the mother and fetus. Pharmacological methods (prostaglandins and/or oxytocin) are used to initiate or stimulate labor. The procedure is

influenced by numerous general and obstetric maternal factors. Analyzing these factors can aid in patient selection and improve results. **Objective:** Assessment of the efficacy and safety of pharmacological labor induction and identification of maternal-fetal factors associated with the success of the procedure. **Material and methods:** A retrospective study was conducted involving 111 patients who underwent medical induction of labor in the Obstetrics and Gynecology Department 1 at the Târgu Mureș County Clinical Hospital between 1.01.2024-31.12.2025 (2 years). Data collected from clinical observation charts : (demographic data, obstetric data, maternal age, parity, gestational age, cervical status, indications for induction, associated maternal conditions, pharmacological method used, duration of labor and the mode of delivery) formed the basis for the conclusions. The success of the procedure was defined as achieving vaginal delivery. The data were statistically analyzed based on the results obtained. **Results :** Of the 2,652 births during the study period, 111 patients underwent medically induced labor (4,19%); 61,26% were primiparous and 38,73% were multiparous. The mean age of the patients was 28,56 years, and the mean gestational age at the time of induction was 39,1 weeks of amenorrhea. The cervical status at the start of the procedure was "shortened to 1-2 fingers." The main indication for labor induction was post-term pregnancy. The most common associated maternal comorbidity was gestational hypertension (14.41%). Prostaglandins were used in 23,42% of cases, and oxytocin in 69,36%. The rate of vaginal delivery following induction was 90,99%, with the remainder resulting in cesarean section 9,01% due to failure of medical induction or obstetric reasons. Statistical analysis revealed that a favorable cervical condition and multiparity were significantly associated with successful labor induction. Maternal complications were rare, with uterine hypotonia in the fourth stage being the most common (5,4%). Apgar score assessment showed that most newborns had scores ≥ 7 at 1 minute (92,79%), and these scores were maintained or improved at 5 minutes (93,69%), indicating a generally favorable neonatal condition. **Conclusions:** Pharmacological induction of labor with prostaglandins and/or oxytocin is an effective method. Cervical changes, multiparity, gestational age, and membrane status are important factors influencing the success of the procedure. These parameters allow for the personalization of medical induction and increase the success rate with optimal maternal-fetal outcomes.

Keywords: labor induction, medication, indications, efficacy

PRECISION TARGETING OF RET IN ADVANCED MALIGNANCIES: REAL-WORLD OUTCOMES OF SELPERCATINIB THERAPY AT SEMMELWEIS UNIVERSITY (2021–2025)

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Background: Alterations of the *RET* proto-oncogene, including activating mutations and gene fusions, represent major oncogenic drivers in thyroid malignancies. The presence of *RET* alterations enables targeted therapy with selective RET inhibitors such as selpercatinib. Since 2021, selpercatinib has been available in Hungary for the treatment of advanced malignancies harboring *RET* alterations regardless of tumor origin. **Objective:** The aim of this study was to evaluate real-world clinical outcomes and therapeutic responses among patients receiving selpercatinib at Semmelweis University, focusing on radiological tumor response and biochemical tumor marker changes. **Material and methods:** In this retrospective study, clinical data of 19 patients who initiated selpercatinib therapy between December 2021 and December 2025 were analyzed. Patients were identified in the eMedSolution clinical information system based on drug prescription records. Treatment response was assessed using tumor marker dynamics, radiological findings, and RECIST version 1.1 criteria when available. **Results :** A total of 19 patients with advanced malignancies were included (12 males: median age 49 years [10-80]; 7 females: median age 15 years [7-67]); 8 patients (42%) were younger than 18 years at treatment initiation. Treatment indications included medullary thyroid carcinoma (MTC) in 11 patients (57.8%), papillary thyroid carcinoma (PTC) in 7 patients (36.8%), and mesothelioma in 1 patient. Selpercatinib therapy was initiated due to a germline *RET* mutation in 1 patient (5.2%), somatic *RET* mutation in 11 patients (57.8%), and *RET* gene fusions in 6 patients (31.6%). The mesothelioma patient received off-label therapy. Among patients with thyroid cancer, 15 (83%) had previously undergone total thyroidectomy with cervical lymph node dissection. Patients with differentiated thyroid carcinoma had received prior radioiodine therapy, while 7 patients had been treated with multikinase inhibitors and 4 received radiotherapy. The median duration of selpercatinib therapy was 24 months (range: 3-48 months). Among PTC patients, stable disease was observed in 6 cases and complete remission in 1 patient. In patients with MTC, stable disease occurred in 6 cases (54.5%) and partial remission in 5 cases (45.5%). Disease progression was noted only in one patient (malignant mesothelioma). A marked biochemical response was observed in the MTC subgroup: calcitonin levels decreased more than 94% in all patients, with normalization (<10 pg/mL) in 5 of

11 patients. Adverse events included QTc prolongation in 8 patients (42.1%), proteinuria in 4 (21.0%), and treatment interruption due to drug-induced hepatotoxicity in 2 patients (10.5%). **Conclusions:** Selpercatinib demonstrated substantial clinical and biochemical activity in *RET*-altered malignancies, indicating meaningful clinical benefit in real-world practice.

Keywords: Selpercatinib, RET alterations, Thyroid carcinoma, MTC

PREDICTORS OF ISCHEMIC STROKE IN PATIENTS WITH MODERATE CAROTID STENOSIS AND HIGH INTENSITY STATIN TREATMENT

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Background: Despite high-intensity statin therapy, patients with moderate carotid stenosis remain at risk of stroke, underscoring the need for improved risk stratification to guide treatment decisions. **Objective:** This study aims to identify predictors of stroke in patients with moderate carotid plaques. **Material and methods:** This prospective study enrolled 54 patients at very high cardiovascular risk with unilateral carotid plaques (20-50%). At the 12-month follow-up, patients were divided into two groups based on stroke occurrence: those with ischemic stroke (n=18) and those without (n=36). Baseline demographic, clinical, ultrasound, and laboratory data were analyzed to identify predictors of stroke. **Results :** Patients experiencing stroke were more often male (78% vs. 53%, p=0.04), had higher systolic blood pressure (SBP) (146±15 mmHg vs. 132±12 mmHg, p<0.01), and were more likely to be on more than three antihypertensive drugs (61% vs. 36%, p=0.03). Additionally, they exhibited elevated levels of hsCRP (4.2±1.1 mg/L vs. 2.8±0.9 mg/L, p<0.01) and uric acid (6.1±1.2 mg/dL vs. 5.2±1.0 mg/dL, p=0.02). Ultrasound measures showed higher PSV (280±35 cm/sec vs. 220±40 cm/sec, p<0.01) and EDV (90±15 cm/sec vs. 70±12 cm/sec, p<0.01) in the stroke group. Multivariate analysis identified SBP (OR:1.08 per mmHg, 95%CI: 1.02-1.15, p=0.01) and hsCRP (OR:2.44 per mg/L, 95%CI: 1.25-4.78, p=0.008) as independent stroke predictors. **Conclusions:** Elevated SBP and hsPCR levels independently predict stroke risk in patients with moderate carotid stenosis under high-dose statin therapy. These findings emphasize the need of comprehensive risk assessment beyond plaque severity, supporting personalized strategies, including consideration of carotid surgery, to prevent stroke.

Keywords: carotid stenosis, hsCRP, stroke predictors, systolic blood pressure

PREDICTORS OF THREE-MONTH LDL-CHOLESTEROL TARGET ACHIEVEMENT AFTER STEMI

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Background: Achieving guideline-recommended LDL-cholesterol (LDL-C) targets after ST-elevation myocardial infarction (STEMI) is essential for secondary prevention, yet many patients fail to reach LDL-C <55 mg/dL despite high-intensity statin therapy. Early identification of predictors of target attainment may guide lipid-lowering strategies. **Objective:** To identify clinical and biochemical predictors of achieving LDL-C <55 mg/dL at 3 months in statin-naïve STEMI patients treated with maximum-dose statins. **Material and methods:** In this prospective single-center study, 142 consecutive STEMI patients without prior lipid-lowering therapy received high-intensity statins (atorvastatin 80 mg/day or rosuvastatin 40 mg/day) at discharge and were followed for 3 months. Fasting LDL-C was measured at baseline and at 3 months. Patients were stratified into two groups according to 3-month LDL-C: Group 1, target achieved (<55 mg/dL; n=89) and Group 2, target not achieved (≥55 mg/dL; n=53). Baseline demographics, cardiovascular risk factors, lipid profile, high-sensitivity C-reactive protein (hs-CRP), estimated glomerular filtration rate (eGFR), type of statin and treatment adherence (self-reported and pill count) were recorded. Univariable and multivariable logistic regression were used to identify independent predictors of LDL-C target attainment. **Results :** Mean age was 59±11 years, and 28% were women; baseline characteristics were similar between groups (all p> 0.05). At 3 months, mean LDL-C was 43±9 mg/dL in Group 1 versus 76±12 mg/dL in Group 2 (p<0.001). Rosuvastatin 40 mg was prescribed in 54% of Group 1 versus 36% of Group 2 (p=0.03). Good adherence (≥80% of prescribed doses) was more frequent in Group 1 (86% vs. 57%, p<0.001). Patients with eGFR <60 mL/min/1.73 m² were less likely to reach target (12% vs. 28%, p=0.02). In multivariable analysis, independent predictors of achieving LDL-C <55 mg/dL were treatment with rosuvastatin 40 mg (OR 1.9, 95% CI

1.0-3.6, $p=0.04$), good adherence (OR 3.8, 95% CI 1.8-7.8, $p<0.001$) and preserved renal function (eGFR ≥ 60 mL/min/1.73 m²; OR 2.1, 95% CI 1.0-4.4, $p=0.049$). The model showed good discrimination (AUC 0.79). **Conclusions:** In statin-naïve STEMI patients treated with maximum-dose statins, use of rosuvastatin 40 mg, good adherence and preserved renal function independently predict achievement of LDL-C <55 mg/dL at 3 months. These factors may help identify candidates for early combination lipid-lowering therapy.

Keywords: ST-elevation myocardial infarction, LDL-cholesterol target, High-intensity statin, Treatment adherence

PROGNOSTIC FACTORS AND THERAPEUTIC PERSPECTIVES IN SUBARACHNOID HEMORRHAGE CAUSED BY RUPTURED ANEURYSMS

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Background: Subarachnoid hemorrhage resulting from the spontaneous rupture of a cerebral aneurysm (aSAH) has a global incidence of 7.9 per 100,000. aSAH is associated with high morbidity and mortality. Short-term survival within the first 30 days is compromised by complications such as vasospasm and re-rupture. **Objective:** The purpose of this retrospective cohort study was to assess patients from our region by examining non-modifiable factors (sex, age) alongside modifiable risk factors, such as hypertension. Clinical status at admission was characterized using the World Federation of Neurosurgical Societies (WFNS) and Hunt-Hess (HH) scales. Furthermore, we evaluated the short-term outcomes in relation to treatment (surgical, endovascular or supportive). **Material and methods:** We analyzed the data from 190 patients with aSAH who were treated at the Department of Neurosurgery in Tîrgu Mureş between 2022 and 2024. Statistical analysis was performed using GraphPad Prism and Microsoft Excel. **Results :** Regarding the demographic data, there was a statistically significant difference in the gender distribution. A higher incidence of female patients ($n=112$, 58.95%) was observed compared to males ($n=78$, 41.05% - $p=0.0164$). The median age was 53 years for males and 59.5 years for females. Hypertension was observed in 70% of the patients (133 out of 190, $p<0.0001$). The overall mortality rate was 24.21% (46 out of 190). Mortality increased significantly with higher WFNS grades. Rates ranged from 3.41% in the WFNS I group to 54.55% in the WFNS V group ($p<0.0001$). Patients were categorized into WFNS I-II, III and IV-V groups. Outcomes (recovery, prolonged care or death) were then evaluated, revealing a clear prognostic trend. Mortality increased with clinical severity, reaching 48.10% in the WFNS IV-V group vs. 6.60% in the WFNS I-II group. The rate of direct home discharge was highest in the WFNS I-II group (32.08%). Notably, this group also exhibited the highest transfer rate to other rehabilitation clinics (61.32%). Consistent with WFNS findings, higher HH grades showed increased mortality. Rates ranged from 6.25% in grade I to 75.00% in grade V, as also described in the literature. Regarding treatment, endovascular procedures ($n=131$) and surgical clipping ($n=40$) showed 12.98% and 30% mortality, respectively. Palliative and supportive care was provided in critical and hemodynamically unstable cases. **Conclusions:** Modern neurosurgical technology allows for a better treatment with lower periprocedural complication rates. However, the overall mortality rate remains high due to the severity of the initial hemorrhagic event. Additional factors of great influence include resulting neurological and secondary systemic impairment.

Keywords: Subarachnoid hemorrhage, Cerebral aneurysms, WFNS, Mortality

RECURRENCE PATTERNS AND POSTOPERATIVE OUTCOMES IN PATIENTS TREATED FOR PERIANAL ABSCESS: A THREE-YEAR RETROSPECTIVE COHORT STUDY.

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Background: Perianal abscess, a common anorectal emergency, is associated with significant morbidity due to recurrence and development of fistulas. Recurring rates are still extremely high, about 20 - 40% in the published literature, despite standardized surgical management by incision and drainage. The identification of predictive factors will help refine surgical strategy and postoperative follow-up. **Objective:** This study aims to assess the recurrence patterns and postoperative outcomes in patients who have undergone surgical treatment of perianal abscess. Furthermore, the study also aims to isolate independent predictors of recurrence. **Material and methods:** A retrospective cohort study of patients who underwent surgical treatment for perianal abscess was conducted.

Information was taken from the Hipocrate hospital information system. After excluding certain patients, the following variables were analyzed: demographic characteristics, comorbidities, abscess type, and surgical management. The occurrence of repeat surgical drain requirement was referenced as the primary endpoint. Clavien-Dindo grading of postoperative complications and 30-day readmission was an important secondary endpoint. Multivariate logistic regression analyses were performed to identify independent predictors of recurrence, which were expressed as odds ratios with 95% confidence intervals. **Results** : A total of 95 hospitalised patients with a mean age of 45.0 ± 14.2 years. Of these patients, more than three-quarters (78.9%) were male. The mean hospitalization stay was 4.9 ± 2.1 days. The overall recurrence rate was 29.5%, while the 30-day readmission rate was 14.7%. Most complications following the procedure were Clavien-Dindo grade I-II. As a result of multivariate logistic regression, the odds ratio for recurrence was 3.12 with a 95% CI of 1.28 - 7.61 (p value 0.012) in patients with a suspected fistula at index presentation. The odds ratio for horseshoe abscess configuration was 2.85 (CI 1.10-7.34; p = 0.031), which indicates that the horseshoe configuration of abscesses has a higher risk for recurrence. Diabetes mellitus or smoking status was not significantly related to recurrence. **Conclusions**: In nearly one-third of occurrences, the perianal abscess recurs. The recurrence risk is significantly increased by a fistula and complex abscess anatomy. The significance of timely diagnosis and customized surgical management strategies in cutting down recurrence and enhancing long-term results.

Keywords: postoperative outcomes, perianal abscess, recurrence, fistula

RESHAPING THE TREATMENT PARADIGM FOR HER2-LOW AND HER2-ULTRALOW BREAST CANCER: A SYSTEMATIC REVIEW OF TRASTUZUMAB DERUXTECAN

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Background: The long-standing binary classification of HER2 status in breast cancer is undergoing a significant paradigm shift. The emergence of HER2-low and HER2-ultralow categories has identified a substantial patient population that, until recently, lacked access to effective, targeted therapeutic interventions. **Objective:** This review aims to evaluate the clinical efficacy and impact on quality of life of Trastuzumab Deruxtecan (T-DXd) for patients with HER2-low and HER2-ultralow metastatic breast cancer, while assessing its potential to redefine standard treatment protocols. **Material and methods:** A literature search was conducted on PubMed for articles published within the last 5 years. Based on predefined inclusion and exclusion criteria, three key studies (DESTINY-Breast04, DESTINY-Breast06, and DESTINY-Breast12) were included in the final analysis. Data regarding key efficacy endpoints, hazard ratios (HR), and quality of life parameters were extracted and synthesized. **Results** : In the DESTINY-Breast04 trial, T-DXd significantly improved median progression-free survival (mPFS) compared with standard chemotherapy (10.1 vs. 5.4 months; HR=0.51) in patients with HER2-low metastatic breast cancer previously treated with chemotherapy. DESTINY-Breast06 successfully shifted T-DXd to an earlier treatment line (following endocrine therapy, without prior chemotherapy) and confirmed the benefit for both HER2-low (mPFS 13.2 vs. 8.1 months; HR=0.62) and exploratory HER2-ultralow populations. Additionally, DESTINY-Breast12 proved substantial intracranial activity, demonstrating a 12-month CNS PFS of 58.9% in patients with active or stable brain metastases. From a patient-centered perspective, data from DESTINY-Breast06 indicated that while T-DXd increased gastrointestinal side effects, it effectively delayed the deterioration of physical and emotional functioning, and significantly reduced pain compared to chemotherapy. **Conclusions:** T-DXd has fundamentally redefined HER2 targetability, extending major survival benefits to HER2-low and HER2-ultralow populations across different metastatic settings, including early-line disease and brain metastases. Crucially, this survival advantage is paired with the overall preservation of the patients' quality of life, firmly establishing a new standard of care.

Keywords: HER2-low, HER2-ultralow, Breast cancer, Trastuzumab Deruxtecan

RESULTS OF TOTAL KNEE ARTHROPLASTY IN PATIENTS WITH PRIMARY AND METASTATIC TUMORS OF THE FEMUR AND PROXIMAL TIBIA

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Background: Oncologic knee arthroplasty represents the main surgical reconstructive treatment for patients with

tumors of the distal femur and proximal tibia, enabling limb preservation and maintenance of function. **Objective:** The aim of the study was to evaluate the outcomes of surgical treatment in patients with primary and metastatic bone tumors in the knee region. **Material and methods:** The study included 26 patients operated on between 2021 and 2025 who underwent modular oncologic arthroplasty. The procedures comprised distal femoral resections and proximal tibial resections. One quarter of the patients had metastatic bone tumors. Functional evaluation was performed using the MSTS score, and graft and patient survival were analyzed according to tumor type and disease progression. **Results :** The mean survival of patients with metastatic tumors was 12 months, while for those with primary tumors it was 73% at 5 years. The mean functional MSTS score was 78% for the entire cohort. Postoperative complications, including infections, mechanical instability, and local recurrences, occurred in 12-30% of patients. **Conclusions:** Modular oncologic knee arthroplasty allows for good functional outcomes and limb preservation in patients with primary and metastatic tumors of the femur and proximal tibia. Prognosis is significantly influenced by the histological type and stage of the disease, and careful patient selection is essential for optimizing long-term outcomes.

Keywords: Oncologic knee arthroplasty, Bone tumors, Limb-sparing surgery, Functional outcomes

RISING THREATS IN THE ICU: EPIDEMIOLOGY AND ANTIMICROBIAL RESISTANCE OF ACINETOBACTER BAUMANNII IN A SIX-YEAR RETROSPECTIVE STUDY

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Background: Sepsis is one of the most life-threatening disorders, representing almost 20% of worldwide deaths. Infections caused by multidrug-resistant bacteria in intensive care units (ICUs) burden the management of the patients, with *Acinetobacter baumannii* (*A. baumannii*) being one of the major etiological agents of healthcare-associated infections. The presence of carbapenem-resistant (CR) *A. baumannii* is a significant problem, because it limits treatment options and is associated with higher mortality rates and longer hospitalisation. However, regional data from Romania and Eastern Europe are still limited. **Objective:** This study aims to evaluate the epidemiology, antimicrobial resistance, and clinical outcomes of *A. baumannii* infections in the Mureș County Clinical Hospital's ICU over a six-year period. **Material and methods:** We conducted a single-centre, observational, retrospective study in the ICU of Mureș County Clinical Hospital from January 2019 to December 2024. The study included data from adult patients hospitalised in the ICU with at least one positive culture for *Acinetobacter* species and clinical signs of infection. The data was collected from the hospital's electronic database. The biological samples included respiratory secretions, blood cultures, urine, and wound secretions. Bacterial identification and antibiotic susceptibility were interpreted according to the European Committee on Antimicrobial Susceptibility Testing standards. Pathogens were classified into multidrug-resistant (MDR), extensively drug-resistant (XDR), and pandrug-resistant (PDR). Statistical analyses included Chi-Square or Fisher's exact tests for categorical variables, and Student's t-test or Mann-Whitney tests for continuous variables, and statistical significance was defined as $p < 0,05$. **Results :** We analysed a total of 169 patients with 211 positive cultures. The majority were men ($n=109$, $p=0,03$), with a mean age between 63 and 76 years. Most isolates were collected from the respiratory tract, particularly tracheal aspirates ($n=112$, $p=0,009$). *A. baumannii* was the most common organism found ($n=180$, $p<0,001$). A significant increase in XDR strains was observed after 2022 ($p<0,001$), which coincides with the decrease of MDR strains ($p<0,001$). Additionally, high rates of resistance were observed for fluoroquinolones, aminoglycosides, and carbapenems. Compared to survivors, patients who died had significantly higher leukocyte ($p=0,0028$) and neutrophil ($p=0,0006$) counts, urea ($p<0,0001$) and creatinine ($p=0,0006$), and lower lymphocyte counts ($p=0,0013$) upon diagnosis and follow-up, with no significance between the groups for the inflammatory biomarkers. **Conclusions:** In this study, *A. baumannii* was the predominant species, and XDR species were observed to rise in the later years. Although inflammatory markers cannot predict the outcome, biochemical markers such as urea and creatinine might help better evaluate the course of treatment and patients' evolution.

Keywords: *Acinetobacter baumannii*, antimicrobial resistance, healthcare-associated infections

RISK FACTORS ASSOCIATED WITH ABDOMINAL AORTIC ANEURYSM RUPTURE: A SINGLE-CENTER EXPERIENCE

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Background: Ruptured abdominal aortic aneurysm (rAAA) represents a life-threatening condition with a very high mortality rate, despite advances in surgical and endovascular treatment. During the last two decades, numerous risk factors associated with aneurysm rupture have been identified and analyzed. In addition, several screening programs have been implemented in developed countries to reduce the incidence of rAAA and the associated mortality. **Objective:** The aim of the present study was to assess the risk factors associated with abdominal aortic aneurysm rupture in a cohort of patients treated at a single tertiary care center. **Material and methods:** In the present study, all patients diagnosed with AAA admitted to the Department of Vascular Surgery at Emergency Clinical County Hospital, Târgu Mureș, between 2019 and 2025 who underwent open repair were included. All clinical and demographic data were retrospectively retrieved from the hospital's electronic database. The presence of aneurysm rupture at baseline was also assessed, and patients were accordingly classified into two groups: rAAA and uAAA. This work was supported by the "George Emil Palade" University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș, Research Grant no. 170/2/09.01.2024. **Results :** A total of 125 patients were included in the analysis, with a mean age of 72.6 ± 7.53 years; 104 (83.2%) were male. The mean AAA diameter was 9.25 ± 4.37 cm. At admission, 70 patients presented with rAAA through the emergency department, while 55 patients underwent elective repair for an intact aneurysm. Patients with rAAA were older and had a higher prevalence of atrial fibrillation and prior myocardial infarction, along with lower hemoglobin and hematocrit levels. On univariate analysis, increasing age (OR:1.55, $p=0.021$) and history of myocardial infarction (OR:2.96, $p=0.048$) were significantly associated with rupture at presentation. In addition, markers of malnutrition, reflected by decreased serum albumin and total protein, were associated with AAA rupture. **Conclusions:** In this single-center cohort, higher age and a history of myocardial infarction were independent predictors of rupture, while lower hemoglobin, hematocrit, and serum protein levels were more frequently observed in patients presenting with rAAA.

Keywords: Abdominal aortic aneurysm, open repair, EVAR, vascular surgery

RISK FACTORS ASSOCIATED WITH CLINICAL SEVERITY IN PATIENTS WITH PERIPHERAL ARTERIAL DISEASE UNDERGOING FEMOROPOPLITEAL BYPASS WITH GREAT SAPHENOUS VEIN GRAFT

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Background: Peripheral arterial disease (PAD) is characterized by reduced peripheral tissue perfusion secondary to atherosclerotic plaque formation. In lower extremity arterial disease, the femoropopliteal (FP) segment is the most commonly affected. According to current European guidelines, open surgical revascularization with an autologous great saphenous vein (GSV) graft remains the gold standard for the treatment of long femoropopliteal occlusive lesions. **Objective:** The objective of this study was to evaluate the risk factors associated with clinical severity in patients with PAD who underwent lower limb revascularization using FP bypass with a GSV graft. **Material and methods:** In the present study, all patients diagnosed with PAD who were admitted to the Department of Vascular Surgery, Emergency Clinical County Hospital, Târgu Mureș, and underwent FP bypass with a GSV graft were included. All clinical and demographic data were retrospectively retrieved from the hospital's electronic database. Patients were stratified into three groups according to disease severity using the Leriche-Fontaine classification: "Stage IIB", "Stage III", and "Stage IV". This work was supported by the "George Emil Palade" University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș, Research Grant no. 170/2/09.01.2024. **Results :** A total of 76 patients who underwent FP bypass with a GSV graft were included in the study. The mean age was 65.72 ± 7.19 years, and the majority of patients were male ($n=65$, 85.5%). The most common comorbidities were arterial hypertension ($n=62$, 81.6%), ischemic heart disease ($n=32$, 42.1%), and diabetes mellitus ($n=29$, 38.2%). Active smoking was present in 22 patients (28.9%), while obesity was recorded in

11 patients (14.5%). Associated femoral endarterectomy was performed in 22 patients (28.9%), and popliteal endarterectomy in 7 patients (9.2%). According to the Leriche-Fontaine classification, 28 patients were Stage IIB, 28 Stage III, and 20 Stage IV. Analysis of laboratory parameters showed that patients in Stage IV had significantly higher white blood cell counts (WBC) ($p=0.037$), higher neutrophil counts ($p<0.001$), and elevated glucose levels ($p=0.019$), while hemoglobin levels were significantly lower ($p=0.006$). Receiver operating characteristic (ROC) curve analysis demonstrated that white blood cell count (AUC:0.695, $p=0.003$), neutrophil count (AUC:0.784, $p<0.001$), and glucose level (AUC:0.685, $p=0.018$) were significantly associated with Stage IV severity.

Conclusions: Higher inflammatory markers, elevated glucose levels, and lower hemoglobin levels were associated with greater clinical severity in patients with peripheral arterial disease undergoing femoropopliteal bypass with a great saphenous vein graft, suggesting their potential value as predictors of advanced disease.

Keywords: Peripheral arterial disease, great saphenous vein, risk factors, FP

RISK FACTORS FOR POSTOPERATIVE NAUSEA AND VOMITING AFTER CESAREAN SECTION: A 24-HOUR OBSERVATIONAL STUDY

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Background: Nausea and vomiting are common findings associated with pregnancy. In many cases this condition is limited to the first trimester, but in other occasions these symptoms can last up until the delivery. Postoperative nausea and vomiting is a common feature of anesthetic complications that occurs after cesarean delivery. Among obstetric patients, the incidence is notably elevated. Recent studies estimate that 21 - 79% of women experience PONV after cesarean delivery, a wide range explained by differences in anesthesia methods, patient-related factors, and preventive approaches. **Objective:** The aim of this study is to assess the main determinants of postoperative nausea and vomiting in cesarean patients and to explore their role in guiding individualized preventive strategies. **Material and methods:** This pilot study screened 15 women giving birth via cesarean section in the Obstetrics Department of County Emergency Clinical Hospital of Tîrgu Mureş. Our inclusion criteria were of age ≥ 18 years, cesarean section under neuraxial or general anesthesia, and ability to provide consent and exclusion criteria: refusal/withdrawal, inability to reliably assess nausea/vomiting (deep sedation/ICU without assessment windows), or preexisting active gastrointestinal illness unrelated to pregnancy. A 24-hour postoperative follow-up was conducted, recording the number and severity of nausea and vomiting episodes, as well as the interventions applied to improve patient condition. **Results :** Patients who experienced PONV were younger on average (mean age = 26.2 years, SD = 5.25) compared to those without PONV (mean age = 32.5 years, SD = 4.41) ($p = 0.08$). Body mass index (BMI) was broadly comparable between groups (PONV: mean = 28.2, SD = 7.73; no PONV: mean = 29.8, SD = 3.11). Patients who experienced PONV showed a greater mean drop in systolic blood pressure (mean = 40.5 mmHg, SD = 5.74) compared to those without PONV (mean = 33.5 mmHg, SD = 20.5), although this difference was not statistically significant ($p = 0.24$). All patients who experienced PONV received sympathomimetic vasopressor treatment (100%), compared to 70% of patients without PONV. However, this difference was not statistically significant ($p = 0.51$). **Conclusions:** The findings suggest that younger maternal age and more pronounced hypotension may contribute to PONV risk after cesarean delivery; however, these associations were not significant. Despite higher vasopressor use in PONV cases, statistical significance was not reached. Due to small sample size, findings should therefore be interpreted with caution and considered hypothesis-generating.

Keywords: pregnancy, cesarean section, anesthetic risk, PONV

RISK VS REALITY: CAN ARISCAT REALLY PREDICT RESPIRATORY FAILURE IN LAPAROSCOPIC SURGERY?

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Background: Respiratory complications after surgery still represent a significant clinical concern, even in the context of minimally invasive techniques. The ARISCAT score is widely validated for predicting pulmonary complications, though its applicability to laparoscopic surgery patients requires further clarification. **Objective:** The main objective of this preliminary study was to assess the ability of the ARISCAT score to predict postoperative

respiratory failure in laparoscopic surgery within an intention-to-treat framework. Follow-up was conducted through to hospital discharge. **Material and methods:** This prospective observational study was structured using the PICO framework. The population included adult patients undergoing elective laparoscopic surgery. The exposure consisted of preoperative assessment with the ARISCAT score, with comparison across predefined risk categories: low, intermediate, and high, while all patients received standard perioperative management. The primary outcome was postoperative respiratory failure, defined as the need for ventilatory support or persistent hypoxemia requiring oxygen therapy. Secondary outcomes included length of hospital stay. Patients were monitored for respiratory complications from surgery until hospital discharge. **Results :** A total of 57 adult patients with ASA physical status I-IV were included. Perioperative risk stratification was performed using the Apgar Surgical Score (range 0-10) and the ARISCAT score, categorizing patients into low (<26), intermediate (26-44), and high-risk (≥ 45) groups. All procedures were conducted under balanced general anesthesia with standard intraoperative monitoring. At 1 minute following induction and immediately prior to extubation (TOF $\geq 80\%$), no desaturation events were observed ($\text{SpO}_2 > 92\%$). End-tidal CO_2 values ranged from 23 to 45 mmHg, and respiratory system compliance remained within optimal limits, averaging approximately 50 ml/cmH₂O. The duration of laparoscopic surgery ranged from 20 to 180 minutes, with intra-abdominal pressures maintained between 10 and 15 cmH₂O. One procedure required conversion to open surgery. No cases of acute respiratory failure were recorded during the in-hospital follow-up period. **Conclusions:** No cases of postoperative respiratory failure were observed, even across varying ARISCAT risk categories, suggesting adequate perioperative care. The ARISCAT score may still provide useful risk stratification, but further studies with larger cohorts are required.

Keywords: elective laparoscopy, balanced anesthesia, ARISCAT score, pulmonary complications

RUPTURED BRAIN ARTERIOVENOUS MALFORMATIONS – IS THERE AN IDEAL TIMING FOR MICROSURGERY?

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Background: Brain arteriovenous malformations comprise a challenging subset of neurovascular pathologies, requiring extensive experience and exceptional microsurgical dissection skills for their surgical management. However, there is still no consensus regarding the optimal timing of their definitive surgical treatment. **Objective:** The main purpose of this paper is to share the experience of a neurosurgical department in an emergency hospital. **Material and methods:** In the Neurosurgical department of the Emergency County Hospital in Tîrgu Mureș, Romania, 36 patients were operated between 2014 and 2025 for ruptured cerebral arteriovenous malformations, 5 of them receiving preoperative endovascular embolisation of the feeders. In a retrospective analysis, we identified three subgroups of patients based on the timing of microsurgery (measured from the estimated moment of malformation rupture): patients operated <7 days from the onset of their symptoms, those operated between the 7th and the 14th day and those operated beyond 14 days. The subgroups were named subgroup 1, 2 and 3, respectively. The following postoperative outcomes were compared in order to assess whether an optimal treatment window exists: postoperative evolution, malformation obliteration rate and early postoperative complication rate. **Results :** The results indicated that our patient cohort displayed no statistically significant difference between subgroups with respect to the obliteration rate (1 vs 2 - $p = 1.000 > 0.017$; 2 vs 3 - $p = 0.554 > 0.017$; 1 vs 3 - $p = 1.000 > 0.017$) and early postoperative complication rate (1 vs 2 - $p = 0.641 > 0.017$; 2 vs 3 - $p = 0.562 > 0.017$; 1 vs 3 - $p = 1.000 > 0.017$). Regarding postoperative evolution, a statistically significant difference was observed only between subgroups 2 and 3 ($p = 0.015 < 0.017$), with a significantly higher rate of favourable outcomes in subgroup 2, but not between subgroups 1 and 2 ($p = 0.156 > 0.017$) or 1 and 3 ($p = 0.335 > 0.017$). **Conclusions:** Our retrospective analysis of 36 cases of ruptured cerebral arteriovenous malformations suggests a more favourable evolution in patients operated on between days 7 and 14 after hemorrhage onset compared to those treated more than two weeks after rupture, but without a statistically significant difference compared to patients undergoing acute surgery. The timing of definitive treatment does not appear to influence postoperative complication rates or the extent of AVM resection. Management should remain individualised and surgical timing should be determined by taking into account the clinical status and angioarchitectural features of the malformation.

Keywords: arteriovenous malformation, ruptured, timing, microsurgery

SPECTRAL CT (DUAL-ENERGY) IN THE DIAGNOSIS OF POST-THROMBECTOMY HEMORRHAGE IN ISCHEMIC STROKE: A CASE SERIES

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Background: Differentiating hemorrhagic transformation from contrast staining remains a key challenge when evaluating ischemic stroke patients who undergo mechanical thrombectomy. Post-procedure, conventional CT scans often show intracranial hyperdensities, but determining their exact nature can be difficult, potentially complicating interpretation and subsequent clinical decisions. In this setting, dual-energy CT (DECT) provides a significant advantage by distinguishing contrast staining from blood. It achieves this by exploiting the energy-dependent properties of iodine and blood, enabling more precise characterisation of lesions. **Objective:** The aim of this study is to assess the performance of dual-energy CT in identifying post-thrombectomy haemorrhage and to examine the predictive value of biological parameters for haemorrhagic transformation, with the goal of developing a more comprehensive imaging and paraclinical approach. **Material and methods:** Our study included patients aged over 18 years who were hospitalised in the Emergency County Hospital of Târgu Mureș between August 2025 and February 2026, who underwent thrombectomy for ischemic stroke and had a DECT scan done. **Results :** 100 patients, 59 males and 41 females were included in the study, with an average age of 69.25 ± 12.74 years. The stroke distribution between the anterior and posterior territories was 85 in the anterior and 15 in the posterior. DECT identified haemorrhage in 34 (34%) patients and residual iodinated contrast staining in 25 (25%), with both findings coexisting in 11 (11%) cases. Isolated contrast staining was observed in 14 patients (14%), highlighting the value of dual-energy CT in distinguishing true haemorrhage from post-procedural contrast retention. Regarding biological parameters, patients with haemorrhage showed significantly higher admission glycaemia and lower serum potassium levels than those without haemorrhage (glycaemia: median 126 vs 105, $p = 0.008$; potassium: median 3.91 vs 4.32, $p < 0.001$). **Conclusions:** These results support the clinical utility of dual-energy CT after mechanical thrombectomy, primarily by increasing diagnostic confidence and reducing uncertainty about the interpretation of post-interventional hyperdensities.

Keywords: dual-energy CT, ischemic stroke, mechanical thrombectomy, haemorrhagic transformation

SURGICAL COMPLICATIONS AFTER PELVIC EXENTERATION: A TERTIARY CLINIC EXPERIENCE FOLLOWING 105 PROCEDURES

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Background: Pelvic exenteration is performed nowadays as an ultimate, salvage therapy for patients with an advanced or recurrent pelvic cancer. It is considered an extremely difficult and demanding procedure for both surgeon and anaesthesiologist. **Objective:** To analyze our results and complications after pelvic exenterations for pelvic malignancies in a tertiary referral center. **Material and methods:** Between November 2011 and March 2026, 105 patients underwent a pelvic exenteration. The indications were cervical (71 patients), vaginal (9), vulval (5), recurrent ovarian (8), endometrial (5), recurrent sigmoid or rectal (2), bladder cancer (5) or undifferentiated pelvic sarcoma. **Results :** Out of these 105 pelvic exenterations, 58 were total, 35 anterior, and 12 posterior. Regarding levator ani muscle, 58 exenterations were supralelevatorian, 22 infralevatorian and 25 infralevatorian with vulvectomy. Non-continent (Bricker or double-barrel wet colostomy), continent heterotopic (Miami pouch) or orthotopic (Budapest pouch) urinary diversions were tailored in all 93 total or anterior pelvic exenterations. Early complications occurred in 45 patients of whom 8 perioperative deaths (7.6 %). **Conclusions:** Pelvic exenteration can be associated with a long-term survival and cure without high perioperative mortality in properly selected patients. However, postoperative complications could be serious, even lethal.

Keywords: pelvic exenteration, surgical complications, urinary diversions

SURGICAL TREATMENT OF GASTRIC CANCER - POSTOPERATIVE EVOLUTIONARY PARAMETERS

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Background: Gastric neoplasm is considered, globally, the 5th most common and deadly cancer. Eastern Europe ranks second in statistics according to these parameters. Romania is approaching double the European average incidence and mortality for this pathology. These patients require a multimodal, individualized therapeutic approach to maximize the chances of success, for the radical treatment, respectively the duration of survival, in cases with palliative approach. **Objective:** This study aims to analyze the influence of various clinical, biological and demographic factors on the surgical approach to gastric cancer patients and on the postoperative results obtained. **Material and methods:** We conducted a retrospective, observational study on a total of 127 patients treated in the Surgery I department of the County Emergency Clinical Hospital, over a period of five years (January 2021 - December 2025), for the diagnosis of malignant gastric tumor. They were divided according to the type of resection performed. We collected demographic, clinical and biological data, data on the surgical treatment performed and on the postoperative evolution of the patients (hospitalization days, the need for intensive therapy, complications, mortality). All this information was organized into a database and statistically analyzed in search of significant relationships between the various parameters. **Results :** The average age of the patients was approximately 66 years, with a male predominance (64.5%). Of the total number of surgical interventions performed, 84.25% had radical intent and 15.75% were palliative. Regarding the type of radical resection were performed 38 total gastrectomy (35.51%), 65 subtotal resections (60.74%) and 4 upper polar gastrectomy (3.73%). The analyzed data showed significant relationships between the type of anastomosis performed and the surgical intervention performed, in the majority of total gastrectomy cases mechanical anastomosis being preferred (97.4%). The overall complication rate was 17.75%, in the study group, with a mortality of 9.34%. Regarding the occurrence of complications, they were more common in male patients, with a statistical association noted with the presence of comorbidities. The length of hospitalization, the need for intensive care and the death rate were significantly correlated with the duration of the surgical intervention. **Conclusions:** Prolonged operative time and the presence of complications were the main factors associated with an unfavorable postoperative outcome with longer hospitalization, need for intensive care and increased mortality rates. Perioperative management of gastric cancer cases must be patient individualized to reduce the rate of complications.

Keywords: gastric cancer, surgical treatment, gastric resection, postoperative outcome

SYMPTOM BURDEN AND RISK PERCEPTION AMONG OPERATING ROOM PERSONNEL EXPOSED TO AIRBORNE POLLUTANTS

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Background: Operating room staff are frequently exposed to airborne pollutants such as surgical smoke, anesthetic gases, and disinfectant vapors. These exposures may lead to symptoms such as nasal irritation, eye irritation, and cough and may also influence how occupational risk is perceived and managed. **Objective:** The aim of the study was to assess the frequency of symptoms among operating room staff and to analyze the relationship between symptom burden and risk perception. **Material and methods:** The study had a cross-sectional design and was based on an anonymous questionnaire administered to operating room healthcare personnel (N = 71). Data were collected regarding symptoms experienced on days with increased exposure, their frequency (Likert scale 1-5), the perceived harmfulness of pollutants (10-point rating scale), and the level of concern regarding exposure (Likert scale 1-5). Descriptive statistics were used to summarize symptom prevalence. Associations between variables were analyzed using Spearman's rank correlation, with statistical significance set at $p < 0.05$. **Results :** The most frequently reported symptoms during high-exposure days were nasal irritation (76.1%), eye irritation (73.2%), and throat irritation/cough (64.8%). Symptom frequency showed a significant positive correlation with perceived harmfulness of airborne pollutants ($p = 0.515$, $p < 0.001$) and with concern about exposure ($p = 0.601$, $p < 0.001$). **Conclusions:** Operating room personnel experience a high burden of symptoms, and risk perception appears to be associated with symptom experience, suggesting a level of awareness of occupational

exposure. These findings emphasize the importance of improving workplace conditions and strengthening awareness to reduce occupational risk.

Keywords: operating room, airborne pollutants, risk perception, healthcare workers

THE AUTONOMY OF A MEDICAL STUDENT: CHILDHOOD INFLUENCE

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Background: Autonomy in young adulthood plays an important role in social integration and the academic life. University life comes with many challenges and an evergrowing number of tasks and responsibilities. Many studies have focused on children and adolescents, quantifying the autonomy one experiences in the familial setting. Recent studies recognize the effect that parental autonomy support has over a young adult's autonomy. **Objective:** This study aimed to examine if a connection can be established between a young adult's self evaluated level of autonomy and parental influence during childhood and adolescence. **Material and methods:** A cross-sectional, observational, and monocentric study was conducted over a two-month period (November-December 2025). Data was collected using a structured questionnaire comprising of three sections. The first section contains 6 demographic related questions. The second part contains 12 questions regarding the perceived levels of parental autonomy during childhood adapted from the P-PASS (Perceived Parental Autonomy Support Scale), a validated instrument. The third part contains 7 questions evaluating the level of autonomy experienced as a young adult, taken from the BPNS (Basic Psychological Need Satisfaction in general). The questionnaire was forwarded electronically via whatsapp to the target group, containing all the students from the first year, from the faculty of medicine in the "George Emil Palade" University of Medicine, Pharmacy, Science and Technology of Tîrgu Mureș. A total of 105 voluntary and anonymous respondents participated. All answers were rated on a 7 point Likert scale. Statistical analysis was performed using IBM SPSS Statistics 2, applying the Chi-Square test (statistical significance set at $p < 0.05$) **Results :** A moderate positive correlation was identified between childhood parental autonomy support and current perceived levels of autonomy ($r = 0.355$, $p < 0.001$) indicating a statistically significant association. Specifically, opportunities for independent decision-making during childhood were significantly associated with a greater sense of freedom in adulthood ($p < 0.001$). Additionally, parental behaviors such as encouraging personal choice, validating preferences, and respecting the child's perspective showed significant correlations with higher levels of autonomy in young adulthood ($p < 0.001$) **Conclusions:** First-year medical students reported an increased level of autonomy in daily life which were significantly associated with the degree of autonomy support experienced during childhood. Understanding the importance of sustaining and encouraging independence and autonomy in children will lead to the individual turning into a self sustaining adult, capable of taking on difficult tasks later on, given their increased level of confidence in their own abilities.

Keywords: students, autonomy, development

THE GREAT MASQUERADER: AORTOENTERIC FISTULA PRESENTING AS MALLORY-WEISS SYNDROME AND CULMINATING IN LATE ENDOGRAFT INFECTION

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Background: Aortoenteric fistula (AEF) is a rare but frequently fatal condition defined by a pathological communication between the aorta and the gastrointestinal tract. It often presents with a "herald bleed" but is commonly misdiagnosed due to overlap with more benign causes of upper gastrointestinal bleeding (UGIB). Delayed recognition significantly increases morbidity and mortality, particularly in patients with abdominal aortic aneurysms or prior endovascular repair. **Objective:** To describe the clinical course, diagnostic challenges, and multidisciplinary management of a patient with an initially unrecognized AEF complicated by endograft infection and septic dissemination. **Material and methods:** We present an 18-month longitudinal case integrating clinical, imaging, microbiological, and surgical data. Diagnostic work-up included upper endoscopy, Angio-CT, blood cultures, and intraoperative sampling. The definitive therapeutic approach consisted of emergency exploratory laparotomy with complete explantation of the infected endograft, control of the aortoenteric fistula, and restoration of distal perfusion through extra-anatomic revascularization using a left axillofemoral bypass, avoiding placement of prosthetic material in an infected field. **Results :** Clinical evolution was characterized by the development of

systemic infection associated with septic embolic phenomena. Microbiological investigations identified a polymicrobial infection, including ESBL-producing *Klebsiella pneumoniae* and *Enterococcus faecalis*. Imaging confirmed a patent aortoduodenal fistula with infected endograft. Definitive surgical management, combining graft explantation and left axillofemoral bypass with targeted antibiotic therapy, resulted in favorable evolution. Septic foci at the level of the lower limb were surgically managed by drainage and debridement, with good local progression. The postoperative course was marked by resolution of sepsis, normalization of inflammatory markers, preservation of limb perfusion, and overall clinical improvement, allowing discharge in stable condition with apparent remission of the acute infectious episode. **Conclusions:** AEF remains a diagnostic and therapeutic challenge, particularly when initial presentations are misleading. In the setting of endograft infection, prompt radical surgery combined with extra-anatomic bypass and aggressive infection control measures is essential. This approach can lead to favorable outcomes, including remission of severe septic complications.

Keywords: AEF= Aortoenteric fistula, EVAR= Endovascular Aneurysm Repair, UGIB= Upper Gastrointestinal Bleeding

THE GUT-HEART AXIS: A LITERATURE REVIEW OF THE INTERDEPENDENCE BETWEEN DIET QUALITY, GUT MICROBIOTA AND CARDIOVASCULAR HEALTH IN PATIENTS WITH HEART DISEASE

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Background: Despite therapeutic advances, cardiovascular diseases remain the leading cause of death worldwide. Most cases, however, could be prevented by addressing behavioural risk factors early on. Although nutrition is increasingly recognized as an important pillar of overall health, it remains relatively underutilized in the prevention and management of cardiovascular disease. **Objective:** The aim of this literature review is to explore the relationship between diet quality, gut microbiota and cardiovascular health and to emphasize the need for integrating nutrition into clinical practice. **Material and methods:** An extensive literature search was conducted using PubMed, ScienceDirect, Frontiers, and JAMA to identify studies on the correlation between cardiovascular disease, gut health, and different types of diets, with emphasis on Mediterranean diet, macronutrient-based approaches and ultra-processed food-rich patterns. Selected studies included peer-reviewed original articles, systematic reviews and meta-analyses. Relevant European and U.S. guidelines were also reviewed to contextualize current clinical practice. **Results :** Evidence suggests that the gut microbiome is directly involved in cardiovascular disease mechanisms through pathways including SCFAs, TMAO and LPS. A healthy and diverse gut microbiome, supported by a Mediterranean or mostly plant-based whole-food diet, may contribute to significant improvements in symptoms, life quality and expectancy in patients with heart disease. Some studies report reductions of up to 60% in fatal and 70% in non-fatal cardiovascular events. **Conclusions:** Current literature indicates that diet quality is a major determinant of cardiovascular outcomes. The link between the gut microbiota and cardiovascular health is increasingly recognized, with growing evidence showing that dysbiosis promotes atherosclerosis and negatively impacts hypertension and heart failure. Prioritizing sustainable dietary patterns and nutritional counseling may improve adherence and contribute to both prevention and long-term management of cardiovascular disease.

Keywords: cardiovascular disease, gut microbiota, cardioprotective effect

THE IMPACT OF ACADEMIC STRESS ON STUDENTS' LIFESTYLE: A POTENTIAL RISK FOR EMOTIONAL EATING AND METABOLIC HEALTH?

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Background: Stress is a common problem among students and has negative effects on academic performance, as well as on physical and mental health. Emotional eating means eating in response to emotions, not because of real physical hunger. This behavior is often seen in students and is more likely to appear during periods with high academic demands. **Objective:** The main aim of this study was to evaluate the level of perceived stress among students and to analyze its relationship with emotional eating behavior and physical activity. The study was based

on the hypothesis that students with higher stress levels are more likely to develop emotional eating behaviors. **Material and methods:** This observational cross-sectional study included 193 students selected based on voluntary participation and informed consent. Perceived stress was assessed using the Perceived Academic Stress (PAS) scale and items based on the Perceived Stress Scale (PSS-10). Emotional eating was evaluated using the Dutch Eating Behaviour Questionnaire and the Emotional Eater Questionnaire. Body mass index (BMI) and physical activity were also assessed. The statistical analysis included the Spearman correlation coefficient (ρ), used to evaluate the relationships between stress dimensions, BMI, and physical activity level, as well as the Somers' d association coefficient, used to analyze the relationship between stress and emotional eating behavior. **Results :** A significant positive correlation was found between general perceived stress and academic stress. Higher stress levels were associated with a higher frequency of emotional eating, including eating in situations of sadness. Negative correlations were identified between stress and body mass index, as well as between stress and physical activity, suggesting that students tend to become more sedentary during stressful periods. This negative association may be explained by the metabolic and neuroendocrine changes induced by stress. Previous studies suggest that the brain needs more energy during stress, which can affect the body's metabolism and may lead to weight loss, showing that the relationship between stress and nutritional status is complex. **Conclusions:** The study confirms a significant association between perceived stress and emotional eating among students and highlights the impact of stress on lifestyle, including reduced physical activity and changes in nutritional status. These findings underline the need to implement stress screening programs, psychological counseling, and educational interventions regarding eating behavior and the promotion of physical activity, with the aim of reducing metabolic risk and improving the general health status of the student population.

Keywords: academic stress, emotional eating, students, body mass index

THE IMPACT OF SURGERY ON ACUTE INFLAMMATORY RESPONSE AND EARLY FUNCTIONAL REMODELING IN HEMODYNAMICALLY SIGNIFICANT MITRAL VALVE REGURGITATION

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Background: Mitral valve regurgitation represents one of the most prevalent mitral valve disorders and is associated with a significant impact on mortality. This study aimed to comparatively evaluate laboratory and echocardiographic parameters in patients with hemodynamically significant mitral regurgitation undergoing surgical treatment, either through minimally invasive approaches or conventional median sternotomy. **Objective:** To comparatively evaluate the echocardiographic and laboratory changes pre- and postoperatively, and to identify potential predictive factors of slower recovery to support the individualization of therapeutic management. **Material and methods:** This retrospective-prospective observational study included 78 patients, surgically treated and monitored using three-dimensional transthoracic echocardiography. Group A (44 patients treated by classical median sternotomy) was compared with Group B (34 patients treated using a minimally invasive approach). Both laboratory and echocardiographic parameters were evaluated at two time points: preoperatively and postoperatively. **Results :** To assess the overall effectiveness of the surgical intervention, we performed a comparative analysis of the transthoracic echocardiographic parameters across the entire group, regardless of the surgical method. The results showed a statistically significant improvement in all echocardiographic parameters ($p < 0.05$). When comparing the echocardiographic parameters of Group A with Group B, no statistically significant differences were observed ($p \geq 0.05$). For the analysis of laboratory parameters we applied the same statistical approach. In the overall cohort, eGFR and creatinine showed a statistically significant improvement ($p < 0.05$). A statistically significant postoperative increase ($p < 0.05$) in inflammatory markers was observed, including total leukocyte count, neutrophil count, NLR, and CRP. Changes in lymphocytes and fibrinogen were not statistically significant ($p \geq 0.05$). Group A compared with Group B did not demonstrate a statistically significant difference between the two groups ($p \geq 0.05$). The duration of hospitalization was slightly increased in Group A compared with Group B (an average of 13 days for Group A and 12 days for Group B). Complications were less frequent in Group A than in Group B (72,73% patients without complications in Group A and 58,82% in Group B). A statistically significant negative relation ($b = -2.04$, $p = 0.047$) was identified between regurgitant volume and the absolute value of left atrial volume. **Conclusions:** Outcomes were similar between the two groups, although Group A presented a slightly higher rate of complications than Group B. As these are among the first cases treated minimally invasive, the complication rate is expected to decrease over time with the learning curve. Regurgitant volume may have potential predictive value regarding changes in left atrial volume and cardiac adaptation to hemodynamic

alterations.

Keywords: mitral valve regurgitation, surgical technique, three-dimensional transthoracic echocardiography, laboratory parameters

THE IMPORTANCE OF COMMUNICATION IN MEDICAL CARE FOR YOUNG PEOPLE

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Background: Effective communication changes the way patients think, feel, and respond to medical treatment. In addition to enabling effective medical collaboration, when healthcare professionals communicate with empathy, clarity, and respect, patients often experience less uncertainty, increased trust, and a greater sense of safety. Therapeutic success is enhanced when patients feel seen, which increases adherence to treatment, ultimately improving both trust in the medical field and overall health outcomes. **Objective:** The study aims to examine the importance placed on communication by young people in a medical setting based on gender, social status, marital status, and place of residence. **Material and methods:** A cross-sectional study was conducted through an online Google Forms survey between January and March 2026. There were 141 participants, of which 115 were selected for this analysis matching the target age group of 18-34 years old. The Mann-Whitney U test was performed to assess the impact of communication between gender groups, as well as its relevance based on residential demographic data. The Kruskal-Wallis H test then assessed how this age group perceives medical care and communication based on other demographic variables (social status, marital status). **Results :** Women showed through a significantly higher value ($p=0.0050$) an increased importance placed on medical empathy in their communication preferences compared to men, whereas men reported a significant more ($p=0.0035$) positive baseline relationship in their medical interactions. There were no significant differences in how this age group perceives medical care or values communication based on residence, social status or marital status. **Conclusions:** Improved medical communication is essential for treatment. One possible consideration for improving the quality of medical care is recognising that women require communication based on trust and compassion, prioritizing the human and interpersonal aspect of healthcare over the physical environment. Considering men were more satisfied with current communication styles in their medical care, perhaps alternative strategies should be proposed to narrow the perceived communication disparities between genders in the medical field, which can lead to improved healthcare satisfaction and boost treatment adherence.

Keywords: communication, gender, empathy, healthcare

THE IMPORTANCE OF THE NUTRITIONAL STATUS AS A PROGNOSTIC FACTOR IN PATIENTS WITH LUNG CANCER

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Background: Lung cancer is the most diagnosed cancer worldwide, being the main neoplasia detected in male patients and the second most frequent regarding female patients. This pathology is also known for its high mortality rate being the first cause of death in oncological patients. Lately, nutritional status has been part of many discussions when it came to predicting the survival rate of the oncologic patients. Although it is already well-known that cancer causes plenty of metabolic dysfunctions that can lead to malnutrition and finally to cachexy, the correlation between it and the prognostic rate involves a much complex connection. **Objective:** In this study we aim to evaluate the prognostic role of the nutritional status in patients who suffer from pulmonary cancer and to correlate it with the survival rate. **Material and methods:** We performed a retrospective observational study consisting of 61 patients who underwent CT-guided biopsy and were diagnosed with lung cancer between 2020-2025 in the Topmed Hospital from Tîrgu Mureș, Romania. For each patient, we gathered clinical, imagistic and biological data from the existing patient's files. We used the program IBM SPSS statistics v31 for the statistical data processing, subsequently using the Shapiro-Wilk test for obtaining the Gaussian curve for the numerical variables. The p values $<0,05$ were considered statistically relevant. **Results :** From the number of the patients, 42.6 % were female and 57.4 % male. The mean age was 66.82 ± 8.3 years. As for the weight (kg) and height (cm) average values were 71.28 ± 17.14 , respectively 166.92 ± 9.66 . We compared biological results between the living and the deceased. Albumin was higher among the living population ($p<0.01$). C-Reactive protein/Albumin

ratio was found out to be higher amid the deceased patients ($p<0.012$). The prognostic nutritional index was also higher among the living ($p<0.071$). **Conclusions:** Our results demonstrate the importance of the nutritional status of the patients with lung cancer in predicting the outcome of these patients. The early dosing of these markers could help the physician to adjust the treatment based on the values of these parameters.

Keywords: Lung cancer, Nutritional status, Survival rate

THE ISCHEMIC OCULAR SYNDROME – THE OPHTHALMOLOGIST’S ROLE IN INITIATION OF CAROTIDIAN SCREENING

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Background: Obstruction and stenosis of the carotid artery can cause ocular hypoperfusion and embolization of vessels supplying the orbit and the eye. These processes result in ophthalmologic signs and symptoms such as amaurosis fugax, transient or permanent visual loss, blindness, neovascular glaucoma, and Hollenhorst plaques.

Objective: The aim of this review is to determine whether the diagnosis of ocular ischemia can initiate screening for occlusive disease of the carotid arteries. This could help prevent strokes, with a potentially major impact. The ultimate goal of the review is to encourage interdisciplinary collaboration. **Material and methods:** We conducted an extensive search in Google Scholar, PubMed, and Elicit for reviews intersecting the chosen subject. The following keywords were used: "ischemic ocular syndrome," "carotid artery occlusion," "carotid endarterectomy," and "ischemic retinopathy." We evaluated studies that showed relevance for the topic. **Results :** In studies involving patients with pre-existing internal carotid artery abnormalities (stenosis and thrombosis) confirmed by Doppler ultrasonography, 50% presented ophthalmologic symptoms. Transient vision loss, optic disc abnormalities, central retinal artery occlusion, and ischemic retinopathy (S. Cherninkova) are among the most frequent. Moreover, the 5-year mortality in patients with ischemic ocular syndrome is 40%, mainly due to cardiac disease and stroke (A. Sivalingam). With carotid endarterectomy and stenting, these complications can be prevented. **Conclusions:** This review highlights the critical role of ophthalmologists in the early identification of patients at risk for stroke, supporting carotid screening as a standard preventive measure.

Keywords: ischemic ocular syndrome, stroke, ischemic retinopathy, carotid artery occlusion

THE MANY FACETS OF BASILAR ARTERY DOLICHOECTASIA: A REVIEW OF PATHOLOGICAL ASSOCIATIONS AND IMPLICATIONS

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Background: Basilar artery dolichoectasia (BAD) is a rare, often underdiagnosed arteriopathy and a marker of systemic vascular fragility. BAD is defined by the triad of dilation, elongation, and tortuosity. Radiological diagnosis is based on the Smoker criteria, where a transverse diameter >4.5 mm marks the threshold for ectasia. **Objective:** In this context, the aim of this study is to summarize the pathophysiological mechanisms and pathological associations of BAD based on recent literature and to evaluate their clinical correlation. **Material and methods:** This study is based on a literature review, supplemented by a retrospective analysis of a cohort of 9 patients diagnosed with basilar or vertebrobasilar artery dolichoectasia, which allowed clinical validation of the described mechanisms. Analysis of the cohort not only confirms data from the literature but also highlights the clinical distribution of pathophysiological mechanisms in real-world practice. **Results :** Hypertension was identified in 88.8% of patients (8/9), confirming its major role in vascular remodeling, as described in the literature. Previous studies indicate the bidirectional nature of the relationship between hypertension and BAD. Vascular tortuosity can stimulate cardiovascular centers, contributing to the maintenance of sympathetic hyperactivity and the formation of a vicious cycle. The pathophysiological mechanisms described in the literature were also observed in the analyzed cohort: the compressive mechanism (4 cases), manifested by neurovascular conflicts with facial hemispasm or vertigo; the ischemic mechanism (4 cases), associated with pontine infarcts due to involvement of the perforating arteries; the hydrodynamic mechanism (1 case), responsible for leading to hydrocephalus through disruption of cerebrospinal fluid flow due to a "water-hammer" effect; as well as the neurodegenerative component, suggesting the impact of chronic pulsatile stress on the cerebral parenchyma. The distribution of mechanisms suggests a

predominance of compressive and ischemic components in clinical practice, compared to hydrodynamic ones, which are rarely reported. Although the cohort did not include genetic confirmations, the literature emphasizes the importance of screening for extracellular matrix fragility, given the association of BAD with syndromes such as Marfan, Ehlers-Danlos, Loeys-Dietz, or type 1 neurofibromatosis, suggesting the presence of a primary structural defect in the vascular wall. **Conclusions:** The analyzed data support the observations in the literature, reinforcing the concept of BAD as a multisystemic disorder. Thus, BAD should be regarded as an expression of systemic vascular vulnerability, with broad clinical implications. Recognition of the pathophysiological mechanisms and their correlation with clinical data is essential for an accurate diagnosis and multidisciplinary management aimed at preventing major complications. Funding: This work was supported by George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureș, Research Grand number 850/6/22.01.2026.

Keywords: Basilar artery dolichoectasia, Smoker Criteria, vascular remodeling, "water-hammer" effect

THE PERCEPTION OF ARTIFICIAL NUTRITION AT THE END OF LIFE

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Background: The decision to initiate, continue, or discontinue artificial nutrition (AN) in patients in the final stages of life raises some complex ethical dilemmas in modern medicine. A more detailed analysis of this topic could serve as a first step toward clarifying current legislation, which would be of great benefit to physicians, patients, and caregivers alike. **Objective:** This study aimed to examine how AN is perceived in the terminal stage. Specifically, we sought to compare the perspectives of the general public, medical students, and healthcare professionals. **Material and methods:** We conducted an observational, cross-sectional study using an online questionnaire, that took place between 01.12.2025 - 01.05.2026. Participants were divided into the three target groups. The data was analyzed with the MedCalc Statistical Software using non-parametric statistical tests (Mann-Whitney, Spearman's correlation, and chi-square). **Results :** The results show a shift in perspective that is directly proportional to the level of medical training. Medical staff are more likely to believe that AN is unnecessary in the terminal stage (average score 2.80) compared to the general population (2.41) and show greater willingness to discontinue AN in critical situations (2.73 vs. 2.50 in the general population). Conversely, the general population has the strongest belief in AN's ability to prolong life (3.74 compared to 3.49 among physicians). Palliative care experience changes clinical attitude: professionals exposed to palliative care report a rate of ethical conflicts with the team/family more than three times higher (25.3% versus 7.6% among those without experience), becoming advocates for patient autonomy. It was also observed that individuals over 45 years of age place less importance on "estimated life expectancy" (3.80 vs. 4.07 among those under 30) and the family's opinion. The overall hierarchy of decisions is clearly dominated by quality of life (4.46) and the patient's wishes (4.32), while the family's opinion received the lowest importance score (3.31). **Conclusions:** As clinical expertise and medical education accumulate, the illusion that AN could save a terminally ill patient fades, giving way to a single goal: maintaining comfort and alleviating suffering. The way respondents chose to prioritize their decision-making factors reflects ethical maturity. In the balance of medical decisions, the quality of the remaining days and the patient's expressed wishes invariably carry far more weight than any pressure from the family.

Keywords: artificial nutrition, end of life, bioethics

THE PERICRANIAL FLAP AS A SALVAGE PROCEDURE IN PEDIATRIC NEUROSURGICAL COMPLICATIONS

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Background: Neurosurgical procedures such as craniotomy and craniectomy in pediatric patients are prone to complications such as wound infections, cerebrospinal fluid leakage, exposure of the bone, and the formation of draining sinuses. These are difficult to correct because of the inelasticity of the scalp tissue and the compromised blood supply from the original incisions. Though the free tissue flap is an option in such cases, the procedure is difficult in pediatric cases, and a reliable "workhorse" flap is required for the reconstruction. **Objective:** To assess

the efficacy and safety of the procedure in the treatment of complicated scalp injuries or in the prophylactic treatment of high-risk pediatric patients. **Material and methods:** A retrospective chart review was conducted at the American University of Beirut Medical Center from February 2010 to February 2020. The study included 10 pediatric patients (age range: 6 months to 18 years) who underwent scalp or skull reconstruction using a pedicled pericranial flap. Data collection included demographics, primary pathology, indications (prophylactic vs. therapeutic), flap characteristics (anterior, lateral, or posterior pedicles), and post-operative complications. **Results :** Indications for surgery included the presence of chronic draining sinuses (n=7) and prophylactic protection in high-risk redo-craniotomies or hardware cover (n=3). Various primary etiologies included trauma, tumors, and infected ventriculoperitoneal shunts. The flaps utilized included the supratrochlear/supraorbital (n=3), superficial temporal (n=3), and occipital vessels (n=4). At a mean follow-up of 23 days, no infections, hematomas, seromas, or meningitis occurred. Only one patient (10%) had a minor skin dehiscence, which was treated conservatively and resulted in healing within two weeks. In three cases, the flap successfully saved the alloplastic implants. **Conclusions:** The pericranial flap is a very effective, versatile, and technically feasible option for pediatric cranial reconstruction. The pericranial flap offers well-vascularized tissue for healing in infected beds with minimal donor site morbidity. Therefore, with its high success rate and low morbidity, it should be used as a first-line option for complex pediatric scalp defects.

Keywords: Pericranial flap, draining sinus, complex wound, Scalp reconstruction

THE PERSPECTIVE OF BODY MASS INDEX AS A MODEL OF HEALTH

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Background: Weight gain represents a global trend, and the way this issue is approached from the perspective of the lifestyle of those being trained in the medical field may reflect how future specialists will address this reality. **Objective:** The study aimed to analyze the weight status of second-year students from the General Medicine and Nutrition-Dietetics programs at "George Emil Palade" University of Medicine, Pharmacy, Science, and Technology of Târgu Mureş. **Material and methods:** During the routine medical check-up conducted for second-year students, the body mass index (BMI) was calculated according to the criteria of the World Health Organization for a total of 498 students, of whom 441 were enrolled in the General Medicine program and 57 in the Nutrition-Dietetics program. BMI values were compared both between students from the two specializations and according to gender. **Results :** The majority of subjects (72.29%) were female. A total of 65.66% of the subjects had normal body weight, with a higher percentage among females (71.67%). Students from the Nutrition-Dietetics program were more concerned about their weight status (normal BMI: 83.33% among males and 80.30% among females) compared with those from General Medicine (normal BMI: 48.48% among males and 70.23% among females). **Conclusions:** The analysis of the results shows that most students fall within a normal weight range, although differences exist between genders and specializations. Underweight status is more frequently observed among females, while excess weight is more common among male students.

Keywords: lifestyle, weight status, obesity

THE USAGE OF DERMA V IN COMBINATION WITH PICOSURE PRO FOR TREATING MELASMA WITH A VASCULAR COMPONENT

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Background: Melasma is a chronic hyperpigmentation disorder characterized by irregular facial patches, primarily affecting individuals with Fitzpatrick skin types III to VI. Traditional treatments focusing solely on melanin deposition often provide only temporary relief and carry significant risks of rebound pigmentation or post-inflammatory hyperpigmentation (PIH). Emerging research indicates a critical vascular component in melasma, where increased blood vessels and sub-clinical telangiectatic erythema contribute to the condition's persistence. There is a need for treatment strategies that address this multifactorial pathogenesis. **Objective:** The primary objective of this retrospective study was to evaluate the effectiveness and safety of a combined laser therapy-utilizing a long-pulse KTP laser (Derma V) and a 755 nm Alexandrite Picosecond laser (PICOSURE Pro)-in

treating melasma lesions exhibiting subtle or sub-clinical telangiectatic erythema. **Material and methods:** This retrospective study reviewed 34 patients (average age 49; Fitzpatrick types III-IV) treated over a two-year period. All patients had telangiectatic erythema confirmed via spectrophotometry. The protocol consisted of four sessions, spaced 4-6 weeks apart, using the Derma V (12 mm spot, 5-6 J/cm²) followed by the PICOSURE Pro (low-fluence, fractional passes). Clinical improvement was assessed 90 days post-treatment using clinical photography and a quartile improvement scale. Statistical significance was determined using paired t-tests ($p < 0.05$). **Results :** The dual-modality approach yielded significant clinical results: 47% of patients (n=16) achieved >79% improvement ($p < 0.01$), and 32% (n=11) showed 50-75% improvement. Reduction in erythema was highly correlated with pigment reduction, particularly in patients with higher baseline erythema. The treatment was well-tolerated with no reports of PIH, rebound melasma, or scarring. Patient satisfaction was high, with 65% rating their experience as "very satisfied" and 35% as "satisfied". **Conclusions:** Combining Derma V and PICOSURE Pro is a safe and effective advancement in melasma management. By simultaneously addressing vascular and pigmentary components, this approach provides superior outcomes with minimal risk of adverse events for patients with darker skin types.

Keywords: Melasma, Derma V, PICOSURE Pro, Laser Therapy

THE USE OF GAMIFICATION METHODS TO IMPROVE THE QUALITY OF THE EDUCATIONAL PROCESS AMONG MEDICAL STUDENTS

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Background: Medical education is currently facing a rapidly and continuously expanding knowledge base. The teaching methods might need to be adapted to enhance the students' active engagement and to facilitate the long-term retention of the information. Gamification, which integrates game-specific elements in non-recreational contexts, is one of the most useful modern and promising teaching strategies, making the learning process interactive by using immediate feedback, competition and visible progress. Existing studies suggest that gamification is associated with increased student involvement and learning outcomes, although results on academic performance remain inconsistent. **Objective:** The aim of this study was to evaluate the association between exposure to gamification and academic performance in medical students. **Material and methods:** Our interventional prospective study included fourth-year medical students, during their radiology and medical imaging course. Students were divided into two groups: a study group exposed to gamification, and a control group without exposure. Exposure to gamification was defined based on participation in interactive activities during each practical activity of the student. The final theoretical and practical examination scores, as well as the interactive games score accuracy, were used to analyze the academic performance. We analyzed the data obtained using the Mann-Whitney U test and Student's t-test for group comparisons, and Spearman test for the correlations between interactive activities performance and examination outcomes. **Results :** A total of 209 students were included in the study. After removing the students who did not pass the final exam, 195 students remained for the analysis: 106 students were included in the study group and 89 in the control group. Applying the Mann-Whitney U test, statistically significant differences were observed between the two groups for both the final grade ($p=0.023$) and the practical exam grade ($p=0.015$), students from the study group having higher grades compared to the control group. However, no statistically significant difference was found for the final theoretical exam grade between the two groups applying the Student's t-test. Spearman correlation analysis revealed moderate, statistically significant correlations between the accuracy of the answers during the interactive activities and both the theoretical grade and the final grade. There were weak but significant correlations between the number of correct answers at the interactive activities and the final grade, theoretical grade and practical grade. **Conclusions:** Gamification was associated with improved academic performance, particularly in practical skills, and higher engagement in interactive activities correlated with better examination outcomes.

Keywords: gamification, interactive learning, student engagement

THE VICIOUS CYCLE OF PEDIATRIC SLEEP: HOW RESPIRATORY AND DIGESTIVE PATHOLOGIES DISRUPT THE RESTFUL NIGHT

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Background: Sleep disorders in the pediatric population are frequently underdiagnosed, with an estimated prevalence ranging between 25% and 50%. Sleep quality results from the interaction of intrinsic, extrinsic, environmental, and behavioral factors. The spectrum of respiratory and digestive pathologies, including allergic rhinitis, sleep apnea, and gastroesophageal reflux disease, contributes to nocturnal awakenings, with subsequent effects on neurocognitive development. **Objective:** The aim of this study is to evaluate the extent to which respiratory and digestive pathologies, as well as dietary habits, influence sleep quality in the pediatric population, and to assess the consequences on daytime functioning of the child and overall family dynamics. **Material and methods:** A cross-sectional observational study was conducted, based on an online questionnaire comprising 34 items, completed by 307 parents of children aged between 0 and 18 years, with the predominant age group being 7-10 years. Inclusion criteria consisted of parents of children aged 0-18 years who fully completed the questionnaire and provided consent for data processing. Exclusion criteria included lack of informed consent, as well as incomplete or inconsistent data. Statistical analysis was performed using Microsoft Excel, Epi Info, and GraphPad software. Chi-square and Fisher's exact tests were applied to assess correlations, with statistical significance set at $p < 0.05$. **Results :** Sleep consolidation improved significantly with age ($p < 0.001$). Prematurity was associated with a twofold higher prevalence of sleep initiation difficulties ($p < 0.001$). Nocturnal cough contributed significantly to sleep fragmentation ($p=0.000$), while nasal obstruction increased the likelihood of snoring more than sevenfold ($p=0.0001$). These conditions promote compensatory oral breathing, associated with a fourfold increase in nocturnal awakenings ($p=0.003$). A significant association was identified between nocturnal gastroesophageal reflux, pre-sleep abdominal pain, and restless sleep. These factors ($p=0.0001$), along with nightmares ($p=0.002$), were linked to frequent awakenings. Additionally, heavy meals before bedtime ($p=0.041$) and late consumption of sweets ($p=0.009$) negatively affected sleep by impairing deep sleep stages, whereas a light dinner was positively associated with adequate sleep quality ($p=0.031$). Sleep disturbances significantly impacted daytime functioning, leading to increased irritability in children ($p=0.033$) and reduced overall family quality of life ($p=0.001$). **Conclusions:** Respiratory and digestive conditions, along with dietary habits, are significantly associated with impaired sleep quality in children, with measurable effects on daytime functioning and family well-being. These findings highlight the need for a multidisciplinary approach targeting both medical and lifestyle factors.

Keywords: sleep, respiratory pathology, gastroesophageal reflux disease, sleep hygiene

TREATMENT OF REFRACTORY MELASMA IN MIDDLE EASTERN WOMEN

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Background: Melasma is a chronic condition marked by excessive pigmentation. It is particularly difficult to treat populations with high UV exposure, like those in the Middle East. Current treatments, such as chemical peels and topical treatments, have not produced long-lasting results and are associated with serious side effects like post-inflammatory hyperpigmentation. Conventional lasers have been shown to be successful in treating melasma, but they have also been associated with post-treatment problems like recurrence and hyperpigmentation in people with darker skin tones. There is a need for safer, more efficient laser treatments that cause less thermal damage. **Objective:** In comparison to a specialised diffractive lens array, this prospective study aims to assess the efficacy and safety of the 755 nm picosecond Alexandrite laser with a standoptic for treating refractory flatry melasma in Middle Eastern patients. **Material and methods:** 48 women with Fitzpatrick skin types III to V, ages 25 to 50, who had had melasma for at least two years were included in the study. The participants were divided into two groups at random: Group 2 comprised 31 women treated with a diffractive lens array, whereas Group 1 comprised 19 women treated with a flat optic. Each group received six sessions spaced three weeks apart. The primary outcome was the Melasma Severity Index (MSI), which was assessed at baseline, three months, and six months after treatment by two separate dermatologists. **Results :** At six months, it was found that the diffractive lens group showed a 75.7% enhancement in their scores, which was significantly higher compared to the 57.2% enhancement in scores of the flat optic group ($p < 0.05$). Moreover, it was found that the diffractive lens group showed better safety and durability characteristics, as it had a lesser rate of recurrence compared to the flat optic group (5% vs 16%), and it had no cases of hyperpigmentation compared to 21% in the flat optic group. **Conclusions:** The picosecond alexandrite laser with a diffractive lens array has been found to be a very effective and safe treatment modality for melasma that persists in Middle Eastern women. It has the advantage of two action

mechanisms, making it more effective in treatment and less likely to recur.

Keywords: Refractory Melasma, Picosecond Alexandrite Laser, Middle Eastern Women, Diffractive Lens Array

TRIGEMINAL NEURALGIA IN PATIENTS WITH MULTIPLE SCLEROSIS: A RETROSPECTIVE SINGLE-CENTER STUDY

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Background: Trigeminal neuralgia (TN) is a recognized but relatively uncommon pain syndrome in patients with multiple sclerosis (MS). In this setting, TN may be related to demyelinating pontine lesions involving the trigeminal root entry zone, although in some patients other mechanisms, such as neurovascular conflict, may also contribute. Data on the prevalence and clinical profile of TN in real-world MS cohorts remain limited. **Objective:** To evaluate the prevalence and clinical characteristics of trigeminal neuralgia in patients with MS followed in a tertiary MS center. **Material and methods:** We conducted a retrospective study in the Regional Multiple Sclerosis Center of Târgu Mureş, a tertiary referral center. Among 690 patients with MS under follow-up and treatment, 24 cases of trigeminal neuralgia were identified. Demographic and clinical data were reviewed, including age, sex, MS phenotype, disease duration, disability status, TN laterality, affected trigeminal branch, and treatment approach. **Results :** Trigeminal neuralgia was identified in 24 of 690 patients, corresponding to a prevalence of 3.5%. Most affected patients were female, and TN generally occurred in the setting of long-standing MS. Relapsing-remitting MS was the most common phenotype, although progressive forms were also represented. TN was unilateral, with a slight predominance of left-sided involvement. The maxillary division was the most frequently affected branch, either alone or in combination with other trigeminal divisions. Treatment was mainly pharmacological, most commonly with carbamazepine, pregabalin, or gabapentin, while surgical procedures were reserved for refractory cases. **Conclusions:** In our cohort, TN was present in 3.5% of patients with MS. Although uncommon, it represents a clinically relevant complication that can have a substantial impact on quality of life and management. A careful evaluation of these patients is important, particularly given the potentially heterogeneous mechanisms underlying TN in the setting of MS.

Keywords: Trigeminal Neuralgia, Multiple Sclerosis, Demyelination, Neuropathic pain

VAGINAL DYSBIOSIS AND TISSUE REGENERATION: AN INTEGRATIVE TRANSLATIONAL FRAMEWORK OF THE HORMONAL–EPITHELIAL–MICROBIAL AXIS

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Background: The vaginal microbiome is a key determinant of homeostasis within the female genitourinary ecosystem, contributing to epithelial barrier integrity, modulation of the local immune response, and prevention of pathogenic colonization. Disruption of this microbial balance, known as vaginal dysbiosis, is associated with increased vaginal pH, persistent local inflammation, and impaired tissue regeneration. Emerging evidence indicates that alterations in vaginal microbiota composition influence the epithelial microenvironment and the repair capacity of the vaginal mucosa, contributing to tissue degradation and chronic inflammatory states. Understanding the interaction between hormonal status, epithelial integrity, and the vaginal microbiome is therefore essential for developing modern therapeutic strategies targeting vaginal homeostasis. **Objective:** The objective of this study was to analyse the relationship between vaginal dysbiosis and tissue regeneration and to propose an integrative conceptual model of the hormonal-epithelial-microbial axis relevant to emerging therapeutic approaches. **Material and methods:** This study was conducted as a narrative review of the scientific literature using an integrative and translational approach. Literature searches were performed in PubMed/MEDLINE, Scopus, and Web of Science for the period 2015-2025 using the terms vaginal microbiome, vaginal dysbiosis, tissue regeneration, probiotics, platelet-rich plasma, and vaginal rejuvenation. Study selection followed PRISMA principles. A total of 62 eligible studies were included, comprising observational and interventional clinical studies, experimental studies, and systematic reviews. Data were synthesized through thematic narrative analysis. **Results :** A eubiotic vaginal microbiome is characterized by dominance of *Lactobacillus* species, which maintain an acidic vaginal pH and support epithelial barrier integrity. In dysbiosis, reduced lactobacillary dominance and proliferation of anaerobic

bacteria are associated with chronic low-grade inflammation and disruption of tissue regeneration mechanisms. The analysis supports the existence of a pathogenic hormonal-epithelial-microbial axis linking hormonal status, epithelial homeostasis, and microbiome composition. Identified therapeutic strategies include local estrogen therapy, Lactobacillus-based probiotics (particularly *Lactobacillus crispatus*), vaginal microbiota transplantation, platelet-rich plasma therapy, and energy-based treatments such as fractional CO₂ laser, each targeting different levels of this pathogenic cascade. **Conclusions:** Based on the available evidence, we propose an integrative translational framework of the hormonal-epithelial-microbial axis that provides a mechanistic perspective on vaginal dysbiosis and impaired tissue regeneration. Clinically, this framework supports integrated therapeutic strategies aimed at restoring microbiological balance, improving epithelial trophicity, and stimulating regenerative processes, potentially enabling more personalized approaches in the management of vaginal dysbiosis.

Keywords: vaginal dysbiosis, vaginal microbiome, tissue regeneration, vaginal rejuvenation

VASCULAR TRAUMA AT A TERTIARY VASCULAR SURGERY CENTER: CLINICAL EXPERIENCE AND OUTCOMES

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Background: Although vascular trauma of the upper limb in the civilian population is relatively rare, improper or delayed management may lead to significant morbidity, including limb loss, as well as increased mortality. However, depending on the etiology, the recommended management-according to the guidelines of the European Society of Vascular Surgery-may range from conservative treatment to extensive reconstruction of the affected vascular segment. **Objective:** The main scope of the current study is to evaluate the patterns of injury, management strategies, and clinical outcomes of patients presenting with vascular trauma at a tertiary vascular surgery center. **Material and methods:** In the present study, we included all patients diagnosed with vascular trauma who were admitted to the Vascular Surgery Department of the Emergency Clinical County Hospital in Târgu Mureș between 2019 and 2025. Data were collected retrospectively from the hospital's electronic database. Furthermore, information regarding the injury's etiology, the surgical interventions performed, and the clinical course during the in-hospital stay was recorded and analyzed. This work was supported by the "George Emil Palade" University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș, Research Grant number 170/2/09.01.2024. **Results :** In the present study, 68 patients with upper limb vascular trauma were included, with a mean age of 41.69±18.43 years. The majority of patients were male (91.18%). Regarding comorbidities, 8 patients (11.76%) had hypertension, 6 (8.82%) had ischemic heart disease, 4 (5.88%) had diabetes mellitus, and 16 (23.53%) were active smokers. In terms of the site of vascular injury, the radial artery was affected in 30 patients (44.12%), the ulnar artery in 17 patients (25.00%), and the brachial artery in 13 patients (19.12%). Associated nerve injuries were present in 32 patients (47.06%), while 24 patients (35.29%) had concomitant venous injuries. Regarding treatment, primary arterial repair was performed in 49 patients (72.06%). Autologous vein bypass was required in 8 patients (11.76%), arterial ligation in 5 patients (7.35%), and prosthetic graft reconstruction in 3 patients (4.41%). A venous patch was used in 2 cases, while a major amputation was necessary in 1 patient. **Conclusions:** Upper limb vascular trauma predominantly affects young male patients and most commonly involves the radial and ulnar arteries. Early diagnosis and timely surgical management-most often primary arterial repair-lead to favorable outcomes, although the frequent association with nerve and venous injuries underscores the complexity of these cases and the importance of specialized vascular care.

Keywords: vascular trauma, arterial injury, venous injury, vascular surgery

VENO-VENOUS VERSUS VENO-ARTERIAL EXTRACORPOREAL MEMBRANE OXYGENATION IN PEDIATRIC RESPIRATORY FAILURE: A NARRATIVE LITERATURE REVIEW OF LONG-TERM OUTCOMES

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Background: Extracorporeal membrane oxygenation (ECMO) is indicated in pediatric patients with severe respiratory failure unresponsive to conventional therapies. Veno-venous (VV) ECMO is indicated for isolated

respiratory failure, while veno-arterial (VA) ECMO is indicated for respiratory failure accompanied by cardiac dysfunction or hemodynamic instability. The Extracorporeal Life Support Organization (ELSO) guidelines recommend multifaceted neurodevelopmental follow-up. Health-related quality of life (HRQoL) is assessed using the Pediatric Quality of Life Inventory, the EuroQol 5D, the Child Health Questionnaire, and the Health Utility Index. **Objective:** The objective is to compare long-term outcomes of VV and VA ECMO in pediatric respiratory failure survivors. **Material and methods:** In preparing this narrative literature review, PubMed and MeSH databases were searched to identify studies and review articles on the long-term outcomes of pediatric ECMO survivors, with an emphasis on cannulation modality. Articles published in English between 2000 and 2025 were included. Keywords and MeSH terms used in the search included *extracorporeal membrane oxygenation, pediatric respiratory failure, VV ECMO, VA ECMO, neurodevelopmental outcomes, and quality of life*. **Results :** The latest comparative data associate VV ECMO with better long-term neurodevelopmental outcomes than VA ECMO in pediatric survivors of respiratory failure. VA ECMO carries a higher risk of acute brain injury, strongly associated with neurodevelopmental impairment and lower HRQoL scores. According to a retrospective review of neonatal and pediatric ECMO survivors, HRQoL scores do not differ significantly between VV and VA ECMO survivors. Neurologic complications were more common in VA ECMO survivors, among which 52% exhibited neurodevelopmental impairment, in comparison to a significantly lower incidence in VV ECMO survivors at 9%. Patients with confirmed negative neurological outcomes were associated with lower HRQoL, linking VA ECMO with a lower quality of life. Another retrospective study noted persistent HRQoL concerns on a 5-year follow-up in both groups, with 29% of VA ECMO and 75% of VV ECMO survivors reporting difficulty with activities of daily living. 23% of VA ECMO and 58% of VV ECMO survivors reported a high post-traumatic stress disorder score. **Conclusions:** Currently available data suggest that the VV ECMO should be preferred for pediatric respiratory failure without cardiac dysfunction. However, as there are limited reports of long-term outcomes and the research conducted so far does not provide unequivocal and sufficiently strong evidence and results, further research on this topic could lead to better insight of long-term HRQoL and neurological outcomes, therefore improving evidence-based decision making, long-term follow-up, neurodevelopmental and psychosocial support, and counseling of such patients and their parents.

Keywords: Critical Care Outcomes, Extracorporeal Membrane Oxygenation, Intensive Care Units, Pediatric, Respiratory Distress Syndrome

VENOUS ACCESS PATTERNS AND INJECTION PERFORMANCE IN PEDIATRIC CT ANGIOGRAPHY FOR CONGENITAL HEART DISEASE: A 9-YEAR SINGLE-CENTER COHORT

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Background: Computed tomography angiography (CTA) in pediatric congenital heart disease (CHD) requires reliable venous access capable of supporting power injection despite small vessel caliber and frequent use of small-bore cannulas. **Objective:** We aimed to characterize venous access strategies and injection performance in a large single-center pediatric CHD CTA cohort, and to describe their associated technical event profile. **Material and methods:** We retrospectively analyzed 697 consecutive CTA examinations performed between 2015 and 2024 in patients under 18 years of age with congenital cardiovascular disease. Recorded variables included venous access type and site, cannula size, contrast agent, injection flow rate, and technical or contrast-related adverse events. Contrast was delivered via power injection using a bolus tracking technique. **Results :** Median patient age was 199 days. Peripheral access was most obtained in the left antecubital fossa (265/697, 38.0%), and the most frequently used cannula size was 24-gauge (331 cases). Central venous access was used in 101/697 examinations (14.5%), placed predominantly in the superior vena cava (72 cases) or inferior vena cava tributaries (25 cases). Injection flow rates ranged from 0.3 to 5 mL/s, with progressively lower achievable flow rates as cannula gauge increased; 18-gauge cannulas had the highest median flow rate (2.5 mL/s), whereas 24- and 26-gauge cannulas showed significantly lower median flow rates (0.8 mL/s). Nine peripheral contrast extravasations occurred (1.29%), all with 22 to 26-gauge access, without a significant association between flow rate and extravasation occurrence (1.18 vs 1.31 mL/s, $p=0.447$). Central line use was not associated with contrast extravasation, although two arterial misplacements and one air embolus were identified. **Conclusions:** : In pediatric CHD CTA, protocolized power injection through predominantly small-bore peripheral access is feasible, with low technical complication rates. Access site and cannula caliber strongly influence achievable injection flow, while central venous access offers an alternative strategy but requires careful pre-scan verification. These findings

support standardized venous access selection protocols for pediatric cardiovascular CTA.

Keywords: CT Angiography, Congenital Heart Disease, Venous Access, Power Injection

VITAMIN D AND GASTRIC CANCER: A SYSTEMATIC REVIEW

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Background: Gastric cancer constitutes a significant global health challenge, characterized by a multifactorial etiology including genetic, environmental and nutritional factors. Vitamin D, a secosteroid hormone modulating pathways associated with carcinogenesis, has raised interest for a potential protective role. Its association with gastric cancer risk remains uncertain. **Objective:** This systematic review synthesizes current evidence on serum vitamin D levels, dietary intake and VDR polymorphisms in relation to incidence or prognosis of gastric cancer in adult and pediatric populations. **Material and methods:** A systematic search following PRISMA 2020 standards was conducted across PubMed, Web of Science, Scopus and Lens.org covering literature from January 2007 to December 2025, using Boolean MeSH-based search strings targeting "vitamin D", "25(OH)D", "VDR polymorphism", and "gastric cancer". Observational studies evaluating vitamin D exposure in relation to gastric cancer risk or outcomes were eligible. Study quality and risk of bias were assessed using established instruments. A formal meta-analysis has not yet been initiated, as harmonization of extracted variables remains in progress. **Results :** The search identified 345 records, of which 124 duplicates were removed. After title and abstract screening of 221 studies, 30 were assessed in full text, and 25 met the inclusion criteria. These studies covered three main aspects: circulating 25-hydroxyvitamin D levels, dietary vitamin D intake and VDR genetic polymorphisms. Across the included studies, there was substantial heterogeneity in both design and measurement: several serum-based studies indicated that higher circulating 25(OH)D levels were associated with lower gastric cancer risk, whereas dietary intake studies reported inconsistent results, with some indicating a protective effect and others revealing no significant correlation. Investigations on VDR polymorphisms, including variants such as FokI, TaqI, BsmI, and Cdx2 generally demonstrated no consistent association with gastric cancer risk. However, one variant, rs1989969, exhibited a pattern of increased susceptibility in specific subgroups, particularly younger adults and alcohol consumers. Additionally, haplotype analyses identified a VDR haplotype (T-T-C-G) that seemingly conferred a protective effect against gastric cancer. Associations for several variants further varied according to *H. pylori* status, smoking and alcohol exposure, suggesting gene-environment interactions. No studies evaluating vitamin D or VDR related factors in pediatric populations were identified, revealing a critical evidence gap. **Conclusions:** Current evidence on vitamin D and gastric cancer in adults remains heterogeneous and inconclusive. A major finding of this review is the absence of studies addressing this association in pediatric populations. Further prospective research is needed to clarify vitamin D's role in gastric carcinogenesis, particularly within younger populations.

Keywords: gastric cancer, vitamin D, VDR polymorphisms, systematic review

□ROLE OF NARROW BAND IMAGING IN THE OPTICAL DIAGNOSIS OF COLONIC POLYP

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Background: Colorectal cancer is the third most common malignancy and the second leading cause of cancer-related mortality worldwide. Its incidence is increasing, particularly in developed countries, due to factors such as obesity, low physical activity, and dietary habits. Most colorectal cancers arise from adenomatous polyps, making early detection and accurate characterization essential for prevention and management. Colonoscopy with histopathological examination remains the reference standard for diagnosis. White Light Endoscopy (WLE) is routinely used to detect lesions; however, its ability to predict histopathological characteristics is limited. Narrow Band Imaging (NBI) has emerged as an advanced endoscopic technique that enhances mucosal and vascular patterns, allowing improved characterization of lesions and enabling real-time ("in vivo") diagnosis. Classification systems such as NICE facilitate differentiation between neoplastic and non-neoplastic polyps, supporting clinical decision-making during endoscopy. **Objective:** This study aimed to evaluate the diagnostic accuracy of White Light Endoscopy and Narrow Band Imaging in predicting the histopathological classification of colonic polyps, using histopathology as the reference standard. **Material and methods:** This retrospective study included patients

with colonic polyps detected during using endoscopic examination. The polyps were assessed using White Light Endoscopy (WLE) for morphological description and further evaluated using Narrow Band Imaging (NBI) to predict their neoplastic status. All lesions were subsequently biopsied and underwent histopathological examination, which served as the reference standard. Endoscopic predictions and histopathologic results were recorded and compared. Diagnostic parameters including sensitivity, specificity, positive predictive value, negative predictive value, and overall accuracy were calculated. Statistical significance was evaluated using the Chi-square test.

Results : A total of 393 colonic polyps were included in the analysis. Narrow Band Imaging demonstrated a sensitivity of 81% (95% CI: 76-86%) and a specificity of 92% (95% CI: 87-96%). The positive predictive value was 94% and the negative predictive value was 77%. The overall diagnostic accuracy was 85%. The association between NBI prediction and histopathology was statistically significant ($p < 0.001$). **Conclusions:** Narrow band imaging proved to be a reliable optical biopsy technique for the evaluation of the neoplastic nature of colonic polyps.

Keywords: Narrow Band Imaging, Colonic polyp, Histopathology, Colonoscopy

POSTERS - MEDICINE

"MISSED AT FIRST GLANCE: ACUTE LIMB ISCHEMIA IN THE ED FAST-TRACK SYSTEM REQUIRING URGENT REASSESSMENT AND REVASCULARIZATION"

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Introduction: Acute limb ischemia (ALI) is a vascular emergency characterized by a sudden decrease in arterial perfusion to a limb, typically the lower extremity, that threatens limb viability and, if untreated, can lead to tissue necrosis, amputation, or death. Thus, urgent recognition with accurate classification for prompt revascularization is required to preserve limb viability. **Case Report:** A 79-year-old male presented to the emergency department (ED) with a 2-hour history of acute pain and paresthesia in the left lower limb. His medical history included chronic ischemic heart disease, grade 2 hypertension under treatment, and lumbar discopathy with right-sided radiculopathy. He was initially triaged as green code. On physician assessment two hours later (Fast-Track system), marked pallor of the left lower limb, along with complete absence of the femoral and distal pulses were noted, prompting re-triage to yellow code. An electrocardiogram was performed, and bilateral blood pressure measurement revealed a difference of 20 mmHg between limbs. Laboratory tests showed elevated D-dimer (1047 ng/mL). Analgesia was achieved with tramadol and the vascular surgery team was alerted 18 minutes from the first assessment. Subsequent computed tomography angiography (CTA) demonstrated bilateral total occlusion of the superficial femoral arteries at the mid-segment, with distal reconstitution at the popliteal level. In light of the foregoing, the left limb was classified as Rutherford IIb. Anticoagulation with unfractionated heparin was promptly initiated, and the patient was transferred to the vascular surgery for urgent revascularization, 5-hours from presentation. **Discussions :** This case highlights the importance of repeated clinical reassessment in elderly patients presenting with limb symptoms, as well as the critical role of timely vascular imaging and anticoagulation in suspected acute limb ischemia. The use of a fast-track system in the ED is increasingly common and provides fast and efficient services to patients with minor or apparently minor emergencies, as described by Write et al. A retrospective study conducted by Pesmatzoglou (2018-2024) reported a 5% initial misdiagnosis rate in ALI, which was associated with reduced limb salvage and an increased need for secondary interventions. This finding emphasizes the detrimental impact of initial diagnostic errors by non-vascular specialists. **Conclusions:** Ultimately, outcomes in ALI heavily depend on time-sensitive recognition, accurate severity stratification, and multidisciplinary intervention. In geriatric populations, maintaining a high index of suspicion and performing repeated vascular assessments are critical to optimize limb salvage and improve survival.

Keywords: ALI,, Limb salvage,, Emergency department,, Vascular emergency,

A 10 YEAR DIAGNOSTIC ODYSSEY IN OSTEOGENESIS IMPERFECTA: FROM UNINFORMATIVE MULTIPLEX LIGATION-DEPENDENT PROBE AMPLIFICATION TO A DEFINITIVE DIAGNOSIS VIA WHOLE EXOME SEQUENCING

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Introduction: Osteogenesis imperfecta (OI) and related bone fragility disorders require precise genetic identification for accurate diagnosis and clinical management. This case highlights the limitations of traditional diagnostic methods like Multiplex Ligation-dependent Probe Amplification (MLPA). While MLPA is great at detecting copy number variations, it can easily miss point mutations or splice-site variants, leaving some patients without a clear diagnosis. Therefore, pinpointing the exact genetic etiology in patients with recurrent fractures and previously negative MLPA results is essential. **Case Report:** We present the case of a 20-year-old female patient with a high susceptibility to fractures and a history of recurrent breaks. Previous molecular testing in 2015 and 2016 using MLPA for the COL1A1 and COL1A2 genes showed no structural variations. In 2025, Clinical Whole Exome Sequencing (WES) was performed on her peripheral blood. This successfully revealed a primary pathogenic heterozygous variant in the COL1A1 gene (chr17:48272592, NM_000088.4:c.1299+1G>A). Additionally, a heterozygous Variant of Uncertain Significance (VUS) was found in the WNT1 gene (NM_005430.4:c.413C>T). To evaluate familial segregation and secure a prenatal diagnosis, Sanger sequencing was performed on the patient, her parents, and her amniotic fluid. This confirmed the heterozygous COL1A1 variant in the patient. A fetal ultrasound at 16 weeks of gestation revealed absent nasal bone ossification and

microretrognathia. Given the maternal OI diagnosis and these ultrasound findings, amniocentesis was performed. SNP microarray analysis of the amniotic fluid (evaluating submicroscopic imbalances >100kb) showed a normal female profile (arr(X,1-22)x2). Furthermore, targeted Sanger sequencing of the parents confirmed the maternal COL1A1 variant occurred de novo, while sequencing of the amniotic fluid confirmed the fetus did not inherit the pathogenic variant. **Discussions** : Unlike standard tests such as MLPA, which previously failed to identify the causative variant, Whole Exome Sequencing (WES) enabled the detection of a splice-site variant in this clinical context. Identification of the specific variant and parental testing confirmed its de novo origin, allowing accurate prenatal genetic counseling. **Conclusions**: The utilization of WES enabled the identification of a pathogenic COL1A1 splice-site variant that remained undetected by prior MLPA testing, thereby establishing a definitive molecular diagnosis. This case highlights the clinical utility of WES in evaluating complex bone fragility disorders and guiding appropriate prenatal management.

Keywords: Osteogenesis Imperfecta, Whole Exome Sequencing, Multiplex Ligation-dependent Probe Amplification, Prenatal Management

A 78-YEAR-OLD WOMAN WITH SEVERE HYPONATRAEMIA, ACUTE KIDNEY INJURY, AND SUSPECTED PNEUMONIA HAD MIXED ENCEPHALOPATHY.

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Introduction: In older adults, changes in mental status are often caused by more than one thing, such as metabolic problems, infections, kidney problems, or multiple processes happening at the same time. This case is important because it shows how severe hyponatraemia, acute kidney injury, and suspected pneumonia can all happen at the same time and look like mixed encephalopathy. **Case Report:** A 78-year-old woman was brought to the hospital with a Glasgow Coma Scale score of 7 and trouble staying awake. The first lab tests showed leukocytosis ($15.8 \times 10^3/\mu\text{L}$), neutrophilia, severe hyponatraemia (124-125 mmol/L), high creatinine (2.52-2.57 mg/dL), an estimated glomerular filtration rate of about 19 mL/min, and urea levels above 110 mg/dL. These results suggested dehydration and acute kidney injury on chronic kidney disease. The analysis of the cerebrospinal fluid showed that it was clear and colourless, had 8 leukocytes/ μL , borderline protein levels, and a sterile culture. The reverse transcriptase polymerase chain reaction for severe acute respiratory syndrome coronavirus 2 was negative. The final diagnosis was mixed encephalopathy, which was both dysmetabolic and infectious. It was linked to partially corrected severe hyponatraemia, suspected pneumonia, dehydration syndrome, acute kidney injury on chronic kidney disease, and multiple myeloma. While in the hospital, sodium levels rose to 132 mmol/L and creatinine levels fell to 2.23 mg/dL. **Discussions** : This case backs up the idea that encephalopathy in older people is often caused by more than one thing. Severe hyponatraemia alone can cause confusion or coma, but the fact that the patient also had kidney damage, dehydration, high white blood cell count, and a suspected lung infection suggested a mixed mechanism. The cerebrospinal fluid result was very important because it made a central nervous system infection less likely and helped focus attention on systemic causes. Other studies have found that metabolic encephalopathy often occurs at the same time as an infection in weak patients, so single explanations are not enough. **Conclusions:** This case shows how important it is to have a structured approach for older people with low Glasgow Coma Scale scores. Finding and fixing reversible factors early on, especially an electrolyte imbalance, kidney problems, or an infection, may lead to better clinical outcomes.

Keywords: Mixed Encephalopathy, Acute Kidney Injury, Pneumonia, Low Sodium Levels

A CASE OF PROGRESSIVE MULTIFOCAL LEUKOENCEPHALOPATHY IN A PATIENT WITH NO DETECTABLE IMMUNODEFICIENCY

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Introduction: Progressive multifocal leukoencephalopathy (PML) is an uncommon demyelinating disease of the central nervous system, which is caused by the reactivation of the JC virus (John Cunningham virus), a non-enveloped, ubiquitous virus from the Polyomaviridae family. The disorder is often fatal, affecting the

oligodendrocytes, mostly in patients with a compromised immune system. **Case Report:** We present the case of a 76-year-old male patient, without any identifiable immunodeficiency, bringing to attention the diagnostic challenges of this clinical picture. Medical history of the patient included an ischemic stroke with regressive evolution in 2007, and a minor road traffic accident in January of 2024, upon which his neurological examination and CT-scan showed no abnormalities. Four weeks after the accident, the patient presented with dizziness, progressive deficits in motor function and speech, along with visual problems and right hemiparesis, memory loss and apraxia. After he was admitted to the hospital, a CT-scan and laboratory workup was performed. The CT-scan findings revealed bilateral asymmetrical hypodense parieto-occipital lesions. Magnetic resonance imaging showcased bilateral but asymmetrical supratentorial subcortical lesions in the parieto-occipital and posterior temporal region, which were hypointense in T1- and hyperintense in T2-weighted sequences. These MRI findings along with the subacute worsening of neurological symptoms raised the suspicion of PML. Lumbar puncture was performed, cerebrospinal fluid was clear in appearance, with normal cellularity, biochemistry and negative culture, but positive for JC virus DNA. Our patient's HIV test was negative, and we also excluded tuberculosis. Thoraco-abdominal-pelvic CT-scan showed no signs of malignancy. Search for collagen vascular diseases was also negative. The patient had not been vaccinated in the past three years and was not on any immunosuppressive therapy. He was treated with high-dose intravenous steroids and intravenous antiviral drugs, mirtazapine and risperidone but he showed progressive neurological deterioration. **Discussions :** After the typical MRI findings and the detection of JC virus in the cerebrospinal fluid, the transfer of the patient to a university hospital from the Municipal Hospital of Târgu Secuiesc for further investigation and more treatment options (intravenous immunoglobulin therapy) was recommended. However, the family refused the patient's transfer, considering his severe condition and advanced age. Two months after he was admitted to the neurology department, the patient passed away. **Conclusions:** Literature describes very few cases of PML in immunocompetent patients, however, even in the absence of typical risk factors, the clinical and paraclinical findings led to this diagnosis.

Keywords: progressive multifocal leukoencephalopathy, JC virus, MRI

A COMBINED MECHANICAL-BIOLOGICAL APPROACH TO EARLY GONARTHROSIS: ARTHROSCOPY AND MICRO-FRAGMENTED ADIPOSE TISSUE

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Introduction: Early symptoms of gonarthrosis typically appear during middle age and are commonly described as persistent knee pain that worsens during physical activity or sports, progressive functional limitation, and an overall reduction in quality of life. These symptoms reflect underlying degenerative joint lesions and chronic synovial inflammation. Arthroscopic surgery is frequently used to diagnose and treat intra-articular mechanical lesions in the early stages of the disease; however, it has limited capacity to restore damaged cartilage or reverse the degenerative process. In recent years, regenerative medicine strategies have increasingly been incorporated into orthopedic practice in an attempt to enhance postoperative recovery and support joint regeneration. One such strategy involves the intra-articular administration of autologous adipose-derived mesenchymal cells. **Case Report:** A 51-year-old male patient presenting with bilateral knee pain and restricted range of motion was admitted to the Orthopaedic Department for bilateral arthroscopy in order to evaluate intra-articular lesions and establish the appropriate therapeutic strategy. Arthroscopic examination revealed degenerative lesions affecting both the medial and lateral menisci, chondropathy of the femoral condyles and the patellofemoral joint, findings consistent with stage II bilateral gonarthrosis. Several arthroscopic procedures were performed, including partial meniscectomy, synovectomy, joint lavage, and removal of inflammatory intra-articular structures such as fragments of the Hoffa fat pad. Arthroscopic debridement was also carried out to eliminate degenerated tissue and inflammatory debris within the joint cavity. These interventions aimed to mechanically improve joint function, reduce sources of irritation, and create favorable conditions for postoperative biological treatment. **Discussions :** An essential component of the therapeutic protocol consisted of postoperative intra-articular infiltration with mesenchymal cells obtained from the patient's adipose tissue. Following arthroscopy, adipose tissue was harvested from the abdominal subcutaneous region using a minimally invasive lipoaspiration technique. The tissue was processed with the sterile mechanical system Milli Graft Ortho, which micro-fragments adipose tissue while preserving the stromal vascular fraction containing mesenchymal stromal cells, pericytes, endothelial progenitor cells, and regenerative growth factors. The resulting cellular suspension was injected into both knee joints. These cells act mainly through paracrine signaling, modulating inflammation, stimulating local repair processes, and improving the synovial environment. Their bioactive factors support chondrocyte survival, enhance extracellular matrix synthesis, and decrease intra-articular

inflammatory mediators. **Conclusions:** Combining arthroscopic treatment with mesenchymal cell infiltration may therefore improve functional recovery, reduce pain, and potentially slow osteoarthritic progression in early gonarthrosis. These findings highlight the potential role of combined mechanical and biological therapy in the management of degenerative knee disease overall.

Keywords: Early Gonarthrosis, Arthroscopy, Mesenchymal cells

A FATAL COMPLEX CASE OF EXTENSIVE DIGESTIVE NECROSIS – WAS IT TRAUMA, INTOXICATION, OR ISCHEMIA?

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Introduction: Extensive necrosis of the upper digestive tract is an uncommon and life-threatening condition, usually associated with severe ischemia, toxic agents, or considerable abdominal trauma. Determining the primary cause might be challenging when other factors, such as systemic vascular disease, or delayed hospital presentation, are involved. Instances of simultaneous necrosis in multiple organs are rarely recorded in the literature. We present a fatal case of widespread digestive necrosis in a patient with recent thoraco-abdominal trauma, history of homemade herbal products use, and global hyaline arteriolosclerosis. **Case Report:** A 66-year-old women with a history of type II Diabetes mellitus and previous colectomy presented to the emergency room four days after a domestic fall. Clinical and imaging assessments revealed fluído-pneumothorax, considerable stomach distension, hemoperitoneum, several mesenteric and splenic hematomas. An emergency exploratory laparotomy confirmed the intra-abdominal trauma, also a mesenteric rupture, esophagus and stomach wall necrosis, as corroborated by intraoperative endoscopy. Total gastrectomy, terminal abdominal esophagostomy, segmental small bowel resection, splenectomy, and jejunostomy were performed. Frozen section examination revealed transmural necrosis of the esophagus, stomach, and duodenum, severe ischemic enteritis, and considerable hemorrhagic extravasation. Despite the extensive postoperative care, the patient experienced significant hemodynamic instability, resulting in cardiac arrest and subsequent death. Forensic autopsy was performed at the Institute of Forensic Medicine Târgu Mureş, with informed consent obtained from the relatives. It was required due to trauma sustained prior to admission. A significant observation in microscopic examination was the presence of generalized hyaline arteriolosclerosis affecting the small calibre vessels in multiple organs, including heart, kidneys, lungs, and gastrointestinal system. Toxic etiology was excluded through comprehensive laboratory testing of blood and specimens provided by the investigative authorities. **Discussions :** The concurrent occurrence of severe trauma, delayed hospital presentation, and substantial underlying microangiopathy led to a complex pathophysiological condition. Trauma resulted in mesenteric injury and intra-abdominal hemorrhage, likely exacerbating splanchnic perfusion. Advanced hyaline arteriolosclerosis associated with diabetes mellitus may have significantly compromised baseline microvascular circulation, making the digestive tract vulnerable to ischemia in the setting of systemic hypoperfusion. The transmural necrosis observed in multiple intestinal segments suggests a multifactorial ischemic mechanism rather than a unique traumatic injury. **Conclusions:** The case exemplifies the potential interaction between trauma, delayed hospital presentation, and significant microvascular disease in the emergence of extensive digestive necrosis. Recognizing underlying vascular pathology is essential in evaluating complex abdominal trauma cases, since it can significantly influence clinical course and prognosis.

Keywords: Digestive necrosis, Abdominal trauma, Hyaline arteriolosclerosis, Forensic autopsy

A MODERN ANEURYSM WITH AN OLD ETIOLOGY: SUSPECTED SYPHILITIC AORTITIS PRESENTING AS A GIANT INFRARENAL ABDOMINAL AORTIC ANEURYSM

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Introduction: Cardiovascular syphilis is a rare late complication of *Treponema pallidum* infection. In current clinical practice, aortic aneurysms are attributed almost exclusively to atherosclerosis, which is why serological testing is not a routine investigation. This case is notable because the patient presents with an unexpected etiology-a syphilitic reinfection-with atypical abdominal localization. The diagnostic surprise highlights the need for infectious disease screening even in the presence of classic risk factors, with major implications for treatment planning and follow-up. **Case Report:** A 65-year-old man, a current smoker, with long-standing, poorly controlled stage III

hypertension and chronic obstructive pulmonary disease, was admitted to the hospital due to abdominal pain associated with a severe rise in blood pressure (200/140mmHg). Computed tomography angiography revealed a giant infrarenal fusiform abdominal aortic aneurysm, 10cm in length, with maximum diameters of 53/50mm, partially thrombosed and ulcerated, extending to the iliac bifurcation. Concomitant ectasia of the ascending aorta (44mm) suggested diffuse aortic involvement rather than isolated degenerative aneurysmal disease. Transthoracic echocardiography revealed severe concentric left ventricular hypertrophy, preserved systolic function (EF 52%), grade I diastolic dysfunction, and moderate aortic regurgitation. There was no echocardiographic evidence of pulmonary hypertension. Chest imaging also identified a solitary pulmonary nodule and mediastinal adenopathy; however, the aneurysm represented the immediate therapeutic priority. The medical history revealed a genital infection treated in early adulthood. Serologic tests showed a positive TPHA with a negative RPR, consistent with late latent syphilis. Given the coexistence of extensive aortic involvement and the absence of alternative inflammatory or genetic causes, syphilitic aortitis was considered a potential underlying mechanism, consistent with the vasa vasorum-related aortic wall lesion described in late syphilis. Therapy with benzylpenicillin was initiated before referral to vascular surgery, following a multidisciplinary evaluation. **Discussions** : This report is notable for the mismatch between a typical atherosclerotic risk profile and the suggestion of an underlying infectious etiology. The association of multisegment aortic involvement with positive *Treponema pallidum* serology supports re-evaluation of syphilitic aortitis in contemporary practice. It highlights the importance of systematic etiological assessment in aortic aneurysms, even when conventional risk factors appear sufficient to explain the disease. **Conclusions**: This case illustrates that syphilitic aortitis should remain part of the differential diagnosis in large or atypically distributed aortic aneurysms, even in contemporary clinical practice. Systematic etiological assessment, including targeted serological testing, may identify treatable infectious causes and influence perioperative management as well as long-term follow-up in patients with complex aortic disease.

Keywords: Syphilitic aortitis, Abdominal aortic aneurysm, *Treponema pallidum*, Cardiovascular syphilis

A NEONATAL CHALLENGE - WHEN THE RIGHT VENTRICLE DICTATES THE OUTCOME OF COMPLETE ATRIOVENTRICULAR CANAL DEFECT

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Introduction: Atrioventricular canal defect (AVCD) is a complex congenital malformation characterized by deficiency of atrioventricular septum and a common atrioventricular annulus. AVCD occurs in 2 out of 10.000 births per year, and is strongly associated with maternal factors such as gestational diabetes or obesity. This cardiac defect results in a significant interatrial and interventricular systemic-to-pulmonary shunt, leading to right ventricular pressure and volume overload, subsequently inducing pulmonary hypertension. **Case Report:** We report the case of a full-term female infant (37 weeks gestation, birth weight 2789 g) delivered via cesarean section due to fetal heart rate abnormalities during labor and maternal influenza A infection. In the delivery room, mild acrocyanosis was noted. At 10 minutes postpartum, cardiorespiratory assessment revealed oxygen saturation of 88-92% on room air. On cardiac auscultation, an irregular heart rhythm and a grade 1/6 systolic murmur were detected. The infant was closely monitored, started on empirical ampicillin and gentamicin, and further investigations were carried out. During hospitalization, the patient remains polypneic and oxygen-dependent. Given the symptomatology, a weight gain of 70 g in 24 hours, and decreased urine output on the 8th day of life, it was decided to administer furosemide at 1 mg/kg/day and to conduct follow-up laboratory tests. By the 11th day, the systolic murmur had increased to grade 2/6, accompanied by grade 2 left heart failure and moderate pulmonary hypertension. Furosemide and spironolactone were administered concomitantly, each at 1 mg/kg/day. **Discussions** : Following the administration of diuretics and the gradual weaning from supplemental oxygen, the infant's respiratory status stabilized. Clinical improvement of pulmonary hypertension was evidenced by the resolution of previous symptoms, leaving only slight residual perioral cyanosis. By day 19, the infant demonstrated significant clinical improvement in general status and hemodynamic stability. **Conclusions:** This case underscores the importance of an individualized therapeutic approach and management focused on stabilizing the hemodynamic defects. Such strategies are essential to temporarily alleviate symptoms and optimize the patient's condition until definitive cardiac surgery can be performed, ensuring improved long-term outcomes.

Keywords: Atrioventricular canal defect (AVCD), Pulmonary hypertension, Acrocyanosis, Systolic murmur

A PATIENT PRESENTING WITH SEVERE HEART FAILURE AND TACHYCARDIA: THE CHALLENGES OF DIFFERENTIATING BETWEEN APPROPRIATE PHYSIOLOGICAL RESPONSE AND PATHOLOGICAL TACHYCARDIA

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Introduction: Supraventricular tachycardia (SVT) is an arrhythmia that defines a heart rate greater than 100 beats per minute (bpm) originating in the upper chambers of the heart, the substrate may involve the sinus node, the atrioventricular node, the myocardium in between or accessory pathways. **Case Report:** We present the case of a 63-year-old female patient in NYHA class IV congestive heart failure whose heart rate remained persistently elevated despite optimal medical therapy. The patient has a past history of breast carcinoma requiring chemotherapy which had a reversible impact on left ventricular systolic function 18 years previously. She presented to her local hospital, blood testing revealed abnormal liver enzymes, and soon was discovered that she was in congestive heart failure and the liver enzymes were elevated due to hepatic congestion. Transthoracic echocardiography revealed a dilated left ventricle with ejection fraction of 16% with the suspicion of intracardiac thrombus, later confirmed on a cardiac MRI scan. Electrocardiogram (ECG) monitoring showed a heart rate of less than 130 bpm which was initially interpreted as sinus tachycardia, but P wave activity was not clearly seen. Holter ECG monitoring revealed an incessant tachycardia and transient sinus rhythm during sleep. The patient underwent a diagnostic electrophysiological study, confirming SVT due to AV-nodal reentry tachycardia (AVNRT), which was successfully ablated restoring sinus rhythm. Following the ablation the LV function improved significantly to 30% in nine days, currently being 41%, moreover the apical thrombus resolved. Six months later the patient's NYHA classification changed to NYHA I, in association with the improvement of initial NT-proBNP level of 17 805 pg/mL to less than 1000 pg/mL. **Discussions :** This is a case of tachycardiomyopathy due to incessant AVNRT successfully treated with radiofrequency catheter ablation, and diuretic therapy which postablation resulted in dramatic weights loss. **Conclusions:** In the patient's unusual form of AVNRT, namely incessant tachycardia resulted in tachycardiomyopathy, highlighting the electromechanical uncoupling which occurs when the heart rate is elevated over a prolonged period of time. Clinical recognition lead to appropriate definitive treatment, namely radiofrequency catheter ablation and restoration of sinus rhythm resulted in an improvement in congestive symptoms.

Keywords: Reduced ejection fraction, Heart failure, Incessant AVNRT, Radiofrequency catheter ablation

A RARE ADVERSE EFFECT OF ACENOCOUMARIN IN A PATIENT WITH COMPLICATED CARDIOVASCULAR DISEASE: VASCULAR PURPURA

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Introduction: Acenocoumarin remains an important treatment option for patients with ischemic cardiovascular disease and valve prosthesis, even though DOAC's have emerged as the modern standard due to their improved drug safety profile. However, its use carries a risk of rare but severe dermatological adverse events, alongside its known narrow therapeutic window. **Case Report:** We present the case of a 67-year-old patient with complex cardiovascular history, including a recent postero-infero-lateral myocardial infarction, severe triple coronary artery disease, severe mitral regurgitation, paroxysmal atrial fibrillation and significant bilateral carotid stenosis. The cardiovascular pathology was addressed through a triple surgical intervention: endarterectomy with plasty of the left carotid artery, aorto-coronary bypass and biological mitral valve prosthesis placement. The postoperative ICU phase was complicated by the onset of a right frontal ischemic stroke and cardiopulmonary arrest. Both acute events were overcome and the patient was successfully stabilized. Upon discharge from the surgery department, he was prescribed acenocoumarin associated with double antiaggregant therapy, at the attending surgeons' recommendation. A month later, the patient presented to the emergency department accusing an episode of spontaneous epistaxis. Physical examination revealed diffuse purpura and ecchymoses of the lower legs and feet. Laboratory tests revealed severe coagulopathy, with elevated values for INR of 10.98 and a prothrombin time of 115.5 seconds (NV 9.8 - 12.1), as well as normochromic, normocytic anemia (Hb 11.0 g/dL). Subsequently, the

patients' history revealed that the purpuric lesions developed a few days after initiation of acenocoumarin treatment. The patient was re-evaluated by his attending cardiologist, who discontinued the acenocoumarin and recommended the reintroduction of apixaban, the anticoagulant the patient had been taking prior to the surgical intervention. **Discussions** : Non-blanching rashes show extensive extravasation of blood into tissues or the presence of microthrombi blocking arteries, whereas basic allergic reaction lesions are pruriginous and blush under pressure because of vasodilation. Rather than a dermal hemorrhage caused by coumarone overdose alone, our patients' early-onset purpura upon starting acenocoumarin shows a serious adverse medication response. **Conclusions**: Purpuric lesions that develop under coumarin treatment are not always a sign of simple allergy or dose-dependent toxicity. They can also represent a severe, early-onset adverse drug reaction. In clinical practice, accurate identification of this mechanism is crucial to promptly halting the causal medication and substitution with safer alternatives, such as apixaban, thereby preventing potentially severe treatment pitfalls.

Keywords: Vascular Purpura, Coumarin, Cardiovascular Pathology, Non-blanching Rashes

A RARE ASSOCIATION OF AL AMYLOIDOSIS, LAMBDA LIGHT-CHAIN MULTIPLE MYELOMA, AND JAK2 V617F-POSITIVE MYELOPROLIFERATIVE NEOPLASM: A CASE REPORT

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Introduction: AL amyloidosis is a rare plasma cell dyscrasia characterized by extracellular deposition of misfolded immunoglobulin light chains, leading to progressive multiorgan dysfunction. Its association with multiple myeloma and concomitant chronic myeloproliferative neoplasms is exceptionally uncommon and poses significant diagnostic and therapeutic challenges. We report a complex case of lambda light-chain AL amyloidosis associated with multiple myeloma and JAK2 V617F-positive chronic myeloproliferative syndrome, highlighting the importance of integrated multidisciplinary management. **Case Report:** A 55-year-old male presented with renal insufficiency, proteinuria, anemia, and systemic symptoms. Laboratory investigations revealed elevated lambda free light chains, monoclonal lambda band on immunofixation, and bone marrow plasma cell infiltration of approximately 11%. Molecular testing identified the JAK2 V617F mutation. Renal biopsy confirmed AL amyloidosis with lambda light-chain deposits. Cardiac evaluation demonstrated infiltrative cardiomyopathy with preserved ejection fraction, supported by cardiac MRI findings. Additional complications included peripheral arterial disease requiring right lower limb amputation and recurrent infections. The patient was diagnosed with lambda light-chain multiple myeloma associated with systemic AL amyloidosis and concomitant chronic myeloproliferative neoplasm. Treatment was initiated with Dne-CyBorD followed by subsequent therapy, resulting in partial hematologic response and clinical stabilization. **Discussions** : This case illustrates the rare coexistence of AL amyloidosis, multiple myeloma, and JAK2-positive myeloproliferative disease, emphasizing the need for heightened clinical suspicion in patients with unexplained organ dysfunction and mixed hematologic abnormalities. Early recognition of amyloid organ involvement-particularly renal and cardiac-is critical, as it strongly influences prognosis and therapeutic decisions. Comprehensive diagnostic workup including bone marrow examination, immunofixation, free light chain assays, molecular testing, and organ biopsies remains essential. Management requires individualized, multidisciplinary strategies balancing anti-plasma cell therapy, supportive care, and treatment of coexisting hematologic disorders. **Conclusions:** The coexistence of AL amyloidosis with multiple myeloma and chronic myeloproliferative neoplasm is exceedingly rare. This case underscores the importance of an integrated diagnostic approach and tailored therapy to improve outcomes in complex hematologic presentations. Awareness of such associations may facilitate earlier diagnosis and optimized management.

Keywords: AL amyloidosis, multiple myeloma, myeloproliferative neoplasm, JAK2 V617F

A RARE CASE OF INTRAVENTRICULAR ARTERIOVENOUS MALFORMATION WITH CHRONIC HEMORRHAGIC SEQUELAE

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Introduction: Intraventricular arteriovenous malformations (AVMs) are rare vascular anomalies which represent a

small subcategory of all intracranial AVMs. Due to their deep location and their proximity to critical ventricular structures, there are significant diagnostic and therapeutic challenges. **Case Report:** I report the case of a 51-year-old female patient who presented for neurosurgical evaluation. This case is significant because of the intraventricular location and presence of chronic markers suggesting previous subarachnoid hemorrhage (SAH), as well as presence of secondary brain atrophy. Clinical symptoms that were observed with the patient correlate strongly to the usual presentation of arteriovenous malformations, such as focal neurological deficits, headaches, and symptoms of increased intracranial pressure. MRI imaging of the brain revealed a nodular formation in the right lateral ventricle consisting of multiple tortuous and dilated vessels, highly suggestive of an intraventricular AVM. The nidus measures approximately 29 x 25 x 26 mm. A prominent drainage vein was identified near the septum pellucidum, draining posterior to the splenium of the corpus callosum into the vein of Galen or the right sinus. Secondary findings include dilation of the right lateral ventricle with an Evans index of 0.32, as well as the third ventricle, with a 6 mm midline shift of the septum pellucidum to the left. Chronic hemorrhagic markers, including hemosiderin deposits and encephalomalacia changes in the right basal ganglia and thalamus, suggest prior subarachnoid hemorrhage. Associated right cerebral peduncle atrophy was also noted. **Discussions :** Intraventricular AVMs are fundamentally different from parenchymal AVMs because they lack the usual buffer of the brain parenchyma, which in turn increases the risk of intraventricular hemorrhage. The literature suggests that deeply situated AVMs have a higher rupture rate compared to superficial ones. In this case, the presence of hemosiderin in the frontal sulci and the Sylvian fissure confirms previous hemorrhagic event, more specifically a SAH. The management of such lesions requires a multidisciplinary approach, weighing the risk of microsurgical resection, endovascular embolization, or stereotactic radiosurgery against the high risk of recurrent hemorrhage. **Conclusions:** This case highlights the importance of advanced neuroimaging in identifying the complex architecture of intraventricular AVMs. The presence of chronic gliosis and atrophy underlines the long-term morbidity associated with these lesions. Early diagnosis and a clear management plan are essential to prevent devastating recurrent hemorrhagic events.

Keywords: Intraventricular AVM, Neuroimaging, Subarachnoid Hemorrhage, Arteriovenous Malformation

A RARE CASE OF PONTOCEREBELLAR HYPOPLASIA TYPE 1B: THE ROLE OF WHOLE EXOME SEQUENCING IN NEUROLOGICAL DISEASES

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Introduction: Pontocerebellar hypoplasia type 1B (PCH1B) is a severe, autosomal recessive neurological disorder. It presents with brainstem involvement, causing microcephaly, hypotonia, global developmental delay with neonatal onset. Discovering that a young couple carries a high-risk pathogenic variant for PCH1B, while simultaneously being carriers of a second rare variant for congenital arthrogryposis, is a significant statistical rarity. This case is a clear example of how advanced molecular testing can solve medical mysteries and secure a safer path for conception and prevention. **Case Report:** This case depicts a young couple (a 21 year old mother and a 24-year old father) who chose Whole Exome Sequencing (WES) in July 2025 following the early death of their second child. The WES results revealed that both parents are healthy heterozygous carriers for two distinct autosomal recessive variants. The first variant in the EXOSC3 gene (c.92G>C) is classified as pathogenic. This gene is directly linked to PCH1B, which triggers hypotonia, global developmental delay, and truncus cerebri dysfunction at an early stage in life. The second finding was a variant of uncertain significance (VUS) in the ERGIC1 gene (c.347G>A). Pathogenic variants in this gene are associated with Arthrogryposis Multiplex Congenita 2, Neurogenic Type. In December 2025, targeted family screening by Sanger sequencing was performed. Both grandfathers passed down the EXOSC3 mutation, while both grandmothers passed down the ERGIC1 variant. Most importantly, testing their first son proved he has a homozygous wild type genotype for the EXOSC3 mutation and is only a carrier for ERGIC1. **Discussions :** Clinically, children with Pontocerebellar Hypoplasia type 1B face severe structural brain issues and motor neuron degeneration. It is highly probable that this was the cause of death for the couple's newborn. According to recent publications, the pathogenic variant responsible is a founder mutation and is frequent in the Roma population. With a 25% risk of recurrence for future pregnancies, it is paramount that the parents choose prenatal testing. Finding these mutations perfectly illustrates the importance of genetic testing in plurimalformative syndromes, even after a miscarriage or a neonatal exitus. **Conclusions:** This case powerfully demonstrates the clinical value of post-mortem parental genetic testing, if testing the infant's genetic material is unavailable. Uncovering the EXOSC3 and ERGIC1 variants gave the grieving parents closure, reproductive and prophylactic options.

Keywords: Pontocerebellar hypoplasia type 1B, EXOSC3, ERGIC1, WES

A RARE ENDOCRINE INTERSECTION: MOSAICISM 45,X/46,XY AND PHEOCHROMOCYTOMA

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Introduction: 45,X/46,XY mosaicism is classified as a disorder of sex development, resulting from mitotic errors such as anaphase lag. The clinical presentation is highly variable, ranging from ambiguous genitalia to a normal male or female phenotype. Pheochromocytoma is a rare neuroendocrine tumour originating from chromaffin cells of the adrenal medulla, typically associated with paroxysmal symptoms. **Case Report:** We present the case of a 61-year-old phenotypic female patient, initially admitted to the internal medicine department for evaluation of multiple cardiovascular comorbidities. A previous imaging study had identified an adrenal mass that had not been further investigated. Upon transfer to the endocrinology department, clinical examination revealed features suggestive of a disorder of sex development, including absent breast development and primary amenorrhea. Initial hormonal assessment was consistent with hypergonadotropic hypogonadism, while subsequent karyotype analysis confirmed 45,X/46,XY mosaicism. Gynaecological evaluation revealed a rudimentary uterus, with no ovaries identified on imaging. The patient was also diagnosed with severe osteoporosis, for which osteoanabolic treatment had been initiated. Further imaging evaluation of the adrenal lesion raised suspicion for pheochromocytoma. Biochemical testing subsequently confirmed the diagnosis. The patient underwent right adrenalectomy, with histopathological examination confirming pheochromocytoma. Postoperatively, catecholamine metabolite levels normalized. **Discussions :** This case illustrates a late diagnosis of 45,X/46,XY mosaicism, reflecting the wide clinical spectrum and the potential for under-recognition, particularly in patients with a predominantly female phenotype. The absence of earlier evaluation allowed the development of long-term complications, such as severe osteoporosis secondary to untreated hypogonadism. In addition, the coexistence with pheochromocytoma represents an exceptionally rare association, further complicating the clinical picture and emphasizing the need for a thorough and systematic evaluation in patients with complex or atypical presentations. **Conclusions:** Delayed recognition of disorders of sex development remains a clinical challenge due to their heterogeneous presentation and variable phenotype. Comprehensive endocrine evaluation is essential for timely diagnosis, particularly in patients with subtle or long-standing clinical features. Awareness of potential complications and rare associated conditions may further contribute to improved patient management.

Keywords: 45,X/46,XY mosaicism, disorders of sex development, pheochromocytoma, primary hypogonadism

A RESTROSPECTIVE STUDY OF MICROBIOLOGICAL FINDINGS OF MEARES-STAMEY TEST IN MALE GENITOUINARY INFECTIONS.

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Introduction: Microbiological diagnosis of male genitourinary tract infections can be challenging, as pathogens may not always be detected in routine urine cultures. The Meares-Stamey test, which includes segmented urine samples and expressed prostatic secretion, may improve pathogen detection and provide additional information for the microbiological evaluation of these infections. **Case Report:** A retrospective study was conducted to evaluate the microbiological findings of the Meares-Stamey test performed between January 1 and December 31, 2025, in a private outpatient clinic. During this period, 248 patients with urogenital infections were investigated using the segmented urine culture method. The test included three urine samples (U1, U2, and U3) and expressed prostatic secretion (EPS). Microbiological cultures were performed for all samples, and bacterial identification with antimicrobial susceptibility testing was carried out for positive isolates. For the present analysis, datasets included only patients with positive microbiological cultures, grouped according to the isolated bacterial species. **Discussions :** Among the 248 patients investigated, 36.7% had positive microbiological cultures. The most frequently isolated microorganisms were Enterococcus spp. (n=35), alpha - hemolytical Streptococcus spp. (n=24), and Escherichia coli (n=22). The highest resistance among Gram-positive isolates was observed for tetracycline, reaching 74.29% in Enterococcus spp. and 41.66% in alpha - hemolytical Streptococcus spp., while Escherichia coli showed the highest resistance to ampicillin (43.37%), followed by tetracycline (39.13%). Concordance

between expressed prostatic secretion and at least one urine sample was highest for *Escherichia coli* (77.27%), followed by *Staphylococcus* spp. (71.42%), *Enterococcus* spp. (62.9%), and alpha - hemolytical *Streptococcus* spp. (52.94%). The predominance of *Enterococcus* spp., alpha - hemolytical *Streptococcus* spp., and *Escherichia coli* reflects the diverse microbiological profile of male genitourinary infections. A key finding of this study is the high level of antimicrobial resistance observed across both Gram-positive and Gram-negative. These results underline the limited reliability of empirical therapy in this patient population. In addition, *Escherichia coli* showed higher concordance between urine and prostatic secretion, whereas streptococci and enterococci were less consistently detected, suggesting that pathogen detection may vary depending on the bacterial species. **Conclusions:** This study highlights the high prevalence of antimicrobial resistance among common urogenital pathogens, emphasizing the importance of microbiological testing for appropriate antibiotic selection. The observed variability between bacterial species further suggests that male genitourinary infections are microbiologically heterogeneous, supporting a more individualized diagnostic and therapeutic approach.

Keywords: Meares-stamey test, Antimicrobial resistance, Positive microbiological cultures

A UNIQUE PUZZLE: THE CONNECTION BETWEEN HYPOPHYSITIS AND PULMONARY FINDINGS

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Introduction: Hypophysitis represents an inflammation of the pituitary gland that can occur as a primary condition or secondary to local and systemic diseases. Its clinical presentation is non-specific, typically encompassing headaches, progressive hypopituitarism, central diabetes insipidus, and MRI evidence of pituitary or stalk enlargement. The differential diagnosis is broad and complex, including tumors, lymphoproliferative diseases and systemic conditions such as sarcoidosis and Langerhans cell histiocytosis, making etiological diagnosis a persistent challenge in clinical practice. **Case Report:** We present the case of a 27-year-old female known with hypopituitarism (deficient somatotrope, thyrotrope and gonadotrope), diabetes insipidus, secondary amenorrhea and hyperprolactinemia under treatment, as well as mixed dyslipidemia and grade II obesity. Clinically, the patient complained of dyspnea, insomnia, headaches and polydipsia (4 L/day). Serial pituitary MRI demonstrated a reduced pituitary gland with a partial empty sella appearance, a deviated pituitary stalk with a hypoplastic appearance, progressive enlargement of the tuber cinereum and absent posterior neurohypophyseal bright spot which is suggestive of an active infundibulo-neurohypophysitis. CT investigations identified numerous diffuse air cystic images located bilaterally, without other changes at the abdomino-pelvic level. The pulmonary imaging aspect, as well as the respiratory tests performed initially suggested a possible diagnosis of lymphangioleiomyomatosis, but it was excluded after serum VEGF-D testing which returned within normal limits. The histopathological examination did not provide any important criteria for the diagnosis (immunohistochemical staining S100, HMB45 and CD1a negative), a result most likely influenced by Prednisone treatment. Genetic testing did not detect any known disease-causing or rare variants that could explain the patient's phenotype. It was decided to interrupt the treatment with Prednisone, in order to perform a new biopsy. **Discussions :** The difficulty in this case lies in identifying the etiology of hypophysitis in the context of panhypopituitarism and bilateral pulmonary cystic disease. Initially, the pulmonary lesions suggested lymphangioleiomyomatosis, which was ruled out by VEGF-D testing and the lack of correlation with hypothalamo-pituitary involvement. Lymphocytic hypophysitis was also considered, supported by the MRI findings, but does not explain the pulmonary changes. Finally, Langerhans cell histiocytosis remains the most likely cause that can explain the simultaneous occurrence of pituitary and pulmonary findings. **Conclusions:** This case illustrates the complexity of diagnosing pituitary dysfunction. Although this may correspond to many other etiologies, the combination of clinical and imaging evidence, despite inconclusive histopathological and genetic testing, points toward histiocytosis as the most unifying etiological hypothesis.

Keywords: hypophysitis, Langerhans cell histiocytosis, lymphangioleiomyomatosis, bilateral pulmonary cystic disease

A VIRAL PLOT TWIST, HEPATITIS C MEETS B-CELL DIFFUSE GASTRIC LYMPHOMA- CASE REPORT

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Introduction: Primary gastric diffuse large B-cell lymphoma (DLBCL) represents an aggressive form of non-Hodgkin lymphoma localized most frequently in the stomach, particularly affecting the elderly male population. Even though the association is rare, recent studies have shown an increased risk of developing DLBCL in patients with hepatitis C. Chronic immune stimulation caused by the virus can lead to B-cell clonal expansion, increasing the risk of non-Hodgkin lymphoma. This potential link raises important diagnostic and therapeutic considerations in the management of gastric lymphomas. **Case Report:** We present a case of a 72 year old male patient, accusing of nausea, fatigability, loss of appetite, confusion, significant weight loss and diffuse abdominal pain. Physical examination revealed the following: lymphedema of the left upper limb, left supraclavicular adenopathy, ascites, cavocaval collateral circulation, hepatomegaly and splenomegaly. Laboratory tests showed the presence of hepatitis C causing impaired liver function (elevated level of AST, ALT, total and direct bilirubin) indicating chronic cirrhosis, systemic inflammation (high CRP, ALP and LDH) and signs of anemia. The past medical history revealed, that the patient was diagnosed with Hepatitis C in 2016 but he refused the antiviral treatment. In 1976, he underwent partial gastric resection for an ulcer. with gastrojejunal anastomosis. **Discussions :** All in consideration, a gastroscopy was performed which revealed a hemorrhagic tumor at the gastrojejunal anastomosis site. Histopathological examination confirmed a diagnosis of gastric diffuse large B-cell lymphoma. MRI displayed hepatomegaly, splenomegaly, multiple hepatic metastases and thickening of the antropyloric wall (approximately 10 mm). Antiviral treatment was administered and the patient was referred for general surgery and hematology management. **Conclusions:** This case highlights a rare, but important link between hepatitis C and primary gastric diffuse large B-cell lymphoma, which poses significant challenges in establishing the accurate diagnosis and requires a high level of management. Untreated patients suffering from hepatitis C have an increased risk of developing lymphoma and a lower chance of survival.

Keywords: Hepatitis C, Diffuse Large B-cell lymphoma, non-Hodgkin Lymphoma, Gastrojejunal anastomosis

ABDOMINAL AORTIC PSEUDOANEURYSM IN A PATIENT WITH SINGLE FUNCTIONAL LOWER LIMB AND ADVANCED PERIPHERAL ARTERIAL DISEASE

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Introduction: Abdominal aortic pseudoaneurysms are rare and severe vascular conditions. They are usually associated with prior surgical interventions or arterial wall injury. These lesions carry a high risk of rupture and require prompt diagnosis and management because they lack a complete arterial wall. Its occurrence in patients with advanced peripheral arterial disease (PAD) and after major amputations poses significant diagnostic and therapeutic challenges. **Case Report:** This case report presents a patient with a history of advanced PAD, admitted with complaints of erythema and discomfort in the right lower limb, the remaining one. The patient had undergone left hip disarticulation due to irreversible ischemia, which occurred after occlusion of the left branch of a previous aorto-bifemoral bypass. Medical history included type 2 diabetes mellitus, essential hypertension with extremely high cardiovascular risk, prior myocardial infarction treated with stent implantation, and ischemic stroke. Clinical examination revealed diminished femoral pulse and absent distal pulses in the remaining limb. Computed tomography angiography (CAT) revealed a focal, contrast-filled outpouching arising from the aortic wall. It displays an irregular contour and a lack of a defined wall. These features are consistent with an abdominal aortic pseudoaneurysm, most likely secondary to previous vascular surgical interventions. Both kidneys are enhanced symmetrically, indicating preserved renal perfusion at this level. Overall, the imaging supports the diagnosis of an abdominal aortic pseudoaneurysm with high risk of rupture, requiring urgent vascular evaluation and management. Given the patient's high surgical risk and single functional limb, a multidisciplinary team recommended conservative medical management. The patient received conservative treatment, including antiplatelet therapy, statin, hemorheologic agents, close monitoring of limb perfusion and pseudoaneurysm progression. Further

multidisciplinary evaluation was recommended. **Discussions** : Abdominal aortic pseudoaneurysms are uncommon and often occur as late complications after vascular reconstruction. Compared to aneurysms, they present a higher risk of rupture due to a lack of a complete arterial wall. In patients with an extensive vascular history and a single functional limb, treatment becomes complicated. The literature supports early diagnosis with CAT and individualised treatment strategies, such as endovascular or open repair, depending on the patient's risk profile. **Conclusions**: Abdominal aortic pseudoaneurysms are frequently identified late or only after life-threatening complications develop because they tend to remain clinically silent. These lesions require prompt recognition. In patients with advanced PAD, it is critical to preserve the remaining lower limb and prevent rupture. To prevent limb loss, it is essential to maintain adequate perfusion, minimise ischemic time and ensure careful postoperative monitoring.

Keywords: peripheral arterial disease, abdominal aortic pseudoaneurysm, CTA diagnosis, endovascular repair

ACCELERATED INFLIXIMAB DOSING IN ULCERATIVE COLITIS: A CASE OF THERAPEUTIC CHALLENGES UNDER THE CONSTRAINT OF DRUG-INDUCED LIVER INJURY

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Introduction: Ulcerative colitis (UC) is a chronic, inflammatory bowel disease. Its treatment algorithm involves a step-up strategy, from aminosalicylates (5-ASA) to advanced therapies. Although extensive UC can be managed by combining an anti-tumor necrosis factor- α (anti-TNF α) agent (infliximab) with an immunomodulator (azathioprine), drug-induced liver injury (DILI) precludes the latter, making accelerated infliximab dosing the key strategy for remission. **Case Report:** A 35-year-old female with left-sided UC maintained remission on 5-ASA derivatives until late 2024. She presented with elevated liver enzymes (alanine aminotransferase: 1182 U/L; aspartate aminotransferase: 598 U/L; gamma-glutamyl transferase: 182 U/L). Autoimmune liver-related antibodies (antimitochondrial: AMA-M2, M2-3E; nuclear pore/cytosolic: gp210, LC1) were positive. Following the discontinuation of 5-ASA and a subsequent decrease in liver enzyme levels, the episode was interpreted as DILI alongside autoimmune hepatitis under observation. In February 2025, the patient resumed treatment with mesalazine. However, five months later, she suffered a severe relapse with 5-6 bloody stools per day, abdominal pain, and a weight loss of 5 kilograms. Ultrasonography confirmed disease progression to extensive colitis, supported by a fecal calprotectin level of 1730 $\mu\text{g/g}$. Therapy with infliximab was initiated. Two months after an initial response (fecal calprotectin: 133 $\mu\text{g/g}$), the patient developed a recurrence of symptoms at the beginning of 2026, reporting 4 bloody, mucoid stools per day, abdominal pain, and weight loss, ultimately becoming severely underweight (body mass index of 14). Eight weeks later, she presented the same symptoms and a fecal calprotectin level of 950 $\mu\text{g/g}$. Therapeutic drug monitoring (TDM) identified low infliximab concentrations. Since adding an immunomodulator is precluded in the context of DILI, the infliximab dosing interval was shortened from 8 to 4 weeks, and anti-infliximab antibodies were to be tested. **Discussions** : Extensive UC therapy often involves combining anti-TNF α agents with immunomodulators to optimize remission and potentially prevent the formation of anti-drug antibodies. However, this patient experienced DILI, making azathioprine use unsafe. When symptoms recurred despite initial response to infliximab, a secondary loss of response was suspected. In such cases, TDM and anti-drug antibody assays are mandatory for evidence-based treatment planning. **Conclusions:** This case highlights the clinical challenge of managing extensive UC along with DILI. Following the progression from left-sided to extensive colitis, the strategy remained the use of infliximab without immunomodulators. Low medication levels and recurrence of symptoms justified the transition to an accelerated dosing regimen, focusing on regaining clinical remission without further hepatic risk.

Keywords: ulcerative colitis, drug-induced liver injury, infliximab, therapeutic drug monitoring

ACHIEVING DEEP REMISSION IN ULCERATIVE PANCOLITIS: THE SYNERGY BETWEEN BUDESONIDE MMX AND MICROBIOTA MODULATORS – A CASE REPORT

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Introduction: Ulcerative colitis is a chronic inflammatory disease of the colon that requires a therapeutic strategy

adapted to its anatomical extent. In the case of pancolitis, the primary objective is achieving deep remission, defined by the absence of clinical symptoms and the normalization of biological markers. The major challenge consists of obtaining these targets while minimizing systemic exposure to corticosteroids to avoid long-term adverse reactions. **Case Report:** We present the case of a 32-year-old patient diagnosed with ulcerative pancolitis (Montreal E3). Although the patient was initially in clinical remission, the endoscopic presence of inflammatory pseudopolyps indicated a history of severe chronic damage. This stability was recently interrupted by a moderate flare-up, which was histopathologically confirmed by the presence of crypt abscesses. To manage this, we started a multimodal treatment using mesalazine and budesonide MMX. The induction phase was successful, as shown by the fecal calprotectin dropping to a very low, optimal level. This result allowed us to start a personalized de-escalation strategy. We gradually replaced the corticosteroid therapy with microbiota modulators, specifically sodium butyrate and VSL#3. This transition allowed the patient to move from the acute phase to a stable maintenance treatment, achieving deep remission without any further complications. **Discussions :** The main goal of this clinical approach was to ensure a smooth transition from induction to a long-term maintenance phase. By choosing Budesonide MMX instead of systemic corticosteroids, we were able to treat the entire colon while maintaining a systemic bioavailability below 10%, which avoided typical steroid side effects. A key part of the treatment was securing the steroid withdrawal by using VSL#3 and sodium butyrate together. The high-concentration probiotic helped balance the immune response, while the butyrate provided metabolic support for the healing of the epithelium and the strengthening of the intestinal barrier. The achievement of biochemical normalization, marked by a very low calprotectin level, was a clear objective indicator that we could safely withdraw the steroids. This approach prevented a rebound effect and allowed the patient to maintain remission without needing more aggressive biological therapies. **Conclusions:** Sequential management, based on inducing remission with local steroids and consolidation through high-density probiotics, represents a successful strategy. Monitoring through fecal calprotectin is essential for personalizing the therapeutic de-escalation, ensuring a stable remission and an optimal quality of life by restoring the intestinal ecosystem.

Keywords: Ulcerative pancolitis, Budesonide MMX, Fecal calprotectin, Microbiota modulators

ACROANGIODERMATITIS – THE MIMETIC ENTITY OF KAPOSI SARCOMA

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Introduction: Acroangiodermatitis, or pseudo-Kaposi sarcoma, is a benign angioproliferative entity, related to chronic venous insufficiency or other vascular anomalies, such as arteriovenous malformations of the lower limbs, or chronic renal failure. It is clinically characterized by macules, papules or circumscribed plaques, which are dark violet, brown or dark-colored. **Case Report:** A 69-year-old male patient presented himself with multiple indurated, violet plaques, localized on the interior side plantar region, with clinical suspicion of Kaposi sarcoma. A biopsy probe was obtained, which had bleeding areas. The histopathological examination revealed, at the level of the papillary and reticular dermis, a pseudotumoral vascular proliferation, with a lobular pattern, composed of small capillary-type vessels and medium caliber vessels, with a venular appearance, some of them dilated, or containing erythrocytes in the lumen, lined by flattened or slightly bloated endothelial cells. Immunohistochemical examination was performed, revealing SMA immunoreactivity positive in the media of blood vessels, CD31 and CD34 positive in endothelial cells, Ki-67 expressed in inflammatory cells, and CD68 positive in macrophages. In addition, no atypia or neoplastic-specific mitoses were identified. This correlations supported the diagnosis of acroangiodermatitis, excluding Kaposi sarcoma. **Discussions :** Acroangiodermatitis is a reactive proliferation of small vessels, with less than 100 cases diagnosed in time. It is classified into two types: the Mali type, which is bilateral, and the Stewart-Bluefarb type. The first one is the most frequent type encountered and it is associated with the chronic venous insufficiency of the lower limbs. In the pathophysiological process, VEGF, PGE1, and fibroblasts are involved, contributing to endothelial proliferation under hypoxic conditions. It manifests itself through the appearance of papules, accompanied by painful trophic-cutaneous disorders, such as ulcerations or hemorrhages. The clinical aspect of this condition is similar to Kaposi sarcoma and making correct diagnosis difficult. Kaposi sarcoma is a neoplastic condition affecting the muco-cutaneous tissues, consisting of the proliferation of the capillary-vessels and connective tissue. The clinical manifestation of these pathologies is similar, but histopathological differences exist, including cellular atypia, vascular proliferation, and irregular blood vessels. In acroangiodermatitis, vessels are circular, with the proliferation related to preexisting vasculature. **Conclusions:** Acroangiodermatitis is a rare benign condition that can be easily confused with Kaposi sarcoma. A correct histopathological diagnosis is essential to avoid over diagnosis of a malignant pathology, to provide

appropriate treatment, and to ensure a favorable prognosis.

Keywords: Acroangiodermatitis, Pseudo-Kaposi sarcoma, Vascular proliferation, Chronic venous insufficiency

ACUTE ABDOMEN AS A CLINICAL VERSUS IMAGING-DRIVEN DIAGNOSIS - IMPLICATIONS FOR SURGICAL TIMING

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Introduction: Obstructive tumor masses with acute complications represents a time-sensitive emergency surgical pathology. A delay in the definitive treatment and management may result in severe life threatening conditions. This case presents an atypical presentation of signs and symptoms inconsistent with laboratory values and imagistics. Is acute abdomen a clinical diagnosis supported by investigations - or an investigation-driven diagnosis? **Case Report:** Male patient with chronic hypertension and urolithiasis was sent from the urologist after the destruction of the lithiasis for slight periumbilical pain to the emergency department. At the clinical examination the pain was confirmed without any signs and symptoms of an acute abdomen. Laboratory investigations, as well as a CT scan, revealed aspects of an acute abdomen with a severe tumoral obstruction of the sigmoid colon. The decision of a postponed surgery within 2-3 days by the surgeon was made. The patient returned 6 days later than scheduled and complained about pleuritic, epigastric and retrosternal pain and dyspnea. The clinical examinations remained almost the same, CT scan was similar and laboratory values got slightly worse, compared to the previous investigations. During the emergency exploratory laparotomy, generalized peritonitis secondary to a perforated sigmoid tumor with lesions of the liver suggestive for hepatic metastases were confirmed. The patient received an intensive-care support postoperatively as well as advanced life support and cardiopulmonary resuscitation, as he developed severe bradycardia, which progressed to asystole. Resuscitation was unsuccessful and death was declared one day post op. **Discussions :** The critical issue is not whether to postpone - but for how long it can be safely delayed and how the diagnosis is established. **Conclusions:** Traditionally, acute abdomen is considered a clinical diagnosis, guided primarily by history and physical examination. Imaging and laboratory findings serve as supportive tools rather than replacements for surgical decision making. Medical physicians must recognize the narrow therapeutic window in acute abdomen and interact accordingly with emergency physicians. Delayed treatment might lead to life threatening complications. Psychological distress and a low educational level of the patient highly influences patient compliance and decision making - a well communicated decision making in high-risk emergency and surgical cases shall include clear demonstration regarding potential rapid deterioration. Explicit risk counselling and a safety-net mechanisms to minimize preventable fatal outcomes are unavoidable.

Keywords: Acute Abdomen, Emergency, Postponed Management, Outcome

ACUTE ADRENAL CRISIS UNMASKING AUTOIMMUNE POLYGLANDULAR SYNDROME TYPE 2: A CLINICAL CHALLENGE

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Introduction: Autoimmune Polyglandular Syndrome Type 2 is a rare endocrine disorder defined by the simultaneous presence of primary adrenal insufficiency and either autoimmune thyroid disease or type 1 diabetes. Because the onset of adrenal failure is slow and subtle, the diagnosis is often delayed until a sudden physical stressor triggers a crisis. This case highlights how challenging the diagnosis can be when an acute infection masks a life-threatening endocrine emergency. **Case Report:** A 21-year-old female presented to the Emergency Department in severe hypovolemic shock, with a 6-month history of progressive fatigue, unintentional weight loss, and skin and mucosal hyperpigmentation. Initial evaluation revealed acute tonsillitis, accompanied by profound hypotension (90/60 mmHg after fluid resuscitation), prerenal acute kidney injury, severe hyponatremia, hyperkalemia, and hypoglycemia. Her condition was stabilized using intravenous fluids and empirical dexamethasone. Subsequent endocrine testing showed extremely high ACTH levels (>2000 pg/mL) combined with low basal cortisol, confirming primary adrenal insufficiency. Blood tests also showed an elevated ATPO>1000 UI (VN: 0-5,61) establishing the diagnosis of Autoimmune Thyroiditis. A thyroid ultrasound confirmed a hypoechoic and inhomogeneous pattern. The patient was officially diagnosed with Autoimmune Polyglandular Syndrome Type

2. Treatment prioritized starting glucocorticoid and mineralocorticoid replacement therapy. Crucially, levothyroxine replacement was delayed until adequate glucocorticoid coverage was established, to prevent worsening the adrenal crisis. At the 5-month follow-up, the patient's electrolytes and kidney function had normalized, and therapeutic efforts focused on adjusting the levothyroxine dose to achieve euthyroidism. **Discussions** : The initial presentation of Autoimmune Polyglandular Syndrome Type2 as an acute adrenal crisis, triggered by a localized infection, is a critical clinical scenario. The profound electrolyte imbalances highlight a complete loss of mineralocorticoid activity. A key part of the management was starting hormone replacement in the correct sequence: delaying levothyroxine is absolutely mandatory. Giving thyroid hormones too early accelerates cortisol clearance, which can be fatal in an untreated Addison's patient. Finally, the persistent skin hyperpigmentation serves as a clear clinical marker of prolonged exposure to massive levels of ACTH and MSH before the diagnosis was made. **Conclusions**: Unexplained circulatory collapse combined with electrolyte imbalances in the setting of a minor infection should raise immediate suspicion for undiagnosed primary adrenal insufficiency. Prompt recognition, immediate glucocorticoid intervention, and rigorous patient education regarding "sick day rules" are paramount for survival in Autoimmune Polyglandular Syndrome Type 2.

Keywords: Autoimmune Polyglandular Syndrome, Adrenal Crisis, Addison Disease, Cortisol

ACUTE BILATERAL PULMONARY EMBOLISM AS THE INITIAL MANIFESTATION OF RENAL CELL CARCINOMA WITH TUMOR THROMBUS EXTENSION INTO THE INFERIOR VENA CAVA

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Introduction: Pulmonary embolism (PE) is a life-threatening condition frequently linked to malignancy. Renal cell carcinoma (RCC) is notable for venous invasion and tumor thrombus extension into the renal vein and inferior vena cava (IVC). Acute bilateral PE as its first manifestation is uncommon and diagnostically challenging. **Case Report:** A 48-year-old male presented with lumbar pain, macroscopic hematuria, and progressive dyspnea. On admission, he was hemodynamically stable, with a peripheral oxygen saturation of 93% on room air. Physical examination revealed reduced breath sounds at the left lung base and a positive right-sided Giordano sign. Contrast-enhanced thoraco-abdomino-pelvic computed tomography demonstrated acute bilateral pulmonary embolism involving multiple lobar and segmental branches, associated with bilateral pulmonary infarctions and a moderate left-sided pleural effusion. Abdominal imaging revealed a right renal mass measuring approximately 79 × 41 mm, with continuous tumor thrombus extension from the right renal vein into the inferior vena cava, as well as retroperitoneal lymphadenopathy. Based on clinical and imaging findings, a diagnosis of acute bilateral PE secondary to tumor-associated venous thrombosis in the context of RCC was established. Therapeutic anticoagulation was initiated with full-dose low-molecular-weight heparin, followed by transition to a direct oral anticoagulant after clinical stabilization. Supportive management included oxygen supplementation, analgesia, and close clinical and laboratory monitoring to assess therapeutic response and hemorrhagic risk. Under treatment, the patient showed progressive improvement of respiratory symptoms and stabilization of gas exchange. He was discharged in stable condition, with continuation of anticoagulation and referral for multidisciplinary oncological evaluation, including urology and oncology, for staging and definitive management. **Discussions** : Venous tumor thrombus occurs in a significant proportion of RCC cases and represents both a marker of aggressive disease biology and a potential source of pulmonary embolization. Previous reports identify RCC as one of the few solid malignancies with a high propensity for intravascular tumor growth; however, acute bilateral PE as the inaugural clinical presentation remains rare. Differentiation between tumor thrombus and bland venous thrombosis is essential, as it carries major prognostic implications and directly influences therapeutic strategy, including anticoagulation and surgical planning. This case underscores the importance of systematic etiological evaluation in apparently unprovoked PE and supports the role of extended imaging in detecting occult malignancy in patients with suggestive clinical features. **Conclusions:** Acute bilateral pulmonary embolism may be the initial manifestation of renal cell carcinoma with inferior vena cava tumor thrombus, highlighting a rare form of malignancy-associated thrombosis requiring early multidisciplinary management.

Keywords: pulmonary embolism, renal cell carcinoma, tumor thrombus, inferior vena cava

ACUTE HEPATITIS AS A MANIFESTATION OF Q FEVER IN A YOUNG PATIENT WITH SELECTIVE IGA DEFICIENCY: A CASE REPORT

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Introduction: Acute hepatitis is an inflammatory process of the hepatic parenchyma characterized by a marked elevation of transaminases and impairment of liver function. The etiology is heterogeneous and may include viral or bacterial infections, drug-induced liver injury, toxic exposures or autoimmune mechanisms and establishing the differential diagnosis is essential, particularly in young patients without known hepatic comorbidities, where the clinical profile may be influenced by multiple factors. **Case Report:** A 27-year-old patient with no known medical history presented to the emergency department with scleral and cutaneous jaundice that had appeared approximately one week prior to admission. The patient was hospitalized for further investigations. On physical examination, the liver and spleen were not palpable, but abdominal ultrasound revealed homogeneous splenomegaly. Laboratory investigations showed marked hepatocytolysis with persistently elevated ALT levels during hospitalization. Significant increases in total and direct bilirubin, as well as gamma-glutamyl transferase (GGT) and alkaline phosphatase, were observed, findings suggestive of acute cytolytic hepatitis. In addition, PTT and INR values were initially elevated but gradually improved during hospitalization, indicating transient hepatic dysfunction without criteria for severe liver failure. To further clarify the etiology, a liver biopsy was performed, revealing clinically insignificant sinusoidal portal hypertension. Serological investigations excluded viral and autoimmune causes of hepatitis. Bacteriological testing demonstrated positive IgG antibodies for *Coxiella burnetii*, establishing the diagnosis of Q fever with hepatic involvement. **Discussions :** In the presented case, serological investigations excluded hepatotropic viral infections and autoimmune hepatitis. Additionally, normal ceruloplasmin levels and the absence of other metabolic abnormalities made a metabolic liver disease unlikely. A particular aspect of this case is the presence of congenital selective IgA deficiency, the most common primary immunodeficiency. Although many patients with this condition remain asymptomatic, IgA deficiency is associated with increased susceptibility to infections, especially at mucosal surfaces, as well as a higher risk of autoimmune diseases and atypical infections. In this context, the immunodeficiency may have contributed to the development of *Coxiella burnetii* infection or to a particular immune response characterized by predominant hepatic manifestations. **Conclusions:** This case highlights the importance of a comprehensive etiological evaluation in young patients presenting with acute hepatitis. Identifying a rare cause such as *Coxiella burnetii* infection emphasizes the need to include bacterial infections in the differential diagnosis in order to establish the correct diagnosis and guide appropriate management.

Keywords: acute hepatitis, *Coxiella burnetii*, IgA deficiency, Q fever

ACUTE ISCHEMIC STROKE AND SUSPECTED MOYAMOYA DISEASE IN A PEDIATRIC PATIENT WITH TRISOMY 21

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Introduction: Pediatric acute ischemic stroke is rare, but children with Trisomy 21 (Down syndrome) face an increased risk due to associated cerebrovascular anomalies like Moyamoya disease, as well as other systemic comorbidities such as celiac disease and ventricular septal defects (VSD). Moyamoya involves the progressive narrowing of major cerebral arteries and the formation of fragile, compensatory collateral vessels. This case of acute ischemic stroke driven by suspected Moyamoya in a pediatric patient with Trisomy 21. **Case Report:** A 14-year-old male with Trisomy 21 presented with marked somnolence, a syncopal episode, and left-sided falls. At the time of presentation, his medical history was notable for severe alopecia, VSD, and celiac disease. Neurological examination identified a left central facial paresis and severe left facio-brachial hemiparesis. An initial non-contrast head CT showed no notable cerebral modifications or signs of acute ischemia. However, due to high clinical suspicion, a subsequent Angio-CT was performed, revealing an acute right fronto-temporo-parietal ischemic stroke. Vascular imaging demonstrated an irregular right internal carotid artery with staged stenoses, possible

occlusion of the right middle cerebral artery (MCA), and bilateral collateral vascular networks, an appearance highly suggestive of Moyamoya disease. By discharge, his neurological status had ameliorated, and he regained independent mobility with a left-sided spastic gait. Six months later, with daily Aspirin intake, proper diet and vitamin intake and regular physical therapy sessions, the patient's overall condition has significantly improved: his hair has regrown, his gait and mobility are steadily getting better, and he no longer experiences digestive issues.

Discussions : The fragile collateral vessels formed in Moyamoya are insufficient to sustain cerebral perfusion, predisposing these patients to recurrent ischemic events. The fact that the initial native CT was unremarkable highlights the diagnostic challenge of early ischemic changes in this population. While this acute stroke was managed successfully with conservative medical therapy, strict long-term secondary prevention is critical.

Conclusions: Clinicians must maintain a high index of suspicion for Moyamoya in Down syndrome patients presenting with acute neurological decline, recognizing that early non-contrast CT scans may be deceptively normal. Prompt vascular imaging (Angio-CT) is vital for accurate diagnosis and treatment planning. Managing these complex comorbidities requires a multidisciplinary approach to ensure safe recovery and prevent recurrent strokes.

Keywords: Moyamoya Disease, Trisomy 21, Pediatric Ischemic Stroke, Angio-CT

ACUTE PANCREATITIS PRESENTING AS NEUROLOGICAL DISORDER: A DIAGNOSTIC CHALLENGE

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Introduction: Acute pancreatitis is an inflammatory condition affecting the pancreas, that usually occurs with abdominal pain, distended abdomen, nausea, vomiting, tachycardia and systemic inflammatory response. Although most cases are mild and resolve spontaneously, severe forms may lead to serious complications, such as necrosis, infections, multiorgan failure and death. The most common etiologies are biliary diseases, such as gallstones, and chronic alcoholism. Atypical symptoms may create misdiagnosis and complicate management, especially when extra-abdominal presentations occur. **Case Report:** We report the case of a 33-year-old man, who had recently undergone surgery for a pertrochanteric femoral fracture, in December 2025. Gastro-esophageal reflux disease, chronic alcohol use and smoking were concomitant conditions. A few months post-surgery, in March 2026, the patient was admitted with language disorders, dysarthria, confusion, cognitive impairment, itching and abdominal pain. An initial neurological assessment raised concerns about acute cerebellitis or ischemic events. However, a head CT scan ruled out any acute intracranial pathologies. With no neurological deficits present, metabolic encephalopathy was suspected. Laboratory results showed significant inflammation, indicated by leukocytosis (20×10^3 u/L), neutrophilia (81,50%), elevated fibrinogen (803,40 mg/dL) and a notably high C-reactive protein level (165 mg/L). Pancreatic enzymes were also elevated, including serum (194) and urinary amylase (1422) and serum lipase (113 U/L), which supported the diagnosis of acute pancreatitis. Additional tests revealed increased gamma-glutamyl transferase levels (73 U/L), related to chronic alcohol use, and mild hypocalcemia (8,20 mg/dL). On the abdominal ultrasound, the pancreas appeared enlarged with poorly defined borders. The final diagnosis was acute alcoholic pancreatitis linked to metabolic encephalopathy, chronic alcoholism, gastro-esophageal reflux disease and the post-surgical state following the femoral fracture. During his hospitalization, the patient was treated with intravenous hydration, analgesics, proton pump inhibitors and laboratory monitoring. Clinical conditions progressively improved without any complications and the patient was discharged in stable condition. **Discussions :** This case highlights an atypical neurological presentation of acute pancreatitis, initially misdiagnosed with a cerebellar pathology. The lack of imaging abnormalities, combined with systemic inflammatory and metabolic alterations, played a key role in reaching the correct diagnosis. Early recognition of metabolic encephalopathy in the context of pancreatitis is essential to prevent misdiagnosis and ensure timely treatment. **Conclusions:** Acute pancreatitis can show up with unexpected neurological symptoms, becoming a real diagnostic challenge. A multidisciplinary approach that combines clinical observations, laboratory and imaging findings is essential for making an accurate diagnosis and providing prompt care, especially for patients with multiple risk factors such as chronic alcoholism.

Keywords: Acute pancreatitis, Chronic alcoholism, Metabolic encephalopathy, Cerebellitis

ACUTE PARAPLEGIA AS THE FIRST MANIFESTATION OF MEDIASTINAL TRANSFORMED FOLLICULAR LYMPHOMA WITH EPIDURAL EXTENSION

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Introduction: Mediastinal B-cell lymphoma with epidural spinal extension is a rare and aggressive lymphoproliferative disorder characterized by a mediastinal mass with secondary invasion of the spinal epidural space, resulting in spinal cord compression and acute neurological deficits. **Case Report:** A 79-year-old female presented with acute paraplegia and urinary retention for the past 24 hours. Neurological examination: GCS 15, paraplegia, bilateral hypoesthesia, bilateral positive Babinski sign and bladder dysfunction which required catheterization. CT examination revealed left superior paramediastinal mass (50x45x69 mm) extending into the spinal canal at T1-T3 levels causing spinal cord compression. The patient underwent a T1-T3 laminectomy to decompress the dural sac and nerve roots. The tumor did not significantly affect the stability of the spine, as the SINS score was 8. Therefore, the neurosurgical team chose not to stabilize the spine with screws. An epidural drain was placed and the wound was closed in anatomical layer and the biopsy was sent for histopathological examination. The patient received perioperative dexamethasone, enoxaparin and antibiotics. Postoperatively, the patient showed progressive neurological improvement with paraparesis grade 2/5 and the control CT scan showed adequate decompression. Histopathology and immunohistochemistry confirmed a mature B-cell lymphoma compatible with transformed follicular lymphoma (tFL) and a 50% Ki67 proliferation index. The patient was referred for multidisciplinary oncology evaluation including medical oncology, radiation therapy and thoracic surgery. **Discussions :** Spinal epidural compression as the initial manifestation of mediastinal B-cell lymphoma is very rare. Most reported cases describe primary spinal epidural diffuse large B-cell lymphoma or secondary involvement in advanced disseminated disease. Rapid epidural extension from a mediastinal tFL remains uncommon. This case illustrates the aggressive behavior of transformed follicular lymphoma (tFL) which can lead to neurological deficits within a short time. Prompt surgical decompression with biopsy is essential for neurological recovery and timely multidisciplinary oncology management. **Conclusions:** Transformed follicular lymphoma presenting as acute paraplegia due to mediastinal epidural extension is extremely rare. Early surgical intervention and biopsy is essential for timely initiation of specific oncological treatment and may improve neurological outcome.

Keywords: transformed follicular lymphoma, neurosurgical decompression, epidural spinal cord compression, acute paraplegia

ACUTE RESPIRATORY DECOMPENSATION IN A PATIENT WITH SYSTEMIC SCLEROSIS ASSOCIATED INTERSTITIAL LUNG DISEASE AND COMPLEX CARDIOVASCULAR COMORBIDITIES

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Introduction: Systemic sclerosis is a chronic autoimmune connective tissue disease frequently associated with interstitial lung disease (ILD). The coexistence of autoimmune disorders, cardiopulmonary complications and infectious processes can significantly complicate the clinical course. Acute respiratory deterioration in patients with pre-existing fibrosing interstitial lung disease requires careful differential diagnosis. **Case Report:** A 53-year-old male patient is admitted with progressive dyspnea at rest, dry cough, fever (38.9°C) and chills that began three days prior to presentation. The patient had a complex medical history, including diffuse cutaneous systemic sclerosis, seronegative rheumatoid arthritis, Raynaud syndrome and fibrosing interstitial lung disease with non-specific interstitial pneumonia (NSIP) pattern and was under treatment with nintedanib and leflunomide. Laboratory findings revealed leukocytosis (10,840/uL) with neutrophilia (9,850/uL), lymphopenia (690/uL) and elevated inflammatory markers (CRP 132 mg/L). A chest X-ray demonstrated bilateral reticulo-micronodular interstitial changes (without clear consolidation). CT confirmed diffuse interstitial pulmonary fibrosis with ground-glass opacities and microcystic honeycombing, bronchiectasis and moderate bilateral pleural effusions. Cardiac evaluation revealed newly diagnosed paroxysmal atrial fibrillation, significant valvular disease (severe tricuspid and mitral regurgitation) and moderately reduced left ventricular systolic function (~40%). Additional findings included

mild ascites, hepatomegaly and venous congestion. The patient received broad-spectrum antibiotic therapy (amoxicillin-clavulanate and azithromycin), diuretics, beta-blockers, anticoagulation and supportive treatment. Clinical evolution during hospitalization was favorable, with resolution of fever, reduction of inflammatory markers, improvement in respiratory symptoms and stabilization of cardiopulmonary status. **Discussions** : The case highlights the diagnostic complexity of acute respiratory deterioration in patients with connective tissue disease-associated ILD. In this patient, differential diagnoses included acute exacerbation of NSIP, viral pneumonia, drug-induced pneumonitis, opportunistic infection, pulmonary embolism and cardiogenic pulmonary edema. The presence of fever, significant inflammatory syndrome, leukocytosis and favorable response to antibiotic therapy supported the diagnosis of interstitial pneumonia superimposed on chronic fibrosing ILD. Nintedanib does not appear to increase the risk of respiratory tract infections in patients with systemic sclerosis-associated interstitial lung disease. The coexisting cardiovascular pathology and arrhythmia further complicated the clinical picture and required multidisciplinary management. **Conclusions**: Patients with systemic sclerosis-associated interstitial lung disease are at increased risk of severe respiratory complications. Acute respiratory decompensation in these patients often results from multiple overlapping mechanisms, including infection, autoimmune disease progression and cardiovascular involvement. Early recognition, comprehensive evaluation and multidisciplinary management are essential for improving outcomes.

Keywords: systemic sclerosis, interstitial lung disease, interstitial pneumonia, atrial fibrillation

ACUTE SUBSTANCE-INDUCED PSYCHOTIC DISORDER: CLINICAL FEATURES, CHALLENGES, AND MANAGEMENT

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Introduction: Substance-induced psychotic disorders can present with severe clinical manifestations, particularly in patients with pre-existing psychiatric conditions. This situation, known as dual diagnosis, is characterized by severe symptoms and behavioral instability. This case highlights the clinical challenges of managing a patient with borderline personality disorder and substance use, who experienced an acute psychotic episode accompanied by aggressive behavior. **Case Report:** A 25-year-old man, with a documented psychiatric history since 2021, was admitted on an emergency basis following a violent domestic incident, triggered by chronic and polymorphic substance use, including alcohol, cannabis, and ethnobotanicals. His life context is marked by socio-professional instability and a conflictual family environment. Upon admission, the patient presented with severe psychomotor agitation, verbal and physical aggression, and delusions of persecution and grandeur, accompanied by elaborate and unusual hallucinations. He reported altered sensory perceptions and a marked dissociation from reality. Physical examination revealed old linear scars on the forearms, indicative of previous risk-taking behaviors and self-harm episodes. The patient was diagnosed with an acute substance-induced psychotic disorder and prominent Cluster A personality traits. An integrated treatment regimen including antipsychotics, anxiolytics, hypnotics, mood stabilizers, and antidepressants was implemented. Within a few days, the patient's agitation and hostility decreased, and he became more cooperative and oriented. The clinical course was favorable, although concentration deficits and a tendency toward social withdrawal persisted. This case is notable due to the presence of borderline personality disorder in a patient with a history of substance abuse, who required involuntary hospitalization because of the risk of auto- and hetero-aggression. **Discussions** : The case illustrates how substances can override self-control, transforming an underlying disorder into a major psychiatric emergency. In this context, involuntary hospitalization represented an ethical intervention necessary to protect the patient's life and the safety of those around him. Therefore, the management of these patients requires a careful balance between clinical rigor and respect for patient autonomy. **Conclusions:** Patients with dual diagnosis exhibit a complex behavioral profile, characterized by a high risk of aggression and difficulties in treatment adherence. In the presented context, rapid intervention was necessary to control psychotic symptoms, given the increased risk to both the patient and those around them.

Keywords: Dual diagnosis, ethical considerations, Aggressive behavior

ACUTE SURGICAL ABDOMEN DUE TO ILEAL PERFORATION IN A PATIENT WITH RECURRENT BLADDER CARCINOMA

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Introduction: Acute surgical abdomen represents a major emergency requiring rapid diagnosis and intervention. In patients with complex oncologic history and multiple pelvic interventions, clinical presentation may be atypical, delaying diagnosis. Intestinal perforation remains a life-threatening condition requiring prompt management.

Case Report: We present the case of a 66-year-old female with a history of bladder carcinoma (surgically treated in 2014), recently discharged after transurethral resection of a bladder tumor (TUR-V). She was admitted with abdominal pain, nausea, and vomiting. Clinical examination revealed a distended, tender abdomen with signs of peritoneal irritation and absent bowel transit. Abdominal X-ray and CT scan confirmed pneumoperitoneum and identified an ileal perforation surrounded by air-fluid collections. Emergency surgery was performed, consisting of segmental ileal resection with side-to-side entero-enteral anastomosis, followed by peritoneal lavage and drainage. Postoperative evolution was initially favorable, with restoration of bowel transit and good digestive tolerance. Follow-up CT revealed a localized intraperitoneal collection, requiring close monitoring. **Discussions :** This case highlights the increased risk of intestinal perforation in oncologic patients with prior pelvic interventions. CT imaging played a decisive role in diagnosis. Postoperative inflammatory response and subsequent intra-abdominal collections emphasize the need for careful follow-up in these patients. **Conclusions:** Early correlation between clinical signs of peritonitis and imaging findings is essential for favorable outcomes. Oncologic patients undergoing pelvic procedures require increased vigilance for severe abdominal complications.

Keywords: pneumoperitoneum, acute abdomen, ileal perforation, bladder cancer

ADVANCED METASTATIC PAROTID GLAND TUMOR ASSOCIATED WITH SEVERE HEPATIC DYSFUNCTION AND METABOLIC DISTURBANCES – A CASE REPORT

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Introduction: Parotid gland tumors represent the most common neoplasms of the salivary glands, nevertheless malignant forms may remain asymptomatic for a long time and therefore can be diagnosed in advanced stages which may lead to a poor prognosis. A delay in medical evaluation may lead to a local progression and distant metastasis, often involving the liver and other organs, leading to severe systemic complications. **Case Report:** A 54-year-old male was admitted to the Internal Medicine Department with progressive abdominal distension, fatigue, and worsening general condition. Imaging investigations revealed a left parotid tumor with hepatic and splenic metastases, hepatosplenomegaly, ascites and minimal right pleural effusion. In the laboratory findings was observed persistent hyponatremia (126-131 mmol/L during hospitalization), severe hypoalbuminemia (2.25-2.70 g/dL), and low total protein levels (5.0-5.1 g/dL). The liver function tests showed progressive hepatic cytolysis and cholestasis with elevated AST up to 99 U/L, gamma-glutamyl transferase (GGT) up to 275 U/L, alkaline phosphatase 680 U/L, and total bilirubin rising to 9.6 mg/dL. Coagulation abnormalities were also present, including fibrinogen 0.92 g/L, prolonged prothrombin time (38.2 seconds) and international normalized ratio (INR) 2.14. Elevated lactate dehydrogenase (LDH 1348 U/L) supported extensive tissue involvement. The combination of findings was consistent with advanced metastatic malignancy complicated by hepatic failure, protein-calorie malnutrition and secondary coagulopathy. However despite supportive management, the patient's condition critically deteriorated. **Discussions :** This case shows the aggressive nature of untreated parotid malignancy. The presence of distant metastases on the diagnosis considerably worsens the prognosis of the patient. Severe hypoalbuminemia and hypoproteinemia were likely multifactorial, reflecting both hepatic synthetic dysfunction and chronic malnutrition. Progressive hyperbilirubinemia, elevated cholestatic enzymes, and coagulopathy indicated advanced hepatic failure secondary to metastatic infiltration. When compared with earlier-stage parotid carcinomas described in the literature, this case underlines the dramatic impact of a delayed medical consultation on clinical outcomes. **Conclusions:** Advanced parotid tumors may initially present with nonspecific symptoms, leading to a delay in diagnosis. Early specialist referral in cases of persistent parotid enlargement is essential. This case

highlights the importance of prompt oncologic evaluation to prevent progression to irreversible metastatic disease and hepatic failure.

Keywords: parotid gland tumor, hepatic metastases, hepatic failure, delayed diagnosis

ADVANCED STAGE IV PELVIC ORGAN PROLAPSE ASSOCIATED WITH CHRONIC URINARY RETENTION IN AN ELDERLY PATIENT, CLINICAL AND FUNCTIONAL IMPLICATIONS

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Introduction: Pelvic organ prolapse (POP) is defined as the descent of pelvic organs due to weakening of the pelvic floor support structures, potentially leading to a vaginal bulge and significant impairment in quality of life. Advanced forms of POP may be associated with important urinary and functional complications, requiring careful evaluation and appropriate management. **Case Report:** An 81-year-old female patient presented to the outpatient clinic with complaints of vaginal bleeding. Clinical examination revealed a previously undiagnosed stage IV pelvic organ prolapse, associated with a markedly enlarged myomatous uterus. A notable particularity of the case was the long-standing evolution of the condition, with the patient reporting approximately 15 years of untreated prolapse, which had progressed to a complete eversion of the pelvic structures. **Discussions :** Pelvic organ prolapse is a common condition in elderly women, but long-standing untreated stage IV prolapse is now rarely encountered. In this case, a 15-year history of untreated prolapse led to severe anatomical changes, with complete eversion of the pelvic structures, highlighting the advanced progression of the disease in the absence of medical care. The patient presented with vaginal bleeding in the context of markedly altered pelvic anatomy, associated with a voluminous myomatous uterus. Such advanced presentations are often linked to significant functional impairment, including urinary disturbances, with a major impact on quality of life. **Conclusions:** Neglected pelvic organ prolapse may progress to advanced stages with severe anatomical and functional impairment, highlighting the importance of early diagnosis and timely management.

Keywords: Pelvic organ prolapse, Urinary retention, Advanced prolapse

ADVANCED SURGICAL MANAGEMENT OF A GIANT COMPRESSIVE FIBROID UTERUS WITH MULTIORGAN ADHESIONS AND SEGMENTAL URETERAL RESECTION ASSOCIATED WITH CHRONIC CALCULOUS CHOLECYSTITIS

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Introduction: Giant uterine fibroid tumors represent rare but surgically demanding entities, particularly when associated with extensive pelvic adhesions and compression of adjacent visceral structures. Although benign, large fibroids may clinically mimic advanced pelvic malignancy due to mass effect, distortion of anatomical planes, and involvement of urinary and digestive organs. Multidisciplinary surgical planning is essential when ureteral involvement or adjacent organ compromise is suspected. This report illustrates the operative challenges of managing a giant fibroid uterus complicated by adhesive syndrome and associated chronic calculous cholecystitis.

Case Report: A 67-year-old female was admitted electively for chronic pelvic pain, abnormal uterine bleeding, urinary dysfunction, and altered bowel habits. Preoperative imaging revealed a markedly enlarged fibroid uterus exerting a compressive effect on the rectum, bladder, and right ureter, without clear radiological distinction from malignant pathology. Exploratory laparotomy revealed extensive pelvic adhesive disease. A giant uterine mass originating at the body-isthmus junction was found densely adherent to the bladder, rectum, and right ureter. Chronic calculous cholecystitis was also identified, and cholecystectomy was performed. After meticulous adhesiolysis, total extracapsular Wiert hysterectomy with right oophorectomy and left adnexectomy was completed. Due to severe fibrosis and intimate adherence of the ureter to the uterine wall, a 1 cm segmental ureteral resection was required. Ureteral reconstruction was achieved via termino-terminal (T-T) anastomosis with double-J stent placement, performed in collaboration with the urology team. Postoperative evolution was favorable, without urinary leakage or infectious complications. The patient was discharged with multidisciplinary follow-up.

Discussions : Giant fibroid lesions may simulate malignant disease through aggressive anatomical displacement and adhesions. Ureteral involvement significantly increases surgical complexity and risk of iatrogenic injury.

Segmental ureterectomy with primary anastomosis is a safe reconstructive option when adequate vascularization is preserved. Simultaneous management of associated abdominal pathology may reduce the need for future interventions. **Conclusions:** Management of a giant compressive fibroid uterus requires precise anatomical dissection, multidisciplinary coordination, and individualized operative strategy. Early recognition of ureteral compromise is crucial to prevent long-term functional morbidity.

Keywords: hysterectomy, fibrous uterus, Wiert Procedure, Chronic calculous cholecystitis

ADVANCED SURGICAL MANAGEMENT OF EXTENDED SUBCHONDRAL LESIONS AND HIGH-GRADE CHONDROPATHY OF THE KNEE: A CASE REPORT ON BMAC-AUGMENTED SUBCHONDROPLASTY

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Introduction: Acute trauma or chronic repetitive overload impaction resulting in cartilage injuries have limited spontaneous healing and propensity to worsen over time. The goal of this case report is to highlight the effectiveness of autologous tissue via bone marrow aspirate concentrate (BMAC) in high grade chondropathy and subchondral lesion when compared to traditional calcium phosphate subcondroplasty. **Case Report:** We present the case of 52-year-old male patient, presented with scheduled appointment for additional investigation and specialized treatment. After the objective examination, respectively radiological and magnetic resonance, the diagnosis was: Extended subchondral lesion left external femoral condyles left knee. Internal meniscus anterior horn lesion. ICRS IV chondropathy external femoral condyles. ICRS III chondropathy external tibial plateau. Left anterior intermeniscal ligament lesion. Hoffa body hypertrophy. Inflammatory synovitis. After appropriate preoperative preparation, under spinal anesthesia. The surgery was performed on external femoral condyle subchondroplasty with 2 AccuFill needles after prior augmentation with BMAC, meniscal shower, debridement, synovectomy, joint lavage, joint cauterization, active drainage. The patient's postoperative evolution was favorable, with no signs of local inflammation noted at the time of discharge. Treatments followed: thromboprophylaxis, antibiotic prophylaxis, analgesic, sedative along with recommendation of a recovery program with specialized center. Sterile dressings from 2-2 days until removal of threads and removal of sutures 12-14 days postoperatively. **Discussions :** Traditional calcium phosphate based subcondroplasty showed good outcomes but lacks biological activity and may disrupt the subchondral environment. Leakage into the joint is a known complication. Autologous Bone Marrow Aspirate Concentrate (BMAC), rich in mesenchymal stem cells, enhances subchondroplasty by promoting osteogenesis, angiogenesis, and reducing fibrosis and inflammation but limited to guided fluoroscopy intraoperative. **Conclusions:** This case demonstrates that subchondroplasty augmented with BMAC is an effective approach for treating advanced subchondral lesions and high-grade chondropathy. By combining precise regenerative surgery with a rigorous postoperative pharmacological and physical therapy plan, it is successfully managed by the joint degeneration and promotes lasting functional recovery.

Keywords: Subchondral lesion, BMAC subchondroplasty, Chondropathy, ICRS

AGGRESSIVE KAPOSI SARCOMA AS THE INITIAL MANIFESTATION OF LATE-DIAGNOSED HIV INFECTION

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Introduction: Kaposi sarcoma (KS) is a multicentric vascular neoplasm strongly associated with immunosuppression, particularly in patients with advanced HIV infection. Although its incidence has declined in the era of combination antiretroviral therapy (ART), KS remains one of the most common AIDS-defining malignancies. Delayed diagnosis of HIV infection continues to represent a significant clinical issue, frequently leading to advanced disease stages, opportunistic infections, and malignancies at presentation. **Case Report:** We report the case of a 34-year-old male with a late HIV diagnosis, admitted in September 2019 for a 3-year history of progressive, painful violaceous plaques involving the left hand, inguinal region, and lower limb. MRI revealed subcutaneous infiltration of the left foot. HIV infection was confirmed (viral load: 247,000 copies/mL; CD4: 244 cells/mm³). At presentation, the patient had extensive cutaneous and mucosal lesions suggestive of Kaposi

sarcoma (KS), penile edema, inguinal lymphadenopathy, oral candidiasis, and hairy leukoplakia. Associated conditions included urinary tract infection with *Escherichia coli* and mucocutaneous candidiasis. Skin biopsy confirmed KS. Initial management included antibiotics, antifungals, anticoagulation, and supportive care. Antiretroviral therapy (tenofovir/emtricitabine plus dolutegravir) was initiated 10 days after admission. Systemic chemotherapy with paclitaxel and carboplatin was started two months later, leading to partial clinical improvement. After approximately one year, the patient achieved virological suppression (undetectable viral load) with only partial immune reconstitution (CD4: 329 cells/mm³). Despite viral suppression, in November 2021 the patient presented with disease progression, including systemic symptoms, generalized edema, disseminated KS lesions, lymphadenopathy, and suspected pulmonary involvement, in the context of declining CD4 count (194 cells/mm³). Second-line chemotherapy with pegylated liposomal doxorubicin was initiated; however, the clinical course was unfavorable, and the patient passed away in February 2022. **Discussions** : This case highlights the aggressive evolution of Kaposi sarcoma in the context of late HIV diagnosis and incomplete immune reconstitution. Persistent immunosuppression, despite virological control, remains a key factor in disease progression. The coexistence of opportunistic infections and malignancy further complicates management and negatively impacts prognosis. Delayed presentation and suboptimal adherence to oncologic follow-up contributed to the unfavorable outcome. **Conclusions**: Late HIV diagnosis remains associated with an increased risk of aggressive Kaposi sarcoma, particularly in the setting of persistent immunosuppression despite virological suppression. Early HIV testing, prompt initiation of ART, and close multidisciplinary follow-up are essential to improve immune recovery and clinical outcomes.

Keywords: Kaposi sarcoma, HIV late diagnosis, Opportunistic infections, Antiretroviral therapy

AGGRESSIVE MIDFEMORAL EWING SARCOMA COMPLICATED BY PATHOLOGICAL FRACTURE IN A PEDIATRIC PATIENT

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Introduction: Ewing Sarcoma is a highly aggressive primary bone tumor predominantly affecting children and adolescents. Early imaging-based characterization is essential, particularly in cases complicated by structural instability such as pathological fractures. **Case Report:** A 13-year-old male presented with progressive right thigh pain and functional impairment. Initial radiographs revealed a diaphyseal femoral lesion with a wide zone of transition, permeative cortical destruction, and mixed lytic-sclerotic features suggestive of malignancy. MRI demonstrated a large heterogeneous intramedullary tumor with high STIR signal, extensive bone marrow infiltration, and a significant extraosseous soft tissue component with cortical breakthrough. PET-CT showed intense FDG uptake at the femoral level without evidence of distant metastases, supporting a localized but highly active tumor. Despite initiation of chemotherapy (VIDE protocol), the patient sustained a pathological fracture following minor trauma, reflecting severe structural compromise. Follow-up MRI showed interval tumor progression with increased dimensions and extension toward the distal femur, along with abnormal callus formation and persistent soft tissue involvement. CT further detailed cortical destruction and aggressive periosteal reaction, including Codman triangle. A repeat biopsy was performed due to imaging progression, confirming Ewing Sarcoma. **Discussions** : This case highlights the dynamic role of multimodal imaging in both diagnosis and follow-up of pediatric bone sarcomas. While initial imaging established malignancy and local extent, sequential imaging was critical in detecting progression under treatment and identifying complications such as pathological fracture. The association of fracture after minimal trauma underscores the degree of biomechanical instability caused by tumor infiltration. **Conclusions:** In pediatric Ewing Sarcoma, imaging is essential not only for diagnosis and staging, but also for monitoring treatment response and anticipating complications. Locally aggressive disease may rapidly compromise bone integrity, making early recognition of fracture risk crucial for optimal multidisciplinary management.

Keywords: Ewing Sarcoma, pathological fracture, PET-CT, multimodal imaging

AGGRESSIVE PENILE SUBCUTANEOUS INFECTION CAUSED BY GROUP A STREPTOCOCCUS IN AN IMMUNOCOMPETENT PATIENT: A CASE REPORT

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Introduction: Subcutaneous infections of the genital region are rare but potentially life-threatening conditions characterized by rapid progression and the risk of leading to necrotizing infections such as Fournier's gangrene. They most frequently occur in immunocompromised patients with underlying chronic conditions such as diabetes mellitus, malignancy, or HIV infection, which predispose to severe bacterial spread along fascial planes. Although uncommon in immunocompetent individuals, their aggressive evolution requires early recognition and prompt surgical intervention to prevent systemic complications. **Case Report:** A 36-year-old male presented to the emergency department with fever, penile edema, erythema, and severe pain of the penile shaft. Two days earlier he had presented with similar symptoms and was discharged with methylprednisolone and topical Rivanol, but his condition worsened, leading to a second emergency visit and referral to the urology department. Laboratory tests revealed a markedly elevated C-reactive protein (CRP) of 400 mg/dL and leukocytosis of 18,000/ μ L. The patient denied local trauma, local injections, chronic diseases, or other risk factors, and serologic testing was negative for HIV and viral hepatitis. Due to severe inflammatory markers and clinical findings, urgent surgical exploration was performed. Examination revealed a hematoma at the level of the glans penis centered on a skin lesion. Circumcision with excision of the affected skin was performed, and intraoperative cultures confirmed Group A beta-hemolytic Streptococcus. The postoperative course was initially unfavorable, with superficial penile hematomas and bilateral hemiscrotal edema, raising suspicion of progressive cellulitis with early Fournier's gangrene, and prompting urgent reintervention. Penile degloving with hydrogen peroxide and betadine irrigation was performed, with placement of penile and bilateral scrotal drains and a suprapubic catheter. Subsequently, the patient showed progressive clinical improvement with intensive wound care, daily drain irrigation, and triple antibiotic therapy, accompanied by normalization of CRP and leukocyte counts. **Discussions :** The significance of this case lies in the absence of typical risk factors. Although severe genital infections usually occur in immunocompromised patients, this previously healthy patient tested negative for HIV and viral hepatitis. The rapid progression underscores the virulence of Group A beta-hemolytic Streptococcus and highlights the need for early recognition and aggressive management, even in immunocompetent individuals. **Conclusions:** Anogenital subcutaneous infections progress rapidly and can become life-threatening necrotizing infections. This case shows that such aggressive infections may occur even in immunocompetent patients. Early recognition, prompt surgical intervention, and appropriate antibiotics are critical to prevent systemic complications.

Keywords: Cellulitis, Group A Streptococcus, Fournier's Gangrene

AIRWAY MANAGEMENT CHALLENGES AFTER CAUSTIC INGESTION: A CASE OF DIFFICULT WEANING REQUIRING TRACHEOSTOMY

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Introduction: Caustic ingestion presents a medical emergency with rapid respiratory failure and severe upper gastrointestinal injury. Tissue damage depends on chemical substance, concentration, volume, and medical evaluation delay. Airway patency and esophageal damage must be assessed early since edema progression may require advanced airway treatment. **Case Report:** A 24-year-old male with grade I obesity, BMI 31.65, chronic tobacco usage, and chronic alcohol intake, with no other known medical history, presented to the Emergency Department after involuntarily ingesting approximately 100ml of a caustic substance. He reported heartburn and dyspnea six hours after consumption. The initial evaluation comprised laboratory tests, serial arterial blood gas studies, and imaging. Native cervical CT revealed 13 mm of hypopharyngeal mucosal edema, piriform recess blockage, digestive tract constriction, and circumferential esophageal edema. Laryngoscopy revealed airway patency, moderately hyperemic and edematous epiglottis, movable vocal cords, and mildly edematous laryngeal mucosa. A multidisciplinary examination resulted in ICU hospitalization. Corrosive ingestion was diagnosed, as were secondary caustic oropharyngeal lesions, metabolic disorders, and Zargar grade 1 to 2A esophagitis. At the

time of ICU admission due to the risk of increasing edema, orotracheal intubation was performed and mechanical ventilation and supportive therapy were started. A tracheostomy was performed to help with weaning of mechanical ventilation, after three trials that were negative. Afterwards, the patient was successfully switched to spontaneous breathing, decannulated, and transferred in stable condition. **Discussions** : This case illustrates the dynamic nature of airway injury following caustic ingestion. Although initial laryngoscopic findings suggested adequate airway patency, imaging demonstrated significant hypopharyngeal and esophageal edema, predicting a high risk of delayed obstruction. Early elective intubation was chosen to prevent emergent airway compromise. Prolonged mechanical ventilation was driven by airway edema, and tabacoo consume rather than primary pulmonary pathology due to caustic substance intoxication. Tracheostomy facilitated sedation reduction, improved airway management, and enabled successful ventilatory weaning. Repeated tracheal aspirates supported careful microbiological surveillance and targeted therapy. Multidisciplinary coordination was central to management, addressing airway protection, mechanical ventilation weaning, gastrointestinal injury, infection risk, and metabolic disturbances. **Conclusions**: Despite initial stable findings, caustic ingestion can quickly escalate to airway blockage, necessitating immediate airway protection. In this example, ongoing edema made ventilatory weaning difficult, resulting in multiple failed efforts due to asynchrony. Tracheostomy allowed for sedation decrease, more effective breathing, and progressive weaning. Securing and modifying airway care was critical for recovery and safe transfer in stable conditions.

Keywords: caustic ingestion, difficult weaning, tracheostomy, critically ill patient

AL AMYLOIDOSIS WITH SEVERE CARDIAC INVOLVEMENT – DIAGNOSTIC AND THERAPEUTIC CHALLENGE

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Introduction: Primary light-chain (AL) amyloidosis is a clonal malignant plasma cell disorder characterized by the deposition of misfolded proteins as amyloid fibrils in various organs. Cardiac involvement leads to progressive impairment of myocardial structure and function, frequently resulting in restrictive cardiomyopathy and progressive heart failure. **Case Report:** We report the case of a 69-year-old female patient, a non-smoker, with a history of arterial hypertension and class III obesity, admitted for congestive heart failure with pulmonary and systemic congestion. Laboratory evaluation revealed: elevated troponin and N-terminal pro-B-type natriuretic peptide (NT-proBNP) levels, and normal creatine kinase (CK) and creatine kinase myocardial band (CK-MB) levels. Transthoracic echocardiography showed concentric left ventricular hypertrophy, decreased left ventricular ejection fraction, and severe longitudinal dysfunction. Hematological investigations revealed an immunoglobulin A (IgA) monoclonal gammopathy with lambda light chains, Bence-Jones proteinuria, free lambda light chains, and a kappa/lambda ratio of 0.062, suggesting significant monoclonal lambda plasma cell proliferation. Imaging investigations (bone scintigraphy, whole-body computed tomography) and bone marrow biopsy excluded multiple myeloma and transthyretin amyloidosis (ATTR), supporting the diagnosis of AL amyloidosis with severe cardiac involvement. During follow-up, cardiac biomarkers rose markedly, reflecting rapid progression of heart failure. Atrial fibrillation evolved from paroxysmal to permanent, with thrombotic complications. Renal function progressively deteriorated, accompanied by progressive pulmonary and systemic congestion, neurovegetative disturbances, persistent hypotension, and hemodynamic instability. The patient was not considered eligible for autologous stem cell transplantation due to multiorgan involvement (cardiac, renal, and neurovegetative), elevated troponin levels, and advanced heart failure (NYHA class IV). In this context, a bortezomib-based treatment was initiated, planned for four to six cycles, with response assessment after every two cycles. **Discussions** : This case illustrates the diagnostic challenges of AL amyloidosis with severe cardiac involvement, as early signs were masked by common comorbidities such as hypertension and obesity. The rapid progression of heart failure, coupled with multiorgan involvement and significantly elevated cardiac biomarkers, illustrates the aggressive nature of myocardial amyloid deposition in this patient. Management in such advanced cases requires careful consideration of comorbidities and organ dysfunction to guide individualized therapeutic strategies. **Conclusions:** Early identification of a pattern suggestive of infiltrative cardiac disease and prompt referral for hematological investigations allows rapid establishment of the diagnosis and initiation of specific treatment, with a direct impact on clinical evolution and prognosis.

Keywords: AL amyloidosis, misfolded proteins, IgA monoclonal gammopathy, lambda light chains

ALL PATHWAYS START FROM THE HEART: SEPTIC EMBOLIZATION INVOLVING MULTIPLE SITES, SECONDARY TO INFECTIVE ENDOCARDITIS IN PEDIATRIC PATIENTS - A CASE REPORT

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Introduction: Infective endocarditis is a rare but severe infection of the endocardium, the innermost layer of the heart, often involving the heart valves. It can lead to life-threatening complications including septic embolism and immunological disorders. In the absence of appropriate treatment, mortality in bacterial endocarditis is 100% and it remains high even under conditions of correctly administered treatment. Early diagnosis and aggressive management, including antibiotics and surgical intervention, are essential, especially in pediatric patients. **Case Report:** We present the case of a 16-year-old female with a history of nasal and thong piercings and tattoos who presented to the emergency department with left hypochondrial pain and fever. Clinical examination revealed pallor, splenomegaly and a grade III systolic murmur in the mitral area. Laboratory investigations showed inflammatory syndrome, anemia, and elevated cardiac markers. Blood cultures confirmed infection with *Streptococcus mitis*. Echocardiography revealed a resolved abscess area and vegetation on the anterior mitral leaflet, with leaflet fissures, grade III mitral regurgitation, and pericardial effusion, supporting endo-myocarditis with pericarditis. The diagnosis of infective endocarditis was established using Modified Duke Criteria, fulfilling two major criteria: echocardiographic vegetation on the anterior mitral leaflet with significant regurgitation and positive blood cultures. During hospitalization she developed tenderness, edema and cyanosis of the left foot. Further imaging identified splenic lower pole infarction, aneurysmal dilatation of the right iliac artery, middle cerebral artery aneurysm, and pulmonary consolidation, suggestive of mycotic aneurysms from septic embolization. Initial therapy included ceftriaxone and gentamicin for 11 days followed by ampicillin for 28 days. The patient underwent stent-graft implantation for the iliac artery aneurysm and mitral valve replacement with a mechanical prosthesis, continuing antibiotic therapy and initiating long-term anticoagulation therapy. The patient responded well, with gradual recovery. Continuous follow-up is required to monitor the cerebral aneurysm, prosthetic valve function and anticoagulation. **Discussions :** Infective endocarditis in pediatric patients is a rare condition, and its occurrence in association with piercings or tattoos is even more unusual. *Streptococcus mitis*, normally a commensal of the oral cavity, can become invasive through biofilm formation and strong endothelial adhesion. It can involve the endocardium and cause endocarditis, even in patients without preexisting cardiac disease. **Conclusions:** This case exemplifies the severe complications that can arise in pediatric infective endocarditis, including septic emboli leading to splenic infarction, arterial aneurysms, and lung abscesses. It underscores the importance of early diagnosis, prompt surgical intervention, and a multidisciplinary approach to mitigate both immediate and long-term risks.

Keywords: Infective endocarditis, pediatric, septic embolism

AMIODARONE-INDUCED THYROTOXICOSIS PRESENTING AS UNSTABLE ANGINA IN A PATIENT WITH ISCHEMIC CARDIOMYOPATHY

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Introduction: Amiodarone is a widely used class III antiarrhythmic agent for rhythm control in patients with atrial fibrillation (AF), but its use is frequently complicated by thyroid dysfunction that may mimic or exacerbate cardiac ischemia. Recognizing amiodarone-induced thyrotoxicosis as a cause of new angina-like symptoms in patients with ischemic cardiomyopathy is clinically significant, particularly when coronary angiography shows no new obstructive lesions. **Case Report:** We report a 50-year-old man with a history of anterior ST-elevation myocardial infarction (STEMI) treated with late revascularization of the left anterior descending artery and subsequent heart failure with reduced ejection fraction (LVEF 30%). He had recurrent episodes of persistent AF successfully cardioverted to sinus rhythm and was maintained on amiodarone 200 mg/day and optimal guideline-directed heart failure therapy. After 3 years, one week before the current admission, he developed progressively worsening typical angina, becoming almost daily, associated with dyspnea and fatigue. On presentation, ECG showed sinus rhythm with horizontal ST-segment depression in the anterior leads, and unstable angina was suspected. High-

sensitivity troponin levels were within normal limits and serial measurements remained negative. Coronary angiography demonstrated a patent LAD stent without new significant stenoses. Given the discrepancy between symptoms and angiographic findings, thyroid function was assessed, revealing suppressed TSH and elevated free T4, consistent with hyperthyroidism. Amiodarone was discontinued and treatment with thiamazole and oral prednisone was initiated, targeting suspected amiodarone-induced thyrotoxicosis. At one-month follow-up, the patient reported complete resolution of chest pain and improved exercise tolerance, with normalization of ST-segment changes and a marked improvement in thyroid function tests. **Discussions** : This case illustrates how amiodarone-induced thyrotoxicosis can present with angina-like chest pain and ischemic-appearing ECG changes in a patient with severe ischemic cardiomyopathy, in the absence of new obstructive coronary disease, consistent with reports that hyperthyroidism can precipitate supply-demand ischemia in high-risk patients. Early recognition of thyroid dysfunction and prompt initiation of combined antithyroid and glucocorticoid therapy can lead to rapid clinical improvement and may prevent unnecessary interventional procedures. **Conclusions**: In patients with prior STEMI, reduced ejection fraction and chronic amiodarone therapy, new-onset angina with ischemic-like ECG changes should prompt evaluation for amiodarone-induced thyrotoxicosis, especially when coronary angiography is unchanged. This case underscores the importance of routine thyroid monitoring and multidisciplinary management in optimizing outcomes in complex cardio-endocrine interactions.

Keywords: Amiodarone-Induced Thyrotoxicosis, Unstable Angina, Heart Failure With Reduced Ejection Fraction

AN ADVANCED ENDOSCOPIC PROCEDURE IN A CASE OF TREATMENT-REFRACTORY NON-EROSIVE GASTROESOPHAGEAL REFLUX DISEASE

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Introduction: Anti-reflux mucosal ablation (ARMA) is a minimally invasive endoscopic therapy that strengthens the gastroesophageal junction flap valve and reinforces the physiological anti-reflux barrier for patients with persistent symptoms of Gastroesophageal Reflux Disease (GERD), despite acid-suppressive therapy. This controlled thermal ablation typically uses argon plasma coagulation and creates a superficial circumferential lesion at the gastric cardia. Healing induces localized fibrosis and scar formation, narrowing the junction and restoring valve competence. **Case Report:** A 70 year old patient known with reactive gastropathy and chronic gastroduodenitis was admitted in the gastroenterology clinic, accusing gastroesophageal reflux, heartburn, epigastric pain and progressively worsening symptoms unresponsive to proton pump inhibitor therapy combined with prokinetic agents and other acid-suppressive medications. The clinical evaluation did not reveal any contraindications to endoscopic procedures and an oral contrast swallow study was performed, confirming gastroesophageal reflux. Initial endoscopic assessment demonstrated chronic erosions in the duodenum and a hyperemic gastric antrum with chronic erosive changes. The esophageal mucosa appeared endoscopically normal, with no evidence of hiatal hernia, esophageal varices, or other lesions that would contraindicate the ARMA procedure. Following precautionary evaluations, the ARMA intervention consisted of semicircumferential gastric mucosal ablation by coagulation using argon plasma at a power setting of 40 W, over a width of approximately 2 cm, leaving an intact mucosal area of approximately 2 cm in width. The procedure was completed without incident. The patient's clinical condition remained stable throughout the hospitalization, and, given hemodynamic and respiratory stability, they were discharged with continuation of their baseline pharmacological therapy. **Discussions** : ARMA represents a less complex and potentially safer alternative to anti-reflux mucosectomy (ARMS) in patients without large hiatal hernias, enabling easier retreatment and conferring a reduced risk of perforation. Its advantages include low equipment cost, outpatient feasibility, and no mandatory general anesthesia, while limitations involve restriction to non-severe disease and limited long-term data. **Conclusions**: In conclusion, in this case of treatment-refractory gastroesophageal reflux disease, comprehensive pre-procedural assessment and intervention resulted in a marked improvement in the patient's quality of life. The ARMA procedure demonstrated procedural simplicity, a favorable safety profile, and clinical efficacy, highlighting its significance in the management of treatment-refractory gastroesophageal reflux disease.

Keywords: GERD, ARMA, Endoscopy

AN INFILTRATIVE DECEPTION: A CASE OF LINITIS PLASTICA PRESENTING AS PSEUDOACHALASIA

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Introduction: Diffuse-type gastric adenocarcinoma, one of the two histological subtypes in the Lauren classification, is characterized by aggressive infiltration of discohesive signet ring cells and a desmoplastic reaction that thickens and stiffens the gastric wall, producing the classic linitis plastica appearance. In some cases, tumor infiltration of the myenteric plexus may lead to pseudoachalasia, a rare condition that mimics the clinical and diagnostic features of primary achalasia. **Case Report:** We present the case of a 70-year-old female patient who presented to the emergency department with a month-old history of emesis and dysphagia for both liquids and solids. Computed tomography scans of the chest, abdomen and pelvis showed thickening of the gastric walls and a distended esophagus with stasis. An esophagogastroduodenoscopy (EGD) was performed, with resistance at the passage through the cardia, demonstrating hypertrophied, infiltrative and edematous gastric folds that distend with difficulty at insufflation, imparting a "leather bottle" appearance, the anterior wall of the lesser curvature presenting a deep ulcer with a dirty base. Multiple biopsies were taken for histopathological examination, the one taken from the ulcer displaying an infiltrative growth pattern composed of discohesive cells with large cytoplasmatic mucin vacuoles, creating a signet ring cell morphology. The serum carbohydrate antigen 19-9 (CA 19-9) level was elevated at 190 U/mL (reference range <37 U/mL); however, given its limited specificity, this finding was considered supportive but not diagnostic. The patient was treated symptomatically until she voluntarily terminated care against medical advice and chose to temporize surgical gastrectomy. **Discussions :** Malignant pseudoachalasia is an uncommon presentation of gastric cancer, making it difficult to differentiate from idiopathic achalasia, but rapidly progressive dysphagia and older age favor a secondary cause. The diffuse infiltration of cancer cells can alter the function of the myenteric plexus, resulting in impaired relaxation of the lower esophageal sphincter and esophageal dilation, which mimics achalasia. This growth pattern of the tumor also raises difficulties regarding histological confirmation, as the predominantly submucosal involvement can lead to false-negative biopsies, the superficial mucosa being spared. In our case, the tumor spread superficially to the mucosa, manifesting as a malignant ulcer that enables the acquisition of standard biopsies. **Conclusions:** Diffuse gastric cancer should be considered in patients with rapidly progressive achalasia-like symptoms, as it may be the initial manifestation of linitis plastica. Meticulous inspection and sampling of any gastric mucosa abnormality during the EGD, taking multiple biopsies is imperative.

Keywords: pseudoachalasia, diffuse gastric cancer, linitis plastica

ANAESTHETIC AND THERAPEUTIC CHALLENGES IN A CASE OF EXTENSIVE CUTANEOUS SEPSIS REQUIRING MULTIPLE AMPUTATIONS

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Introduction: Wet gangrene of the lower limb represents a major surgical emergency, frequently associated with severe sepsis and organ dysfunction. Patients frequently present with significant metabolic derangements that may increase perioperative risk and require urgent correction prior to definitive surgical management. Timely recognition and appropriate sequencing of resuscitative, metabolic, and surgical interventions are essential to improve outcomes in these critically ill patients. **Case Report:** A 70-year-old patient presented to the emergency department with wet gangrene of the left lower limb. Medical history included peripheral arterial occlusive disease of the lower limbs and untreated arterial hypertension. Laboratory tests revealed severe renal failure and marked hyperkalemia: creatinine 11,68 mg/dL, urea 250 mg/dL, potassium 7.5 mmol/L. Although transfemoral amputation was indicated, surgery was temporarily postponed in order to perform an emergency hemodialysis session. After dialysis, laboratory parameters improved (creatinine 4.66 mg/dL, urea 124 mg/dL, potassium 4.41 mmol/L), allowing the surgical procedure to proceed. Postoperatively, the patient was admitted to the intensive care unit with septic shock of cutaneous origin, requiring vasopressor support with norepinephrine and intermittent hemodialysis. The clinical course was further complicated by penile necrosis and partial umbilical necrosis, which required additional surgical interventions. Subsequently, the patient developed severe hemodynamic deterioration with

anuria and the need for multiple vasopressors. **Discussions** : Wet gangrene in the setting of advanced peripheral arterial disease can rapidly lead to systemic infection and organ dysfunction. This case highlights the importance of preoperative metabolic stabilization, particularly in the presence of severe hyperkalemia and renal failure, where urgent hemodialysis may be required prior to surgery. Despite appropriate management and timely source control, the patient developed septic shock and ischemic complications, likely related to microcirculatory impairment and vasopressor use. These findings underscore the complexity of managing critically ill patients and the need to balance urgent surgical intervention with optimization of physiological status. **Conclusions**: This case highlights the complexity of perioperative management in patients with severe sepsis and multiorgan dysfunction. Early recognition, prompt metabolic stabilization, and timely surgical intervention remain crucial for improving outcomes in this high-risk population.

Keywords: Wet Gangrene, Sepsis, Renal Failure, Anaesthesia

ANTICOAGULATION IN CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION ASSOCIATED WITH HEREDITARY HEMORRHAGIC TELANGIECTASIA (OSLER-WEBER-RENDU DISEASE): BALANCING THROMBOTIC AND HEMORRHAGIC RISK

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Introduction: Hereditary Hemorrhagic Telangiectasia (HHT), also known as Osler-Weber-Rendu syndrome, is an autosomal dominant disorder. The formation of telangiectasias and visceral arterio-venous malformations (AVMs) characterizes the disease, which will predispose the patient to an increased risk of bleeding. Chronic thromboembolic pulmonary hypertension (CTEPH), on the other hand, is a complication of a pulmonary embolism which obstructs the pulmonary vasculature, resulting in vascular remodeling and eventually right sided heart failure. It is a chronic condition requiring life-long anticoagulation to prevent further thromboembolic events. The combination of the two conditions therefore presents a unique clinical challenge, where the need for anticoagulation in CTEPH must be weighed against the risk of potentially severe bleeding in HHT. **Case Report:** A 71-year-old female presents with dyspnea at low effort and bilateral leg edema. Past medical history includes a diagnosis of HHT since the age of 7, left inferior pulmonary lobectomy for recurrent bleeding, right pulmonary AVM and repetitive GI-bleedings. Physical examination showed perioral cyanosis, telangiectasias on cheeks and lips, and lower limb edema. Further examination revealed a systolic murmur in the tricuspid area and hepatosplenomegaly. Patient received treatment at admission and was discharged. In 2020, the patient developed a pulmonary embolism after a severe SARS-CoV2 infection and was re-admitted. Imagistic studies and right heart catheterization confirmed right heart failure and precapillary pulmonary hypertension, and a regimen of VKA anticoagulation was started. A few months later, the patient presented with a severe upper GI bleed, and the anticoagulation therapy was discontinued. In august 2022 the patient was admitted again due to severe abdominal pain, and an angio-CT was performed revealing extensive portal thrombosis. Given the imbalance between hemorrhage and thrombosis in this patient, anticoagulation was initiated with Enoxaparin. The patient did not reappear for further evaluation. **Discussions** : There is limited literature describing cases such as this. According to the Second International HHT guidelines, the bleeding risk in HHT is not an absolute contraindication for anticoagulation therapy when required. In this case, CTEPH proposes an indication and therefore raises concerns of hemorrhagic and thrombotic risk. When choosing a therapy, warfarin and heparin are preferred over direct oral anticoagulants (DOACs), partly due to available reversal drugs. Before initiating anticoagulant therapy, an individual risk assessment should be made, and dual or combination therapies avoided. **Conclusions:** This case highlights the complexity of treating a patient with HHT requiring anticoagulation for CTEPH. With correct therapy selection and monitoring, anticoagulation may be safely administered.

Keywords: Hereditary Hemorrhagic Telangiectasia, Osler-Weber-Rendu syndrome, Chronic Thromboembolic Pulmonary Hypertension, Anticoagulation

APERT SYNDROME – MULTIDISCIPLINARY CHALLENGES IN A SEVERE CASE WITH LONG-TERM EVOLUTION: CASE REPORT

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Introduction: Apert syndrome is a rare autosomal dominant genetic disorder caused by mutations of the FGFR2 gene, with an estimated incidence of approximately 1:80,000-1:160,000 live births. The mutation typically occurs de novo, in the absence of a family history. However, genetic counseling is recommended for couples who have a child diagnosed with Apert syndrome in order to assess the risk of recurrence and to guide reproductive decisions in subsequent pregnancies. The condition is characterized by a clinical presentation that includes premature craniosynostosis, craniofacial dysmorphism, and complex syndactyly, and is frequently associated with neurocognitive impairment of variable severity. The neurological and psychiatric impact of this condition can significantly influence the clinical course and functional prognosis. **Case Report:** We present the case of a 35-year-old female patient diagnosed with Apert syndrome at birth, with evident congenital polymalformations and severe dystrophy. The initial clinical presentation included craniosynostosis, facial hypoplasia, exophthalmos, severe syndactyly of the hands and feet, as well as cranio-cerebral malformations. Childhood evaluation revealed severe intellectual disability, marked motor delay, alalia, and disharmonic dwarfism. Following a surgical intervention in childhood, performed to partially separate the fused digits, the patient acquired a limited degree of autonomy in daily activities through improved functional grasp. Rehabilitation included physiotherapy programs, psychosensory stimulation, and interventions aimed at developing motor abilities. Superimposed on the severe intellectual deficit, acute psychotic disorders appeared during puberty, associated with self-aggressive behavior and chronic insomnia. The subsequent clinical course required the initiation of long-term antipsychotic treatment and continuous neuropsychiatric monitoring. At present, the patient presents severe intellectual disability with major adaptive deficit, superimposed on the underlying genetic pathology. **Discussions :** This case highlights the complexity of Apert syndrome, not only through severe structural malformations but also through its associated neuropsychiatric impact. Cognitive impairment and behavioral disturbances contribute significantly to global disability and emphasize the need for an integrated therapeutic approach. Early surgical interventions and rehabilitation programs may improve functional autonomy; however, the prognosis remains reserved in cases with severe neurocognitive impairment. **Conclusions:** Apert syndrome represents a rare genetic disorder with major multisystem impact. Long-term management requires a multidisciplinary approach and continuous monitoring, with the aim of optimizing functional abilities and improving quality of life, within the limits imposed by the severity of the congenital condition.

Keywords: Apert Syndrome, Neuropsychiatric disorder, Congenital condition, Neurocognitive impairment

ARRESTED HEART, SHOCKED MYOCARDIUM: A CASE OF CARDIOGENIC SHOCK AFTER ACUTE MYOCARDIAL INFARCTION

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Introduction: Acute myocardial infarction (AMI) complicated by cardiac arrest and cardiogenic shock is associated with substantial mortality and risk of multi-organ failure. Outcomes depend on rapid resuscitation, early coronary reperfusion, and structured intensive care. This case evaluates clinical evolution, therapeutic interventions, and prognostic indicators associated with survival and functional recovery. **Case Report:** An adult male was admitted to the Anesthesia and Intensive Care Unit following successful out-of-hospital cardiopulmonary resuscitation for cardiac arrest of presumed cardiac origin. On admission, he presented with hemodynamic instability requiring vasopressor and inotropic support, consistent with cardiogenic shock. Electrocardiographic changes and elevated cardiac troponin levels confirmed the diagnosis of AMI. Emergency coronarography identified a culprit coronary lesion, and percutaneous coronary intervention (PCI) was performed with restoration of coronary perfusion. The patient required invasive mechanical ventilation and temporary cardiac pacing due to rhythm disturbances. Initial laboratory findings showed elevated lactate levels, indicating tissue hypoperfusion, along with transient renal and

hepatic dysfunction. Prognostic scores, including SOFA and APACHE II, indicated severe critical illness at admission, followed by progressive improvement during hospitalization. **Discussions** : Survival in such cases is closely linked to early return of spontaneous circulation, rapid revascularization, and optimized organ support. Lactate clearance and decreasing severity scores were consistent with improving perfusion and organ function. Gradual reduction and discontinuation of vasopressor and inotropic therapy reflected hemodynamic stabilization. Recovery of intrinsic cardiac rhythm allowed weaning from temporary pacing. Respiratory function improved progressively, and a successful spontaneous breathing trial supported safe extubation. **Conclusions**: Although the initial presentation was severe, timely diagnosis and coordinated multidisciplinary management resulted in favorable clinical evolution. The patient was successfully weaned from vasoactive support and temporary pacing, extubated after a positive spontaneous breathing trial, and subsequently transferred to the cardiology ward for continued care and rehabilitation.

Keywords: out of hospital cardiac arrest, cardio-pulmonary resuscitation, acute myocardial infarction, percutaneous coronary intervention

ASEPTIC LOOSENING ASSOCIATED WITH PAPROSKY IIIA FEMORAL DEFECT FOLLOWING CEMENTED IMPLANTATION OF A CEMENTLESS-DESIGN STEM IN TOTAL HIP ARTHROPLASTY

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Introduction: Total hip arthroplasty (THA) is among the most widely performed and effective orthopedic procedures. It relieves pain and restores function by replacing the femoral head and acetabular articular surface. A leading THA complication is aseptic femoral and acetabular loosening. This can be caused by mechanical instability due to fixation failure, such as cement debonding, and macrophage-mediated osteolysis in response to particulate debris from wear or prosthesis micromotion. This case presents an unusual fixation scenario in which the primary THA used a cementless-design femoral stem implanted with cement. **Case Report:** A 70-year-old female with a prior right cemented THA presented with aseptic loosening of both femoral and acetabular components. Radiographic evidence showed radiolucent lines around the femoral stem cement mantle and acetabular cup, cement extravasation outside the femoral cortex, stem deviation within the intramedullary canal and increased inclination of the acetabular cup. The femoral bone loss was classified as a Paprosky type IIIA defect, characterized by metadiaphyseal bone loss with a minimum of 4 cm of intact cortical bone remaining in diaphysis. Revision THA was performed. The extracted femoral stem displayed porous characteristics typical of cementless designs despite having been implanted using cement fixation. A cortical window in the femur was created to facilitate cement removal. Both prosthetic components were replaced with a Müller II acetabular cup (50/28mm), a Targos femoral stem (size 12, 250mm) and a stainless steel femoral head (28mm, 12/14 taper). Fixation was achieved using Palamed G cement, and the cortical window was stabilized with a metal reconstruction mesh and three cerclage cables secured circumferentially around the femur. The postoperative evolution was favorable with satisfactory recovery. **Discussions** : Although THA is generally durable, aseptic loosening may occur and require revision surgery. Cemented stems rely on a polymethyl methacrylate cement mantle around them to anchor to the femur, while cementless stems are implanted using press-fit fixation and bonding is achieved through osseointegration within the intramedullary canal via bone growth onto their porous surface. Implant surface characteristics influence cement bonding behavior, with rough surface stems producing more debris in case of debonding and presenting higher rates of loosening. Thus, consistency between stem design and fixation technique is important to minimize complication risk. Since this case involved an implant-fixation mismatch, it may have contributed to loosening. **Conclusions:** Compatibility between stem design and fixation method is important to reduce the long-term risk of loosening in THA.

Keywords: total hip arthroplasty, aseptic loosening, revision hip arthroplasty, femoral stem fixation

ASSOCIATION OF CLINICAL AND EPIDEMIOLOGICAL FACTORS WITH COLORECTAL POLYPOID LESIONS: A RETROSPECTIVE STUDY

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Introduction: The risk of developing colonic polyps increases with age, particularly after 50 years, key risk factors include family history of colorectal neoplasia, inflammatory bowel disease, and lifestyle factors such as obesity, smoking and alcohol consumption. Evaluation of colorectal polyps helps us identify clinical and demographic risk factors which are a critical component for the previously mentioned assessment. Clinical history, age, sex, and smoking status are significant predictors of the presence of macroscopic colonic polypoid lesions along with serving as significant statistical predictors for the presence of macroscopic polypoid lesions. **Case Report:** We analyzed the demographic data of patients who presented between 01.01.2023 and 31.12.2023 for endoscopic polypectomy. The mean age indicated by the demographic profile in our statistical analysis was 63.8±10.5 years, with the age range spanning from 35 to 86 years. 58.9% (146) of our patients were male, whilst the rest of 41.1% were female. Nearly half of the clinical group (49%) were identified as smokers. Anemia was also present in 12.6% of the participants. Additionally, 26.2% of the cohort of patients presented a history of polyps, inflammatory bowel disease or colorectal cancer, whilst 12.1% had a history of surgical interventions of their colon. Upon examination of the polyps, in more than 16.9% of cases, more than two polyps were identified. Evaluation of the macroscopic description of the lesions, the most prominent type was sessile polyp (83.9%), followed by pedunculated (12.9%) and flat elevated mucosa and flat mucosal change being 1.6% each. **Discussions :** Bivariate analysis revealed no statistically significant associations with the presence of binary lesions, despite the presence of potential risk factors such as advanced age and a high smoking rate within the patient cohort. No significant correlations were found between lesion presence and smoking status ($p = 0.370$), sex ($p = 0.847$), or age groups ($p = 0.754$). Binomial logistic regression, along with multinomial logistic regression, was performed to evaluate the predictive value of combined clinical variables for binary and macroscopic lesion outcomes. Both models were statistically non-significant ($p = 0.461$ and $p = 0.938$, respectively). **Conclusions:** In this patient cohort, traditional demographic and clinical variables did not demonstrate statistically significant predictive value for the occurrence of polypoid lesions. These findings suggest that standard clinical factors alone may be insufficient as independent predictors of lesion outcomes in this population.

Keywords: Colorectal polyps, Risk factors, Endoscopic polypectomy, Clinical predictors

ASSOCIATION OF ESOPHAGEAL ATRESIA WITH A SEVERE CONGENITAL HEART MALFORMATION IN THE NEWBORN

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Introduction: Esophageal atresia is a congenital anomaly of the gastrointestinal tract, characterized by interruption of the esophagus, which does not connect to the stomach, often accompanied by tracheobronchial fistula. Tetralogy of Fallot is a severe congenital heart malformation, characterized by four anatomical defects (ventricular septal defect, pulmonary stenosis, dextroposition of the aorta, right ventricular hypertrophy) that requires total corrective surgery, usually in the first year of life. **Case Report:** We present the case of a term newborn, gestational age 39/40 weeks, birth weight 3780 g, length: 53 cm, cranial perimeter: 35 cm, Apgar score 8/1' and 8/5', known with antenatal diagnosis of congenital heart malformation - Tetralogy of Fallot with moderate hypoplasia of the trunk and pulmonary branches. The birth occurred vaginally, without pathology of labor/expulsion. Postpartum adaptation with generalized cyanosis unresponsive to oxygen administration, functional respiratory syndrome (tachypnea, subcostal draft), SatO₂: 75% at 15 minutes of life. Astrup from the umbilical cord reveals metabolic acidosis with lactic acidemia 7.7 mmol/l. She benefited from support for the transition to extrauterine life and oxygen therapy. Based on the clinical examination (abundant oropharyngeal secretions requiring frequent suctioning) and the radiological appearance, suspicion of esophageal atresia with tracheoesophageal fistula is raised. The newborn is transferred to the neonatal intensive care unit, where thermal comfort, parenteral nutrition through umbilical vein catheterization, and prophylactic antibiotic therapy are ensured.

When attempting to insert the nasogastric tube, it curls and turns without allowing advancement. Surgical intervention is performed through a right anterolateral thoracotomy, in the 5th intercostal space. After dissection of the aortic cross, the eso-tracheal fistula is identified and closed with double ligation, performing a primary end-to-end eso-esophageal anastomosis and gastrostomy. The postoperative evolution was favorable, the newborn being monitored cardiologically through serial echocardiograms, with corrective cardiac intervention to be performed later. **Discussions** : Despite the fact that the patient associates two major congenital malformations, the first intention was to cure the esophagous fistula, restore the integrity of the esophagus and place a gastrostomy (due to swallowing disorders and the risk of aspiration pneumonia). Thus, through repeated interdisciplinary consultations, the surgical resolution of the digestive malformation was prioritized. **Conclusions**: The association of the two congenital anomalies represents a challenge that requires informing the parents about the risks and prognosis, as well as a multidisciplinary team that includes a neonatologist, pediatric cardiologist and pediatric surgeon, as well as neonatal intensive care measures.

Keywords: Tracheoesophageal fistula, gastrostomy, tetralogy of Fallot

ASSOCIATION OF RETINAL VASCULAR PARAMETERS WITH COGNITIVE FUNCTION IN HYPERTENSIVE PATIENTS: AN AI-ASSISTED ANALYSIS

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Introduction: Arterial hypertension produces microvascular alterations at the cerebral level that may be associated with cognitive impairment. The retina, an extension of the central nervous system, can reveal these changes and represents a readily accessible site for non-invasive assessment. This study aims to explore the relationship between retinal vascular parameters, measured using an artificial intelligence tool (AutoMorph), and cognitive function. **Case Report:** The study included 24 hypertensive patients, divided into two groups based on the Montreal Cognitive Assessment (MoCA) score: those with cognitive impairment (MoCA < 26) and those without cognitive impairment (MoCA ≥ 26). Retinal images of the left eye were analyzed using AutoMorph, automatically generating multiple retinal indices, with the analysis focusing on vascular tortuosity parameters. Comparisons between groups and correlations with MoCA score were performed using the Mann-Whitney test and Spearman correlation. **Discussions** : The groups were comparable in terms of age and mean arterial pressure. However, the patients with cognitive impairment had significantly higher venular tortuosity values: Vein Tortuosity Density ($p = 0.008$), Vein Distance Tortuosity ($p = 0.022$), Vein Squared Curvature Tortuosity ($p = 0.019$). In addition, a moderate negative correlation was observed between MoCA score and Vein Tortuosity Density ($r = -0.425$, $p = 0.038$). **Conclusions:** Retinal venous tortuosity parameters are associated with cognitive impairment in patients with arterial hypertension. This study suggests the possibility of developing an accessible, non-invasive screening tool assisted by artificial intelligence. **Acknowledgements:** The author would like to acknowledge German-Sallo Marta, Zoltan Preg, Nemes Nagy Eniko, Pal Tunde, and Baroti Beata for their contributions to data collection and patient evaluation.

Keywords: Retina, Cognitive Impairment, Venous Tortuosity, Arterial Hypertension

ASYMPTOMATIC BLADDER PARAGANGLIOMA MIMICKING MUSCLE-INVASIVE CARCINOMA: A CASE REPORT

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Introduction: Bladder paraganglioma is a rare neuroendocrine tumor originating from chromaffin cells in the submucosal layer of the bladder wall. Due to its growth between the detrusor muscle fibers, it can mimic muscle-invasive bladder carcinoma. This case includes a nonfunctional, asymptomatic tumor, emphasizing the importance of accurate differentiation from urothelial carcinoma, as management and prognosis differ. Here, we report a rare asymptomatic bladder paraganglioma incidentally discovered in a 50-year-old woman. **Case Report:** We present the case of a 50-year-old woman with no significant past medical history, who underwent pelvic ultrasound for routine evaluation. A small lesion in the bladder wall was noted, prompting cystoscopy, which revealed a submucosal bulging lesion in the dome of the bladder, covered by normal appearing mucosa, without other visible

tumors. Biopsies were obtained and sent for histopathological examination. **Discussions** : Microscopic evaluation demonstrated a tumor growing between the detrusor muscle fibers and the mucosa. Initially suspected as T2 muscle-invasive bladder carcinoma, further evaluation with immunohistochemical markers with positive staining for chromogranin, synaptophysin, and S-100, confirmed the lesion as a bladder paraganglioma. The growth pattern corresponded to the classic „zellballen" architecture typical of paragangliomas. The patient underwent TURBT and has been monitored with regular follow-up, including repeat cystoscopy and biopsy, which confirmed normal bladder mucosa and wall, with no residual tumor. **Conclusions**: Paraganglioma of the urinary bladder is a rare tumor and may be misdiagnosed as urothelial cancer, but careful search for the characteristic histological features and supportive immunohistochemical studies should lead to a correct diagnosis. TURBT is an effective therapeutic approach, and long-term follow-up is recommended due to their risk of potential recurrence.

Keywords: Bladder paraganglioma, Neuroendocrine tumor, Muscle-invasive bladder carcinoma, Immunohistochemistry

AT THE CROSSROADS OF MIS-C AND EBV: GIANT CORONARY ANEURYSM ON AN ANOMALOUS RIGHT CORONARY ARTERY

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Introduction: Multisystem Inflammatory Syndrome in Children (MIS-C) targets the cardiovascular system with profound severity. This case explores a rare hyperinflammatory intersection: a giant coronary aneurysm arising from a congenital anomaly, likely fueled by the synergistic immune stress of concurrent SARS-CoV-2 and EBV infections. **Case Report:** A 6-year-old boy presented with a history of high fever, bilateral non-exudative conjunctivitis, oropharyngeal hyperemia, and cervical lymphadenopathy. Laboratory investigations revealed systemic inflammation with elevated ESR, ferritin, and IL-6. Notably, CRP was relatively low at 7 mg/dL, and D-dimer levels remained within the reference range, a finding that deviates from the typical coagulopathy associated with MIS-C. Serological testing confirmed prior COVID-19 exposure (SARS-CoV-2 IgG positive) and a concurrent primary Epstein-Barr virus (EBV) infection (EBV IgM positive). Transthoracic echocardiography identified a rare congenital variant: an anomalous right coronary artery (RCA) originating from the left coronary sinus. Furthermore, a giant RCA aneurysm was detected, measuring 6 mm with a Z-score of +9.99. Left ventricular systolic function was preserved and no intracoronary thrombi were visualized. Treatment included intravenous immunoglobulin, systemic corticosteroids, and low-dose aspirin. Notably, D-dimers were within the normal range in this patient; nonetheless, anticoagulation was warranted given the well-established thrombotic risk associated with giant coronary aneurysms regardless of coagulation marker levels. **Discussions** : Distinguishing MIS-C from Kawasaki Disease (KD) remains a clinical challenge due to their shared presentation of prolonged fever, mucocutaneous signs, and coronary artery aneurysms (CAA). Although this patient met the criteria for KD, the presence of SARS-CoV-2 antibodies strongly suggested MIS-C. Both conditions drive coronary pathology through similar immune-mediated pathways: cytokine-driven neutrophil and macrophage infiltration of the vessel wall ultimately resulting in aneurysmal dilatation. The concurrent primary EBV infection introduced a secondary pro-inflammatory mechanism. EBV-induced infectious mononucleosis can trigger coronary vasculitis through direct endothelial infiltration or a T-cell mediated hyperinflammatory state. In this case, the synergy between EBV and SARS-CoV-2 likely amplified the immunological hit to the vessel wall. Furthermore, the anomalous RCA origin provided a pre-existing structural vulnerability; altered hemodynamics and intrinsic wall stress at the anomalous ostium may have predisposed the segment to disproportionate inflammatory injury and expansion. **Conclusions:** This case underscores the necessity of cardiac assessment in pediatric systemic hyperinflammation. The rare coexistence of a congenital coronary anomaly and a giant RCA aneurysm-driven by MIS-C and EBV-mediated inflammation-carries significant thrombotic risk. Long-term cardiological surveillance is essential to manage potential complications in these complex post-infectious inflammatory syndromes.

Keywords: MIS-C, Giant coronary aneurysm, Anomalous coronary artery, EBV co-infection

ATYPICAL CHOLESTATIC PRESENTATION OF AUTOIMMUNE HEPATITIS IN AN ELDERLY PATIENT

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Introduction: Autoimmune hepatitis (AIH) is a rare and complex disease with a wide range of clinical presentations, for which understanding of its pathogenesis, accurate diagnosis and effective management remain challenging. While typical presentations predominantly involve hepatocellular damage, cases with a cholestatic component are uncommon and may pose diagnostic challenges, particularly in older patients with complex medical histories. **Case Report:** A 77-year-old woman with a history of hepatic steatosis, chronic gastritis, and right renal cyst presented with three days of right upper quadrant and epigastric abdominal pain, nausea, vomiting and anorexia. Laboratory evaluation revealed hepatocellular injury (AST 366 U/L, ALT 292 U/L) and cholestasis (ALP 1299 U/L, GGT 556 U/L), with mild inflammation (CRP 9.5 mg/L) and preserved renal function. HAV testing was negative. Abdominal CT demonstrated a hiatal hernia, subhepatic gallbladder without radiopaque calculi, dilated common bile duct (12 mm) and a normal pancreas. During hospitalisation, supportive care including hydration and hepatoprotective therapy was initiated. Abdominal MRI and MR cholangiopancreatography showed a normal distended gallbladder, common bile duct measuring 9 mm without intraluminal calculi and a small pericholecystic fluid collection. Progressive hepatocellular and cholestatic laboratory abnormalities prompted empiric antibiotic therapy with ampicillin plus sulbactam, but without any clinical improvement, raising suspicion for AIH, based on prior serology (ANA >400 AU/ml, anti-MPO ANCA IgG 0.87 AU/ml). Comprehensive autoimmune hepatitis panel testing could not be performed due to the unavailability of reagents. Corticosteroid therapy with methylprednisolone resulted in gradual normalization of liver enzymes and cholestatic markers. Additional therapy included proton pump inhibitors, hepatoprotective supplements and probiotics. The patient was discharged in stable condition with follow-up recommendations. **Discussions :** This case illustrates AIH presenting with a cholestatic pattern, abdominal pain, nausea, vomiting and anorexia in an older patient with several underlying conditions, a relatively rare presentation. Diagnosis was complicated by incomplete serologic testing and non-obstructive biliary dilatation. The favourable response to corticosteroid therapy supports an autoimmune etiology. Literature suggests that AIH should be considered in elderly patients with combined hepatocellular-cholestatic liver injury, even when full antibody panels are unavailable. **Conclusions:** Autoimmune hepatitis may present with mixed patterns of liver injury in older adults, even when a complete serologic evaluation cannot be performed. Clinical assessment, imaging, and therapeutic response to corticosteroids are essential for diagnosis. Early treatment can prevent progression and lead to favourable outcomes.

Keywords: autoimmune hepatitis, corticosteroid therapy, antinuclear antibodies (ANA), anti-MPO ANCA

ATYPICAL DERMATOMYOSITIS ONSET WITH VASCULITIS AS A PRIMARY MANIFESTATION AFTER THYROIDIAN CARCINOMA

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Introduction: Dermatomyositis is a rare autoimmune inflammatory disease characterized by distinctive cutaneous manifestations and variable muscle involvement. Its presentation can be heterogeneous and atypical cutaneous onset may delay diagnosis. Dermatomyositis has been associated with malignancy requiring ongoing surveillance. **Case Report:** We report a case of a 60-year-old female with a history of papillary thyroid carcinoma treated by total thyroidectomy in 2018, who developed recurrent pruritic vasculitic-like eruptions beginning in May 2023. Clinical evaluation immunological testing including myositis-specific antibodies, imaging (HRCT) and capillaroscopy were performed with longitudinal follow-up. The patient initially presented with recurrent vasculitic lesions that spontaneously remitted. Over time she developed characteristic dermatomyositis features including heliotrope rash, V-sign and shawl sign accompanied by pruritus. Immunological testing revealed positive anti-Mi-2 β and positive anti-PM-Scl100 antibodies. Muscle strength remained preserved although the patient reported fatigue, reduced exercise tolerance and inflammatory arthralgia. Imaging excluded interstitial lung disease and capillaroscopy showed a nonspecific pattern. Absence of Raynaud phenomenon and scleroderma features excluded overlap with systemic sclerosis. Additional laboratory tests ruled out vasculitis, anti-MPO and anti-PR3

autoantibodies were negative. Systemic corticosteroid therapy was initiated followed by Azathioprine (Imuran) which led to favorable clinical evolution. **Discussions** : Anti-Mi-2 β dermatomyositis typically presents with prominent cutaneous features, mild muscle involvement and a favorable prognosis. Vasculitic-like eruptions as an initial manifestation are rare and may delay diagnosis by mimicking primary vasculitis. Although anti-PM-Scl100 antibodies may suggest overlap syndrome the absence of Raynaud phenomenon, sclerodermatous features and specific capillaroscopy findings argued against systemic sclerosis. This case underscores the importance of careful evaluation of atypical presentations, early recognition for timely treatment and continued malignancy surveillance. **Conclusions**: This case highlights an atypical vasculitic-like onset of dermatomyositis which may delay diagnosis. Recognition of evolving cutaneous features is essential for early identification and treatment. History of malignancy supports ongoing oncologic follow-up. Differential diagnoses including overlap syndromes were excluded based on clinical, capillaroscopic and immunological findings. This case illustrates the importance of recognising atypical presentations of dermatomyositis for timely diagnosis and appropriate management.

Keywords: Dermatomyositis, Autoimmune disease, Vasculitic rash, Anti-Mi-2 β antibodies

ATYPICAL DISCOVERY OF A CASE OF HODGKIN LYMPHOMA

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Introduction: Lymphocyte-rich classical Hodgkin lymphoma (LRCHL) is a rare haematological malignancy, accounting for 5% of all Hodgkin Lymphomas. This case is particularly important in highlighting the incidental diagnosis of an LRCHL in an early stage, which has an excellent prognosis. **Case Report:** A 51-year-old male patient presented with a right Sylvian cerebrovascular accident, for which he was admitted to the neurology department. Multiple laboratory and imaging investigations were performed. The patient was diagnosed with anaemia of chronic disease and an increased erythrocyte sedimentation rate (ESR) of 95 mm/hour, for which he underwent a computed tomography of the thorax, abdomen and pelvis (CT TAP). This revealed mediastinal adenopathy measuring 2 cm. An excisional biopsy of a right supraclavicular lymph node was performed, with a histo-pathological result of LRCHL. The patient was admitted to the haematology department to commence treatment, in good condition with no complaints and no B symptoms. Clinically, bilateral laterocervical and supraclavicular 1-2 cm-sized adenopathies were present. Paraclinically, the patient presented with mild anaemia, thrombocytosis, elevated inflammatory markers and elevated beta-2 microglobulin. A positron emission tomography-computed tomography (PET-CT) scan was performed and revealed supradiaphragmatic adenopathies, consistent with stage IIA (Ann Arbor classification). The patient received epirubicin, bleomycin, vinblastin and dacarbazine (a modified ABVD regimen in which epirubicin replaces doxorubicin). Five cycles were completed, omitting bleomycin after half of the third cycle, as the follow-up PET-CT revealed a complete metabolic response. A sixth cycle is to be completed in the near future. Despite several controlled post-chemotherapeutic adverse effects, the LRCHL is responding well to treatment. **Discussions** : Being clinically indolent, with no B symptoms, this case of LRCHL underscores the importance of a thorough differential diagnosis upon the discovery of elevated inflammatory markers, despite a clear primary diagnosis. Although an ESR elevation in stroke, due to an inflammatory response, is characteristic, the amplitude of the elevation raised suspicion of an underlying cause. Together with the anaemia of chronic disease, this warranted further investigations to reach the underlying diagnosis and initiate treatment as early as possible. **Conclusions:** It is important to perform a holistic, comprehensive, systematic examination of the patient, regardless of the most evident diagnosis. Any abnormal or unusual parameters must be followed up on. In this case, the incidental discovery of early-stage LRCHL enabled early treatment initiation, with a good response, and the patient is on course to remission.

Keywords: Hodgkin lymphoma, Incidental diagnosis, Stroke

ATYPICAL EVOLUTION IN METASTATIC MELANOMA: BETWEEN THERAPEUTIC RESPONSE AND RESISTANCE

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Introduction: Malignant melanoma is the most aggressive form of cutaneous cancer, characterized by early

metastatic potential and an unpredictable clinical course. In recent years, therapeutic advances such as immune checkpoint inhibitors and BRAF-targeted therapies have significantly improved survival outcomes. However, their long-term benefit is frequently limited by the development of acquired resistance, particularly in patients with advanced-stage disease **Case Report:** A 70-year-old female patient, with a medical history of colonic diverticulosis, gastroduodenitis, gastric polyps, hiatal hernia, grade II hypertension, atrial fibrillation, and NYHA class II heart failure, presented in February 2014 with pain in the left breast region. Clinical examination revealed a cutaneous lesion, which was surgically excised. Histopathological evaluation confirmed an ulcerated infiltrative melanoma with regression features, staged as pT1b. The patient did not return for recommended wide local re-excision, resulting in incomplete initial treatment. After being lost to follow-up, she re-presented in May 2021 with a 2 cm left supraclavicular lymphadenopathy. Excisional biopsy confirmed metastatic melanoma harboring a BRAF V600E mutation. Imaging studies demonstrated extensive systemic dissemination, including lymph node, hepatic, and adrenal metastases. First-line therapy with dabrafenib and trametinib was initiated, achieving disease stabilization for approximately two years. Treatment was discontinued in November 2023 due to maintained good clinical status. In October 2024, the patient returned with symptoms suggestive of disease progression, including headache, weight loss, and fatigue. Second-line treatment with nivolumab was initiated and maintained disease stability until July 2025. Subsequent brain MRI revealed multiple cerebral metastases, treated with stereotactic radiotherapy. Due to continued progression, third-line chemotherapy with paclitaxel was administered; however, no durable response was achieved. The patient's condition progressively worsened, with severe neurological impairment and functional decline, ultimately leading to death. **Discussions :** This case is notable for an overall survival of 11 years, despite incomplete initial management and advanced metastatic disease. Targeted therapy enabled prolonged disease control, but resistance eventually emerged. The development of brain metastases highlights the strong neurotropism of melanoma and its poor prognosis. Additionally, multiple comorbidities complicated therapeutic decision-making and likely influenced treatment tolerance and outcomes. **Conclusions:** This case illustrates the dual nature of metastatic melanoma, combining aggressive progression with the potential for prolonged survival under modern therapies. Early molecular testing, appropriate surgical management, and continuous multidisciplinary follow-up remain essential to optimize patient outcomes.

Keywords: Malignant melanoma, metastases, BRAF V600E, immunotherapy

ATYPICAL PRESENTATION OF ADULT-ONSET IMMUNODEFICIENCY WITH RAPIDLY PROGRESSIVE BONE GRANULOMAS AND DEVELOPMENT OF THRC-LBCL

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Introduction: T-cell histiocyte-rich large B-cell lymphoma (THRC-LBCL) occasionally masquerades behind granulomatous lesions, often complicating the clinical picture. **Case Report:** A 36-year-old previously healthy man presented with acute lower back pain, progressive lower limb numbness with limited movement. Imaging revealed disseminated osteolytic lesions and generalized adenopathy, initially suggesting metastatic disease. Bone biopsy demonstrated chronic inflammatory infiltrates with epithelioid histiocytes, multinucleated giant cells and a predominantly CD3+ T cell lymphoid component without atypia or clonal rearrangement; infectious stains were negative. Immunologic workup showed hypogammaglobulinemia (low IgG, undetectable IgM/IgA/IgE), reduced CD4+ and CD8+ T cells, low CD19+ B cells and NK cells, and diminished CD19+ IgG memory B cells; oxidative burst was reduced and β 2 microglobulin mildly elevated. Autoimmune serology, blood cultures, and QuantiFERON were negative. Despite initiation of immunoglobulin replacement and systemic corticosteroids, the patient's condition rapidly progressed with disseminated, evolving granulomatous lesions culminating in paraplegia. Emergency decompression at T9-T11 and S1 was performed; biopsy revealed an atypical, histiocyte rich EBV negative B cell lymphoma (THRC-LBCL). Whole exome sequencing ruled out mutations related to a primary immunodeficiency disorder (PID). Treatment was initiated with rituximab, vincristine and cyclophosphamide. Notable history includes a recently ill pet parrot that died five months before symptom onset and a family history of mitochondrial disease; there is no reported consanguinity. **Discussions :** In patients with adult-onset PID and evolving granulomatous lesions, a high index of suspicion for lymphoid transformation must be maintained. **Conclusions:** This case highlights a peculiar overlap of primary immunodeficiency, granulomatous inflammation and eventual transformation to histiocyte rich B cell lymphoma, raising diagnostic and therapeutic challenges.

Keywords: THRC-LBCL, adult-onset PID, granulomatous inflammation

AUTOIMMUNE HAEMOLYTIC ANAEMIA MANIFESTED BY PERIPHERAL CYANOSIS IN A MIDDLE-AGED FEMALE: A CASE REPORT

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Introduction: Autoimmune haemolytic anaemia (AIHA) is an uncommon haematologic condition resulting from immune-mediated destruction of erythrocytes. It typically manifests with fatigue, pallor, jaundice, and laboratory findings indicative of haemolysis. Some patients, however, may show unusual symptoms that can make it harder to make a diagnosis. This case is significant due to the patient's presentation primarily with peripheral cyanosis and nonspecific symptoms, rendering the diagnosis initially less apparent. **Case Report:** A 55-year-old woman was sent for a blood test because she had cyanosis in her ears and lower limbs for about a year. She also said she was having trouble breathing, feeling weak, and not being able to exercise as much. During the clinical examination, pale skin and mucous membranes were observed, although oxygen saturation was maintained. Lab tests showed that the person had anaemia, with haemoglobin level of 10.7 g/dL, a haematocrit level of 30.2%, and an erythrocyte count of $3.22 \times 10^6/\mu\text{L}$. Further tests showed high levels of lactate dehydrogenase, a positive direct Coombs test, and increased osmotic fragility, which all point to haemolysis. The patient was taken to the haematology department and told they had AIHA. She was given corticosteroids, immunosuppressive drugs, and other types of care. Haemoglobin was 10.4 g/dL when the patient was sent home. Follow-up tests over the next year showed that the person still had mild anaemia, occasional leukocytosis, high lactate dehydrogenase, and high immunoglobulin M levels. This meant that their immune system was still not working properly and that they needed to be watched closely. **Discussions :** This case shows an unusual way that AIHA can show, with peripheral cyanosis being a major sign. Positive Coombs test results and markers of haemolysis were necessary for diagnosis. It also shows that AIHA can have long-lasting symptoms even when the anaemia is only mild. **Conclusions:** AIHA should be taken into account in individuals exhibiting fatigue, pallor, and peripheral cyanosis, even in the absence of severe anaemia. For diagnosis and treatment, it is important to recognise and connect clinical and laboratory findings early on.

Keywords: autoimmune haemolytic anaemia, haemolysis, peripheral cyanosis, Coombs positive

AUTOPSY FINDINGS IN A RARE CASE OF TUBERCULOUS MYOCARDITIS

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Introduction: Tuberculosis remains a major global public health problem, most commonly involving the lungs but with the capacity to affect virtually any organ through hematogenous or lymphatic dissemination. Cardiac involvement is rare, and among its forms, tuberculous myocarditis represents an exceptionally uncommon manifestation compared to the more frequently encountered tuberculous pericarditis. Myocardial infection may occur via three principal pathways: hematogenous spread, direct extension from an infected pericardium, or lymphatic dissemination from mediastinal lymph nodes. Despite its rarity, tuberculous myocarditis is clinically significant due to its potential to cause severe cardiac dysfunction, arrhythmias, or sudden cardiac death, sometimes as the first and only manifestation of the disease. The clinical presentation is often nonspecific, including symptoms such as fatigue, dyspnea, or palpitations, which frequently leads to misdiagnosis or underdiagnosis. As a result, definitive diagnosis during life remains challenging and is often established post-mortem through histopathological examination. **Case Report:** We present the case of a 68-year-old female who underwent a complete forensic autopsy at the Institute of Forensic Medicine Tîrgu Mureş, Romania. Microscopic examination of the myocardium revealed areas of interstitial fibrosis partially surrounding hypertrophic myocardial fibers, along with granulomatous inflammatory infiltrates composed of epithelioid cells, lymphocytes, and multinucleated Langhans-type giant cells, suggestive of a chronic granulomatous process. Pulmonary histopathology demonstrated multiple granulomas of varying sizes with central caseous necrosis, surrounded by epithelioid cells and lymphoplasmacytic infiltrate, consistent with pulmonary tuberculosis. Additional findings included emphysematous changes and vascular congestion in the lungs, vascular stasis in the kidneys, and a

meningioma associated with acute ischemic cerebral lesions in the brain. **Discussions :** Tuberculous myocarditis is a rare manifestation of disseminated tuberculosis, most often identified postmortem due to nonspecific clinical presentation and low clinical suspicion. Myocardial involvement typically occurs via hematogenous or lymphatic spread. In the present case, the coexistence of pulmonary and myocardial granulomatous lesions supports disseminated disease. Compared to the more common pericardial involvement, myocardial localization is uncommon but clinically significant, as it may lead to arrhythmias or sudden cardiac death. This highlights the diagnostic difficulty and the importance of considering cardiac involvement in systemic tuberculosis. **Conclusions:** Tuberculous myocarditis is an uncommon but potentially fatal condition that is frequently under diagnosed during life. This case emphasises the key role of autopsy in identifying rare manifestations of tuberculosis and establishing the cause of death.

Keywords: tuberculous myocarditis, tuberculosis, granulomatous inflammation, autopsy

AVOIDING THE AGE TRAP: THE POWER OF HETEROANAMNESIS IN TRIPLE-ORGAN DECLINE

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Introduction: In geriatric medicine, the "crosstalk" between the heart, liver, and kidneys creates a fragile equilibrium where one organ's failure triggers a rapid domino effect. This interplay is clinically recognized through Cardiorenal Syndrome and Congestive Hepatopathy. When this balance shifts, clinicians often encounter "diagnostic overshadowing"-a bias where acute, treatable symptoms are mistakenly attributed to the inevitable decline of advanced age. This case demonstrates that profound, multi-systemic collapse in a 91-year-old can be reversible. It highlights heteroanamnesis as a decisive diagnostic intervention that can pivot a clinical strategy from a premature palliative trajectory to a successful corrective outcome. **Case Report:** A 91-year-old male presented with acute-on-chronic deterioration, manifested by NYHA class IV dyspnea, chest pain, and bilateral edema. Medical history included Heart Failure with Reduced Ejection Fraction, permanent Atrial Fibrillation, severe Aortic Stenosis, Chronic Kidney Disease stage IIIb, and Hepatic Steatosis. Physical examination revealed respiratory distress, jaundice, and tender hepatomegaly. Laboratory analysis showed hepatic injury (ALT 2828.00 U/L, AST 3036.00 U/L, Total Bilirubin 7.90 mg/dL) and acute renal worsening (Creatinine 2.29 mg/dL, eGFR 24.03 mL/min). Ultrasound confirmed congestive hepatopathy. Heteroanamnesis identified that the patient had recently introduced a daily intake of alcohol and halved his Furosemide dose. These factors catalyzed a catastrophic organ crosstalk: ethanol introduced toxic strain, while the subtherapeutic diuretic dose precipitated fluid retention. Targeted treatment with intravenous diuretics and alcohol cessation led to rapid stabilization and a return to functional baseline. **Discussions :** In a nonagenarian, the margin between stability and systemic collapse is narrow. While it is easy to view such a decline through "clinical fatalism," this case proves multiorgan failure can be reversed if triggers are identified. The patient was pushed into a Type 2 Cardiorenal Syndrome by failures in self-management. Halving the diuretic dose increased venous pressure, while daily alcohol intake-denied by the patient but confirmed by family-acted as a myocardial depressant. This demonstrates that when the clinical picture is clouded by chronic multimorbidity, heteroanamnesis is the key to identifying reversible factors. **Conclusions:** A nonagenarian's perceived "terminal" decline is frequently a reversible acute-on-chronic event. Failure is often propelled by treatable stressors rather than senescence. The discrepancy between the patient's denial of alcohol and the family's report underscores that heteroanamnesis must be elevated to a primary diagnostic intervention. This report urges clinicians to reject "diagnostic overshadowing" and ensure every pathological trigger is excluded before accepting a terminal prognosis.

Keywords: Heteroanamnesis,, Cardiorenal Syndrome,, Geriatric Medicine,, Multimorbidity

BACK PAIN OR BLOOD CANCER? PARAVERTEBRAL MYELOID SARCOMA AS A RARE EXTRAMEDULLARY MANIFESTATION OF FLT3-POSITIVE ACUTE MYELOID LEUKEMIA

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Introduction: Acute Myeloid Leukemia (AML) is a stem cell malignancy that occasionally presents with

extramedullary manifestations known as Myeloid Sarcoma, a solid tumoral mass of immature granulocytic cells. In AML management, identifying molecular markers such as FLT3 mutations and aberrant immunophenotypes is vital, as they dictate prognostic stratification and the use of targeted therapies. **Case Report:** We report the case of a 41-year-old male who presented with severe right-sided low back pain radiating to the lower limb, refractory to NSAIDs. An MRI scan revealed a bilateral solid-infiltrative perivertebral mass at the S1-S2 level, with periradicular and intracanalicular extension. CT-guided biopsy and immunohistochemistry (CD34+, CD117+, MPO+, CD43+) confirmed the diagnosis of Myeloid Sarcoma. In addition, laboratory findings revealed leucocytosis with significant monocytosis, moderate thrombocytopenia. Bone marrow aspirate (BMA) revealed a proliferation consisting of 65% blasts, with morphological and cytological features consistent with AML, while immunophenotyping identified myeloblasts with aberrant expression of CD56. Further genetic and molecular markers showed FLT3-ITD positive AML and the presence of RUNX1-RUNX1T1, t(8;21)(q22;q22) abnormalities. Standard 7+3 induction chemotherapy combined with midostaurin and intrathecal chemotherapy for central nervous system was initiated. Follow-up evaluation showed complete pain resolution and a significant reduction in the size of the paravertebral mass on CT scan. Bone marrow aspirate confirmed morphological remission (<5% blasts). After completing three rounds of intermediate-dose cytarabine (IDAC) consolidation, the patient is currently awaiting an allogeneic stem cell transplant. **Discussions :** This case illustrates myeloid sarcoma's ability to mimic common musculoskeletal disorders. The swift transition from localized pain to systemic malignancy highlights why early clinical suspicion is crucial for prompt diagnosis. The molecular landscape of this case presents a prognostic paradox: while t(8;21) typically suggests a favorable outcome, the co-occurrence of FLT3-ITD mutations, CD56 positivity and extramedullary involvement shifts the risk profile toward a more aggressive phenotype. The practical value of early molecular profiling was demonstrated by the successful integration of midostaurin, a targeted FLT3 tyrosine kinase inhibitor. The dramatic radiological response to combined chemotherapy and a FLT3 inhibitor, led to both morphological remission and clinical improvement, avoiding the need for high-risk neurosurgical decompression, illustrating the efficacy of this combined therapeutic approach in managing solid-tumor manifestations of AML. **Conclusions:** Myeloid Sarcoma is a vital differential diagnosis for refractory back pain associated with AML-suggestive hematological abnormalities. Despite favorable cytogenetics, co-occurring FLT3-ITD and extramedullary disease necessitate aggressive therapy and allogeneic stem cell transplantation for durable remission.

Keywords: acute myeloid leukemia, myeloid sarcoma, paravertebral mass, FLT3-ITD mutation

BALANCING BLEEDING AND THROMBOSIS: COMPLEX PERIOPERATIVE MANAGEMENT IN A PATIENT WITH COLON CANCER

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Introduction: Perioperative management of anticoagulation in patients with malignancy represents a significant clinical challenge, requiring a careful balance between thromboembolic and hemorrhagic risks, particularly in the setting of invasive procedures. **Case Report:** We report the case of a 75-year-old female diagnosed with ascending colon adenocarcinoma, histopathologically confirmed. The patient had a history of paroxysmal atrial fibrillation requiring chronic anticoagulation. Due to severe anemia caused by occult gastrointestinal bleeding, the dose of Apixaban was reduced to 2.5 mg twice daily. Apixaban was maintained due to its favorable bleeding profile and comparatively lower risk of gastrointestinal bleeding among direct oral anticoagulants, an important consideration in the context of a luminal gastrointestinal malignancy. Prior to surgery, apixaban was discontinued to allow colonoscopy and excision of an additional colonic polyp. Bridging therapy with Enoxaparin 1 mg/kg once daily was administered for one week. The patient subsequently underwent right hemicolectomy with ileocolic anastomosis. Within 24 hours postoperatively, the patient developed acute clinical deterioration, characterized by persistent atrial fibrillation with rapid ventricular response and hypotension. Therapeutic-dose enoxaparin was initiated alongside antiarrhythmic therapy and hemodynamic support. In the following days, the patient presented melena, raising suspicion of gastrointestinal bleeding and leading to temporary discontinuation of anticoagulation. Upper gastrointestinal endoscopy did not identify an active bleeding source, and the episode was attributed to residual postoperative blood. Due to persistent tachyarrhythmia and hemodynamic instability, a thromboembolic event was suspected. Venous Doppler ultrasound revealed deep vein thrombosis of the left tibial vein, and computed tomography pulmonary angiography confirmed pulmonary embolism. Therapeutic anticoagulation with enoxaparin 1 mg/kg was resumed for 10 days, followed by long-term treatment with apixaban 5 mg twice daily, without further hemorrhagic complications. **Discussions :** This case illustrates the complex interplay between

thrombotic and hemorrhagic risks in oncologic patients undergoing surgery. The main clinical challenge was balancing bleeding risk against thrombotic risk, particularly in the context of suspected gastrointestinal bleeding and confirmed pulmonary embolism. Anticoagulation strategy evolved dynamically, with temporary interruption due to bleeding concerns and prompt reinitiation following confirmation of thromboembolic complications. Although current guidelines do not recommend routine bridging during interruption of direct oral anticoagulants, this approach may not be universally applicable. In selected high-risk patients with active malignancy, individualized strategies may be considered. **Conclusions:** Perioperative anticoagulation management in patients with malignancy remains a major clinical challenge. Dynamic risk assessment and early recognition of complications such as pulmonary embolism are essential to optimize outcomes.

Keywords: colon cancer, pulmonary embolism, anticoagulation management

BALANCING FERTILITY AND DISEASE CONTROL: COMPLICATED CROHN'S DISEASE AFTER BIOLOGIC THERAPY WITHDRAWAL

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Introduction: Crohn's disease is a chronic inflammatory disorder of immunological origin that may affect any segment of the gastrointestinal tract. Alongside ulcerative colitis, it constitutes part of the inflammatory bowel disease (IBD) spectrum. Crohn's disease is a complex, multifactorial condition arising from the interplay between genetic susceptibility, environmental triggers, and immune dysregulation. Given that a significant proportion of affected individuals are women of reproductive age, the management of IBD poses particular challenges in the context of family planning. **Case Report:** We present the case of a 34-year-old female with a known history of ileocecal Crohn's disease, admitted for lower abdominal pain, marked asthenia, fatigue, and unintentional weight loss. The disease initially manifested in 2011 with erythema nodosum, subsequently followed by gastrointestinal symptoms including severe anal pain and rectorrhagia. Following endoscopic and histopathological evaluation, a diagnosis of Crohn's disease was established and conventional therapy with 5-ASA and azathioprine was initiated. Despite initial clinical and endoscopic remission, a sustained therapeutic response was not achieved, and the patient experienced a moderate flare the following year. Consequently, biologic therapy with Adalimumab was commenced. The patient remained under regular medical surveillance until 2014, when she elected to discontinue biological therapy in order to pursue pregnancy. In 2025, she presented with a relapse characterized by a moderate-to-severe disease flare. Endoscopic assessment revealed a stenosing form of ileal Crohn's disease. Shortly thereafter, abdominal pain intensified, and MRI imaging demonstrated ileal involvement alongside entero-enteric fistula formation and intra-abdominal abscess. Biologic therapy was reinitiated, with favorable clinical response observed at the six-week follow-up. **Discussions :** The development of intestinal fistulas, abscesses, and strictures may arise as complications of Crohn's disease, particularly in the setting of unsupervised discontinuation of biologic therapy. During pregnancy, the decision to interrupt treatment should be undertaken only following thorough consultation with the treating physician and a comprehensive evaluation of available therapeutic alternatives. **Conclusions:** This case highlights the critical role of treatment adherence in influencing the progression of Crohn's disease. Family planning in close collaboration with the treating physician is essential, as the absence of coordinated medical guidance may predispose to the early development of complications.

Keywords: Crohn's disease, pregnancy, stenosis, family planning

BALANCING TWO LIVES: MANAGING ACUTE MYELOID LEUKEMIA DURING PREGNANCY

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Introduction: Acute myeloid leukemia (AML) is a rare but rapidly progressive hematologic malignancy characterized by uncontrolled proliferation of abnormal myeloid precursor cells in the bone marrow and peripheral blood. It often presents with nonspecific symptoms such as fever, fatigue, and increased susceptibility to bruising or bleeding. In pregnant patients, these manifestations may overlap with normal physiological changes, complicating timely diagnosis. Although malignancies in pregnancy are uncommon (estimated incidence 0.07-0.1%), their management is particularly challenging. Optimal care requires a multidisciplinary approach to ensure maternal survival while minimizing fetal risk, balancing the need for effective therapy against potential

teratogenicity. **Case Report:** We report a 37-year-old woman at 16 weeks of gestation who was incidentally found to have marked hyperleukocytosis ($190.79 \times 10^9/L$) with monocytosis, neutrophilia, and lymphocytosis. Clinically, she was largely asymptomatic except for gingival hypertrophy; laboratory tests also revealed severe anemia (hemoglobin 6.8 g/dL) and thrombocytopenia ($38 \times 10^9/L$). Bone marrow aspiration showed 77% blasts with Auer rods, and immunophenotyping with molecular testing confirmed AML with FLT3-ITD mutation. As the diagnosis was established during the first trimester, pregnancy termination was recommended; however, the patient declined. Due to the significant fetal risks associated with intensive induction chemotherapy, cytorreduction with hydroxyurea was initiated, followed by five cycles of azacitidine monotherapy. After an initial leukocyte decrease to $17.67 \times 10^9/L$, counts rose again ($73.67 \times 10^9/L$), prompting delivery at 34 weeks. She delivered a healthy newborn via cesarean section. Two weeks postpartum, treatment with azacitidine plus venetoclax (previously withheld due to teratogenic risk) was started; however complete remission was not achieved. Subsequent therapies included second-line "3+7" chemotherapy and third-line FLAG-Ida, both without complete remission. Blasts initially decreased to 30% by day 15 but rose to 60-65% by day 30. Treatment was then switched to gilteritinib (120 mg daily), but persistent bone marrow blasts remained. The patient was transitioned to palliative care and ultimately succumbed to her disease. **Discussions :** Leukemia complicates approximately 1 in 75,000-100,000 pregnancies, with AML accounting for about 60% of cases. Diagnosis during pregnancy is challenging and requires highly individualized management. The first trimester is particularly critical, therefore termination is often recommended to allow timely therapy. In this case, the patient's decision to continue the pregnancy created a complex clinical and ethical scenario, ultimately resulting in the successful delivery of a healthy newborn. **Conclusions:** This case highlights the importance of individualized management and multidisciplinary decision-making to balance maternal treatment needs with fetal safety.

Keywords: Acute myeloid leukemia, Pregnancy, Hyperleukocytosis

BEATING THE ODDS: LONG-TERM SURVIVAL IN MDS PROGRESSING TO AML

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Introduction: Myelodysplastic syndrome (MDS) is a group of clonal hematologic disorders characterized by ineffective hematopoiesis, dysplasia, and peripheral cytopenias. MDS may evolve to acute myeloid leukemia, a transformation associated with aggressive progression and poor prognosis. This case report follows a patient diagnosed with MDS, later characterized by transformation into acute myeloid leukemia (AML). **Case Report:** We present the case of a 63-year-old patient evaluated in March 2022 for pancytopenia (white blood cells 2,730/ μ L, red blood cells 2,270,000/ μ L, platelets 25,000/ μ L) and the presence of peripheral blasts (12%). Bone marrow aspirate showed dysplasia in all myeloid lineages and an excess of blasts (15%). Cytogenetic analysis revealed a complex karyotype with multiple chromosomal abnormalities (48,XXY,+9,+18,-20[1]/47,XY,+9[2]/46,XY,+9-19[1]/46,XY[16]), suggesting a poor prognosis. The patient was diagnosed with intermediate II-high-risk myelodysplastic syndrome (IPSS= 2.5). Treatment with Azacitidine was initiated, resulting in improvement of cytopenias after the first cycles. After 7 cycles, in February 2023, evaluation revealed transformation to acute myeloid leukemia (28-30% blasts in bone marrow aspirate). The patient underwent induction therapy with the "7+3" protocol, followed by consolidation with three intermediate-dose cytarabine (ARA-C) cycles, achieving complete remission in June 2023 with undetectable minimal residual disease. In August 2023, disease relapse was detected (10% blasts), and reinduction with the FLAG protocol was administered, followed by consolidation with ARA-C in preparation for transplantation. In February 2024, a haploidentical hematopoietic stem cell transplant (HSCT) from a related donor (son) was performed. In August 2024, a new relapse occurred, and treatment with Azacitidine combined with donor lymphocyte infusion was initiated. The patient's course remained stable until February 2025, when another relapse occurred, followed by death. **Discussions :** The presented case is notable for the prolonged survival of a 63-year-old patient with MDS that subsequently transformed into acute myeloid leukemia. Despite disease progression and multiple relapses, the patient received sequential therapies, including chemotherapy, HSCT, and donor lymphocyte infusion, which allowed the maintenance of remissions and extended survival in a context typically associated with poor prognosis. **Conclusions:** This case illustrates an aggressive course of high-risk myelodysplastic syndrome progressing to secondary acute myeloid leukemia. Despite achieving complete remission twice with conventional chemotherapy, the disease was marked by early relapses, including post-transplant relapse after haploidentical HSCT performed at a borderline age. Overall, it emphasizes the highly unstable disease course and therapeutic challenges in such patients.

Keywords: Myelodysplastic Syndrome (MDS), Acute Myeloid Leukemia (AML), Sequential Therapy

BETWEEN PREECLAMPSIA AND LUPUS NEPHRITIS: PREGNANCY MANAGEMENT IN AN ADOLESCENT PATIENT WITH SYSTEMATIC LUPUS ERYTHEMATOSUS

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Introduction: Systemic lupus erythematosus (SLE) during pregnancy represents a major clinical challenge, particularly in young patients, due to the increased risk of hematological, thrombotic, and renal complications. The occurrence of proteinuria in the third trimester requires careful differential diagnosis between preeclampsia and lupus nephritis, with important therapeutic implications. **Case Report:** We present the case of a 16-year-old patient with a history of severe thrombocytopenia ($\sim 7,000/\mu\text{L}$), later integrated into systemic lupus erythematosus with hematological, immunological, and renal involvement, associated with high-risk antiphospholipid syndrome. At the time of admission in October 2025, the patient had active disease (SLEDAI = 3), with thrombocytopenia and regressing proteinuria (1 g/24h previously, 0.3 g/24h at evaluation). Pregnancy-compatible immunosuppressive therapy was initiated (hydroxychloroquine, azathioprine, low-dose corticosteroids), along with prophylactic anticoagulation and antiplatelet therapy. Under treatment, sustained disease control was achieved, with normalization of platelet count and remission (SLEDAI = 0) during the second trimester, maintained into the third trimester. At 36 weeks of gestation, progressive proteinuria developed (0.7 g/24h $\rightarrow$ 2 g/24h), in the absence of hypertension, hyperuricemia, or other criteria for preeclampsia, raising suspicion of lupus-related renal involvement. Pregnancy progressed to 37 weeks, when cesarean section was performed, resulting in a live female neonate (2550 g, Apgar score 9) with favorable outcome. Postpartum, proteinuria persisted (≈ 1.8 g/24h), in the absence of typical immunological changes, leading to initiation of pulse corticosteroid therapy followed by oral corticosteroids, along with reintroduction of azathioprine and hydroxychloroquine, compatible with breastfeeding. Nephrology evaluation and renal biopsy were recommended. **Discussions :** This case highlights the complexity of managing pregnancy in an adolescent patient with SLE and prior hematological manifestations associated with antiphospholipid syndrome. Adequate disease control under immunosuppressive and anticoagulant therapy allowed a favorable obstetrical outcome. The onset of proteinuria in the third trimester raised the differential diagnosis between preeclampsia and lupus nephritis, a frequent clinical challenge. The absence of hypertension and persistence of proteinuria postpartum suggested an autoimmune renal etiology, emphasizing the importance of dynamic monitoring and multidisciplinary management. **Conclusions:** Pregnancy in adolescent patients with SLE can have a favorable outcome under appropriate disease control. However, the occurrence of proteinuria in the third trimester and its persistence postpartum require careful evaluation and further investigations to exclude lupus nephritis.

Keywords: Systemic lupus erythematosus, Pregnancy, Trombocytopenia, Lupus nephritis

BETWEEN SYNCOPE AND EPILEPSY: DIAGNOSTIC PITFALLS

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Introduction: Transient loss of consciousness is a frequent diagnostic challenge, especially in young people, where the clinical picture can suggest both syncope and epilepsy. Differentiating between syncope and epilepsy remains one of the important challenges of clinical practice. **Case Report:** We discuss two clinical cases that highlight the underdiagnosis and overdiagnosis of epilepsy. The first case is of a young woman with recurrent episodes of loss of consciousness, initially interpreted as syncopal episodes. Subsequent investigations (magnetic resonance imaging-MRI) revealed heterotopia of the gray matter, suggesting the existence of an epileptogenic substrate of the symptomatology and establishing the diagnosis of epilepsy. The second case presents a patient with vasovagal syncope, initially diagnosed with epilepsy, in whom careful reevaluation of the anamnesis, clinical aspects, correlated with the cardiological examination (Tilt Table Test-TILT test) supported a syncopal, non-epileptic etiology. The two cases highlight the importance of a systematic, meticulous, and coherent approach in the evaluation of transient loss of consciousness. The detailed anamnesis, the circumstances of occurrence, the prodromal symptomatology, the manifestations during the episode, the post-critical status, as well as the correlation of the clinical examination with the electroencephalogram (EEG), the cardiological evaluation, and the

cerebral imaging were essential for establishing the correct diagnosis. **Discussions** : The main message of the presentation is that the correct diagnosis cannot be established by the isolated interpretation of some clinical elements, but by the careful integration of the anamnesis, the clinical examination, and the appropriate paraclinical investigations. We also highlighted that a brain malformation (heterotopia of the gray matter) can become symptomatic in adults and may be discovered incidentally. **Conclusions**: The differential diagnosis between syncope and epilepsy can sometimes be difficult, with common clinical features that lead to a delay in establishing the correct diagnosis. A rigorous, multidisciplinary clinical evaluation can significantly reduce the risk of these errors and is essential for proper patient management and the avoidance of inappropriate treatments.

Keywords: heterotopia of the gray matter, epilepsy, syncope, TILT Test

BEYOND A SIMPLE ABSCESS: RECURRENT PERINEAL SEPSIS TRIGGERED BY URETHRAL FOREIGN MATERIAL IN AN UNCONTROLLED DIABETIC PATIENT

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Introduction: Perineal abscesses represent severe infectious conditions that may progress rapidly in patients with metabolic comorbidities. Diabetes mellitus, particularly when poorly controlled, significantly increases the risk of deep soft tissue infections, fistula formation, and septic complications. The presence of foreign bodies in the lower urinary tract further complicates management and may lead to recurrent abscess formation and urinary diversion requirements. **Case Report:** A 55-year-old male with poorly controlled type 2 diabetes mellitus, ischemic heart disease, hypertension, dyslipidemia, hepatic steatosis, and chronic tobacco use presented with recurrent perineal abscess and urinary retention. The patient had a suprapubic cystostomy in place and a history of prior perineal drainage. On emergency admission, he presented with spontaneous perineal fistula discharging purulent material and altered general condition. Laboratory findings showed hyperglycemia (299 mg/dL), mild anemia (Hb 11 g/dL), hyponatremia, and preserved renal function. Contrast-enhanced CT of the abdomen and pelvis revealed soft tissue infiltration at the penile base with subcutaneous gas in the perineal tissues, correlating clinically with crepitus on palpation, without intravesical contrast extravasation. Prostate enlargement (54 mm) and vascular aorto-iliac atherosclerosis were noted. Initial surgical exploration included perineal incision and drainage with attempted endoscopic extraction of a presumed urethral foreign body. (5 cm), which was unsuccessful. A second endoscopic procedure achieved removal of a 10 cm intraurethral necrotic material. Histopathological examination revealed necrotic tissue associated with a moderate mixed inflammatory infiltrate and bacterial colonies, without evidence of a true foreign body. Broad-spectrum intravenous antibiotics (including ceftriaxone and metronidazole), anticoagulation prophylaxis, and glycemic control were administered. Postoperative evolution was favorable, with fistula closure and afebrile status at discharge. Urine drainage through cystostomy was clear. **Discussions** : This case highlights the synergistic role of uncontrolled diabetes and urethral foreign material in the pathogenesis of deep perineal infections. Hyperglycemia impairs neutrophil function and tissue perfusion, facilitating rapid spread of infection and potential progression toward necrotizing fasciitis. Early imaging, prompt surgical drainage, repeated intervention when necessary, and aggressive metabolic optimization are essential to prevent life-threatening complications. **Conclusions:** Recurrent perineal abscess in diabetic patients should prompt thorough evaluation for underlying foreign bodies or fistulous tracts. Multidisciplinary management, strict glycemic control, and timely surgical intervention are crucial for favorable outcomes. Early recognition may prevent progression to severe septic or necrotizing conditions.

Keywords: sepsis, foreign material, diabetic patient

BEYOND A SIMPLE FALL: SURGICAL TREATMENT OF A COMPLEX LEFT TROCHANTERO-DIAPHYSEAL FEMORAL FRACTURE

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Introduction: Same-level falls are common among all people; however, such incidents can result in the need for major or complex surgical interventions if an older patient is suffering them, as demonstrated in this patient's case.

Case Report: We present the case of an 80-year-old female who arrived at the hospital by ambulance. She

experienced severe pain, dysfunction, and an unnatural position of her left lower limb, along with thoracic pain, after a fall from the same level. After clinical and paraclinical investigations and consultations with general surgery and cardiology specialists, the patient was admitted to the General Surgery clinic for further interventions, including thoracic drainage. Her medical history includes: hypertension, type 2 diabetes, a hiatal hernia, fractures of the left lateral-posterior costal arches of ribs 6 and 7, and posterior ribs 8, 9, and 10, a left pneumothorax, LSS (lower segment pulmonary contusions), and left lateral-thoracic subcutaneous emphysema. After respiratory stabilization and further work-up, she was transferred to the Orthopedics and Traumatology Clinic for management of a left trochanteric-diaphyseal femoral fracture. Following proper preoperative preparation and lumbar regional anaesthesia, open reduction of the left trochanteric-diaphyseal fracture was performed, followed by osteosynthesis with a titanium Ortovit cephalomedullary nail, dynamically locked distally and reinforced with cerclage, under intraoperative radiological control. The anatomical planes were sutured, and a sterile dressing was applied.

Discussions : The postoperative course was slow but favourable. The surgical wound remained clean, without signs of inflammation or pathological discharge, and healed by primary intention. After one week, the thoracic drain tube was removed by the General Surgery team in preparation for discharge. At the time of discharge, the patient was in good general condition, with stable hemodynamic and respiratory parameters. The surgical wound was clean, showed no evidence of infection, and continued to progress favourably. **Conclusions:** This case demonstrates that even a low-level fall in older adults can result in life-threatening complications. The patient, fortunately, had a favorable postoperative course and regained independent ambulation.

Keywords: open reduction of the left trochanteric-diaphyseal, osteosynthesis, cephalomedullary nail.

BEYOND CLINICAL COEXISTENCE: SOMATIC IDH1 MOSAICISM AS THE BIOLOGICAL LINK BETWEEN OLLIER DISEASE AND PEDIATRIC BRAINSTEM GLIOMA

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Introduction: Ollier disease (multiple enchondromatosis) is a rare, non-hereditary skeletal dysplasia with a prevalence of 1:100,000. Characterized by multiple benign cartilaginous tumors, the somatic mosaicism of mutations in the IDH1 or IDH2 genes embodies the etiology behind this condition. While these patients are susceptible to an increased risk of secondary malignancies, the association with brainstem gliomas is exceedingly rare, with approximately 30 cases reported in the literature. The uniqueness of this case lies in its rare neuro-oncological manifestation: a brainstem glioma carrying the same molecular signature as the skeletal lesions, positioning a pediatric diagnosis at the forefront of precision medicine challenges. **Case Report:** We report a case of a 14-year-old boy diagnosed with Ollier disease in September 2022, amid presenting with multiple bone fractures. Whole-body MRI revealed generalized enchondromatosis, along with the presence of cerebral gliomas. Following an initial watch-and-wait approach, imaging performed in January 2025 demonstrated marked progression of the brainstem lesions, involving the pons, cerebellar peduncles, and cerebellar hemispheres. The biopsy confirmed the diagnosis of a pediatric diffuse low-grade glioma harboring an IDH1 p.R132C mutation. The patient failed multiple lines of chemotherapy, including the SIOPE protocol (Vincristine/Carboplatin) and Vinblastine. Following tumor progression and the development of active hydrocephalus in late 2025, a ventriculoperitoneal shunt was placed in February 2026. Currently, the patient is undergoing external beam radiotherapy (EBRT), showing significant improvement in his general status. **Discussions :** In sporadic gliomas, the R132H variant accounts for over 90% of cases and occurs mainly in the cerebral hemispheres. In contrast, the R132C variant identified in our case is highly indicative of enchondromatosis, supporting a shared clonal origin between mesodermal and neuroectodermal lesions through somatic mosaicism. The lack of response to conventional chemotherapy emphasizes the inherent resistance of these tumors. As a result, the multidisciplinary therapeutic decision committee has considered post-radiotherapy targeted therapy with anti-IDH agents. Recent data have shown significant success in extending progression-free survival in mutant low-grade gliomas, stabilizing tumor volume and greatly enhancing quality of life. **Conclusions:** This case underscores the pivotal role of molecular characterization in pediatric oncology, while emphasizing treatment selection according to tumor biology and clinical course. Identifying the IDH1 p.R132C mutation enables a shift from non-specific toxic chemotherapy to precision medicine, creating a framework for stability and quality of life.

Keywords: Ollier Disease, Enchondromatosis, Pediatric Brainstem Glioma

BEYOND COMMON WASPS: CLINICAL SIGNIFICANCE OF A POLISTES DOMINULA STING

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Introduction: *Polistes dominula*, a European paper wasp with a rapidly expanding global distribution, is increasingly recognized as a cause of Hymenoptera stings. Despite its growing prevalence, stings from *P. dominula* remain underdiagnosed in many regions, partly due to limited awareness and inadequate diagnostics.

Case Report: We report the case of a 67-year-old woman with a history of essential hypertension treated with perindopril arginine and indapamide, presented to the Emergency Department (ED) following an episode of erythematous, pruritic maculopapular lesions accompanied by genital itching, following household activities in the garden, which responded to antihistamine therapy. One month later, she experienced a suspected wasp sting, after which symptoms developed rapidly within two minutes, with genital pruritus, localized angioedema of the hands and face, and generalized pruritic erythema. Upon arrival at the ED, 25 minutes post-exposure, her blood pressure was 103/68 mmHg, heart rate 93 bpm, and SpO₂ 89%. Immediate management was initiated, combining antihistamines to relieve pruritus and urticaria, corticosteroids (dexamethasone), intramuscular adrenaline to counteract systemic anaphylaxis, calcium gluconate, and a short-acting anxiolytic (alprazolam), resulting in prompt and significant improvement of her clinical condition. A month after the event, the patient came to the allergology department for extended testing, including serum specific IgE testing (ALEX-MADx) and revealed low-level sensitization to *Polistes dominula* (Pol d 0.46 kUA/L, Pol d 5 0.80 kUA/L). Although the values were low, they were clinically relevant, indicating serologic sensitization to paper wasp venom, consistent with the patient's systemic reactions. Considering the patient's clinical symptoms and tests, carrying an emergency kit with two adrenaline autoinjectors and antihistamines was recommended due to the unavailability of specific paper wasp venom immunotherapy in Romania. **Discussions :** Literature indicates that clinical manifestations of *Polistes dominula* stings range from mild local reactions to severe systemic responses (36%). Pol d 5 (PDV antigen 5), a key diagnostic marker for Vespidae venom allergy with sensitization rates of 20-85%, has been reported to cross-react with Ves v 5, commonly used in clinical practice. Component-resolved diagnosis to these major venom proteins can help assess reaction risk, though their levels do not always predict severity. Reports of confirmed *Polistes dominula* venom allergy remain rare in Romania, making this case particularly notable. **Conclusions:** This case highlights the particularity and clinical importance of *Polistes dominula* stings, as venom immunotherapy (VIT) is effective for bees and common wasps but not locally available for *Polistes*, emphasizing the need for emergency preparedness and avoidance of allergen.

Keywords: *Polistes dominula* stings, Pol d 5, specific IgE testing, venom immunotherapy

BEYOND MEDICATION: EDUCATION – THE KEY ELEMENT IN THE MANAGEMENT OF DIABETES MELLITUS

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Introduction: Diabetes mellitus is one of the most prevalent chronic diseases worldwide and is associated with significant morbidity, mortality, and a substantial impact on patients' quality of life. Effective diabetes management extends beyond pharmacological treatment and requires a comprehensive, patient-centered approach in which therapeutic education plays a crucial role. **Case Report:** We report the case of a 26-year-old male with Type 1 diabetes mellitus, diagnosed in 2002, under treatment with insulin in basal-bolus regimen and a continuous glucose monitoring system. The patient presented to the Diabetology Department in January 2026 with poorly controlled glycemic values, including multiple episodes of hyperglycemia (~300 mg/dL) and hypoglycemia (~30-40 mg/dL). Laboratory investigations revealed a fasting plasma glucose level of 275 mg/dL and a glycated hemoglobin of 9.8%. Data from the continuous glucose monitoring system showed a time in range of 22%. Although the patient reported adherence to prescribed insulin therapy, evaluation revealed inadequate lifestyle habits, poor adherence to dietary recommendations, and insufficient understanding of carbohydrate counting and insulin-to-carbohydrate dose adjustment. During hospitalization, targeted therapeutic education was provided, focusing on correcting these deficiencies and delivering individualized nutritional guidance tailored to the patient's

needs and preferences. To further optimize glycemic control and lifestyle flexibility, insulin pump therapy was initiated. Following these interventions, the patient achieved improved glucose control and a marked reduction in glycemic fluctuations. At follow-up after almost 2 months, the patient showed better glycemic control, with an HbA1c of 8.5% and an improved time in range of 53%. **Discussions** : Patient education in diabetes care aims to develop essential self-management skills, including blood glucose monitoring, adherence to dietary recommendations, proper insulin administration, and maintaining a healthy lifestyle. By improving knowledge, self-efficacy, and patient engagement, structured educational interventions contribute to better glycemic control, reduction of acute and chronic complications, and lower healthcare costs. In this context, diabetes education represents a fundamental component of high-quality modern clinical practice. **Conclusions**: Individualized education for patients with diabetes represents a cornerstone of effective disease management. Evidence shows that structured educational interventions improve patients' ability to monitor their condition and enhance adherence to therapeutic recommendations. Empowering patients with self-management skills is one of the most valuable interventions clinicians can provide to improve glycemic control and overall well-being.

Keywords: Type 1 Diabetes Mellitus, Patient education, Diabetes care, Diabetes management

BEYOND PERFORATION: GASTRIC ULCER COMPLICATED BY PORTAL VEIN THROMBOSIS

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Introduction: Perforated gastric ulcer remains a common cause of acute peritonitis and represents a surgical emergency requiring prompt diagnosis and operative management. Despite advances in imaging and surgical techniques, it continues to carry significant morbidity and mortality, particularly in elderly patients or in cases of delayed presentation. The coexistence of gastric ulcer perforation with portal vein thrombosis (PVT) is extremely rare and presents additional diagnostic and therapeutic challenges. Local inflammation, dehydration, sepsis, or an underlying prothrombotic state may contribute to splanchnic venous thrombosis in this setting. **Case Report:** A 66-year-old male presented to the emergency department with severe diffuse abdominal pain of approximately 24 hours' duration. Clinical examination revealed signs of generalized peritonitis, including abdominal guarding, rebound tenderness, and absent bowel sounds. Laboratory investigations showed inflammatory syndrome and metabolic disturbances. Native abdomino-pelvic CT demonstrated pneumoperitoneum in the upper abdomen with gas inclusions at the posterior pyloric level, suggestive of perforated gastric ulcer, associated with minimal intraperitoneal fluid. Imaging also revealed extensive thrombosis of the portal vein and its branches. Emergency exploratory laparotomy confirmed a perforated gastric ulcer on the posterior aspect of the pylorus. Surgical management consisted of primary suture closure, extensive peritoneal lavage, and abdominal drainage. Postoperatively, the patient was admitted to the Intensive Care Unit for close monitoring and supportive management, including fluid resuscitation, broad-spectrum antibiotics, gastric protection, and correction of metabolic disturbances. Follow-up contrast-enhanced CT demonstrated resolution of pneumoperitoneum, an intact suture line without leakage, and stable portal vein thrombosis without progression. The patient remained hemodynamically stable, resumed oral intake progressively, and was discharged in good clinical condition.

Discussions : Perforated gastric ulcer is a surgical emergency requiring prompt operative management. Primary suture repair with peritoneal lavage remains the standard treatment when tissue viability is preserved. The coexistence of portal vein thrombosis (PVT) is extremely rare. In this case, PVT is likely secondary to ulcer perforation and the associated inflammatory and septic response, promoting a transient hypercoagulable state. However, a direct causal relationship cannot be definitively established, and the association remains partially speculative. Diagnosis was confirmed by contrast-enhanced CT, and relevant imaging and clinical records are available. **Conclusions:** Perforated gastric ulcer associated with portal vein thrombosis represents a rare but challenging clinical scenario. Early diagnosis, prompt surgical intervention, and careful postoperative monitoring are essential for favorable outcomes. This case highlights the importance of multidisciplinary collaboration in managing complex acute abdominal emergencies.

Keywords: Perforated Gastric Ulcer, Portal Vein Thrombosis, Acute Peritonitis, Pneumoperitoneum

BEYOND RECURRENCE: DECOMPENSATED CIRRHOSIS MIMICKING CANCER RELAPSE IN A TESTICULAR CANCER SURVIVOR

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Introduction: Testicular cancer has a favorable prognosis, with high cure rates following orchiectomy and chemotherapy. Nevertheless, a prior oncologic history may influence clinical reasoning when new symptoms occur, predisposing clinicians to diagnostic anchoring toward cancer recurrence. This case highlights the importance of maintaining a broad differential diagnosis in oncology survivors. **Case Report:** We report the case of a 46-year-old male with a history of left testicular cancer treated with orchiectomy and chemotherapy (2021-2022), subsequently declared in complete remission. He presented with progressive abdominal distension, marked lower limb edema, fatigue, and generalized weakness over two months. Given his oncologic history and bilateral inguinal lymphadenopathy, tumor recurrence was initially suspected. Physical examination revealed tense ascites, abdominal collateral circulation, spider angiomas, and massive peripheral edema. Laboratory tests showed hyperbilirubinemia, hypoalbuminemia, macrocytic anemia secondary to folate deficiency, and elevated inflammatory markers. Tumor markers, including alpha-fetoprotein (AFP), beta-human chorionic gonadotropin (β -hCG), and carcinoembryonic antigen (CEA), were within normal limits. Contrast-enhanced thoraco-abdomino-pelvic CT demonstrated marked hepatomegaly with nodular contour, extensive portosystemic collateral circulation, and large-volume ascites, without radiologic evidence of tumor recurrence. Diagnostic paracentesis was consistent with portal hypertensive ascites. Viral hepatitis serology was negative. Upper gastrointestinal endoscopy revealed portal hypertensive gastropathy and grade I-II esophageal varices. The final diagnosis was toxic liver cirrhosis, Child-Pugh class B, complicated by portal hypertension and decompensated ascites. The patient was treated with diuretics, albumin supplementation, non-selective beta-blockers, and supportive measures, resulting in clinical improvement. **Discussions :** Testicular cancer relapse typically presents with retroperitoneal lymphadenopathy, pulmonary metastases, or elevated tumor markers. In contrast, the presence of normal tumor markers and imaging findings suggestive of portal hypertension redirected the diagnostic approach in this case. Ascites associated with malignancy is usually exudative and related to tumor infiltration or lymphatic obstruction. Conversely, ascites secondary to portal hypertension results from increased sinusoidal resistance and splanchnic vasodilation, leading to transudative fluid accumulation. Recognizing these distinctions prevented misclassification as oncologic relapse. This case exemplifies anchoring bias in cancer survivors. While vigilance for recurrence is essential, new symptoms must be evaluated systematically to avoid misdiagnosis and delayed treatment of unrelated pathologies. **Conclusions:** A history of cancer does not preclude the development of independent diseases. Avoiding diagnostic anchoring and maintaining comprehensive clinical assessment are essential in oncology survivors to ensure timely and appropriate management.

Keywords: Testicular cancer survivor, liver cirrhosis, portal hypertension, anchoring bias

BEYOND SUTURES: A STABILIZED CARTILAGE-CUTTING APPROACH FOR RELIABLE CORRECTION OF PROMINENT EARS

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Introduction: Auricular (pavilion) malformations are among the most common congenital anomalies of the external ear. The most frequent of these is prominent ear deformity, which affects around 5% of the population and can have an important psychological impact, especially in children and adolescents. Several surgical techniques have been described for correcting this deformity, but achieving stable positioning of the ear while maintaining a natural contour can still be challenging. Objective anthropometric measurements of the auricle are useful for distinguishing normal ear projection from pathological prominence and for evaluating surgical results. **Case Report:** A cartilage-cutting otoplasty technique reinforced with fascioperichondrial flaps used for the correction of prominent ear deformity. The procedure involves controlled excision of conchal cartilage combined with the creation of triangular fascioperichondrial flaps that are anchored to the mastoid periosteum in order to stabilize the new auricular position. The main surgical steps are illustrated using intraoperative photographs, while postoperative images demonstrate the aesthetic outcome of the procedure. Auricular projection is assessed using helix-mastoid distance

measurements at three levels: superior, middle, and inferior. These measurements are taken preoperatively, immediately after surgery, and during follow-up to objectively evaluate the reduction in ear prominence. In prominent ear deformity, these distances exceed the normal anthropometric values described for the external ear. **Discussions** : Surgical correction aims to reduce the excessive helix-mastoid distance and restore a balanced relationship between the auricle and the scalp. In the presented cases, postoperative evaluation showed a clear reduction in auricular projection together with improved symmetry of the ears. The use of fascioperichondrial flaps provides additional stabilization of the reconstructed auricular framework and helps maintain the corrected position of the ear. **Conclusions**: Cartilage-cutting otoplasty combined with fascioperichondrial flaps represents a reliable technique for correcting prominent ear deformity. The use of objective anthropometric measurements together with clinical images allows clear evaluation of the surgical outcome and demonstrates improvement of auricular projection toward normal anatomical values.

Keywords: Otoplasty, auricular malformations, fascioperichondrial flap, prominent ear deformity

BEYOND THE FRACTURE: AN INCIDENTAL DIAGNOSIS OF CHONDROSARCOMA IN PROXIMAL LEFT FEMUR

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Introduction: Chondrosarcoma is the second most common primary bone sarcoma (20-25%), usually located in the pelvis, proximal femur, and humerus. The incidence is estimated at 1-2 cases per million per year and typically affects adults between 40-60 years old, with a slight male predominance. Clinically, initial signs such as increasing localized pain, swelling and stiffness have a late onset, which delays diagnosis. **Case Report:** We present the case of a 69-year-old man admitted for left hip pain and impaired of movement following minimal trauma. X-ray examinations revealed a fracture of femoral neck associated with a suspicious bone lesion. CT angiography of the lower limb revealed an infiltrative tumor of the proximal femur (10x10x8 cm) with osteolysis, medullary involvement (over 12 cm), extension into the thigh musculature but no significant compression of femoral vessels. A biopsy was performed, after which a histopathological examination confirmed a grade 3, pT2 (TNM classification) secondary peripheral chondrosarcoma. After a preoperative planning, en bloc resection of the proximal femur with oncological safety margins was performed, followed by reconstruction with tumoral prosthesis (total hip arthroplasty). After the surgical intervention, the patient started the rehabilitation protocol immediately. At 6 month follow-up, despite the absence of oncologic treatment, the evolution was favorable, with patient mobilised independently, without assistive aids. A PET/CT was performed, which showed a regressive appearance of the circumferential collections around the prosthesis, with a few residual calcifications and mild diffuse peripheral periprosthetic, consistent with chronic inflammatory changes. No other morpho-metabolic abnormalities were identified in the lower limbs bilaterally, indicating a favorable evolution. **Discussions** : Unlike the usual clinical manifestation of a chondrosarcoma, the initial presentation was a pathological fracture following minimal trauma which represents a challenging diagnosis and complex management. In spite of the advanced stage of tumor (grade 3, pT2- TNM classification), the evolution was favourable and the patient did not required an oncological treatment. **Conclusions:** This case illustrates the progression of an undiagnosed bone malignancy, from a silent phase to a structural failure, clinical recognition and the orthopaedic management of proximal femur chondrosarcoma.

Keywords: Chondrosarcoma, Pathological femoral neck fracture, atypical presentation, oncologic surgery

BEYOND THE LABEL OF ALLERGY: REASSESSING REACTIONS TO LOCAL ANESTHETICS

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Introduction: Local and regional anesthetics are frequently associated with suspected allergic reactions; however, true hypersensitivity is rare, with an incidence below 0.1%. Most reported events are non-allergic adverse reactions, often misinterpreted as allergies, particularly in dental practice where cardiovascular manifestations are common and frequently related to epinephrine-containing anesthetic solutions. This case highlights the risk of

misdiagnosis and the importance of accurate evaluation to ensure safe anesthetic management. **Case Report:** We present the case of a 48-year-old female scheduled for gynecological surgery (uterine fibroid). Three months prior, she underwent dental extraction under local anesthesia with Ubistesin (articaine combined with epinephrine). Shortly after administration, she developed tremor of the extremities, nausea, followed by transient loss of consciousness lasting approximately 30 seconds. These symptoms were initially interpreted as an allergic reaction to local anesthetics. However, the temporal relationship with administration and the presence of epinephrine suggest a vasovagal or systemic adrenergic response rather than IgE-mediated hypersensitivity. Preoperative allergological evaluation included testing for ropivacaine and bupivacaine, which showed no evidence of hypersensitivity. Testing did not identify the presence of IgE-type antibodies against two amide-structured anesthetics. Therefore, there is no IgE-mediated sensitivity to local anesthetics, and the reaction was most likely secondary to the epinephrine content. Based on these findings, spinal anesthesia was performed, and the surgical procedure was completed without complications. **Discussions :** This case illustrates the frequent overdiagnosis of allergic reactions to local anesthetics. Symptoms such as tremor, nausea, and syncope are more consistent with systemic effects of epinephrine (e.g., adrenergic stimulation) or vasovagal reactions, rather than immunoglobulin E (IgE)-mediated hypersensitivity. Literature data confirm that true allergies to amide-type anesthetics, including articaine, ropivacaine, mepivacaine, bupivacaine, and lidocaine, are extremely rare. Importantly, epinephrine-containing formulations are a common cause of transient cardiovascular and neurologic symptoms that may mimic allergic reactions. Mislabeling patients as allergic may lead to suboptimal anesthetic choices and increased perioperative risk. Allergy testing is essential for accurate diagnosis and safe management. **Conclusions:** Multidisciplinary collaboration between anesthesiology, surgery, and allergology is crucial in evaluating suspected anesthetic allergy. This case emphasizes the importance of allergological assessment and of recognizing epinephrine-related adverse reactions, allowing clinicians to avoid misdiagnosis and ensure safe anesthetic choices.

Keywords: local anesthetics, hypersensitivity, allergological testing, adverse reactions

BEYOND THE LIVER: HYDATID CYST INVADING THE BILE DUCT - A CASE REPORT

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Introduction: Cystic echinococcosis, caused by the larval stage of *Echinococcus granulosus*, is an endemic zoonotic infection with predominant hepatic involvement. Following ingestion of parasite eggs, hydatid cysts develop in the liver and may remain asymptomatic until complications occur. From a gastroenterological perspective, the most significant complication is intrabiliary rupture, resulting from cyst-biliary communication and leading to biliary obstruction, cholestasis, and potentially severe acute cholangitis. We report a case illustrating this rare but life-threatening biliary complication. **Case Report:** A 58-year-old male patient with essential hypertension and mesogastric hernia presented with diffuse abdominal pain and sclero-tegumentary jaundice for several days prior to presentation. Physical examination revealed right upper quadrant tenderness, scleral icterus, and a negative Murphy's sign. Laboratory findings demonstrated cholestasis, mild normocytic normochromic anemia, hepatocytolysis, and an inflammatory syndrome. Pre-admission contrast-enhanced abdominopelvic MDCT identified a large hepatic cystic lesion (17.5 x 13 x 13 cm) originating from segment IV, exerting mass effect and communicating with the biliary tree, along with hilar lymphadenopathy (15 mm). Abdominal ultrasonography identified features suggestive of a hepatic hydatid cyst, with subsequent serological testing providing confirmatory evidence. Endoscopic retrograde cholangiopancreatography (ERCP) demonstrated a markedly dilated common bile duct containing heterogeneous intraluminal material with irregular ductal contour, suggesting cysto-biliary communication. A 10 Fr/10 cm biliary stent was subsequently placed, achieving effective drainage of dark, turbid bile. The patient was transferred to the General Surgery Department of the Military Hospital. Preoperative dietary measures and antiparasitic therapy were initiated, and endoscopic follow-up was scheduled at 3 months for biliary stent exchange. **Discussions :** Current guidelines advocate a staged, multidisciplinary approach for this complication. Initial management includes supportive care and administration of broad-spectrum antibiotics in cases of associated cholangitis. Endoscopic retrograde cholangiopancreatography (ERCP) remains the first-line modality for biliary decompression, facilitating clearance of hydatid material, ductal lavage, and stent placement, while percutaneous drainage may be considered when endoscopic therapy is not feasible. Definitive management is imperative, and in the presence of cysto-biliary communication, percutaneous aspiration-instillation-reaspiration (PAIR) is contraindicated, with surgical intervention representing the preferred approach. Surgical techniques include controlled cyst evacuation, instillation of scolical agents, and unroofing with partial pericystectomy,

avoiding radical hepatic resection due to increased morbidity. Adjunctive perioperative benzimidazole therapy (e.g., albendazole) is recommended to reduce recurrence risk. **Conclusions:** Intrabiliary rupture of hepatic hydatid cysts represents a severe complication requiring early recognition and multidisciplinary management. ERCP enables effective biliary decompression, while definitive surgical management, supported by antiparasitic therapy, remains essential for optimal outcomes.

Keywords: Cystic echinococcosis, intrabiliary rupture, ERCP, multidisciplinary approach

BEYOND THE MIND THE UNEXPECTED LINK BETWEEN SCHIZOPHRENIA AND CELIAC DISEASE

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Introduction: Celiac disease is the most common cause of malabsorption and fatty diarrhea in adults. It is considered a multifactorial disease, where genetic susceptibility, environmental factors, and a hyperpermeable gut all play roles. There is a female predominance, and the most common presenting factor in adults is iron-deficiency anemia. **Case Report:** A 35-year-old woman with a history of hebephrenic schizophrenia presented with multiple episodes throughout the last two weeks of diarrhea associated with mucus and bright red blood, pain in the hypogastric region, and loss of appetite. At further questioning, the patient revealed that the diarrhea began several years ago, but had progressively worsened over time. On exam, severe malnutrition was noted, with a body mass index (BMI) of 13.8 kg/m². Upper gastrointestinal endoscopy revealed an atrophic duodenal mucosa with flattened/absent folds; therefore, duodenal biopsy demonstrated a thinned duodenal mucosa consistent with MARCH 3c/4 classification. Given the lower gastrointestinal bleeding, a colonoscopy was subsequently performed, which revealed mucus deposits on an erythematous mucosa. Thus, biopsy specimens were obtained for histopathological examination, revealing an acute exacerbation of chronic inflammation. Based on the clinical and histological findings, the diagnosis of celiac disease was established. The patient was advised to follow a strict gluten-free diet and was subsequently discharged. **Discussions :** This case highlights the possible association between celiac disease and psychiatric disorders. The presence of this disorder led to a delayed diagnosis and given the time span between the onset of symptoms and diagnosis, the patient had an unknowingly long-term exposure to gluten intake, as proven by the severe villous atrophy. The patient's diagnosis was masked by her underlying condition, concealing any gastrointestinal symptoms and likely impairing her ability to adequately notice these pathological symptoms. Previous studies have suggested that schizophrenia is associated with a large range of autoimmune diseases, such as celiac disease. **Conclusions:** Celiac disease is an inflammatory autoimmune intestinal disease that may lead to severe malnutrition cases. We suggest that physicians should be aware of the possible association with psychiatric disorders, such as those observed in our patient. Several studies have reported an association between intestinal malabsorption and schizophrenia as early as 1961, so clinicians should consider gastrointestinal involvement in psychiatric patients and vice versa.

Keywords: Celiac disease, Schizophrenia, Malabsorption, Villous atrophy

BEYOND THE NAKED EYE: IDENTIFYING PARATHYROID TISSUE THROUGH DENSE SCARRING USING THE PTEYE NIRAF PROBE

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Introduction: Accidental parathyroidectomy remains a significant contributor to postoperative morbidity, often leading to transient or permanent hypocalcemia. This challenge is particularly acute during complex oncological resections, where malignant infiltration or previous interventions frequently obscure essential anatomical landmarks. To address these surgical limitations, the PTEye system has been developed to leverage Near-Infrared Autofluorescence (NIRAF). This technology exploits the unique intrinsic biophysical properties of parathyroid tissue. Unlike surrounding structures such as the thyroid, lymph nodes, or adipose tissue, parathyroid cells exhibit a high-intensity fluorescence signal when stimulated by near-infrared light at a wave length of 820 nm. **Case Report:** We report the case of a 41-year-old male patient with a complex surgical history, including recurrent

thyroglossal duct cyst excisions in 2016 and 2025, who was diagnosed with follicular thyroid carcinoma. A total thyroidectomy was indicated. The procedure was anticipated to be technically challenging due to extensive fibrotic tissue from previous interventions obscuring standard anatomical landmarks. During the dissection of the thyroid beds, the PTEye system (a sterile fiber-optic probe) was utilized to scan the surgical field via Near-Infrared Autofluorescence (NIRAF). The methodology relied on the system's real-time audiovisual feedback to confirm parathyroid tissue contact, facilitating precise identification despite the presence of dense scarring. This approach allowed for the successful identification and functional preservation of the parathyroid glands and the right recurrent laryngeal nerve. Postoperative monitoring confirmed the absence of clinical hypocalcemia, with no reports of paresthesia or muscular contractures. The patient's recovery was uneventful, and he was discharged in stable condition on postoperative day 2. **Discussions** : This case demonstrates the critical advantage of the PTEye system in "redo" surgery, where a 9-year interval between interventions created dense fibrosis that completely obscured anatomical landmarks. This "surgical GPS" allowed for real-time, audiovisual mapping of the parathyroid glands and the recurrent laryngeal nerve through scar tissue, ensuring their functional preservation and preventing permanent postoperative morbidity in a hostile surgical environment. **Conclusions**: The integration of Near-Infrared Autofluorescence via the PTEye system transitions parathyroid identification from subjective visual assessment to an objective, data-driven methodology. This label-free adjunct provides critical decision-making support in complex endocrine surgery, effectively mitigating hypocalcemia and improving safety profiles in oncological neck dissections where traditional anatomical landmarks are obscured.

Keywords: Near-infrared autofluorescence (NIRAF), PTEye system, parathyroid identification, redo surgery

BEYOND THE PRESUMPTIVE DIAGNOSIS: WHEN "NECROTIZING ENTEROCOLITIS" HIDES A CONGENITAL MALFORMATION IN AN EXTREME PRETERM INFANT

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Introduction: Intestinal duplications are rare congenital malformations of the gastrointestinal tract. They can present as cystic or tubular structures and are most frequently located in the ileum. A crucial anatomical feature is that the duplication shares a common muscular wall and blood supply with the adjacent normal bowel. **Case Report:** We report the case of a newborn delivered at 24 weeks of gestation, with an extremely low birth weight of 550 grams. The Apgar score was 2 at 1 minute, necessitating immediate delivery room resuscitation. The Apgar scores improved to 5 at 5 minutes and 7 at 10 minutes. He was admitted to the neonatal intensive care unit in critical condition, requiring complex medical management including surfactant administration and caffeine citrate therapy to maintain vital functions. On the fifth day of life, a grade 3/6 left sternal border systolic murmur revealed a large patent ductus arteriosus (PDA) with left-to-right shunting, managed with IV acetaminophen for 5 days. During the third week of life, a clinical picture suggestive of necrotizing enterocolitis began to emerge, prompting the initiation of targeted therapy. Subsequently, the infant's clinical status deteriorated in the context of absent bowel movements (both spontaneous and stimulated), abdominal distension and tenderness. A pediatric surgery consult confirmed the diagnosis of bowel obstruction and emergency surgical intervention was indicated. In this case, an exploratory midline supra- and infraumbilical laparotomy revealed a segmental jejunoileal volvulus secondary to an intestinal duplication, complicated by bowel necrosis and perforation, an enterovesical peritoneal band and a microcolon. A segmental ileal resection was performed, followed by a single-layer end-to-end ileoileal anastomosis, along with peritoneal lavage and drainage. **Discussions** : Postoperatively, the neonate remained under the strict monitoring of a multidisciplinary team. A remarkable aspect of this case is the absence of severe homeostatic imbalances and intraventricular hemorrhage, despite the extremely low birth weight. **Conclusions:** Enteric duplication can create a fulcrum effect that promotes intestinal hypoxia, which, combined with prematurity and PDA, can significantly increase the risk of an adverse outcome. Although the congenital anomaly was not diagnosed in utero due to a lack of prenatal care, astute clinical judgment led to prompt intervention.

Keywords: intestinal duplications, volvulus, premature, necrotizing enterocolitis

BEYOND THE SKIN: CREST FEATURES IN SYSTEMIC SCLEROSIS

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Introduction: Systemic sclerosis (SSc) is a rare autoimmune connective tissue disease characterized by fibrosis, vascular dysfunction, and immune activation. It is classically classified into limited and diffuse forms according to the extent of skin involvement. The sine scleroderma variant represents a rare subtype in which characteristic skin thickening is absent despite significant visceral involvement, constituting an important diagnostic challenge. **Case Report:** We present the case of a 74-year-old female admitted for ulcerated nodular lesions on the chest, covered by post-scratching crusts, painful digital ulcers, and Raynaud phenomenon. The patient was known with atrial fibrillation. Laboratory investigations revealed iron-deficiency anemia, mild inflammatory syndrome, and positive antinuclear antibodies with a centromere pattern. During hospitalization, the patient developed recurrent upper gastrointestinal bleeding due to gastric antral vascular ectasia (GAVE). Additional findings included moderate pulmonary hypertension and peripheral atherosclerotic vascular disease. **Discussions :** The diagnosis was challenging, with initial differential diagnoses including vasculitis, neutrophilic dermatoses, and paraneoplastic syndrome. A multidisciplinary evaluation enabled the integration of clinical and immunological findings, leading to the diagnosis of systemic sclerosis with a limited profile, in the absence of evident skin involvement, suggestive of sine scleroderma. The presence of anticentromere antibodies, along with features suggestive of the CREST spectrum (Raynaud phenomenon, telangiectasias, vascular and gastrointestinal involvement), supported classification within the limited form of the disease. The absence of cutaneous sclerosis represented the main diagnostic pitfall, delaying recognition of the underlying condition. Management was complex, requiring a careful balance between thromboembolic risk in the setting of atrial fibrillation and increased bleeding risk due to GAVE. Treatment included calcium channel blockers, vasodilators, carefully monitored anticoagulation, and endoscopic hemostatic interventions, with partially favorable evolution. **Conclusions:** Systemic sclerosis should be considered in patients presenting with suggestive vascular and visceral manifestations, even in the absence of skin thickening. The presence of CREST-like features and anticentromere antibodies may provide important diagnostic clues. Early recognition is essential for preventing severe complications and requires a multidisciplinary, individualized approach.

Keywords: Systemic sclerosis, CREST syndrome, thromboembolic risk

BEYOND TYPE 2 DIABETES: LATE DIAGNOSIS OF LADA – A CASE REPORT

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Introduction: Latent autoimmune diabetes in adults (LADA) is a form of diabetes characterized by the slow progression of autoimmune damage to pancreatic beta cells with its onset typically occurring during middle age. Due to LADA's clinical similarity to Type 2 Diabetes Mellitus (T2DM), it frequently leads to misdiagnosis and inadequate therapeutic strategies. **Case Report:** We present the case of a 66-year-old female patient who was admitted to the Diabetology Department of the Emergency Clinical County Hospital of Cluj-Napoca, presenting with poor glycemic control. Her medical history included dyslipidemia, NYHA class II heart failure, and grade II hypertension, placing her at high cardiovascular risk. Five years prior, she had been diagnosed with T2DM. Despite treatment with a basal-bolus insulin regimen (Lantus 0.3 IU/kg/day and Humalog 0.2 IU/kg/day) combined with oral antidiabetic therapy (metformin/sitagliptin), her HbA1c was 8.5%, indicating uncontrolled hyperglycemia. Given her suboptimal glycemic control, the elevated HbA1c, and her normal body mass index (BMI=21.6 kg/m²), we suspected a different type of diabetes. Further investigations revealed undetectable C-peptide levels (<0.01 ng/mL) and positive anti-GAD antibodies. Therefore, after five years of diabetes misclassification, LADA diagnosis was confirmed. The long-acting insulin was switched from Lantus to Toujeo 0.5 IU/kg/day, the prandial insulin boluses were titrated based on carbohydrate intake, and the oral antidiabetics were discontinued. At the three-month follow-up, further investigations revealed that HbA1c had decreased to 7.3%, signaling a marked improvement in glycemic control. **Discussions :** Epidemiological studies suggest that a substantial proportion of adults initially diagnosed with T2DM may have underlying autoimmune diabetes. In this case, the original diagnosis

of T2DM was based on the patient's age (61 years old), cardiovascular comorbidities, and dyslipidemia. Additionally, for at least six months, the patient responded well to oral antidiabetics, primarily suggesting insulin independence. However, the presence of atypical clinical features -such as a lean or normal BMI, marked glycemic variability, difficult-to-stabilize insulin requirements, recurrent hypoglycemia, or a coexisting autoimmune disease-warrants further testing for C-peptide and anti-GAD antibodies. If proven, the diagnosis of T2DM may be reclassified as LADA. For this patient, the transition to insulin-deficiency-focused therapy led to a reduction in HbA1c level from 8.5% to 7.3%, demonstrating increased glycemic control, thus potentially reducing the risk of long-term complications. **Conclusions:** Given that LADA is frequently misdiagnosed as T2DM, this case emphasizes that early diagnosis is essential for implementing an insulin-centered management strategy to achieve optimal glycemic control and delay disease progression.

Keywords: LADA, Type 2 Diabetes Mellitus, C-peptide, anti-GAD antibodies

BILATERAL ACCESSORY IRIS MEMBRANE WITH SIGNIFICANT VISUAL IMPAIRMENT IN AN ADOLESCENT – A CASE REPORT

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Introduction: Accessory iris membrane (AIM) is a rare congenital anomaly of the anterior segment, characterized by the presence of an additional stromal membrane anterior to the normal iris. Often asymptomatic, dense or bilateral forms may obstruct the visual axis. This can lead to significant visual impairment. Due to its rarity and frequent underdiagnosis, AIM is most commonly described in isolated case reports. This case highlights the functional impact of bilateral AIM diagnosed at a later stage in an adolescent patient. **Case Report:** We report the case of a 17-year-old male with no prior ophthalmological evaluation and no familial ocular pathology known, presenting with decreased visual acuity in both eyes. The onset was insidious, with slow progression. Best-corrected visual acuity (BCVA) was 0.3, with no significant improvement following refractive correction. Slit-lamp examination revealed bilateral, symmetrical and circumferential stromal membranes located anterior to the iris zone. These abnormal structures led to the formation of a central pseudopupil and a reduced functional pupillary aperture. Fundoscopic examination showed normal optic discs and retinal vasculature, with no pathological signs. A presumptive diagnosis of bilateral AIM associated with deprivation amblyopia was established. Additional investigations such as ultrasound biomicroscopy (UBM), anterior segment optical coherence tomography (AS-OCT), and gonioscopy may contribute to a more detailed evaluation of the membrane and anterior chamber angle involvement. Management included clinical monitoring and optical correction. Individualized therapeutic strategies were also considered, for example, a potential surgical intervention to restore the functional visual axis. **Discussions :** AIM is considered part of the anterior segment dysgenesis spectrum. It must be differentiated from persistent pupillary membrane (PPM), which typically consists of fine fibrovascular strands rather than a structured stromal membrane. The bilateral presentation and significant reduction of the functional pupillary diameter in this case are associated with a higher risk of visual axis obstruction and amblyopia. In this patient, the diagnosis was delayed, which limited the potential for visual recovery. This emphasizes the importance of early detection. Imaging techniques such as UBM and AS-OCT play an essential role in confirming the pathology and guiding management decisions. **Conclusions:** This Case illustrates the clinical and functional implications of bilateral AIM diagnosed during adolescence. Persistent obstruction of the visual axis during critical periods of development may result in irreversible deficits. Early ophthalmological screening and accurate differential diagnosis are important for improving visual outcomes. This report contributes to the limited literature on AIM and reinforces the importance of early recognition of this rare condition.

Keywords: Accessory iris membrane, Anterior segment dysgenesis, Deprivation amblyopia, Pseudopupil

BILATERAL HYDRONEPHROSIS PRESENTING AS ACUTE-ON-CHRONIC KIDNEY INJURY

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Introduction: Acute kidney injury (AKI) accounts for approximately 7% of hospital admissions, with in-hospital mortality rates reaching up to 50%. AKI is characterized by a rapid and abrupt decline in renal function and is staged according to changes in serum creatinine levels and urine output. In contrast, chronic kidney disease (CKD)

typically has an insidious onset, with many patients remaining asymptomatic for prolonged periods. CKD classification is based primarily on estimated glomerular filtration rate (eGFR) and the degree of albuminuria. The aetiologies of both AKI and CKD may be categorized as prerenal, intrinsic, or postrenal. **Case Report:** We report the case of a 57-year-old male with a history of hypertension, atrial fibrillation, heart failure with reduced ejection fraction, and chronic kidney disease of unknown aetiology, who presented to the emergency department with dyspnoea. Laboratory investigations revealed severe anaemia, metabolic acidosis, hyperkalaemia, and acute renal deterioration, with a serum creatinine of 23.78 mg/dL and urea of 321.00 mg/dL. Urological evaluation raised suspicion of a bladder tumour, with imaging confirming bilateral hydronephrosis. A right internal jugular catheter was placed for urgent haemodialysis. The patient underwent four haemodialysis sessions. After the first session, creatinine decreased to 15.55 mg/dL and urea to 214.00 mg/dL. Before the second session, creatinine rose to 17.91 mg/dL and urea to 246.10 mg/dL, decreasing post-dialysis to 11.43 mg/dL and 142.52 mg/dL, respectively. Similar pre- and post-dialysis fluctuations were observed during the third and fourth sessions. At discharge, creatinine was 11.53 mg/dL and urea 128.40 mg/dL, with recommendations for close nephrological follow-up.

Discussions : This case illustrates acute-on-chronic kidney injury secondary to postrenal obstruction, emphasizing the potential for rapid and severe deterioration in patients with underlying CKD. It also underscores the critical role of prompt recognition and initiation of renal replacement therapy. Haemodialysis proved to be a life-sustaining intervention in the setting of severe metabolic imbalance. **Conclusions:** Acute-on-chronic kidney injury secondary to bilateral hydronephrosis may present with extreme metabolic derangement requiring immediate renal replacement therapy. Prompt identification of the obstructive cause and timely intervention are crucial for stabilization and renal recovery.

Keywords: Kidney disease, Haemodialysis, Creatinine, Urea

BONE MARROW ASPIRATE CONCENTRATE (BMAC) AND INTRAARTICULAR INJECTION OF PLATELET-RICH PLASMA (PRP) FOR AVASCULAR BONE NECROSIS

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Introduction: Avascular necrosis (AVN) of the femoral head is a debilitating condition that often leads to joint collapse and the need for total hip arthroplasty, particularly in young adults. While conventional core decompression can relieve intraosseous pressure, it does not address the underlying deficiency of osteoprogenitor cells needed for bone regeneration. **Case Report:** A 48-year-old male presented with progressive right hip pain for six months, with significant limitation in ambulation. Initial MRI confirmed a diagnosis of Steinberg stage IIC AVN of the femoral head, with a measurable necrotic lesion. The patient had had a history of alcohol abuse. The patient was enrolled in a clinical trial and randomized to the intervention arm. He underwent percutaneous multiple small-diameter drilling of the femoral head lesion, augmented with autologous bone marrow aspirate concentrate (BMAC). This was followed by an intraarticular injection of platelet-rich plasma (PRP). **Discussions :** At the 12-month follow-up, the patient demonstrated significant clinical improvement. The Harris Hip Score (HHS) improved to 82, the WOMAC index decreased to 44, and the VAS pain score was 1. Radiographically, a follow-up MRI showed a significant reduction in the necrotic lesion volume (a 16% reduction from baseline), indicating disease regression. The patient remained complication-free with no progression to femoral head collapse, and treatment was considered a success. **Conclusions:** This case demonstrates the potential of a regenerative approach for early-stage femoral head AVN. The combination of decompression with BMAC augmentation and intraarticular PRP not only provided symptomatic relief but also induced radiographic disease regression. This strategy addresses both the mechanical and biological deficiencies of the necrotic lesion, offering a promising joint-preserving alternative to conventional decompression alone for symptomatic Steinberg stage II disease. This work was supported by the G.E. Palade UMFST of Targu Mures Research Grant number 853/3/22.01.2026.

Keywords: avascular necrosis, platelet-rich plasma, bone marrow aspirate concentrate, core decompression

BORDERLINE SYNDROME AND SEVERE SOMATIC DISEASE: A MIND–BODY VICIOUS CIRCLE – CASE REPORT

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Introduction: In borderline syndrome, clinical manifestations may occur not only in the context of primary personality disorders but also secondary to cerebral dysfunctions or neurodevelopmental disorders. Differentiating between these entities represents an important clinical challenge, with significant diagnostic and therapeutic implications. The addition of dysfunctional coping mechanisms and somatic comorbidities to the diagnostic profile may generate a psychosomatic vicious cycle, leading to a particularly complex clinical evolution and therapeutic management. **Case Report:** We present the case of a 33-year-old female patient, with moderate intellectual disability diagnosed in childhood, who later developed affective and behavioral changes suggestive of borderline-type syndrome. Early family abandonment, the absence of a secure emotional environment, and long-term institutionalization in her personal history represent predisposing factors for the development of impaired emotional regulation and deficient social adaptation mechanisms. The symptomatic profile is characterized by marked emotional instability, impulsivity, difficulties in interpersonal relationships, and self-aggressive behaviors, including episodes of self-harm. In order to regulate emotional tension, the patient developed dysfunctional coping mechanisms, such as predominantly nocturnal hyperphagia oriented toward the consumption of sugary foods, as well as chronic tobacco use. These behaviors progressively led to severe obesity, later associated with residual hypercorticism, type 2 diabetes, and arterial hypertension. The patient is also diagnosed with asthmatic bronchitis since childhood which, associated with chronic smoking, contributed to the development of chronic obstructive pulmonary disease (COPD). In addition, she presents chronic veno-lymphatic insufficiency of the lower limbs, manifested by bilateral venolymphedema, stasis dermatitis, and truncal varicose vein disease, complicated by recurrent episodes of erysipelas. In the context of a personal history marked by early relational trauma and long-term institutionalization, the increased level of persistent somatic distress contributed to the amplification of emotional instability and behavioral disturbances, manifested by irritability, chronic insomnia, and repeated episodes of psychiatric decompensation. **Discussions :** This case illustrates the relationship between psychiatric and somatic pathology, in which dysfunctional coping mechanisms facilitate the development of severe somatic comorbidities, which in turn amplify behavioral and emotional instability. Moreover, intellectual disability and early relational trauma played a significant role in the development of borderline-type manifestations. **Conclusions:** The clinical evolution highlights the interaction between psychological vulnerability, environmental factors, and somatic pathology in shaping the psychiatric presentation, emphasizing the need for a multidisciplinary therapeutic approach. The psychiatric pathology may be improved through pharmacological treatment and complementary therapies, such as physiotherapy, psychotherapy, and occupational therapy, thereby significantly improving the patient's quality of life and social functioning.

Keywords: Borderline Syndrome, Somatic comorbidities, Dysfunctional coping mechanisms, Psychiatric pathology

BREAKING THE SCALPEL MYTH: RETHINKING RESECTABLE GASTRIC CANCER

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Introduction: Gastric cancer is an important global health issue, often linked to *Helicobacter pylori* infection, which can lead to a progression from chronic gastritis to adenocarcinoma. Liver cirrhosis related to metabolic dysfunction-associated steatotic liver disease causes portal hypertension and reduced liver function. When these two conditions occur together, treatment becomes more complex and carries higher perioperative risks. **Case Report:** We present the case of a 73-year-old female patient with a history of type 2 diabetes mellitus, class I obesity (BMI 34.3 kg/m²), bronchial asthma, and status post cholecystectomy (2022). The patient was admitted for endoscopic reevaluation and oncologic staging. Of note, 18 months prior, an upper gastrointestinal endoscopy revealed erythematous antral gastritis and a polyp in the gastric body. Histopathological examination showed an intestinal-

type gastric adenoma with high-grade dysplasia, associated with chronic gastritis and extensive intestinal metaplasia. Six months later, endoscopic reassessment revealed pangastritis with intestinal metaplasia, chronic gastric ulcer, and significant nuclear changes of the epithelium suggestive of dysplastic progression. Contrast-enhanced abdominal CT, performed to evaluate the gastric lesion, revealed features suggestive of chronic liver disease: a cirrhotic and steatotic-appearing liver, splenomegaly, and signs of portal hypertension. In the context of type 2 diabetes and obesity, a diagnosis of metabolic-associated cirrhosis was established. At present, upper gastrointestinal endoscopy revealed a laterally spreading polypoid lesion approximately 2-2.5 cm in size, located in the posterior wall of the gastric body, above the gastric angle. Esophageal varices grade I were also observed. Histopathological examination of gastric lesion biopsies showed intestinal metaplasia, high-grade dysplasia, and foci of well-differentiated tubular adenocarcinoma (G1), confined to the mucosa. Endoscopic ultrasound demonstrated a hypoechoic lesion approximately 2 cm in size, with disruption of the gastric wall stratification and extension to the muscularis propria, corresponding to stage cT2. CT imaging showed no distant metastases or suspicious lymphadenopathy. The liver appeared cirrhotic, with portal hypertension and collateral circulation, without focal lesions. Final clinical staging was cT2N0M0. Considering the absence of metastases and the compensated status of her liver cirrhosis, curative-intent surgical intervention was recommended following multidisciplinary evaluation. **Discussions** : This case shows the importance of a thorough evaluation of cancer patients, with special attention to liver conditions that can affect treatment choices and overall management. **Conclusions**: The development of gastric adenocarcinoma from preneoplastic lesions highlights the importance of prevention and regular monitoring to help reduce the risk of progression to cancer.

Keywords: preneoplastic, adenocarcinoma, cirrhotic, endoscopy

BREATHING LIFE INTO THE BONE: HYPERBARIC OXYGEN THERAPY IN FEMORAL HEAD AVN

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Introduction: Avascular necrosis (AVN) of the femoral head is a progressive condition caused by impaired blood supply, leading to bone ischemia, structural collapse, and joint dysfunction. It commonly affects young to middle-aged adults and is associated with risk factors such as corticosteroid use, alcohol consumption, trauma, or may occur idiopathically. Early diagnosis is challenging, as radiographs are often normal, making MRI essential. Recently, hyperbaric oxygen therapy (HBOT) has emerged as a potential non-invasive treatment. **Case Report:** A 43-year-old male construction worker (BMI 31) presented with a 5-month history of progressive right hip and groin pain, radiating to the femoral and inguinal regions, sometimes mimicking lumbosciatica. The pain was exacerbated by weight-bearing and associated with functional limitation and limp. Multiple prior consultations suggested lumbar disc herniation. In the emergency department, AP pelvic X-ray and lumbar CT were unremarkable. Neurosurgical evaluation and lumbar MRI did not correlate with symptoms. Orthopedic reassessment, prompted by persistent symptoms, included repeat imaging and a dedicated coxofemoral MRI, which revealed avascular necrosis of the right femoral head (Ficat stage II), with subchondral changes and bone marrow edema involving the femoral head and neck. Further history revealed prior high-dose intravenous corticosteroid therapy for COVID-19, acting as a key etiological factor. Management included non-weight-bearing mobilization with two crutches for three weeks, targeted rehabilitation, and HBOT (24 sessions, 3 hours each, over 38 days with a mid-treatment break). The therapy was well tolerated. Progressive clinical improvement was observed, with reduction of pain and improved mobility. The patient also achieved weight loss (BMI reduced to 27). Follow-up MRIs demonstrated resolution of bone marrow edema and reparative changes with scar tissue formation at the femoral head, without progression to collapse. Residual discomfort was noted only during forced or extreme movements. **Discussions** : This case highlights the diagnostic difficulty of AVN, often misinterpreted as lumbar pathology due to overlapping symptoms and negative pelvic X-ray. MRI remains the gold standard for early detection. Corticosteroid-induced AVN is well documented, even in younger patients, and disease progression to stage IV may occur rapidly if untreated. Current literature suggests HBOT may enhance angiogenesis, reduce edema, and delay disease progression, particularly in pre-collapse stages. **Conclusions:** This case is notable for the early recognition and successful non-surgical management of steroid-induced AVN in a young patient, preventing joint collapse. It underscores the importance of considering hip pathology in persistent groin pain and supports HBOT as a valuable adjunct in halting disease progression.

Keywords: Hyperbaric Oxygen Therapy, Avascular Necrosis, Femur Head

CANDIDOZYMA AURIS - A SERIES OF THREE CLINICAL CASES

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Introduction: Candida auris is an emerging multidrug-resistant fungus that represents a significant public health concern, particularly in hospital environments. It is characterized by its ability to colonize the skin asymptomatically, persist on surfaces and medical equipment, and spread efficiently between patients. Its clinical significance derives from its predominance in critically ill or immunocompromised patients, difficulties in identification, and increased resistance to antifungal agents. Colonization represents an important reservoir for transmission and for the development of invasive infections associated with significant mortality. **Case Report:** The series includes three patients with severe pathology in whom Candida auris was identified at different stages: cutaneous colonization at the level of a pressure sore, inguinal colonization detected through screening, and confirmed candidemia. All cases shared major risk factors, including prolonged hospitalization, intensive care, invasive devices, and broad-spectrum antibiotic exposure. The series illustrates the clinical spectrum of Candida auris, from colonization to invasive infection. A 51-year-old female patient, immobilized in bed, presented with fever and dyspnea. Investigations revealed inflammatory syndrome and findings suggestive of pneumonia, progressing to sepsis and acute respiratory failure, requiring intensive care admission (~20 days), mechanical ventilation, and tracheostomy. Candida auris was detected in blood cultures, confirming candidemia. Treatment included antibiotic therapy, corticosteroids, supportive care, and antifungals (echinocandins). A 46-year-old male patient presented with acute myocardial infarction complicated by cardiac arrest and respiratory failure, requiring intensive care admission (~10 days). The course was complicated by bronchopneumonia with multidrug-resistant organisms. Investigations revealed colonization with Candida auris, without invasive infection. Treatment included supportive care, antibiotics, and antifungals, with favorable outcome. A 75-year-old female patient with multiple comorbidities presented with acute respiratory failure and pulmonary sepsis. The evolution was complicated by renal failure and cardiac arrest, requiring intensive care admission (~14 days). Investigations revealed colonization with Candida auris, without invasive infection. Treatment included supportive care, targeted antibiotics, and antifungals. **Discussions :** The cases reflect literature data, being associated with major risk factors. Colonization, defined by the presence of the microorganism in the absence of clinical manifestations, contrasts with invasive infection (candidemia), confirmed by blood cultures in a suggestive clinical context. The series highlights difficulties in controlling spread and its association with the nosocomial environment. Early identification of colonization requires rapid diagnostic methods, infection control measures, and appropriate antifungal therapy to prevent progression. **Conclusions:** The cases emphasize the difficulty of differentiating colonization from infection and illustrate clinical variability and diagnostic and therapeutic challenges.

Keywords: Candidozyma auris, Colonization, Multidrug resistance, Nosocomial infections

CARDIAC TAMPONADE AS THE INITIAL MANIFESTATION OF LUNG MALIGNANCY

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Introduction: Cardiac tamponade represents a medical emergency caused by rapid or progressive accumulation of pericardial fluid leading to impaired cardiac filling and hemodynamic compromise. Malignant pericardial effusion may develop through direct tumor invasion, lymphatic obstruction, hematogenous dissemination, or secondary inflammatory mechanisms. **Case Report:** A 71-year-old male patient, former smoker, with a history of arterial hypertension and childhood pulmonary tuberculosis, presented with progressively worsening dyspnea over approximately one month, associated with productive cough for several weeks (being admitted to the Internal Medicine Clinic). **Electrocardiography** showed sinus rhythm, HR 100/min, electrical alternans, microvoltage in limb leads, diffuse repolarization changes. **Chest radiography** revealed pulmonary vascular congestion, bilateral basal interstitial accentuation, and global cardiomegaly. **Transthoracic echocardiography** demonstrated a large circumferential pericardial effusion, measuring 30 mm laterally and at the left ventricular apex, and 10-27 mm anterior to the right ventricle, associated with right atrial ventricular collapse and inspiratory transmitral flow variation exceeding 50%, consistent with cardiac tamponade physiology. **Emergency pericardiocentesis** was performed, evacuating 900 mL of serosanguineous fluid, resulting in rapid clinical improvement. Biochemical

analysis of the fluid revealed low glucose levels and elevated LDH(1200 U/L). **Cytopathological examination** identified epithelial cells with cytonuclear atypia suggestive of malignancy, including cells with a signet-ring appearance. Subsequent **thoraco-abdomino-pelvic CT scan** demonstrated a space-occupying lesion in the right upper lobe (suggestive of malignancy), a spiculated pulmonary nodule in the left upper lobe, and bilateral postero-basal pleural effusions. A left pleural puncture evacuated 430 mL of sanguinolent fluid, with negative cultures. After resolution of the tamponade, the patient developed atrial fibrillation (160 bpm), successfully converted pharmacologically to sinus rhythm. Follow-up echocardiography showed preserved LV systolic function (EF 50%) and a small stable pericardial effusion without hemodynamic compromise. The patient was discharged hemodynamically and respiratory stable, with recommendations for further oncologic evaluation and close cardiologic monitoring, considering the increased risk of recurrent pericardial effusion. **Discussions** : Although malignant pericardial effusion is typically associated with advanced cancer, it may occasionally represent the first clinical sign leading to the detection of an occult neoplastic process. In the context of underlying malignancy, reaccumulation of pericardial effusion is expected. **Conclusions**: This case illustrates cardiac tamponade as a rare but dramatic initial manifestation of an underlying malignancy. The cellularity of the fluid suggests a neoplasm with digestive origin, while imaging reveals a pulmonary neoplastic process in a patient with a history of tuberculosis. Early recognition and prompt pericardiocentesis are lifesaving interventions, providing both immediate hemodynamic stabilization.

Keywords: Cardiac tamponade, malignant pericardial effusion, synchronous cancer

CASCADE GENETIC SCREENING IN MEN2A: SURGICAL MANAGEMENT OF AN ASYMPTOMATIC RET P.CYS634TYR CARRIER

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Introduction: The primary objective of this report is to present the clinical management, biochemical evaluation, and curative surgical intervention in the case of a 31-year-old, completely asymptomatic male patient who was diagnosed with Multiple Endocrine Neoplasia type 2A (MEN2A) exclusively following familial cascade genetic screening. **Case Report:** Following the confirmation of the MEN2A diagnosis in the patient's father, a comprehensive diagnostic protocol was initiated. Precise molecular analysis was performed using next-generation sequencing technology (Illumina NovaSeq). The preoperative evaluation included extensive neuroendocrine biochemical assays-specifically, the measurement of basal calcitonin, intact parathyroid hormone (PTH), Carcinoembryonic Antigen (CEA), and fractionated metanephrines-alongside imaging evaluation via contrast-enhanced CT and cervical MRI. The surgical strategy consisted of a total thyroidectomy associated with a bilateral selective functional neck dissection and a complex multiglandular parathyroidectomy. **Discussions** : Genomic sequencing identified a pathogenic heterozygous RET c.1901G>A (p.Cys634Tyr) mutation. Preoperative biochemical evaluation revealed a synchronous dual involvement: a marked elevation of serum calcitonin reaching 159.50 pg/ml (Normal Values: < 8.4 pg/ml), clearly indicating a medullary thyroid carcinoma (MTC), and an increased parathyroid hormone level of 157.60 pg/ml (Normal Values: 15 - 65 pg/ml), accompanied by mild hypercalcemia, suggesting primary hyperparathyroidism (PHPT). Additionally, plasma and 24-hour urinary metanephrines were within physiological limits, ruling out an active pheochromocytoma. Neck US and MRI identified a suspicious 8 mm right thyroid nodule and a localized enlargement of the parathyroid glands. Surgery was performed in December 2024. Subsequent histopathological analysis confirmed a bilateral medullary thyroid carcinoma pT1bN0Mx, with all 19 examined regional lymph nodes being negative, coexisting with marked hyperplasia in the three excised parathyroid glands. The postoperative metabolic evolution was characterized by the onset of persistent hypoparathyroidism, requiring lifelong treatment with calcium and vitamin D analogs. A complete remission of the disease was biochemically confirmed through the normalization and sustained suppression of serum calcitonin (1.75 pg/ml) and CEA (0.70 mUI/ml), observed during the 10-month follow-up phase. **Conclusions:** This case highlights the crucial role of genetic screening in families with known RET mutations. Early surgical intervention, guided by the genetic profile, successfully prevented the progression to metastatic disease. However, patients with MEN2A syndrome require lifelong multidisciplinary follow-up. This is essential both for the management of postoperative complications (such as permanent hypoparathyroidism) and for monitoring the risk of developing a pheochromocytoma in the future.

Keywords: MEN2A, RET p.Cys634Tyr, Medullary Thyroid Carcinoma, Primary Hyperparathyroidism

CASE PRESENTATION: UNDER THE SHADOW OF INFECTION: RADIOLOGIC EVALUATION OF BILATERAL BRONCHOPNEUMONIA

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Introduction: Bilateral Bronchopneumonia is a rare condition representing an advanced infectious process with impaired airway defence mechanism. In patients with a history of recurrent sinus surgeries it can serve as a reservoir for pathogenic spread to lower respiratory tract. Prognosis is favourable with early antibiotic therapy and appropriate drainage/ management. **Case Report:** We report the case of a 10-year-old girl who underwent recurrent sinus surgery and was diagnosed on chest X-ray with bilateral bronchopneumonia, and abscesses. Further imaging was performed, a chest CT scan showing multiple nodular cavitary lesions, with thickened, irregular walls, present subpleurally at the postero-basal segment with cumulative dimensions of 28/46/26 mm (ap/ll/cc). Bilateral apical and postero basal interlobular septal thickenings. Chest X-ray shows irregular patchy opacities/ consolidations, about 1-2cm, in the perihilar and lower lung zones, less defined with a mixed homogeneity associated with bronchopneumonia. Peribronchial thickening and increased lung/ interstitial markings indicating possible inflammation and mucus filling. Contrast enhanced head CT displays the paranasal sinuses with remodelled ethmoid air cells and reduced intercellular septations. Features consistent with post operative changes following previous sinus surgery. No acute sinonasal obstruction present but altered airway suggest mucociliary clearance and potential for persistent bacterial colonization. **Discussions :** This case shows rare complication of upper airway pathology due to a severe lower respiratory tract infection in a patient with a history of recurrent paranasal sinus surgeries. Lung abscesses are typically unilateral and confined to specific pulmonary segments. Existing reports have proved relatively low postoperative infection rates following endoscopic sinus surgery (ESS), displaying the rarity of this complication and emphasizing that, despite ESS being generally safe, significant pulmonary complications can still arise in select cases. It highlights the critical role of radiologic imaging in characterizing lesion morphology, identifying complications, cavitary lesions, and for differential diagnosis like pneumothorax. Management focuses on broad-spectrum antibiotics, for both aerobic and anaerobic organisms, with radiologic monitoring and guidance for drainage procedures. **Conclusions:** This case demonstrates how chronic sinonasal disease and repeated sinus surgery can be contributing factors to lower respiratory tract infections and extensive lung damage. Radiology plays a crucial role in confirming presence of cavitary lesions, their distribution, and involvement to help in early detection, assessing severity and guiding antibiotic choice and surgery interventions. Proper management can help prevent long term complications and improve patient outcomes.

Keywords: Bilateral Bronchopneumonia, Sinus Surgery, Endoscopic Sinus Surgery, Recurrence

CASE REPORT: SEVERE ADULT EBSTEIN ANOMALY WITH CARDIOMYOPATHY AND TRICUSPID REGURGITATION

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Introduction: Ebstein Anomaly is a rare congenital heart defect characterized by apical displacement of the tricuspid valve leaflets and variable tricuspid regurgitation, often leading to right ventricular dysfunction. It accounts for less than 1% of congenital heart diseases, with an estimated prevalence of 1 per 200,000 live births. Lifelong morbidity may include arrhythmias, heart failure, and structural complications, with supraventricular arrhythmias occurring in up to 70% of adults. Despite its rarity, comprehensive cardiovascular assessment is essential, particularly in patients presenting with multisystem symptoms. **Case Report:** A 56-year-old female with known Ebstein Anomaly presented with right hypochondrial and hypogastric pain. Laboratory evaluation revealed hyperkalemia, elevated urea, increased plateletcrit, neutrophilia, elevated total and LDL cholesterol, hypocalcemia, and elevated ESR. Holter and effort testing showed a blunted heart rate response, predominantly sinus rhythm with minor ectopy, mild ST segment depression, isolated elevations, and modest QT prolongation, without sustained arrhythmia or ischemia. Transthoracic echocardiography revealed severe apical displacement of the tricuspid valve (27 mm), marked atrialization of the right ventricle, severe tricuspid regurgitation (RV/RA gradient 27 mmHg), right atrial dilation (85 mm), right ventricular enlargement (64 mm), and left ventricular compression

(LVEDD 35 mm). Despite extensive remodeling, RV systolic function was preserved (TAPSE 38 mm). The patient received intravenous Furosemide and 10% glucose with insulin, and continued oral therapy with Ramipril, Diurex, Betaseric, Furosemide, and Spironolactone, with close monitoring of renal function and electrolytes. **Discussions :** This case illustrates a severe presentation of Ebstein Anomaly, where the patient's abdominal pain, hyperkalemia, and elevated urea suggest systemic congestion or cardiorenal syndrome. Although Holter monitoring showed predominantly sinus rhythm, metabolic disturbances (hypocalcemia, dyslipidemia) and inflammatory markers (elevated ESR, neutrophilia) highlight a high-risk systemic environment that may exacerbate cardiac instability. **Conclusions:** In patients with Ebstein Anomaly and cardiomyopathy, an integrated approach combining laboratory assessment, ECG monitoring, and echocardiography is crucial. Early recognition of functional and structural abnormalities, together with targeted pharmacotherapy, can mitigate progression and improve clinical outcomes.

Keywords: Ebstein Anomaly, Tricuspid Regurgitation, Cardiomyopathy

CECAL VAGINOPLASTY VERSUS COMBINED VAGINAL-LAPAROSCOPIC NEOVAGINA CREATION IN MRKH SYNDROM

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Introduction: Mayer-Rokitansky-Küster-Hauser syndrome is a congenital condition caused by abnormal development of the müllerian ducts, leading to vaginal agenesis in women with normally developed secondary sexual characteristics and normal ovarian function. Multiple surgical techniques for neovagina creation have been successfully used, including bowel vaginoplasty and skin graft reconstruction. This case illustrates a comparison between cecal neovaginoplasty and a new combined vaginal-laparoscopic skin graft technique, highlighting differences in surgical technique and functional outcome. **Case Report:** 22-year-old patient presenting with primary amenorrhea and normal secondary sexual characteristics. After undergoing multiple MRI investigations, she was diagnosed with MRKH syndrome. In this case the surgical approach involved a neovaginal reconstruction using an intestinal segment (cecum) to create a self-lubricating, functional vagina. The procedure was performed via an abdominal approach, consisting of isolation of a vascularized cecal segment, appendectomy and anastomosis of the cecum with the 3 cm vaginal canal. This approach is compared to a recently described technique which combines the Fortunoff technique for the distal neovagina with laparoscopic creation of the proximal canal, followed by coverage using an autologous skin graft. **Discussions :** Cecal vaginoplasty has the advantages of providing a well vascularized, mucosa-lined neovagina, with intrinsic lubrication, reducing the need for long term dilation and improving sexual function. However, it involves bowel resection, which associates risks such as infection, anastomotic leak, and increased operative difficulty. On the other hand, the combined vaginal-laparoscopic skin graft technique avoids bowel surgery and its possible complications and allows precise dissection under direct visualization, potentially reducing intra-abdominal morbidity. However, it depends on successful graft healing and requires long-term postoperative dilation, its possible complications being stenosis and dryness. Compared to traditional techniques, both approaches offer distinct advantages: the cecal method prioritizes function and lubrication, while the hybrid technique focuses on minimally invasive access and anatomical control. **Conclusions:** Both techniques represent viable options for neovaginal reconstruction in MRKH syndrome. Cecal vaginoplasty offers superior functional outcomes due to natural lubrication but at the cost of being far more invasive. The combined vaginal-laparoscopic skin graft approach is less invasive and technically innovative but requires further validation. An individualized surgical approach remains essential.

Keywords: Mayer-Rokitansky-Küster-Hauser syndrome, neovagina, cecal vaginoplasty, skin graft

CEREBRAL VENOUS THROMBOSIS COMPLICATED BY VENOUS INFARCTION AND INTRACEREBRAL HEMORRHAGE

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Introduction: Cerebral venous thrombosis (CVT) is a rare type of stroke, accounting for approximately 0.5 to 3% of acute cerebrovascular disorders, with most cases involving multiple venous sinuses. It predominantly affects women, with a female-to-male ratio of 3:1. The most commonly associated risk factors are pregnancy, the postpartum period, and the use of oral contraceptives. At onset, patients most frequently present with varying

degrees of headache, signs of intracranial hypertension, encephalopathy, and seizures. **Case Report:** We present the case of a 43-year-old female patient with a history of two spontaneous miscarriages and two full-term pregnancies resulting in healthy infants. She reported the use of oral contraceptives initiated on her own approximately six months prior to admission. The patient was admitted to our center with acute onset headache, left-sided sensory disturbances, and decreased muscle strength in all four limbs. At admission, neurological examination revealed quadriplegia, left superficial hemihypoesthesia, hemisomatognosia, and anosodiaphoria. A contrast-enhanced brain MRI performed on the same day revealed bilateral parietal hyperintense lesions on T2- and FLAIR-weighted sequences, as well as minimal bilateral subarachnoid hemorrhage on T2* sequences. Post-contrast T1-weighted images demonstrated filling defects in the superior sagittal and sigmoid sinuses. On the second day after admission, the patient developed altered consciousness, followed by a tonic-clonic seizure. An emergency cerebral CT scan demonstrated right parietal venous hemorrhagic stroke. Follow-up MR angiography showed extension of the thrombotic process, with filling defects in the right transverse sinus, right sigmoid sinus, and superior sagittal sinus. Extensive laboratory investigations were performed to evaluate possible hypercoagulability causes, but the results were unremarkable. During hospitalization, the patient received anticoagulant therapy with enoxaparin, as well as levetiracetam, with good clinical evolution, regression of neurological deficits, and no further seizures. Anticoagulation therapy was continued despite the presence of intraparenchymal hemorrhage, with subsequent conversion to a direct oral anticoagulant regimen at discharge. Three months after discharge, follow-up MRI revealed complete recanalization of the venous system. **Discussions :** Early diagnosis supported by appropriate imaging is essential in CVT, as prompt initiation of first-line therapy with full-dose anticoagulation remains the gold standard, even in the presence of intraparenchymal hemorrhage. **Conclusions:** CVT remains a potentially life-threatening condition when diagnosis is delayed, treatment is not initiated promptly, or modifiable patient-related risk factors are not addressed. First-line treatment consists of heparin-based anticoagulation, followed by transition to oral anticoagulants when clinically appropriate.

Keywords: cerebral venous thrombosis, oral contraceptives, intraparenchymal hemorrhage, anticoagulation

CERVICAL CERCLAGE FOR PREVENTION OF PRETERM BIRTH IN AN ADOLESCENT PREGNANCY: A CASE REPORT

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Introduction: Cervical shortening in the second trimester reflects premature cervical remodeling and is a well-recognized risk factor for preterm birth, with short transvaginal cervical length strongly associated with increased spontaneous preterm delivery. In selected cases of cervical insufficiency or early cervical dilation, ultrasound-indicated cervical cerclage, placed based on clinical and transvaginal ultrasound assessment, may provide mechanical support to the cervix and has been associated with prolonged gestation and reduced early preterm birth in women with a markedly short cervical length before 24 weeks. **Case Report:** A 17-year-old patient was admitted at 23 weeks of gestation with painful, rare, and irregular uterine contractions. Clinical examination revealed a leucorrhoeic, non-characteristic vaginal discharge, a slightly shortened cervix, and a visible amniotic sac at the cervical os without vaginal bleeding or amniotic fluid leakage. Ultrasound showed a viable singleton fetus in cephalic presentation, normal amniotic fluid volume, and anterior placenta without abnormalities. A cervical cerclage was carefully performed under clinical and ultrasound guidance, with no immediate complications and preserved fetal viability. Approximately ten days later, the patient developed painful uterine contractions. Examination of the cerclage revealed an intact cervix without visible dilation, but given the clinical presentation, she was transferred to the delivery unit, where a cesarean section was performed, resulting in the birth of a healthy, viable neonate. **Discussions :** Cervical cerclage provides mechanical support to a shortened cervix and is associated with prolongation of pregnancy in selected high-risk cases. Evidence suggests that outcomes are influenced by gestational age at placement, degree of cervical shortening, and concurrent uterine activity. Although cerclage can reduce the risk of preterm birth, it does not always prevent early delivery, particularly in patients with ongoing contractions or additional risk factors. In this case, the procedure initially maintained fetal viability without complications, but preterm delivery occurred ten days later, highlighting the multifactorial nature of preterm birth and the importance of individualized management strategies. **Conclusions:** Careful selection and placement of cervical cerclage may help extend pregnancy in high-risk cases, although early delivery remains possible, emphasizing the importance of tailored patient management.

Keywords: Cervical cerclage, Adolescent pregnancy, Preterm birth, Cervical shortening

CERVICAL SPINAL OSTEOLASTOMA MIMICKING SCHWANNOMA: AN IMAGISTICALLY CHALLENGING CASE

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Introduction: Osteoblastoma is a rarely reported primary benign tumor of the osteoblasts, accounting for 1-5% of cases, correlated with gene mutations involved in bone homeostasis, therefore inducing osteolytic lesions. Its dimensions, usually over 2 cm, and symptoms, unrelieved by NSAIDs, differentiate it from osteoid osteoma, which is typically smaller, causing severe but aspirin-responsive nocturnal pain. Schwannoma is an imagistically remarkable differential diagnosis to consider, since it is a dense tissue mass, often causing mechanical bone remodeling through chronic pressure, although originating from Schwann cells and usually responsible for neurological symptoms. **Case Report:** A 45-year-old patient, with no known pathological history, accuses cervical vertebral pain radiating in the upper right extremity, associated with diffuse sensory disturbance. Spinal CT shows an expansive process in the right vertebral-paravertebral region, at C4-C5 level, associated with bone remodeling phenomena in the right zygapophyseal joint, affecting the right laminae and pedicles, with visible intracanalicular and muscular invasion. Cervical MRI confirms expansion surface of approximately 21/35/25 mm, prolonged to the spinous apophyses, highlighting a mass effect on the adjacent spinal horn and the right vertebral artery surrounded by the process. Physical examination shows right cervicobrachialgia, diffuse hypoesthesia and paresthesia in the superior right limb, unaffected motricity. To prevent tumor complications and recurrence, surgical treatment was necessary. The intervention required total excision of the expansive, solid process located at C4-C5 and consecutive decompression of the dural sac, through posterior approach. Postoperatively, MRI shows resection cavity, clear spinal canal, evolution is favourable, symptomatology in remission, no further complications. Diagnostic conclusions of the clinical observation, imaging and pathological examination are: C4-C5 right vertebral-paravertebral, bone-remodeling osteoblastoma-suggesting neoplasm, associated with spinal canal invasion and dural sac compression, operated. **Discussions :** The case emphasizes the importance of imaging and surgical intervention for total tumor resection, in order to prevent malignant evolution, further aggravating symptomatology, or recurrence of a tumor known to be unresponsive to radiotherapy or chemotherapy. Pathological analysis is also of maximum importance, since spinal bone-infiltrating osteoblastomas can be imagistically confused with schwannomas, which are known to have a tropism for the cervical region but are more often encapsulated and of nervous tissue origin, causing mechanical erosion of adjacent bone. **Conclusions:** Immediate intraoperative intervention with complete ablation of the expansive process is both a curative and prophylactic procedure in the management of extremely rare, but alarming spinal osteoblastoma cases, due to its aggressive character and up to a 22% recurrence rate.

Keywords: Osteoblastoma, Osteolytic lesions, Cervicobrachialgia, Schwannoma

CHALLENGES IN DIAGNOSING AND MANAGING KNEE DISLOCATIONS IN HIGH INTENSITY TRAUMA

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Introduction: Traumatic knee dislocations are serious conditions that have had historically variable outcomes. Even if the multiple studies revealed a consensus regarding need for surgery, the management of traumatic knee dislocations remains controversial. **Case Report:** A 47 year old male patient with a medical history of bilateral knee instability, presents in the ER (emergency room) accusing excruciating pain and impairment of left knee movement, after a Motocross accident. The patient reported a dislocation of the left knee, spontaneously reduced following the trauma. Medical examination reveals swelling of the left knee, as well as a hematoma and vicious position of the lower left limb, without neurovascular damage. X-Ray exam indicated left knee subluxation. After the admission in the Trauma department, the patient underwent a native left knee MRI, which reveals Schneck III M knee dislocation and meniscus injuries. An open reduction of knee dislocation and sutures of the MCL (medial collateral ligament), meniscus and the internal capsule was performed by internal parapatellar approach.

Postoperative course was uneventful with patient discharge at 5 days after surgery. **Discussions :** The management of this case can be difficult based on the multiple ligaments and meniscuses injuries. Taking in consideration the need of using an allograft or synthetic ligament, further surgery of ACL (anterior cruciate ligament) and PCL (posterior cruciate ligament) reconstruction is required. In addition the literature showed a higher risk of potential injury of the popliteal artery in posterolateral dislocations, this case is particular in having an intact neurovascular compartment, that still needs to be monitored. **Conclusions:** The management of knee dislocation after a high-intensity trauma represents a challenge for most of the trauma surgeons and it is crucial in preventing chronic complications such as post-traumatic gonarthrosis and chronic joint instability .

Keywords: knee dislocation, management, ACL, collateral ligaments

CHALLENGES IN THE MANAGEMENT OF A PATIENT WITH SEVERE MITRAL REGURGITATION

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Introduction: Mitral regurgitation is a common valvular pathology, when there is an inability of complete mitral valve closure during systole. Mild forms often are asymptomatic. The severe forms can lead to atrial and ventricular remodeling as well as heart failure and cardiogenic shock (mostly in acute cases). It frequently coexists with different types of arrhythmias and heart failure symptoms. **Case Report:** A 64-year-old male patient, presented due to symptoms of dyspnea and intermittent palpitations. An ECG showed atrial fibrillations, complete right bundle branch block and secondary repolarization abnormalities. On Doppler echocardiography, the left ventricular end-diastolic diameter (LVEDD) was 62mm and the end-systolic diameter (LVESD) was 39mm. The EF was 55-60% and the PISA radius was 12mm before surgery indicating a severe mitral regurgitation. Biatrial enlargement was present (LA 56/76mm, RA 65mm). A mechanical mitral bileaflet prosthesis was implanted by transseptal approach. Postoperatively the EF was reduced to approximately 40% and the left ventricle diameter was 60mm. At discharge, anticoagulation with Acenocoumarol (Sintrom) was prescribed, targeting an INR of 2,5-3,5. After readmission due to palpitations, tachycardia, and dyspnea, a cardioversion was performed. The patient first showed sinus rhythm followed by recurrent episodes of atrial fibrillation. At discharge the patient showed sinus rhythm with first degree AV block and complete right bundle branch block. He was hemodynamically and respiratory stable in a good general condition **Discussions :** This case shows the complexity of mitral valve regurgitation management. Especially the transition from volume overload physiology in the beginning to afterload mismatch after surgical mitral valve replacement. Resulting in a postoperative left ventricular dysfunction. Despite a successful cardioversion first resulting in sinus rhythm, the patient repeatedly presented with persistent arrhythmias. Showing the advanced atrial remodeling contributing to the impaired ventricular filling and progression of heart failure. The therapeutic dilemma is to balance repeated rhythm control strategies which in cases of structural heart disease can be more difficult but may have greater benefits. And rate control requiring less frequent clinical interventions and representing a stable long-term strategy. The patient needs lifelong anticoagulation therapy which can complicate the management plan. **Conclusions:** This case shows mitral valve failure requires multiple management approaches, due to the constantly changing and evolving medical status of the patient. Working in an interdisciplinary team and continuously reevaluate the management strategy is important. Correction of the valvular lesion alone may not prevent the progression of heart failure and rhythm disorders.

Keywords: Mitral regurgitation, Arrhythmia management, Mitral valve replacement

CHALLENGES IN THE SURGICAL MANAGEMENT OF EPIPHARYNGEAL PAPILLOMATOSIS

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Introduction: Human papilloma virus (HPV) is a double stranded DNA virus with oncogenic potential. There are non-oncogenic types 6, 11 associated with genital warts, upper respiratory lesions and oncogenic types 16, 18 causing cervical cancer and 70% of oropharyngeal cancer. HPV targets Waldeyer's tonsillar ring, a lymphoid tissue, consisting in pharyngeal, tubal, palatine and lingual tonsils. The uncommon localisation of the papilloma, on

the anterior pharyngeal wall, makes this case unique. **Case Report:** The patient presented at the medical practice with one symptom: foreign body sensation in the retropalatal region. They had a history of papillomatosis one year prior which required surgery for a soft palate papilloma. Surgical treatment is recommended for the recurrence. The surgeon chose coblation because of the anterior pharyngeal wall localisation. Firstly, the uvula was retracted anteriorly using a straight Pean hemostat. A 70-degree rigid endoscope was introduced, allowing the visualization of the papillomatous lesion. Under endoscopic guidance, an angled coblation wand was inserted, and the destruction of the lesion was performed. During an attempt for deeper cauterization, a haemorrhage occurred; haemostasis was obtained using a curved bipolar forceps. Postoperatively, the patient presented a pharyngeal discomfort and uvular oedema. A potential complication may occur between days 5-8, a secondary haemorrhage of the previously cauterized vessel. The only method to control the bleeding is by using a urological Foley catheter; the procedure involves transnasal insertion of the catheter into the nasopharynx and inflation of the balloon for compression. In the discharge papers, the patient was provided a summary of the protocol and was given a Foley catheter to facilitate emergency intervention if necessary. **Discussions :** Pharyngeal papillomatosis in adults has a recurrence of 65.85%, according to Zheng et al. To minimize tissue damage, coblation has appeared to be superior than CO2 laser(Hao et al), reducing pain and bleeding postoperatively. Regarding postoperative nasopharyngeal haemorrhage, The American Academy of Otolaryngology recommended Foley catheter balloon tamponade to occlude the posterior choana when other methods fail. **Conclusions:** The anterior pharyngeal wall localisation caused significant surgical challenges, necessitating coblation for precise tissue ablation. This case highlights the importance of personalised surgical approaches and proactive haemorrhage management in complex nasopharyngeal papillomatosis.

Keywords: HPV, papillomatosis, oropharyngeal papillomatosis, coblation

CHALLENGING CASES IN CARDIAC SURGERY: A CASE REPORT

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Introduction: Extensive aortic calcifications ("porcelain aorta") can significantly complicate arterial cannulation and limit the use of standard cardiopulmonary bypass techniques in cardiac surgery. In such high-risk cases, mechanical circulatory support, such as ECMO (Extracorporeal Membrane Oxygenation), and on-pump beating-heart surgery are alternatives for patient management. **Case Report:** In this case, a 73-year-old patient with severe multivessel and left main coronary disease, disabling angina, prior MI (Myocardial Infarction) with pulmonary edema, heart failure, valvular replacement, aortic and carotid atherosclerosis, type II diabetes, and chronic kidney disease. Due to unstable angina, emergency surgical intervention was performed when extensive aortic calcifications were found, which led to a coronary artery bypass grafting carried out on the beating heart without aortic cross-clamping, using femoral arterial cannulation. Postoperatively, the severe status of the patient did not permit weaning from cardiopulmonary bypass and required ECMO support. Multiple factors interfered and threatened the recuperation, such as a cardiac tamponade and an acute right lower limb ischemia treated surgically, the preexisting renal failure, which needed continuous hemofiltration, and a significant pleural effusion, which was drained. Eventually, due to temporary clinical improvement, weaning from ECMO was permitted. However, the patient experienced sudden deterioration with cardiac arrest, initially responsive to resuscitation, followed by a second refractory arrest resulting in death. **Discussions :** Considering all aspects mentioned before (extensive aortic calcifications, the multiple comorbidities, and severe hemodynamic instability), performing myocardial revascularization on a beating heart was the most adequate and viable decision. Weaning the cardiopulmonary bypass was unsuccessful, mainly due to severe hypotension occurring when the flow was reduced to approximately 1.5 L/min. In this scenario, ECMO was the optimal solution, but the patient's critical condition made it impossible. **Conclusions:** To conclude, critical cases demand patience, resilience, and innovation, as in the present case, where numerous approaches were considered given the patient's complex medical history, and even though the most suitable technique was used, the patient's evolution was unfavorable due to uncontrollable factors in the postoperative period.

Keywords: Extracorporeal Membrane Oxygenation, Porcelain Aorta, Cardiopulmonary Bypass, Severe Hypotension

CHALLENGING HEPATOPULMONARY HYDATID DISEASE WITH EXTENSIVE LOCAL INVASION: A COMBINED SURGICAL APPROACH

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Introduction: Hydatid disease remains an important zoonotic condition in endemic regions, caused by infection with *Echinococcus granulosus*. Simultaneous hepatopulmonary involvement with large, complicated cysts is relatively rare and poses significant diagnostic and therapeutic challenges. **Case Report:** A 73-year-old patient presented to the clinic with asthenia, fatigue, 10 kg weight loss over two months, dry cough, and pruritus for one year. On clinical examination, cachexia was noted, along with hepatomegaly (liver palpable 4 cm below the costal margin). Laboratory findings revealed anemia and leukocytosis. Based on the presenting symptoms, the patient underwent imaging investigations. Abdominal CT revealed multivesicular cysts suggestive of hydatid disease, characterized by a double-layered wall and a "wheel-spoke" appearance. Chest radiography showed bulging of the cyst elevating the diaphragm toward the right lung, along with bronchoalveolar changes due to the presence of hydatid vesicles in the lung. Consequently, the patient was scheduled for surgical intervention using a combined (bipolar) approach, both abdominal and thoracic. The abdominal approach involved a median and right subcostal laparotomy, with resection of hepatic cysts and anterograde cholecystectomy, along with transcystic drainage to prevent complications and deformation of adjacent structures. This technique involves removal of the gallbladder from the fundus toward the cystic duct, reducing the risk of injury to the common bile duct. Due to the large size of the cysts and the associated bleeding risk, the Lagrot pericystectomy technique was preferred, which involves evacuation of cyst contents, partial resection of the cyst wall, and drainage, as a conservative treatment approach. At the thoracic level, a right thoracotomy was performed, with atypical resection of the right lower lobe and pleural drainage due to cyst extension. **Discussions :** Hepatic hydatid cysts with the extensive involvement of adjacent structures, along with concomitant pulmonary localization, significantly increased the surgical complexity. Postoperative contrast-enhanced cholangiography was performed to evaluate the residual cavity and to confirm the patency of the biliary tree, particularly in the context of biliary fistulas and dense adhesions. The combined abdominal and thoracic approach proved effective in managing extensive disease while preserving organ function. **Conclusions:** This case underscores the importance of early diagnosis and multidisciplinary management in patients with advanced hydatid disease. Large, multivesicular cysts with simultaneous hepatic and pulmonary involvement require individualized surgical strategies to minimize complications and ensure complete disease control.

Keywords: Anterograde cholecystitis, Atypical resection, Bipolar approach, Hydatid Chyst

CHALLENGING VASCULAR ACCESS IN MORBID OBESITY: PUSHING THE LIMITS OF ONE-STAGE AVF

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Introduction: Morbid obesity is an increasingly prevalent condition and a major public health concern worldwide, including for patients undergoing hemodialysis. Vascular access is difficult in these patients due to excess adipose tissue, which increases the depth of the veins and the risk of complications during the creation of an arteriovenous fistula. **Case Report:** We present a case of a 55-year-old female patient with multiple comorbidities, including morbid obesity (BMI=58,8 kg/m²), end-stage kidney disease, type 2 diabetes mellitus, asthma, heart failure and arterial hypertension, who is admitted to our Vascular Surgery Clinic for creation of a permanent vascular access. The patient started hemodialysis 2 weeks ago, using a CVC as the vascular access. A preoperative mapping of upper limb vessels using Doppler ultrasound was performed, the distal cephalic vein measuring 2 mm in diameter, the cephalic vein at the cubital fossa 3-4 mm and the radial artery 2 mm, with a depth of 18 mm. For the AV fistula creation, the patient received regional anesthesia using a supraclavicular brachial plexus block. We made three staged incisions along the right forearm, exposing the cephalic vein. We ligated the collaterals, hydrated the vein with heparinised serum and marked it on the anterior wall to prevent kinking. We made another incision on the distal third of the right forearm and exposed the radial artery. The cephalic vein was mobilised and tunnelled to a more superficial position, reducing the depth to 5 mm. Finally, an end-to-side anastomosis was performed between

the radial artery and the cephalic vein, creating a radiocephalic fistula. A strong palpable thrill was revealed postoperatively, suggesting patency and procedural success. **Discussions** : Most AV fistulas in obese patients have been performed in two steps to minimise the risk of complications and increase the chances of fistula maturation. However, a few case reports describe single-stage AV fistula creation, demonstrating that this technique is also safe. The primary benefit of the one-stage technique is that the patient undergoes a single procedure, resulting in a reduced interval before the fistula may be utilised for dialysis, in contrast to the two-stage technique. In our case, the primary technical challenge was the significant depth of the vein, which was successfully superficialized through tunnelling, reducing its depth from 18 mm to 5 mm. **Conclusions**: This case highlights that careful preoperative planning and optimal surgical technique can create a safe and effective single-stage AV fistula regardless of morbid obesity and multiple comorbidities.

Keywords: arteriovenous fistula, vascular access, morbid obesity, hemodialysis

CHASING A MOVING TARGET: A JOURNEY TO PRRT ELIGIBILITY IN MEN1 SYNDROME

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Introduction: Multiple endocrine neoplasia type 1 (MEN1) results from a mutation in the MEN1 gene on chromosome 11, with a prevalence of approximately 1:30,000 in the general population. The classic triad comprises multiglandular primary hyperparathyroidism, duodenopancreatic neuroendocrine tumors (NETs), and pituitary adenomas. MEN1-associated NETs carry significant malignant potential and mandate multidisciplinary management. Peptide receptor radionuclide therapy (PRRT) is a targeted approach utilizing radiolabeled somatostatin analogs to irradiate somatostatin receptor-expressing tumor cells. It represents a recommended therapeutic option for progressive, unresectable, or metastatic disease. **Case Report:** We present a 59-year-old patient with genetically confirmed MEN1 syndrome. At age 52, a gastric G2 NET was treated by subtotal gastrectomy, and a pancreatic G2 NET (Ki-67=3%) by distal splenopancreatectomy, after which somatostatin analog therapy was initiated. Primary hyperparathyroidism was managed by subtotal parathyroidectomy. Rising chromogranin A levels led to the detection of a new pancreatic head G2 NET (Ki-67=3%), which was resected. Abdominal MRI subsequently confirmed liver metastases, and biopsy of a peritoneal nodule confirmed dissemination, with a Ki-67 of 19% at metastatic sites. Somatostatin receptor scintigraphy revealed heterogeneous receptor expression, and CAPTEM (capecitabine and temozolomide) was initiated in the context of disease progression and rising tumor markers. However, follow-up MRI confirmed continued progression despite therapy, prompting discontinuation of CAPTEM and initiation of everolimus. In the absence of further systemic options, PRRT was initiated as the next line of therapy. **Discussions** : This case illustrates the complexity of managing MEN1 syndrome presenting with synchronous and metachronous NETs. The Ki-67 of 19% at metastatic sites informed the decision to initiate CAPTEM, while reflecting the aggressive biological behavior driving disease progression. The suboptimal response to CAPTEM, confirmed radiological evidence of progression, necessitated treatment escalation. Somatostatin receptor expression was heterogeneous: intense in hepatic and nodal metastases, but absent in peritoneal and pancreatic lesions. This guided a therapeutic strategy targeting receptor-negative disease with systemic chemotherapy and receptor-positive sites with PRRT. Prognosis remains guarded, contingent on sustained disease control and receptor status stability. **Conclusions:** This case exemplifies MEN1 syndrome as a "moving target", where proliferative progression and heterogeneous receptor expression demand ongoing reassessment and individualized decision-making. Multimodal management must be tailored based on tumor biology, receptor status, and disease dynamics. Tumor heterogeneity, understood as a guide rather than a barrier, becomes the foundation of effective treatment planning.

Keywords: MEN1 syndrome, neuroendocrine tumor, CAPTEM, peptide receptor radionuclide therapy

CHRONIC HYPOKALEMIA REVEALING PRIMARY ALDOSTERONISM IN A PATIENT WITH MILD HYPERTENSION: A CASE REPORT

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Introduction: Aldosterone is a mineralocorticoid hormone that acts on the renal collecting ducts, promoting

sodium and water reabsorption and potassium excretion. Excess aldosterone secretion leads to hypokalemia and increased intravascular volume, resulting in hypertension. Primary aldosteronism is the most common cause of endocrine secondary hypertension and remains an underdiagnosed cause of secondary hypertension overall.

Case Report: A 45-year-old male patient, smoker, with a history of arterial hypertension, type 2 diabetes mellitus, and obesity, presented to the outpatient endocrinology clinic for a routine evaluation. Blood pressure values were mildly elevated, reaching up to 140/90 mmHg in the absence of antihypertensive treatment. Laboratory tests revealed severe hypokalemia (2.19 mmol/L). The patient was recommended hospital admission for potassium correction and further endocrine investigations, raising the suspicion of primary aldosteronism. However, he was initially non-compliant and postponed further evaluation and treatment for approximately one year. At follow-up, persistent severe hypokalemia (2.3 mmol/L) was identified, and the patient agreed to hospitalization. During admission, hypokalemia was corrected with both intravenous and oral potassium supplementation. Further endocrinological evaluation revealed suppressed renin levels and elevated aldosterone concentration, with an increased aldosterone-to-renin ratio, consistent with primary aldosteronism. Abdominal CT imaging was recommended for etiological assessment; however, the patient postponed the investigation for personal reasons. Treatment with spironolactone was initiated, with subsequent normalization of potassium levels. The patient remains under follow-up, with further imaging planned to establish the underlying cause and assess eligibility for potential surgical management. **Discussions :** Primary aldosteronism remains an underdiagnosed cause of secondary hypertension, despite being the most common endocrine etiology. Although classically associated with severe or resistant hypertension, milder forms may be overlooked in clinical practice. Persistent hypokalemia represents a key diagnostic clue and should prompt further evaluation. This case also highlights the impact of delayed investigation and patient non-compliance, which may contribute to postponed diagnosis and management. **Conclusions:** Primary aldosteronism should be suspected in patients with persistent hypokalemia, even in the absence of severe hypertension. Early diagnosis is essential to reduce long-term cardiovascular risk and to guide appropriate, targeted treatment.

Keywords: primary aldosteronism, hypokalemia, secondary hypertension, mineralocorticoid receptor antagonist

CHRONIC SPONTANEOUS URTICARIA AND EOSINOPHILIC ASTHMA - A CLINICAL ASSOCIATION WITH PROGNOSTIC AND THERAPEUTIC IMPLICATIONS. CASE PRESENTATION

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Introduction: Chronic spontaneous urticaria (CSU) is a more recently defined clinical entity, included in the classification of chronic forms of urticaria, which manifests through the spontaneous appearance of wheals and/or angioedema, lasting more than 6 weeks, without obvious causes, frequently refractory to classical antihistamine therapy. The particularity of the case is represented by the associative presence of CSU and eosinophilic asthma, thus suggesting a common IgE-mediated pathophysiological pathway. CSU requires a multidisciplinary approach, and in cases refractory to conventional therapy, a switch to biological therapy is necessary. **Case Report:** A 23-year-old female patient with a complex atopic background (eosinophilic bronchial asthma and allergic rhinitis) associated with other comorbidities: cardiac (extrasystoles), digestive (gastroesophageal reflux disease), and vertebral (cervico-dorso-lumbar discopathy). Anamnestically, the disease began 4 months ago, with confluent seropapules forming well-defined urticarial plaques, intensely pruritic, transient in nature, disseminated on the trunk, limbs, and head extremity, without angioedema. Allergological examination identified allergy to bee venom and goat milk. The initial diagnosis established was acute urticaria of unspecified etiology. First-line therapy included antihistamines (levocetirizine 5 mg) at a dose of 1 × 5 mg in the evening. In the absence of therapeutic response, the dose was escalated to 2 × 5 mg morning and evening, then 4 × 5 mg (according to therapeutic guidelines), associated with low-dose systemic corticosteroids (Lemod Solu 62.5 mg), and a restrictive dietary regimen avoiding food allergens. The therapeutic response was modest, with slight improvement in symptoms, without complete remission of the eruption. Upon discontinuation of corticosteroid therapy, the skin lesions reappeared accompanied by pruritus. Based on the medical history, clinical examination, and evolution, with the exclusion of other external triggering factors, the diagnosis of CSU is supported. **Discussions :** Considering the patient's profile and the failure of conventional treatment, initiation of biological therapy with Omalizumab (anti-IgE monoclonal antibody) was proposed, targeting dual control and benefit (cutaneous and respiratory). **Conclusions:** The need for prompt application of the biological therapy protocol in refractory CSU cases is confirmed. Omalizumab represents an optimal therapeutic solution for cases with multiple atopic associations, thus

providing significant improvement in quality of life and reducing dependence on corticosteroids.

Keywords: chronic spontaneous urticaria, eosinophilic asthma, antihistamines, omalizumab

CLINICOPATHOLOGICAL FEATURES OF ENDOMETRIAL INTRAEPITHELIAL NEOPLASIA AND INCIDENTAL OVARIAN STEROID CELL TUMOR IN A POSTMENOPAUSAL PATIENT

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Introduction: Postmenopausal bleeding refers to any vaginal blood loss occurring after at least 12 consecutive months of amenorrhea, the period that defines menopause. It is a pathological clinical sign, because after menopause, ovarian activity and estrogen secretion decrease, and the endometrium becomes atrophic. Any bleeding at this stage is considered abnormal and requires prompt gynecological evaluation, being treated in practice as potentially malignant until this cause is ruled out. **Case Report:** A 55-year-old patient presented with persistent vaginal bleeding for 4 months, which began approximately one year after the onset of menopause. MRI imaging revealed an anteverted uterus with thickened endometrium (~9.5 mm), multiple uterine fibroids (the largest measuring approximately 5-6 cm), left ovarian formations suggestive of a follicular cyst and possible paraovarian cyst, no pathological adenopathy, and minimal free pelvic fluid. Noteworthy are significant pathological antecedents, including embolism and venous thrombosis, chronic peripheral venous insufficiency, iron deficiency anemia, secondary hypertension, and uterine leiomyoma. Total abdominal hysterectomy with bilateral salpingo-oophorectomy was performed. Postoperatively, the evolution was favorable, with a cardiological consultation being performed and antihypertensive treatment (Norvasc). Macroscopic examination revealed an enlarged uterus with thickened myometrium and numerous whitish nodules of firm consistency, typical of leiomyoma, thickened cervical canal, and endometrial cavity occupied by a polyp. Serous cysts and yellowish nodules were observed in the uterine body. The fallopian tube was of normal size, presenting a small para-tubal cyst, and the ovaries were normal in size, one of them presenting a stromal tumor with steroid cells, an appearance compatible with a benign lesion. After microscopic evaluation, the following diagnoses were made with certainty: LSIL (low-grade squamous intraepithelial lesion) and chronic polypoid cervicitis, Nabothian cysts, endometrial polyp containing an area of EIN (endometrial intraepithelial neoplasia) with atypical hyperplasia, adenomyosis, uterine leiomyomatosis, nodular stromal hyperplasia, corpus albicans cysts, and bilateral chronic salpingitis. Regarding the ovarian stromal tumor with steroid cells, the diagnosis was confirmed by immunohistochemistry, with diffuse Inhibin positive, focal Melan A positive, and Calretinin positive results, supporting the benign nature and steroid origin of the cells. **Discussions** : In this patient, the steroid cell ovarian stromal tumor was asymptomatic. This lesion is rare, usually benign, and due to its nonspecific macroscopic appearance, the use of immunohistochemical markers was essential to rule out malignancy. **Conclusions:** Although it may seem a radical approach, complete hysterectomy is, in certain cases of postmenopausal bleeding with multiple lesions or risk of malignancy, the safest and most effective therapeutic option.

Keywords: steroid, hysterectomy, atrophic, amenorrhea

CO-INFECTION WITH CLOSTRIDIODES DIFFICILE AND OXA-48-PRODUCING KLEBSIELLA PNEUMONIAE IN A HIGH-RISK ELDERLY PATIENT: A CASE REPORT

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Introduction: Co-infection with *Clostridioides difficile* (CDI) and carbapenemase-producing *Klebsiella pneumoniae* represents a major challenge in elderly hospitalized patients. Advanced age, multiple comorbidities, and prolonged exposure to broad-spectrum antibiotics significantly increase the risk of severe infections, antimicrobial resistance, toxicity and poor clinical outcomes. **Case Report:** We report the case of an 82-year-old female with a history of arterial hypertension, ischemic cardiomyopathy, permanent atrial fibrillation (on DOAC), and stage III chronic kidney disease, who presented with progressive dyspnea, orthopnea, productive cough, nausea over the past 3 days. Physical examination revealed crackles in the right lower lung field. Laboratory findings showed leukocytosis ($13.52 \times 10^3/\mu\text{L}$) with neutrophilia ($12.03 \times 10^3/\mu\text{L}$), elevated C-reactive protein (63.4 mg/L), and hypoxemia. Chest X-ray revealed an inhomogeneous, high-density opacity projected over the left lower lung field, interpreted as

suggestive of pneumonia. The patient was admitted to the Internal Medicine Clinic No.1. The patient received sequential broad-spectrum antibiotic therapy, including amoxicillin-clavulanate, moxifloxacin, ceftriaxone, and azithromycin, along with proton pump inhibitor therapy and anticoagulation. During hospitalization, the patient developed multiple episodes of diarrhea, raising suspicion for CDI. Diagnosis was confirmed by positive stool toxin B and GDH antigen. Treatment with oral vancomycin and intravenous metronidazole was initiated, consistent with severe CDI management. Urine culture revealed OXA-48-producing *Klebsiella pneumoniae* with bacterial count of 80,000 CFU/mL and extensive antimicrobial resistance. Despite targeted therapy, the patient's condition deteriorated, with marked leukocytosis ($29.5 \times 10^3/\mu\text{L}$), respiratory failure (developing acute pulmonary edema), macroscopic hematuria requiring discontinuation of anticoagulation, and hemodynamic instability requiring vasopressor support. Empirical meropenem therapy was initiated for suspected sepsis. Despite escalation of antimicrobial therapy and intensive care support, the patient progressed to cardiopulmonary arrest and died despite resuscitation efforts. **Discussions** : This case highlights the lethal impact of concomitant CDI and carbapenemase-producing *Klebsiella pneumoniae* infection in a multimorbid patient. Advanced age, cardiovascular disease, and chronic kidney disease contributed to increased vulnerability and poor prognosis. Extensive exposure to high-risk antibiotics likely facilitated both microbiota disruption and selection of multidrug-resistant organisms. CDI further exacerbated systemic inflammation and clinical instability, while the emergence of OXA-48-producing *Klebsiella pneumoniae* complicated antimicrobial management and contributed to septic deterioration. Risk factors for secondary bacteremia and poor prognosis of CDI include high doses of oral vancomycin (>500 mg/day), but the current guideline recommend this doses in severe infection, complicating medical decision. **Conclusions:** Co-infection with CDI and carbapenemase-producing *Klebsiella pneumoniae* represents a life-threatening condition in elderly patients with multiple comorbidities, characterized by rapid clinical deterioration and high mortality.

Keywords: co-infection, *Clostridioides difficile*, *Klebsiella pneumoniae*, comorbidities

COEXISTING FRONTAL MENINGIOMA AND ASTROCITOMA: A DIAGNOSTIC CHALLENGE

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Introduction: Grade III astrocytoma, also known as anaplastic astrocytoma, is a malignant high-grade primary brain tumour. Typical presenting symptoms include headaches, seizures, and focal neurological deficits, whereas atypical presentations may complicate the diagnostic process by mimicking other neurological or systemic conditions, thereby delaying both diagnosis and management. **Case Report:** A 74-year-old patient presented to the emergency department with symptoms suggestive of a posterior circulation stroke, raising suspicion of basilar artery thrombosis, in the setting of elevated D-dimer levels. The initial non-contrast head CT scan showed no abnormalities, prompting CT angiography of the cerebral arteries. This examination revealed a 19×14 mm hyperenhancing juxtacortical lesion in the right frontotemporal region, with homogeneous contrast enhancement, initially considered suggestive of an arteriovenous malformation with a limited number of feeding vessels. The patient was admitted to the neurology department, and cerebral angiography performed the following day demonstrated arterial supply from the middle meningeal artery, findings more suggestive of a meningioma. Brain MRI was subsequently performed and further supported the diagnosis of meningioma based on the lesion's imaging appearance. Additionally, the MRI also showed a small hyperenhancing lesion accompanied by digitiform oedema. Histopathological examination following surgical resection established the diagnosis of grade III astrocytoma and a meningioma. **Discussions** : Grade III astrocytoma may show highly variable contrast enhancement and often lacks overt necrosis, which can make imaging diagnosis challenging. In addition to conventional MRI sequences, proton magnetic resonance spectroscopy (MRS) allows quantification of tissue metabolites, providing valuable information beyond standard MRI. An increased choline-to-creatine ratio, together with normal or slightly reduced N-acetylaspartate (NAA) levels and the absence of significant lactate elevation, may suggest the presence of this type of tumour. Furthermore, the detection of 2-hydroxyglutarate (2HG) in IDH-mutant tumours may offer noninvasive molecular characterization without the need for biopsy. **Conclusions:** This case highlights the diagnostic challenge posed by synchronous brain lesions in the same lobe, which can be easily missed, especially when an evident lesion can mask the second one. Although multimodal imaging plays a crucial role in lesion characterization, histopathological examination remains the definitive gold standard.

Keywords: Grade III astrocytoma, Anaplastic astrocytoma, Brain tumor, Atypical presentation

COLLAGENOUS GASTRITIS IN ADOLESCENCE: AN UNCOMMON CAUSE OF SEVERE ANEMIA

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Introduction: Collagenous gastritis (CG) is an extremely rare inflammatory disorder of the stomach characterized histologically by a thickened subepithelial collagen band ($>10\ \mu\text{m}$) associated with chronic inflammatory cell infiltration in the lamina propria. Although CG has been reported in both children and adults, its occurrence remains exceptionally rare across all age groups, with only a limited number of cases described in the literature. Due to its nonspecific clinical manifestations and rarity, diagnosis is often delayed and relies on histopathological confirmation. **Case Report:** We present the case of a 17-year-old boy who experienced persistent fatigue and exercise intolerance. Initial blood tests revealed very low hemoglobin and severe iron-deficiency anemia. Given his young age, the severity of anemia and the absence of obvious bleeding, esophagogastroduodenoscopy was performed. Endoscopic examination revealed a diffuse papulo-nodular, erythematous gastric mucosa, prompting multiple biopsies for histopathological evaluation. **Discussions :** Microscopic examination revealed a thickened subepithelial collagen band beneath the surface epithelium, associated with chronic inflammatory infiltration in the lamina propria involving both the body and antrum. Trichrome staining confirmed the presence of collagen deposition, establishing the diagnosis of collagenous gastritis. The patient received corticosteroid therapy with rapid recovery and is currently in good health. He remains under regular follow-up, as collagenous gastritis may be associated with autoimmune disorders. **Conclusions:** Collagenous gastritis is a rare condition in adolescents, often presenting with iron-deficiency anemia rather than gastrointestinal symptoms, making early recognition challenging. Endoscopic findings are frequently nonspecific, emphasizing the role of biopsy and histopathological confirmation for diagnosis. This case highlights the importance of considering CG in the differential diagnosis of severe unexplained anemia in young patients and contributes to the limited literature on its pediatric and adolescent presentation.

Keywords: Collagenous gastritis, Adolescents, Anemia, Corticosteroid therapy

COLONIC LYMPHOPROLIFERATIVE DISORDERS MIMICKING INFLAMMATORY BOWEL DISEASE

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Introduction: Gastrointestinal lymphoproliferative disorders involve the abnormal proliferation of lymphoid cells. These disorders range from benign lymphoid hyperplasia to malignant lymphoma. Involvement of the colon is rare and represents a diagnostic challenge since the symptoms overlap with Inflammatory Bowel Disease. **Case Report:** We present a 63 years old female. The patient complains of semi-formed stools, rectal bleeding at the end of defecation, and diffuse abdominal pain. Her medical history includes colonic diverticulitis, haemorrhoids and prior cholecystectomy. On clinical examination the patient presents a good general status, non-tender abdomen, preserved bowel movements, non-palpable spleen and liver edge at the right costal margin. The laboratory evaluation shows elevated inflammatory markers, mild iron deficiency anaemia, highly increased faecal calprotectin ($758.80\mu\text{g/g}$) and normal AFP, CA19.9 and CEA. The imagistics and endoscopic examination revealed colonic lymphoproliferative process; homogenous hepatosplenomegaly; multiple diverticula in the sigmoid; extensive lesions affecting the gastric body, cecum, ascending colon and rectosigmoid; lymphadenopathy in presacral, bilateral common iliac and lumbo-aortic regions near the greater and lesser curvature (largest is 14 mm near the greater gastric curvature); left adrenal adenoma (9mm). At the moment, the therapeutic plan of the patient includes cyclic antibiotic therapy (Normix) and supportive treatment for haemorrhoids (Hemovert). **Discussions :** This case emphasizes a suspected malignant intestinal lymphoproliferative disease, in which the clinical, laboratory and imagistic (endoscopy) results mimic Inflammatory Bowel Disease. The elevated faecal calprotectin and the expensive gastrointestinal inflammatory lesions suggest active mucosal inflammation. Hepatosplenomegaly and lymphadenopathy highlight the need of follow up to evaluate the disease progression and to exclude malignancy. This case highlights the need for an early diagnosis and a multidisciplinary approach.

Conclusions:

This case emphasizes the overlap between lymphoproliferative process and Inflammatory Bowel Disease, which often delays the definitive diagnosis of intestinal lymphoma. A follow-up including laboratory investigations, abdominal-pelvic CT, colonic biopsy and histopathological examination are essential, in order to avoid misdiagnosing and to initiate an adequate treatment plan.

Keywords: Colonic lymphoproliferative, Inflammatory Bowel Disease, Lymphadenopathy, Faecal calprotectin

COLPOSCOPY IN THE MANAGEMENT OF ABNORMAL PAP SMEARS: A CASE REPORT AND LITERATURE REVIEW

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Introduction: Cervical cancer remains a major global health issue, underscoring the importance of effective screening strategies. Colposcopy plays a pivotal role in the evaluation and management of cervical abnormalities detected on cytology, particularly after an abnormal Pap smear. By using a colposcope to magnify and assess the cervix, vagina, and vulva, clinicians can more accurately detect suspicious areas, guide biopsies, and identify precancerous lesions at an early stage, thereby improving reproductive and overall gynecologic health outcomes. This paper presents the clinical course of a patient whose initial cytological finding of ASC-US (Atypical Squamous Cells of Undetermined Significance) ultimately led to a diagnosis of carcinoma in situ of the cervix following colposcopic assessment. **Case Report:** We report the case of a 44-year-old woman whose cervical cytology demonstrated ASC-US, a category that may reflect early preneoplastic changes. Given this result, colposcopic examination was performed and revealed areas warranting targeted cervical biopsy. Histopathological evaluation of the biopsy confirmed a high-grade lesion consistent with CIN III / HSIL. The patient then underwent LLETZ (Large Loop Excision of the Transformation Zone) for excision of the transformation zone and the abnormal epithelium. Subsequent histopathological analysis of the excised specimen demonstrated carcinoma in situ of the cervix. A comprehensive literature search was also conducted using PubMed to identify relevant studies on colposcopy and Pap smear accuracy. **Discussions :** Histology confirmed complete removal of the lesion with clear margins, and no additional surgical or oncologic treatment was required. In the absence of colposcopic evaluation and subsequent LLETZ, the in situ carcinoma would likely have remained undiagnosed and at risk of progressing to invasive disease in a relatively short time. Findings from a large meta-analysis paralleled our observations, reporting diagnostic accuracy rates of 82.2% for Pap smears and 96.3% for colposcopy. These data support the value of timely colposcopic assessment for the early identification and management of cervical neoplasia. **Conclusions:** Integrating colposcopy into the evaluation of women with equivocal or abnormal cytology facilitates earlier diagnosis, targeted treatment, and improved prognostic outcomes, thereby strengthening cervical cancer prevention efforts at the population level.

Keywords: cervical cancer, pap smear, colposcopy

COMPLEX LONG-TERM COURSE OF EARLY-ONSET FISTULIZING CROHN'S DISEASE WITH ASSOCIATED THERAPEUTIC CHALLENGES

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Introduction: Crohn's disease is a chronic inflammatory bowel disease classified as a chronic inflammatory bowel disease and is characterized by a recurrent and advancing disease course, associated with a substantial risk of both intestinal and extraintestinal complications. Long-term disease evolution may be influenced by fistulizing complications, the necessity for biologic therapy, and several and significant surgical operations **Case Report:** We describe a 47-year-old female patient with a 27-year history of Crohn's disease. All clinical data were collected through a retrospective study of several admissions and their corresponding discharge summaries, imaging studies, and laboratory records. The patient suffered from severe ileocolonic Crohn's disease complicated by perianal fistulas and a parietocolonic fistula. The disease evolution was later complicated by additional extraintestinal manifestations such as erythema nodosum and arthralgia, along with infectious complications from *Clostridioides difficile* infection, and a history of prior pulmonary tuberculosis. Therapeutic approach proved challenging. Infliximab was the first biological treatment administered but withdrawn as a result of an allergic reaction. Subsequently, therapy was changed to Adalimumab, under which the patient develops an episode of

acute Hepatitis C that evolved into chronic infection, successfully treated later on with interferon-free direct-acting antiviral therapy. Azathioprine treatment was afterwards introduced, and this ultimately led to endoscopic remission, with documented mucosal healing, but yet treatment was stopped after two years because of development of drug-induced pancytopenia. Starting from 2023, therapy was switched to Vedolizumab. Further progression of the disease necessitated multiple surgical interventions, such as right hemicolectomy initially and later subtotal colectomy with protective ileostomy. Imaging data showed long-term inflammatory intestinal findings and ongoing enteral fistulas. **Discussions** : The chosen case illustrates the long-term complexity of managing patients with severe and progressive forms of Crohn's disease, associated with multiple serious complications and limited treatment options. The highly unfavorable evolution of the disease comes as a result of the presence of multiple poor prognostic indicators, such as a young age at diagnosis and early fistula development. **Conclusions**: The management of severe forms of Crohn's disease remains a demanding and difficult task that requires continuous evaluation and an adapted therapeutic approach, given that every patient has a personal and unique way of responding to different treatment alternatives. It is crucial, to identify poor prognostic indicators early and to implement prompt therapeutic measures to minimize complications and improve over-time outcomes.

Keywords: Crohn's disease, fistulas, extraintestinal manifestations, biologic therapy

COMPLEX MULTIOCLULAR SUPRAUMBILICAL HERNIA IN AN ELDERLY PATIENT: SURGICAL MANAGEMENT AND OUTCOME

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Introduction: Supraumbilical hernias represent a frequent pathology in general surgery, with increased complexity in elderly patients with multiple comorbidities. While most defects are small and easily managed, giant multilocular and multisaccular hernias are rare and may present significant technical challenges due to altered anatomy, adhesions, and risk of visceral involvement. Early surgical intervention is essential to prevent complications such as incarceration, strangulation, or bowel necrosis. **Case Report:** We present a 79-year-old patient with a 20-year-old giant supraumbilical hernia of the multilocular and multisaccular type associated with multiple comorbidities such as arterial hypertension, mitral and tricuspid insufficiency, congestive heart failure, and obesity. A large abdominal wall defect, partially reducible, was noted on examination. Intraoperatively we revealed intrasaccular ascending and transverse colon in the hernia sac. The non-viable greater omentum was resected due to extensive adhesiolysis together with adhesiolysis. The polypropylene mesh abdominal wall reconstruction was carried out using mesh placement in a supraaponeurotic position (onlay technique) with separate fascial sutures for adequate defect closing defect. Following the operation, everything was favorable; bowel motility was reestablished, urinary function was normal, and no local complications were observed. The patient received discharge instructions for weight reduction, wound care, and cardiological follow-up. **Discussions** : Giant multilocular hernias are a distinct surgical challenge due to the anatomy of the sac and adhesion formation. Enterotomy risk and intraoperative difficulty are significantly increased by these factors. While sublay mesh placement is the method of choice in most cases, onlay technique is a safe and efficacious alternative in selected cases, particularly in elderly patients with comorbidities where operative time needs to be minimized. **Conclusions:** Multiloculated supraumbilical incisional hernias require individualized surgical management. Open repair with mesh reinforcement remains a reliable approach, providing favorable outcomes when careful surgical technique is applied. Early intervention may prevent progression to complicated hernias requiring emergency surgery.

Keywords: giant hernia, multiloculated and multisaccula, supraumbilical hernia, adhesiolysis

COMPLEX SURGICAL MANAGEMENT OF PERFORATED GANGRENOUS CHOLECYSTITIS WITH CYSTICO-CHOLEDOCHAL FISTULA ASSOCIATED WITH GIANT INCISIONAL HERNIA AND LOSS OF DOMAIN IN AN ELDERLY PATIENT

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Introduction: Gangrenous perforated cholecystitis represents a severe form of acute biliary infection associated with high morbidity and mortality, particularly in elderly patients. The coexistence of cystico-choledochal fistula (Mirizzi syndrome spectrum) further increases surgical complexity due to altered anatomy and increased risk of bile

duct injury. When associated with a giant incisional hernia presenting loss of domain, operative management becomes technically demanding and physiologically challenging, requiring careful intraoperative strategy to avoid abdominal compartment syndrome and postoperative complications. **Case Report:** An 86-year-old female patient was admitted with acute right upper quadrant pain, fever, and inflammatory syndrome. Imaging studies revealed complicated lithiasic cholecystitis with suspected hepatic bed abscess and large multilocular incisional hernia with significant loss of domain. Emergency exploratory laparotomy was performed. Intraoperatively, extensive adhesions, gangrenous perforated gallbladder, hepatic bed abscess, and cystico-choledochal fistula were identified. Adhesiolysis and abscess evacuation were followed by antegrade cholecystectomy with meticulous dissection of the hepatoduodenal ligament. Simultaneously, abdominal wall reconstruction was achieved using the Ramirez component separation technique. A polypropylene mesh was placed in a supra-aponeurotic position, and double subcutaneous drainage was inserted. Careful reintegration of herniated viscera was performed to minimize elevation of intra-abdominal pressure. The postoperative course was favorable, without signs of abdominal compartment syndrome. **Discussions :** The simultaneous management of septic biliary pathology and giant incisional hernia with loss of domain remains controversial. While staged procedures are often recommended, selected stable patients may benefit from single-stage surgery. Component separation allows tension-free closure while preserving vascular supply. Literature regarding combined emergency cholecystectomy and complex abdominal wall reconstruction in octogenarians remains limited. **Conclusions:** In selected elderly patients, a single-stage surgical approach combining definitive biliary surgery and abdominal wall reconstruction using the component separation technique can be safely performed. Careful intraoperative judgment and postoperative monitoring are essential to reduce morbidity and ensure favorable outcomes.

Keywords: Gangrenous cholecystitis, Mirizzi syndrome, Incisional hernia, Loss of domain

COMPLICATED CROHN'S DISEASE: A CASE REPORT ON THROMBOTIC RISK AND TREATMENT FAILURE

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Introduction: Crohn's Disease (CD) is a chronic inflammatory bowel disease (IBD) characterized by transmural inflammation and a high risk of systemic complications. Beyond gastrointestinal symptoms, patients often face a prothrombotic state and cardiovascular burdens that significantly complicate the clinical course and therapeutic options. **Case Report:** A 70-year-old male with a history of ulcerative pancolitis presented in 2024 with a severe flare: 10+ bloody stools/day, hypogastric abdominal pain, weakness and fatigue. Bloodwork revealed leukocytosis with neutrophilia, severe anemia, (Hb 5.1 g/dL), nitrogen retention and increased inflammatory markers (CRP: 73 mg/L). An infectious screening detected a urinary tract infection with *Enterococcus*. Fecal calprotectin highly elevated (994 microg/g). Colonoscopy reclassified the condition as ileo-colonic Crohn's disease. His course was critically complicated by decompensated heart failure (EF 35%) and a massive bilateral pulmonary embolism. Following stabilization the patient began Infliximab. Despite initial improvement, by early 2026 he developed a secondary loss of response (CDAI 229, Fecal Calprotectin 1600 µg/g). Due to TNF-alpha failure and multiple comorbidities (CKD, DM II, AFib), treatment was escalated to Ustekinumab (520 mg IV induction). Now he remains under multidisciplinary surveillance (Gastroenterology, Cardiology, Pulmonology). **Discussions :** This case highlights the diagnostic shift frequently seen in IBD where a long-standing diagnosis of ulcerative pancolitis is reclassified as Crohn's disease upon documenting small bowel involvement. It underscores the severe prothrombotic risk due to IBD flares, where a massive bilateral pulmonary embolism (PE) created a life-threatening conflict between necessary anticoagulation and active gastrointestinal bleeding. The management was constrained by the patient's comorbidity profile which limited the long-term use of Infliximab due to potential cardiac exacerbation. After a secondary loss of response, the successful transition to Ustekinumab (IL-12/23 inhibitor) demonstrates its utility as a safe and effective alternative for geriatric patients with high cardiovascular risks. This case also proves that managing refractory Crohn's disease in complex patients requires a multidisciplinary approach to balance aggressive immunosuppression with thromboembolic stability. **Conclusions:** This case demonstrates the high thrombotic risk during IBD flares and the complexity of managing elderly patients with multiple comorbidities. The follow-up helped with modifying the treatment and limiting the complications. The transition from Infliximab to Ustekinumab was important to overcome therapeutic failure while navigating the narrow window between treating aggressive inflammation and managing systemic vascular complications.

Keywords: Crohn's Disease, Thrombotic risk, Biological therapy, Therapeutic Escalation.

COMPLICATIONS FOLLOWING SEVERE POLITRAUMA: FROM ROAD TRAFFIC ACCIDENT TO SECONDARY ORGAN FAILURE

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Introduction: The management of severe polytrauma remains a significant challenge in intensive care units, requiring prompt stabilization of life-threatening injuries while ensuring vigilant surveillance for delayed secondary complications. Road traffic accidents remain a leading cause of morbidity and mortality worldwide. Early metabolic instability, acute respiratory failure, and secondary neurological complications are pivotal determinants of prognosis in these patients. We aim to present a case of traumatic polytrauma complicated by secondary ischemic stroke and acute kidney injury, to emphasize the diagnostic and therapeutic challenges involved. **Case Report:** We report the case of a 46-year-old man who arrived at the Emergency Department in critical condition following a motor vehicle accident. The initial assessment revealed a complex traumatic scenario, including severe traumatic brain injury, bilateral Le Fort II-III fractures, cervical spine fractures (C1-C4 and multiple rib fractures. Thoracic trauma was notable for a large right pneumothorax (up to 53 mm in thickness), fractures of the right and left sixth and seventh ribs, along with a 13 mm retrosternal hematoma. ABG results showed mixed acidosis (pH 7.02) and severe hypercapnia (pCO₂ 99 mmHg). Laboratory results indicated moderate post-traumatic anemia and significant leukocytosis with neutrophil dominance, reflecting a systemic inflammatory response. A mild prolongation of prothrombin time suggested early trauma-related coagulopathy. CT scans confirmed extensive craniofacial and cervical spine fractures, a right pneumothorax with lung collapse, and pulmonary contusions. Follow-up imaging identified ischemic changes consistent with a right middle cerebral artery territory, aligning with worsening left hemiparesis. Emergency interventions involved facial wound repair, nasal packing, drainage of the right pleural cavity, and a later surgical tracheotomy due to extended ventilatory needs. Early development of acute kidney injury required continuous venovenous hemodiafiltration. **Discussions :** Although initial management focused on life-threatening respiratory and hemodynamic instability, the most significant delayed complication was the development of ischemic stroke. In polytrauma patients, cerebrovascular events may result from arterial dissection, thromboembolism, or sustained cerebral hypoperfusion. In this case, the coexistence of severe metabolic acidosis, inflammatory activation, and transient hypotension likely contributed to cerebral vulnerability. **Conclusions:** This case exemplifies the complex pathophysiological cascade initiated by polytrauma from a motor vehicle accident, triggering a complex cascade, causing metabolic imbalance, respiratory failure, and organ dysfunction. The trauma's "lethal triad", acidosis, coagulopathy, and hypothermia, markedly heightens mortality risk and complicates resuscitative efforts, even if not all are fully present. Continuous monitoring and reassessment were key to improving survival and functional outcome.

Keywords: Polytrauma, Acute kidney failure, Ischemic stroke

COMPREHENSIVE MANAGEMENT OF POST-TRAUMATIC ACUTE MITRAL REGURGITATION DUE TO PAPILLARY MUSCLE RUPTURE UNDER ECMO SUPPORT – CASE REPORT AND LITERATURE REVIEW

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Introduction: Blunt chest trauma frequently involves pulmonary injury, yet traumatic cardiac valvular dysfunction remains rare, occurring in fewer than 0.5% of severe cases. Acute mitral regurgitation secondary to papillary muscle rupture represents a critical complication. In young patients, violent shearing forces can exceed subvalvular resistance through the "Hydraulic Ram" effect—a phenomenon where sternal-vertebral compression during isovolumetric systole triggers a catastrophic surge in intraventricular pressure. Diagnosis is often confounded by pulmonary contusions and Acute Respiratory Distress Syndrome (ARDS), which mask primary cardiac symptoms. Modern management utilizes Extracorporeal Membrane Oxygenation (ECMO) as a vital "bridge-to-surgery" for hemodynamic stabilization. **Case Report:** A 17-year-old male presented in critical condition following severe sports-related blunt chest trauma. Clinical evaluation revealed acute heart failure, severe ARDS, and bilateral pulmonary contusions. Transthoracic echocardiography identified severe mitral regurgitation secondary to an anterolateral papillary muscle rupture. Given the refractory respiratory and hemodynamic

instability, the patient was stabilized using veno-venous (VV) ECMO as a "bridge-to-surgery" alongside inotropic support. Emergency cardiac surgery was performed via median sternotomy. Intraoperative inspection confirmed a complete avulsion of the anterolateral papillary muscle from its base. Under extracorporeal circulation, the mitral valve was excised and replaced with a Medtronic mechanical prosthesis. Postoperative management required continued VV-ECMO to facilitate lung-protective ventilation during recovery from the extensive pulmonary contusions. Following a favourable clinical trajectory, the patient was extubated on the fifth postoperative day and decannulated on the sixth. He was discharged hemodynamically stable and neurologically intact. **Discussions :** The primary diagnostic challenge is that pulmonary contusions frequently mask mechanical cardiac lesions, delaying intervention. In this case, rapid echocardiography was definitive. VV-ECMO proved decisive, serving as a "bridge-to-surgery" that interrupted the cycle of refractory hypoxia and retrograde heart failure. By ensuring systemic oxygenation, ECMO stabilized the patient's metabolism and protected the lungs from ventilator-induced barotrauma. Postoperatively, it facilitated a lung-protective strategy, allowing recovery from severe contusions. **Conclusions:** This case highlights the necessity of a multidisciplinary strategy in severe blunt trauma. Early echocardiography is essential, as mechanical lesions are often hidden by pulmonary injuries. VV-ECMO provides the stability needed for definitive repair while protecting injured lung parenchyma. Integrating advanced life support with prompt surgical intervention transforms potentially fatal traumatic injuries into successful clinical outcomes.

Keywords: Papillary muscle rupture, Acute mitral regurgitation, VV-ECMO, Hydraulic Ram effect

COMPREHENSIVE MANAGEMENT OF SYSTEMIC VENOUS THROMBOSIS IN A YOUNG PATIENT WITH AN ETIOLOGICAL MOSAIC

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Introduction: The emergence of life-threatening thrombotic events in patients in their third decade of life represents a significant diagnostic challenge, requiring a rigorous differentiation between transient triggers and permanent hypercoagulable states. Epidemiologically, while venous thromboembolism (VTE) is rare in young adults, the risk increases exponentially with genetic mutations like Factor V Leiden. However, the clinical prognosis is drastically altered when these predispositions coexist with acquired autoimmune syndromes. Understanding this "multi-hit" cumulative risk is vital to prevent fatal recurrences and chronic complications. **Case Report:** A 26-year-old male smoker presented with hemoptysis, acute abdominal pain, and massive right lower extremity edema following post-traumatic immobilization (multiple rib fractures, hemopneumothorax). Laboratory investigations revealed marked leucocytosis ($16.8 \times 10^3/\mu\text{L}$) and critical D-dimer levels ($>5 \mu\text{g/mL}$). Angio-CT confirmed bilateral pulmonary embolism (PE) and extensive deep vein thrombosis of the right ilio-femoral-popliteal axis, with an 18 mm thrombus propagation into the inferior vena cava. Screening identified a heterozygous Factor V Leiden mutation and a high titer of anti-cardiolipin antibodies (55 mg/dL). Despite initiating apixaban (DOAC), the patient suffered a symptomatic recurrence within three months. Re-evaluation showed an escalation of anti-cardiolipin antibodies to 63 mg/dL, confirming Antiphospholipid Syndrome (APS) and prompting a shift to acenocoumarol. **Discussions :** This case highlights the "therapeutic failure" of DOACs in high-risk thrombophilic environments. While DOACs are effective for hereditary mutations like Factor V Leiden, international guidelines caution against their use in high-titer APS due to increased recurrence risks. The failure of apixaban served as a clinical indicator that the prothrombotic drive exceeded the capacity of Factor Xa inhibitors, necessitating vitamin K antagonists to achieve stability. **Conclusions:** In young patients with extensive thrombosis, a single diagnosis often fails to explain clinical severity. The coexistence of Factor V Leiden and trauma may mask underlying APS. Clinicians must maintain a high suspicion for APS when standard DOAC therapy fails, as transitioning to vitamin K antagonists remains a lifesaving intervention.

Keywords: Factor V Leiden, DOAC failure, Antiphospholipid Syndrome, Venous Thromboembolism

CONCOMITANT HIV AND CHRONIC HEPATITIS B INFECTION PRESENTING AS REFRACTORY MALABSORPTION AND ESOPHAGEAL CANDIDIASIS: A COMPLEX DIAGNOSTIC CHALLENGE

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Introduction: The clinical management of Human Immunodeficiency Virus infection and chronic Hepatitis B coinfection remains a significant challenge due to accelerated liver disease progression and an increased risk of opportunistic complications. While modern antiretroviral therapy has transformed the prognosis, atypical gastrointestinal presentations often signal advanced immunosuppression. This case highlights the importance of a broad diagnostic workup in patients presenting with refractory nutritional deficiencies and profound lymphocyte depletion. **Case Report:** A 34-year-old female with a known history of chronic hepatitis B (diagnosed in 2016) presented for clinical reevaluation. Prior to admission, she had experienced colitis caused by *Candida Albicans*, which was treated with Fluconazole. Previous interferon therapy had been replaced with Entecavir and Tenofovir due to adverse reactions. The current clinical picture was dominated by signs of malabsorption, including iron- deficiency anemia and hypoproteinemia. Upper GI endoscopy revealed esophageal candidiasis and significant flattening of the duodenal villi. Duodenal biopsy identified PAS-positive macrophages, raising a suspicion of Whipple's disease. Celiac disease was also suspected, and anti-transglutaminase IgA antibodies were tested. Nevertheless, immunological screening confirmed an underlying HIV infection with severe immunosuppression (CD4+ count: 184 cells/ μ L; CD4+/CD8+ ratio: 0.53). Following the initiation of Biktarvy and antifungal treatment, the patient achieved virological suppression, with both HIV-1 and HBV viral loads becoming undetectable. **Discussions :** This case illustrates the diagnostic pitfalls when gastrointestinal symptoms mask a systemic immunodeficiency. The presence of PAS-positive macrophages, while classic for Whipple's disease, requires careful differentiation in HIV-positive patients, where opportunistic pathogens can produce similar histopathological findings. The profound CD4+ lymphopenia (184 cells/ μ L) and the coexistence of esophageal candidiasis served as definitive markers for the clinical stage. This case highlights that even in patients with a known viral pathology, persistent malabsorption should trigger immediate screening for HIV to prevent further immunological decline. **Conclusions:** Effective management of HIV/HBV coinfection demands high clinical vigilance. Integrating fast HIV testing and T-cell immunophenotyping in cases of refractory gastrointestinal manifestations is paramount to ensuring timely Antiretroviral therapy initiation and achieving long-term virological control.

Keywords: HIV/HBV coinfection, malabsorption syndrome, esophageal candidiasis, Whipple's disease

CONGENITAL ANOMALIES OF THE THORACIC SPINE AND AORTIC COARCTATION. THE PROCESS OF A PRENATAL SUSPICION BEING RULED OUT POSTNATALLY, UNDERSCORING THE IMPORTANCE OF SERIAL ECHOCARDIOGRAPHIC MONITORING IN NEONATAL CARE

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Introduction: Aortic coarctation represents an obstructive congenital cardiac malformation and a potentially life-threatening diagnosis, being prone to becoming ductal dependent in neonates. It occurs in 0.3/1000 live births, accounting for 6-8% of infants with congenital heart defects (Arya B, 2022 Jun). While prenatal diagnosis remains rather difficult, and differentiating true coarctation from aortic arch hypoplasia requires attentive monitoring, the significance of serial postnatal evaluation in establishing the therapeutic strategy is emphasized. **Case Report:** The case of a full-term female neonate is presented, being born via spontaneous vaginal delivery in cephalic presentation at 39/40 gestational week, having an APGAR score of 9 at 1 minute and 10 at 5 minutes. The infant was appropriate for gestational age (AGA), weighing 3240g, from a 32-year-old woman, gravida 4, para 2. Given the prenatal diagnosis of congenital cardiac malformation with borderline left ventricle, aortic coarctation and aortic arch hypoplasia, the patient was transferred to NICU for hemodynamic monitoring, further assessment and specialized therapy, where treatment with PGE1 was initiated in sight of maintaining the patency of the arteriosus canal (0.01 microg/kgBW/min). The NICU clinical examination further revealed a café-au-lait 0.5x0.7cm macule at T6-8 level, kyphoscoliosis in observation (manifesting clinically as brevicollis and mild postural asymmetry), pre- and post-ductal saturation and pressure gradient SatO2(preductal) 96%, SatO2(post-ductal) 92%, MAP(preductal) 68mmHg, MAP(post-ductal) 56mmHg. Thoraco-abdominal X-ray was solicited (A-P, L-L) showing thoracic scoliosis at T5-8 level with apparently malformed and partially fused vertebral bodies, aberrant rib insertion at the left hemithorax, suspicion of spina bifida occulta. Upon echocardiographic reassessments (day 4,11) the diagnosis of aortic coarctation with ductal dependent systemic circulation was ruled out, the observed changes being interpreted as potentially secondary to the spinal malformation, with subsequent improvement along postnatal cardiovascular adaptation, the latest exams showing only a gracile aorta, ostium-secundum type atrial septal

defect and aneurism, associated with good biventricular contractility; therefore, the treatment with PGE1 was discontinued. Upon discharge the patient was clinically and hemodynamically stable, remaining under clinical observation, being recommended orthopedic, genetic and cardiologic reevaluations. **Discussions** : The hypoplasia of the aortic arch can mimic a severe obstructive heart lesion in neonates, therefore initiating prostaglandin E1 therapy represents a measure of security until ductal dependency is ruled out and an alternative treatment plan is set. **Conclusions:** The prenatal suspicion of aortic coarctation imposes careful management alongside serial clinical and echocardiographic monitoring.

Keywords: Aortic coarctation, aortic arch hypoplasia, congenital heart malformations, congenital spine malformations

CONGENITAL DYSPLASIA OF THE HIP: DIAGNOSIS AND MANAGEMENT – A CASE REPORT

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Introduction: Congenital dysplasia of the hip (CDH) represents structural abnormalities of the acetabulum and proximal femur present at birth, characterized by insufficient femoral head coverage and altered biomechanics. Early detection allows conservative management, but untreated cases may progress to premature degenerative joint disease. Type II dysplasia is associated with delayed acetabular development, progressive instability, abnormal load distribution, and early secondary coxarthrosis, often resulting in limb length discrepancy and compensatory spinal deformities. Total hip arthroplasty (THA) is the definitive treatment in advanced stages.

Case Report: A 34-year-old female presented with progressive left hip pain, gait disturbance, and functional limitation. Examination revealed painful, restricted hip motion and limb shortening causing pelvic obliquity. Radiographs confirmed advanced secondary left coxarthrosis with Type II dysplasia. Spinal assessment showed compensatory lumbar scoliosis from chronic pelvic tilt. The patient underwent cementless THA using a Taperloc femoral stem and Trilogy acetabular component. Acetabular preparation required careful orientation due to dysplasia and deficient coverage. Restoration of the hip center and limb length was prioritized to ensure joint stability. Postoperatively, early mobilization and progressive weight-bearing were allowed. Limb length and pelvic alignment were restored, and the patient achieved significant symptomatic improvement at discharge.

Discussions : Untreated CDH is a recognized cause of early secondary osteoarthritis. Chronic instability and altered biomechanics accelerate cartilage degeneration. Limb length discrepancy contributes to pelvic tilt and compensatory scoliosis, worsening pain and dysfunction. THA in dysplastic hips is technically challenging due to acetabular deficiency, abnormal femoral anatomy, and soft tissue imbalance. Accurate restoration of limb length and biomechanics is essential to prevent residual deformity or instability. Cementless fixation is preferred in young adults for durable biological integration. In this case, THA effectively addressed degenerative changes while correcting limb inequality and improving global biomechanical balance. **Conclusions:** Type II CDH may progress to early secondary coxarthrosis, limb length discrepancy, and compensatory scoliosis. THA provides reliable pain relief and functional recovery in young adults when surgical planning ensures restoration of anatomy and biomechanics.

Keywords: Congenital hip dysplasia, Compensatory scoliosis, Total hip arthroplasty, Cementless fixation

CONTAINED, UNTIL IT BLED: A HEMORRHAGIC PANCREATIC PSEUDOCYST

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Introduction: Hemorrhagic complications of pancreatic pseudocysts are uncommon but potentially life-threatening events, most frequently resulting from vascular erosion or pseudoaneurysm rupture. Massive intraperitoneal bleeding may rapidly lead to hypovolemic shock, requiring urgent surgical intervention and advanced perioperative critical care. Due to the risk of rapid hemodynamic deterioration, early diagnosis and prompt multidisciplinary management are essential to reduce morbidity and mortality. **Case Report:** A 69-year-old female with a history of hypertension presented with acute abdominal pain, vomiting, and progressive clinical deterioration. On admission, she was hypotensive and tachycardic, with signs of peripheral hypoperfusion. Laboratory tests revealed leukocytosis, anemia, thrombocytosis, severe hyponatremia, and elevated transaminases. Contrast-enhanced CT

showed a pancreatic pseudocyst with peripancreatic fluid collections, hemoperitoneum, and a splenic subcapsular hematoma, suggesting vascular involvement. Emergency exploratory laparotomy confirmed massive hemoperitoneum caused by vascular fistulization of the pancreatic pseudocyst. Splenectomy and surgical hemostasis were performed. Due to persistent bleeding risk, relaparotomy with vascular suture and partial resection of the pseudocyst wall was required to achieve definitive control. Postoperatively, the patient was admitted to the Intensive Care Unit with hemorrhagic shock, requiring invasive mechanical ventilation, vasopressor support, blood transfusion, and guided fluid resuscitation. Broad-spectrum antimicrobial therapy (meropenem) and antifungal prophylaxis (fluconazole) were initiated due to the risk of infected intra-abdominal collections. Severe hyponatremia and metabolic disturbances were gradually corrected under continuous monitoring. Progressive hemodynamic stabilization allowed vasopressor withdrawal and successful extubation. Renal function remained preserved, inflammatory markers improved, and no recurrent bleeding occurred during the postoperative course.

Discussions : Hemorrhage related to pancreatic pseudocysts is a rare but severe complication that may rapidly progress to life-threatening hypovolemic shock. Vascular erosion of adjacent arterial structures can result in hemoperitoneum and acute hemodynamic instability. Contrast-enhanced CT plays a key role in diagnosis and treatment planning. Although endovascular techniques may be used in selected stable patients, surgical intervention remains the main option in cases of diffuse intra-abdominal bleeding or hemodynamic instability. Postoperative intensive care is essential for outcome optimization through hemodynamic stabilization, correction of metabolic abnormalities, infection control, and organ support. **Conclusions:** Vascular fistulization of a pancreatic pseudocyst represents a rare but potentially life-threatening surgical emergency. Early recognition and timely operative hemostasis are essential, and optimal outcomes depend on structured perioperative intensive care, including hemodynamic stabilization, correction of metabolic abnormalities, and infection control. This case underscores the importance of rapid multidisciplinary decision-making and close collaboration between surgical and critical care teams in managing complex abdominal hemorrhagic complications.

Keywords: Pancreatic pseudocyst, Hemoperitoneum, Vascular fistulization, Hemorrhagic shock

CONTRAST-ENHANCED ULTRASOUND'S ROLE IN ATYPICAL RENAL CYST POSITIVE DIAGNOSIS

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Introduction: Abdominal ultrasound (US) frequently reveals renal cysts, particularly in elderly patients or those with chronic renal pathology. Most cysts have distinctive imaging characteristics and are straightforward and benign. However, atypical ones may have septations, irregular contours, or internal echoes. It becomes more challenging to distinguish benign from potentially malignant lesions in these circumstances, and additional imaging techniques may be needed. Contrast-enhanced ultrasonography (CEUS) is an accessible, non-invasive tool that is not routinely used in renal ultrasound, but the structure and vascularization can only be partially described by conventional ultrasound. **Case Report:** A 63-year-old male patient with a known history of autosomal dominant polycystic kidney disease and end-stage renal disease on dialysis (CKD stage G5D) is evaluated for kidney transplantation. During routine US of the abdomen, a suspect renal cystic lesion was identified in the left kidney and a malignant lesion was suspected. It had thin internal septations and inhomogeneous echoes inside. CEUS examination using 2.4 ml SonoVue showed no abnormal enhancement patterns or wash-out suggestive of malignancy, only mild septal enhancement identical with the renal vascular phase. These results led to the lesion's classification as a Bosniak category 2F cyst. CT and MRI revealed the same characteristics as CEUS, but to be transplanted, nephrectomy was finally indicated. Histology showed no malignancy in the cyst and the patient was successfully transplanted after two months. **Discussions :** It is still difficult to diagnose atypical renal cysts, especially in patients with polycystic kidney disease, where several cysts may coexist, which is crucial to distinguishing benign from malignant lesions, since it was necessary to keep him on the transplant waiting list. Prior research has shown that CEUS is as accurate as CT and MRI in characterizing complex renal cysts. Furthermore, CEUS is useful because it is non-toxic and allows real-time assessment of a suspected malignant lesion. **Conclusions:** Contrast-enhanced ultrasound (CEUS) is an accurate and non-invasive imaging technique for assessing atypical renal cysts, which facilitates more accurate lesion characterization and supports appropriate patient management.

Keywords: polycystic kidney disease, CEUS, ultrasound, Bosniak classification

CRISS-CROSS HEART WITH COMPLEX UNIVENTRICULAR PHYSIOLOGY: EARLY DIAGNOSIS AND MANAGEMENT CHALLENGES IN INFANCY

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Introduction: Criss-cross heart (CCH) is a rare congenital heart defect (CHD), less than 0.1% of CHD, caused by abnormal rotation of the ventricular mass, resulting in crossing atrioventricular inflow tracts and complex intracardiac spatial relationships. CCH is associated with ventriculo-arterial discordance, ventricular hypoplasia, and functionally univentricular physiology, making diagnosis and therapeutic planning challenging. Owing to its rarity and anatomical heterogeneity, each reported case provides insight into diagnostic reasoning and individualized management strategies. **Case Report:** We report the case of a 3-month-old female infant with complex CHD. The malformation was prenatally diagnosed at 24 weeks of gestation during a detailed fetal echocardiography as double outlet right ventricle (DORV) with transposition of the great arteries and pulmonary stenosis. The patient was referred to our centre for further evaluation and management. She was born at term (birth weight 3500 g), with good neonatal adaptation and oxygen saturations of 90-95% in room air. Postnatal echocardiography and computed tomography demonstrated a complex anatomy including CCH with clockwise rotation, anatomically corrected transposition of the great arteries, double-inlet left ventricle, DORV, hypoplastic right ventricle (RV), sub-pulmonary and pulmonary stenosis with a hypoplastic pulmonary annulus. Hemodynamic assessment demonstrated a balanced circulation, allowing deferred surgical intervention. A genetic syndrome was strongly suspected based on phenotypic features, however, the parents declined genetic testing. During follow-up, hypoxic spells suggested progressive dynamic RV outflow obstruction, with favourable response to Propranolol. Following multidisciplinary evaluation, a staged surgical strategy with superior cavo-pulmonary (Glenn) anastomosis was performed. The postoperative course was complicated by major bleeding and partial Glenn thrombosis, successfully managed with anticoagulation. Long-term anticoagulation was initiated, and thrombophilia is under investigation. **Discussions :** This case highlights the importance of prenatal diagnosis and structured counselling in complex CHD. According to current international guidelines, including those of the International Society of Ultrasound in Obstetrics and Gynaecology (ISUOG) and the European Society of Cardiology (ESC), prenatal diagnosis of major CHD requires multidisciplinary counselling (detailed anatomical assessment, associated anomalies, postnatal management strategies, short/long-term prognosis, the option of pregnancy termination within legal limits). In this case, the parents were fully informed about the complexity of the defect, surgical requirements, and potential risks, and chose to continue the pregnancy. **Conclusions:** In such rare and anatomically complex conditions, the heart defies standard classification, requiring a shift from protocol-based management to truly personalized decision-making, supported by early multimodal imaging in CCH, where standardized therapeutic pathways may not apply.

Keywords: Criss-cross heart, Congenital heart disease, Glenn anastomosis

CRUSH INJURY OF THE FOREARM COMPLICATED BY ACUTE COMPARTMENT SYNDROME: SURGICAL MANAGEMENT AND OUTCOME

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Introduction: Plenty of injuries are listed under the category of surgical emergencies and severe forearm crush injuries are listed in it. Oftentimes crush injuries cause significant soft tissue degeneration accompanied by increased risk of compartment syndrome. Hence, the crucial role of correctly identifying whilst using time wisely to avoid irreversible neuromuscular deterioration or any functional deficit. **Case Report:** A male patient, age 37, was admitted to the Emergency County Hospital Targu-Mures on 09.02.2026 after sustaining a crush injury to his left forearm. The duration of hospitalization was 7 days. Upon examination a contused wound was identified on the volar surface of the mid-to-distal third of the forearm, oedema and risen clinical suspicion indicated compartment syndrome. During intraoperative examination it has been confirmed that both superficial and deep flexor muscle groups have been ruptured. Additionally, necrotic tissue was found together with an identifiable hemorrhage. A surgical intervention was undertaken immediately. A widespread surgical removal of the non-viable tissue, proximal and distal fasciotomes to guarantee appropriate decompression, drainage of the haemorrhage, precise

haemostasis and cleansing were all part of the procedure. The treatment has taken place in various stages. Furthermore, the treatment of the patient required a follow-up, secondary excision of non-contractile muscle fibers.

Discussions : The outcome of the surgery was desirable. Moreover, the removal of the sutures has been achieved without adverse events. At the beginning of the treatment the oedema was severe but due to the success of the surgery it has abated, no infection was detected nor abnormal discharge at the site of the wound.

Conclusions: The case given to me emphasizes the vital role of early suspicion together with adequate surgical interventions which facilitates to preclude irreversible functional damage. It's crucial to note that in cases of trauma, time and adequate management are the very heart and soul in conserving the function of the wounded limb.

Keywords: Crush injury, Forearm, Compartment syndrome, Fasciotomy

CRUSH INJURY WITH SKIN NECROSIS AND OPEN FRACTURE OF THE LEFT LEG

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Introduction: Accidental trauma to the calf can be particularly severe when associated with complications such as skin necrosis, open fractures, and compartment syndrome occurring simultaneously. In such cases, the exposure of osseous structures increases the risk of contamination and subsequent infection, which can rapidly worsen the clinical course if not managed promptly and appropriately. This case was considered noteworthy because the surgical team addressed both the extensive soft-tissue defect and the underlying fracture during the same operative session-an approach that is often challenging in high-complexity trauma scenarios due to the need for simultaneous skeletal stabilization and soft-tissue reconstruction. **Case Report:** We present the case of a 31 male patient who presents to our hospital with a crush injury on his left calf caused by a heavy wooden object falling onto the limb. He presented with tegumentary necrosis 1/3 distal on the anterior part of the calf. Prior to the transfer to our institution, an emergency fasciotomy was performed, due to the development of compartment syndrome. Furthermore, based on the imagistical evaluations, the patient had a Gustilo-Anderson type I-II open fracture involving both the tibia and fibula, reduced and fixed with two external fixators. Our objective examination revealed a 8x8 cm area of necrotic tissue on the distal part of the calf and two lacerations in the medial and lateral borders. The performed surgical intervention consisted of extensive wound debridement with removal of necrotic tissue, followed by soft-tissue reconstruction using a fasciocutaneous local transpositional flap from the posterior part of the calf. **Discussions :** Early and adequate debridement, infection control, and stable fracture fixation are essential steps in preventing complications such as chronic infection, nonunion, or limb loss. In cases presenting with substantial soft-tissue defects, timely coverage of exposed bone and hardware is crucial to protect underlying structures and to promote optimal healing. Local fasciocutaneous flaps remain a reliable reconstructive option for defects of the distal third of the leg, particularly when microsurgical resources are limited or when the patient's condition favors a shorter operative time. In the present case, the use of a posterior calf fasciocutaneous transpositional flap allowed adequate defect coverage while preserving limb function. **Conclusions:** Severe lower limb trauma associated with open fractures and soft-tissue loss represents a significant reconstructive challenge and requires a multidisciplinary approach involving both orthopedic and plastic surgery teams. This case highlights the importance of prompt surgical intervention and appropriate reconstructive planning in the successful management of complex lower limb trauma.

Keywords: Skin necrosis, Compartment syndrome, Fasciocutaneous flap, Lower limb reconstruction

CYTOMEGALOVIRUS COLITIS PRESENTING WITH SEVERE ANEMIA IN AN ELDERLY PATIENT WITH MULTIPLE COMORBIDITIES

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Introduction: Cytomegalovirus (CMV) colitis is an inflammatory disease of the colon caused by CMV infection, characterized by mucosal ulceration, necrosis, and varying degrees of inflammation. It most commonly occurs in immunocompromised patients but may also affect immunocompetent individuals, particularly elderly patients with multiple comorbidities or recent critical illness. **Case Report:** We report the case of a 67-year-old male with multiple comorbidities, including hypertension, chronic ischemic heart disease, dyslipidemia, pulmonary fibrosis,

and a prior ischemic stroke with residual left spastic hemiplegia, admitted for evaluation of severe anemia associated with gastrointestinal symptoms, including rectorrhagia and altered bowel habits. Physical examination revealed edema of the left upper limb with local inflammatory signs. Laboratory investigations showed severe hypochromic microcytic anemia, with a hemoglobin level of 6.6 g/dL, requiring transfusion of three units of packed red blood cells. A peripheral blood smear demonstrated hypochromia, microcytosis, and thrombocytosis, consistent with iron-deficiency anemia. Inflammatory markers were elevated, suggesting an underlying inflammatory process. During hospitalization, the patient developed pain on mobilization of the right shoulder, attributed to minimal degenerative changes, and infectious complications, including right basal pneumonia and a urinary tract infection caused by *Escherichia coli*, both of which responded to targeted antibiotic therapy. Imaging studies also identified a nodular lesion adjacent to the transverse colon, requiring further evaluation. Endoscopic examination revealed inflammatory lesions involving multiple gastrointestinal segments, including erythematous gastritis, duodenitis, and colitis. A sigmoid polyp was identified and excised. Multiple biopsies were obtained. The final diagnosis of CMV colitis was confirmed by histopathological examination, which revealed colonic mucosa with cytomegalovirus inclusions. **Discussions** : Recent evidence suggests that elderly patients with multiple comorbidities may develop clinically significant CMV disease even in the absence of overt immunosuppression. Gastrointestinal CMV infection may present with persistent diarrhea (often bloody), abdominal pain, and altered bowel habits. In this case, the presence of extensive inflammatory lesions involving multiple gastrointestinal segments, correlated with clinical and paraclinical findings, raised suspicion for CMV-associated gastrointestinal disease. The mucosal injury and bleeding likely contributed to the development of secondary iron-deficiency anemia. **Conclusions**: CMV infection should be considered in elderly patients presenting with gastrointestinal inflammation of unclear etiology and severe anemia, even in the absence of overt immunosuppression. Early recognition, histopathological confirmation, and multidisciplinary evaluation are essential for accurate diagnosis and appropriate management, helping to prevent complications such as toxic megacolon or colonic perforation.

Keywords: Cytomegalovirus colitis, elderly patient, iron-deficiency anemia, gastrointestinal bleeding

DEFINING THE RIGHT MOMENT: ACALABRUTINIB THERAPY FOLLOWING FULFILLMENT OF TREATMENT CRITERIA IN CLL

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Introduction: Chronic lymphocytic leukemia (CLL) is characterized by the progressive accumulation of morphologically mature but functionally incompetent B lymphocytes in the blood, bone marrow, and lymphoid tissues. The median age at diagnosis is approximately 70 years. In recent years, the therapeutic landscape has evolved significantly, with Bruton tyrosine kinase (BTK) inhibitors revolutionizing disease management. Acalabrutinib, a second-generation selective BTK inhibitor, represents an effective treatment option with an improved safety profile. **Case Report:** A 78-year-old female was diagnosed with CLL in 2018 (Rai 0, Binet A) and initially managed with a watch-and-wait strategy due to the absence of treatment indications. After being lost to follow-up for four years, she presented herself to the emergency department in June 2024 with a respiratory infection and marked leukocytosis (WBC 160,000/mm³). Upon transfer to the hematology department, clinical evaluation revealed asthenia, a 5 kg weight loss, and splenomegaly (3 cm below the costal margin). Although treatment initiation was considered due to the elevated WBC count, observation was maintained. Following treatment of the infection, WBC levels decreased, and treatment criteria were no longer met. Laboratory findings showed WBC 134,180/mm³, absolute lymphocyte count 110,000/mm³, hemoglobin 11.6 g/dL, and platelets 127,000/mm³. Molecular and immunophenotypic evaluation in September 2024 demonstrated unmutated IGHV status without TP53 mutation or del(17p), indicating a less favorable prognosis. By March 2025, the patient met treatment criteria, including lymphocyte doubling time <6 months, symptomatic splenomegaly (8 cm), and progressive anemia (Hb 9.8 g/dL). Considering the prognostic profile, patient age and preference for oral therapy, Acalabrutinib was initiated. The treatment was well tolerated, with a favorable clinical response. **Discussions** : Therapeutic decisions in elderly CLL patients must balance efficacy and toxicity. Unmutated IGHV status is associated with inferior outcomes under chemoimmunotherapy, supporting the use of targeted therapies. Acalabrutinib demonstrates greater selectivity for BTK compared to first-generation inhibitors such as ibrutinib, reducing off-target effects and the incidence of cardiovascular adverse events, including atrial fibrillation and hypertension. This safety profile is particularly relevant in older patients. Additionally, oral administration enables outpatient management and helps preserve quality of life. **Conclusions:** This case highlights the importance of adhering to established treatment criteria and performing prognostic molecular testing prior to therapy initiation.

Acalabrutinib remains an effective and well-tolerated option for elderly CLL patients with unfavorable prognostic features.

Keywords: Acalabrutinib, Chronic lymphocytic leukemia, Treatment initiation criteria

DELAYED HYPOPHYSITIS AND SECONDARY ADRENAL INSUFFICIENCY FOLLOWING PEMBROLIZUMAB THERAPY: A CASE REPORT

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Introduction: Immune checkpoint inhibitors (ICIs) have significantly improved outcomes in metastatic melanoma but are associated with immune-related adverse events (irAEs). Endocrine toxicities are particularly challenging due to their insidious onset and potential for permanent dysfunction. Although hypophysitis is less frequently reported with anti-PD-1 agents such as pembrolizumab compared to CTLA-4 inhibitors, it may lead to secondary adrenal insufficiency requiring lifelong hormone replacement. Delayed onset, including after treatment discontinuation, further complicates recognition and highlights the need for prolonged endocrinological surveillance. **Case Report:** A 73-year-old male patient with auricular malignant melanoma (pT3pN0M0, BRAF-negative) underwent surgical excision followed by adjuvant pembrolizumab therapy (6 cycles, 200 mg). Two months after treatment discontinuation, he developed severe asthenia, anorexia, vomiting, and a 20 kg weight loss. Biochemical evaluation revealed secondary adrenal insufficiency, with markedly reduced morning cortisol ($<0.5 \mu\text{g/dL}$; reference range $5.27\text{--}22.45 \mu\text{g/dL}$) and suppressed ACTH levels (1.5 pg/mL ; reference range $7.2\text{--}63.3 \text{ pg/mL}$). Given the clinical presentation, hydrocortisone replacement therapy was initiated intravenously, followed by oral administration, resulting in rapid clinical improvement. The initial course was complicated by a transient glucocorticoid-induced psychotic episode. After clinical stabilization, pituitary MRI with contrast was performed, revealing an atrophic gland with a partially empty sella appearance. At 4-month follow-up, hemodynamic stabilization and partial weight recovery were observed, supporting the need for long-term hormone replacement.

Discussions : ICI-induced hypophysitis is a recognized but less frequent complication of anti-PD-1 therapy compared to CTLA-4 blockade. It most commonly presents as isolated secondary adrenal insufficiency, which may be life-threatening if not promptly recognized. Unlike CTLA-4-associated hypophysitis, pituitary enlargement is less common, and imaging findings may be subtle or even show atrophy. The delayed onset observed in this case, occurring after treatment discontinuation, emphasizes the need for continued vigilance beyond the active treatment period. **Conclusions:** Immune checkpoint inhibitor-related hypophysitis may present with delayed and nonspecific symptoms, even after treatment discontinuation. Early recognition is essential to prevent life-threatening complications such as adrenal crisis and to ensure timely hormone replacement. Long-term endocrine monitoring and close collaboration between oncologists and endocrinologists are essential for optimal patient management.

Keywords: pembrolizumab, immune checkpoint inhibitors, hypophysitis, secondary adrenal insufficiency

DELAYED RADIOCARPAL DISLOCATION TREATED WITH OPEN REDUCTION AND KIRSCHNER WIRE FIXATION: A CASE REPORT

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Introduction: Radiocarpal dislocations are rare injuries, typically resulting from high-energy trauma. Because of their low incidence and subtle radiographic findings, these injuries may be overlooked during initial assessment. Delayed diagnosis increases the risk of joint instability, soft-tissue contracture, and long-term functional impairment. In neglected cases, surgical management is often required to restore joint congruity and wrist stability.

Case Report: A 28-year-old male presented with persistent pain and deformity of the left wrist following trauma approximately three weeks earlier. Physical examination revealed visible wrist deformity, tenderness, and a markedly restricted range of motion. Neurovascular examination was normal. Plain radiographs demonstrated a radiocarpal dislocation without associated major fractures. According to the Dumontier classification, the injury was classified as a Type I radiocarpal dislocation, characterized by a pure ligamentous dislocation without an associated radial styloid fracture. Given the delayed presentation and joint incongruity, surgical treatment was indicated. The patient underwent open reduction under fluoroscopic guidance. After achieving anatomical

reduction, internal fixation was performed using two Kirschner wires to stabilize the radiocarpal joint. An antebrachio palmar cast was applied postoperatively. Postoperative recovery was uneventful, with satisfactory radiographic alignment and no neurovascular complications. The patient was discharged with instructions for continued immobilization and outpatient follow-up. **Discussions** : Treating neglected radiocarpal dislocations is challenging because soft tissues adapt over time, leading to capsuloligamentous contracture and joint incongruity. Early diagnosis usually allows closed reduction; however, delayed cases often require open reduction to restore normal joint anatomy. Kirschner wire fixation provides reliable temporary stabilization and supports ligament healing while maintaining joint alignment. This method is particularly useful in Dumontier Type I radiocarpal dislocations, where ligament injury occurs without a radial styloid fracture. In the present case, open reduction with Kirschner wire fixation achieved good radiographic alignment and favorable early clinical results. **Conclusions**: Delayed Dumontier Type I radiocarpal dislocations require prompt surgical management to restore joint alignment and prevent long-term dysfunction. Open reduction combined with Kirschner wire fixation represents an effective treatment option when followed by proper immobilization and rehabilitation.

Keywords: Radiocarpal dislocation, Dumontier classification, Kirschner wires; wrist trauma

DELAYED RADIOGRAPHIC MANIFESTATION OF SPONTANEOUS DURAL BREACH IN A SECOND-TRIMESTER GRAVIDA: A DIAGNOSTIC CHALLENGE

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Introduction: Grade I dural tear is a small breach of the dura mater. The breach causes cerebrospinal fluid leak which can lead to intracranial hypotension. This pathology presents with headaches, nausea, dizziness and even auditory symptoms. Very specific for this condition is the fact that the symptoms are exacerbated by orthostatism and ameliorated when the patient lays down. It has serious repercussions and can appear after surgery, trauma or even idiopathically. **Case Report:** A 32-year-old woman, 17-18 weeks pregnant, presented to the Emergency Department with unilateral left-sided cephalgia. The pain was described as pulsating, rated 8/10 on the pain scale, and accompanied by dizziness, nausea and vomiting. Her symptoms were exacerbated by orthostasis. An MRI was requested on her first day of hospitalization, which did not reveal a visible breach. After further examination, meningitis was ruled out. On the third day of hospitalization, the patient reported that the pain had returned after a brief period of improvement, this time accompanied by nuchal rigidity. Following this development, a second MRI was performed, at which point the breach became visible alongside an arteriovenous fistula (in the right cerebellar hemisphere). The final diagnosis of Spontaneous Intracranial Hypotension caused by a Grade I Dural Breach was established. **Discussions** : Grade I Dural Breach that appears idiopathically and without initial radiographic manifestation poses a serious diagnostic challenge. Neurological conditions must be monitored during their evolution and the clinicians have to pay attention to all symptoms. Pregnancy presents an added diagnostic challenge due to the physiological and hormonal changes. This should not lead to diagnostic overshadowing, attributing the neurological symptoms to the patient's gestational stage. Additionally, the pregnancy limits the range of investigations and treatments that can be safely used. Spontaneous Intracranial Hypotension in the second trimester is rare which accentuates the diagnostic difficulty of this case. **Conclusions:** This case highlights the potential for initial false-negative imaging and emphasizes that certain conditions may only manifest radiographic evidence as they evolve and thus posing a diagnostic challenge for most clinicians.

Keywords: Grade I Dural Breach, Spontaneous Intracranial Hypotension, Pregnancy, Arteriovenous fistula

DEPRESSIVE SYMPTOMS AS INITIAL MANIFESTATION OF CELIAC DISEASE REACTIVATION AFTER DIETARY NON ADHERENCE

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Introduction: Celiac disease is an autoimmune intestinal disease, induced by gluten ingestion, that results in an inflammation of the small intestinal mucosa and villous atrophy, leading to impaired nutrient absorption. Lifelong adherence to a gluten free diet is crucial for disease control and plays a key role in preventing both gastrointestinal and extraintestinal complications. **Case Report:** We report the case of a 55-year-old male patient with a 15-year

history of celiac disease, previously well-controlled with strict adherence to a gluten free diet for 10 years. He presented to the Gastroenterology Department after dietary non-compliance, complaining of abdominal discomfort, pain in the right iliac fossa and hypogastrium, diarrheal stools, fatigue and brain fog. To be noted that, two years after abandoning the diet, the patient had been diagnosed with depression and put on an antidepressant therapy. Serological tests showed positive anti-tissue transglutaminase IgA and anti-endomysial IgA antibodies. Upper gastrointestinal endoscopy revealed a markedly atrophic duodenal mucosa with nodular appearance in the proximal segment. Duodenal biopsies confirmed the relapse with total villous atrophy and crypt hyperplasia corresponding to grade C Marsh-Oberhuber classification. Abdominal ultrasonography and contrast-enhanced abdominopelvic CT revealed findings suggestive of gluten enteropathy, such as uniform thickening of the jejunal and ileal walls, with mild luminal dilatation and fluid content. A strict gluten-free diet was reintroduced, resulting in rapid improvement of the gastrointestinal symptoms. **Discussions** : In most patients, symptoms recurrence following gluten reintroduction occur within approximately 10 months, or even within hours in some cases. The presented case is unusual because of the delayed reappearance of symptoms, occurring after 5-6 years of continued gluten exposure, a phenomenon which is rarely described in the literature. The fact that the depression started at the same time as gluten was reintroduced isn't just a coincidence. Research shows that about 22% of patients with celiac disease may experience depressive disorders, particularly during periods of active disease or relapse. **Conclusions**: The particularity of this case lies not only in the unusually long period of time before the recurrence of clinical manifestations, a rarely reported situation, but especially in the fact that the depressive symptoms preceded the onset of gastrointestinal manifestations. This highlights the importance of recognizing neuropsychiatric symptoms as potential early indicators of celiac disease reactivation, as they are often considered unrelated.

Keywords: Celiac disease reactivation, depression, gluten free diet

DESCENDING AORTIC ANEURYSM WITH MURAL THROMBUS AND PORTAL VEIN THROMBOSIS – A RARE CASE REPORT

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Introduction: A 68-year-old man with a past medical history of hypertension, dyslipidemia, and acute myocardial infarction presented to the emergency department with isolated abdominal pain. Nonspecific symptomatology should never be overlooked; however, in this case, the initial consideration was acute pancreatitis. **Case Report:** On physical examination, the patient was afebrile, with a heart rate of 67 bpm and blood pressure of 98/61 mmHg. He was hemodynamically stable and reported nonspecific discomfort with abdominal pain of a band-like character, predominantly localized to the right hypochondrium. Laboratory tests revealed markedly elevated inflammatory markers, with a C-reactive protein of 96.2 mg/dL and D-dimer levels of 1743 ng/mL. **Discussions** : Initial abdominal CT revealed portal vein thrombosis. As the abdominal pain progressed, a subsequent angio-CT excluded pulmonary embolism but identified a 3.4 cm abdominal aortic aneurysm with mural thrombus. A follow-up CT performed shortly after confirmed portal vein thrombosis and demonstrated an extensive mural thrombus involving the descending thoracic aorta and extending into the suprarenal abdominal aorta, on a background of a calcified abdominal wall with smaller thrombi. The imaging also raised suspicion of a chronic type B dissection with a thrombosed false lumen. Given the aneurysm's small size, surgical intervention was not required. The patient was managed conservatively with oral anticoagulation (Apixaban 5 mg twice daily), continuation of his usual therapy. **Conclusions:** This case underscores the importance of recognizing atypical abdominal pain, while also highlighting that conservative multidisciplinary management can be effective in rare associations such as concomitant portal vein and mural aortic thrombosis.

Keywords: Aortic Aneurysm, Mural Thrombosis, Portal Vein Thrombosis, Abdominal Pain

DEVELOPMENTAL DYSPLASIA OF THE HIP – WHEN DELAYED DIAGNOSIS CHANGES THE PROGNOSIS

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Introduction: Developmental dysplasia of the hip (DDH) represents a broad spectrum of abnormalities affecting the development of the hip joint, including neonatal instability, acetabular dysplasia, hip subluxation, and complete dislocation. These structural changes alter the normal biomechanics of the hip, leading to increased stress on the articular cartilage and contributing to the early development of osteoarthritis. DDH affects approximately 1-3% of newborns and is considered one of the leading causes of total hip arthroplasty in young adults, accounting for about 21-29% of such procedures. Early diagnosis is essential because timely treatment can prevent long-term complications and improve the functional outcome. **Case Report:** We present the case of a patient diagnosed with developmental dysplasia of the hip at a late stage, during adolescence. Imaging investigations confirmed advanced joint degeneration, making conservative treatment ineffective. As a result, surgical intervention in the form of total hip arthroplasty was considered the most appropriate therapeutic option. In this case, incomplete development of the acetabulum resulted in insufficient coverage of the femoral head, leading to joint instability and a progressive tendency for femoral head subluxation. This articular incongruence caused abnormal pressure distribution on the articular cartilage, promoting premature cartilage wear, pathological remodeling of bone structures, and early onset of degenerative changes consistent with coxarthrosis. Imaging studies (X-rays and, if needed, computed tomography) revealed marked acetabular dysplasia, lateralization and upward displacement of the femoral head, as well as advanced degenerative changes, including joint space narrowing and marginal osteophyte. **Discussions :** When the condition is detected early in infancy, non-surgical treatments such as the Pavlik harness can help guide normal hip development. However, when diagnosis occurs later, the joint may already be severely damaged. In such cases, reconstructive surgery or joint replacement becomes necessary. Total hip arthroplasty involves the use of a hip prosthesis, such as the Link Synthes total hip replacement system, which replaces the damaged joint with artificial components including a metal or ceramic femoral head and an acetabular cup made from durable materials such as titanium or polyethylene. This procedure aims to restore joint stability, reduce pain, and improve patient mobility. **Conclusions:** Early detection and appropriate management of developmental dysplasia of the hip are crucial for preventing long-term complications. Delayed diagnosis can lead to severe joint degeneration and the need for complex surgical procedures such as total hip arthroplasty. Increasing awareness and improving early screening methods are essential for optimizing patient outcomes.

Keywords: delayed diagnosis, hip biomechanics, prosthesis, screening

DIABETIC FOOT COMPLICATED BY OSTEOMYELITIS – THE IMPORTANCE OF EARLY MULTIDISCIPLINARY MANAGEMENT

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Introduction: Type 2 diabetes mellitus (T2DM) is associated with vascular complications, including peripheral artery disease (PAD), which increases the risk of amputation and delayed wound healing. Poor treatment adherence and wound infections may lead to severe hyperglycaemia and progressive tissue damage, emphasizing the need for early recognition and multidisciplinary management. **Case Report:** We report the case of a 72-year-old male smoker with a 5-year history of T2DM, poor treatment adherence, PAD, and previous left thigh amputation. The diagnosis of T2DM was based on clinical history and phenotype, with no evidence of secondary diabetes. Prior to admission, the patient was receiving oral antidiabetic therapy but demonstrated poor compliance. He was admitted to the Diabetology Department due to marked hyperglycaemia, polyuria, polydipsia, and an approximate 10 kg weight loss over 2 months. Laboratory investigations revealed an HbA1c of 17.4%, fasting plasma glucose of 375 mg/dL, leukocytosis with neutrophilia, and elevated inflammatory markers. Insulin therapy in a basal-bolus regimen was initiated, resulting in progressive glycaemic improvement. Clinical examination revealed diabetic peripheral neuropathy, for which antioxidant therapy was prescribed. Examination of the right hallux identified a periungual abscess, and radiographic evaluation confirmed osteomyelitis of the distal phalanx. Bacterial cultures were positive for *Enterococcus faecalis* and MSSA. Treatment for PAD with vasodilators and antiaggregants was initiated in collaboration with the vascular surgery team. A multidisciplinary approach was adopted. Antibiotic therapy was initiated by the infectious disease physician according to the antibiogram; however, no favourable response was observed. Following multidisciplinary consultation with general surgery, vascular surgery, and orthopaedic specialists, amputation of the distal phalanx of the right hallux was recommended. The procedure was successfully performed, resulting in a favourable outcome. **Discussions :** Diabetic foot infections in patients with T2DM and PAD are multifactorial, influenced by poor glycaemic control, smoking, vascular

compromise, neuropathy, and poor adherence. Early diagnosis, appropriate antibiotic therapy, timely surgery, and multidisciplinary management are essential to improve outcomes and reduce complications. **Conclusions:** This case highlights the need for prompt medical and surgical treatment, glycaemic optimisation, and multidisciplinary management in diabetic foot infections.

Keywords: Diabetic foot, type 2 diabetes mellitus, peripheral artery disease

DIAGNOSTIC AND THERAPEUTIC MANAGEMENT CHALLENGES IN NON-SMALL CELL LUNG CANCER :COMPLICATED BY BRONCHOCAVITARY FISTULA IN A PATIENT WITH MULTIPLE COMORBIDITIES

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Introduction: The diagnosis and treatment of lung cancer in a patient with COPD is a clinical challenge, especially when the symptoms overlap with those of other respiratory conditions. However, persistent dyspnea, cough, and general malaise require further investigation, especially in the presence of major oncological risk factors. The association of cardiovascular comorbidities, anemia, and poor nutritional status requires a multidisciplinary approach, with rigorously monitored therapeutic management. **Case Report:** We present the case of a 67-year-old male patient, smoker, with cachexia (BMI=16), known to have COPD and stenotic pyloric ulcer, presenting the following complaints: dyspnea, fatigue, marked physical asthenia, generalized pain, and cough with white sputum. Laboratory tests indicated a biological inflammatory syndrome, for which antibiotic treatment was initiated, with favorable clinical evolution. Additional investigations established the diagnoses of: multiple cardiac regurgitations, normochromic anemia, and NYHA 4 heart failure. Thoracic-pelvic CT examination revealed an abscessed cavitory tumor formation in the right lung, associated with suspicious mediastinal adenopathies, respectively mediastinal adenopathic blocks, raising suspicion of a neoplastic substrate. The patient is then transferred to the Pulmonology Clinic for the following specific tests: spirometry and fibrobronchoscopy, confirming the presence of a proliferative process in the RSL, complicated by a broncho-cavitory fistula. Histopathological examination confirmed the presence of a malignant tumor: non-microcellular lung carcinoma. The patient is redirected to the internal medicine clinic for a multidisciplinary approach and careful therapeutic management. After approximately 4 weeks, the patient returns on an emergency basis with the same symptoms, and a diagnosis of pulmonary infection on a neoplastic background is made. He is readmitted to the pulmonology department, receives the necessary symptomatic treatment, and a radiotherapy consultation is requested to determine the therapeutic approach for the lung carcinoma. The patient's condition improves, and he is discharged to continue treatment at home. **Discussions :** The particularity of the case lies in the association between a complicated proliferative process with a bronchocavitory fistula, which predisposes to recurrent infections, nutritional status that decreases tolerance to radio and chemotherapy, and contraindication of surgical treatment due to severe cardiac status. Radiotherapy was the only viable therapeutic alternative after assessing the risk-benefit ratio. **Conclusions:** The therapeutic approach was palliative, using radiotherapy, which showed favorable results. Tomographic reevaluation revealed a reduction in the size of the abscessed tumor cavity.

Keywords: Non-small Cell lung carcinoma, Heart Failure, Cavitory Fistula, Abscessed Tumor

DIAGNOSTIC CHALLENGES AND CLINICAL EVOLUTION OF A PEDIATRIC PATIENT WITH GATA1-DRIVEN MYELOYDYSPLASTIC SYNDROME

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Introduction: Pediatric myelodysplastic syndrome (MDS) is a rare group of hematopoietic stem cell diseases leading to poor blood cell production and an increased risk of acute myeloid leukemia. The aim of this paper is to analyze the diagnostic process and clinical progression of a unique GATA1-driven pediatric MDS case, while evaluating a conservative 'watch and wait' management approach alongside intensive supportive care to sustain clinical stability and quality of life. **Case Report:** We describe a rare case of myelodysplastic syndrome in a 3-year-old patient who presents at the Pediatrics II Clinic with hepatosplenomegaly, multiple disseminated petechiae, severe pallor, poor nutritional status. Bone marrow aspiration, peripheral blood smears, cytogenetic analysis were among the many tests carried out to identify the cause and establish the treatment plan. The GATA1 mutation is

revealed, a fluctuating pancytopenia, with episodes of severe anemia (minimum hemoglobin 3.7 g/dl), severe thrombocytopenia (minimum platelets 3,000/ μ l), neutropenia (granulocytes dropping below 2.0×10^3 / μ l), requiring constant transfusion support with erythrocyte and platelet concentrates. Periods of leukocytosis (14.43×10^3 / μ l) are noted, suggesting a possible reactive or proliferative component. The microscopic examination of the peripheral blood smear is extremely relevant and shows clear signs of dysplastic, ineffective hematopoiesis. Marked anisocytosis, poikilocytosis, the presence of microcytes, macrocytes, ovalocytes, basophilic stippling are described. The rare presence of megaloblasts in peripheral blood is a strong indicator of abnormal erythropoiesis. Leukocyte changes: the constant presence of granulocyte precursors (metamyelocytes) and nuclear shadows (smudge cells) suggests defective granulopoiesis and increased cellular fragility, and severe thrombocytopenia with platelet anisocytosis is confirmed. The medical team decides to "watch and wait" due to the patient's clinically fragile condition and the lack of an HLA-matched donor. The patient requires continuous transfusions, has a slight improvement in hematological condition after transfusion, and regularly returns for assessment. **Discussions :** Megakaryocytic dysplasia and erythroid maturation failure in this patient are associated with a GATA1 mutation. Conservative management is effective in maintaining quality of life in pediatric patients. A critical decision involves whether to proceed with Allogeneic Hematopoietic Stem Cell Transplantation, while considering the long-term risks of transfusion dependence, such as iron overload and alloimmunization. **Conclusions:** In conclusion, pediatric MDS associated with a GATA1 mutation necessitates a tailored clinical strategy. The case illustrates that a "watch and wait" approach, supported by regular transfusions and symptomatic care, serves as an effective preventive measure for certain pediatric phenotypes, managing complications and minimizing disability while ensuring optimal patient well-being.

Keywords: Myelodysplastic syndrome, Hypoplasia, GATA1

DIAGNOSTIC CHALLENGES IN CHRONIC NEUROVASCULAR DISEASE: ACUTE ENTERITIS AS A TRIGGER FOR SEVERE NEUROLOGICAL DECLINE

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Introduction: In geriatric medicine, patients with a significant history of cerebrovascular disease often present with complex clinical pictures in which systemic illnesses can mimic acute neurological events. This case highlights the diagnostic challenges when a patient with chronic brain injury experiences acute physiological stress. It emphasizes the need for systematic evaluation to distinguish between a new primary neurological event and secondary encephalopathy caused by systemic infection and metabolic failure. **Case Report:** A 77-year-old female patient was admitted to the emergency department following a sudden decline in her level of consciousness. Her medical history was significant for a prior ischemic stroke in the right middle cerebral artery territory, resulting in permanent left-sided hemiparesis. She also suffered from grade II arterial hypertension and chronic cerebral microvascular disease. The episode was preceded by acute abdominal pain, nausea, and vomiting. On physical examination, the patient was in a comatose state with a Glasgow Coma Scale score of 9 and tetraparesis. Clinical signs of severe dehydration were evident. Vital signs showed tachycardia at 111 beats per minute and blood pressure of 176/87 mmHg. Laboratory results revealed hyperglycemia and electrolyte imbalances. Due to her neurological condition, an acute recurrent stroke was initially suspected. However, computed tomography of the brain showed no acute intracranial hemorrhage or new large-vessel occlusion; only chronic lacunar infarcts and cerebral atrophy were present. The diagnosis was revised to mixed encephalopathy triggered by acute gastroenteritis, severe dehydration, and metabolic disturbances. Intravenous fluid therapy, electrolyte replacement, and empiric antibiotherapy were initiated. The patient showed progressive neurological and general improvement and was admitted to the infectious diseases clinic for continued treatment before discharge. **Discussions :** This case illustrates "diagnostic overshadowing," where acute neurological alteration superimposed on preexisting brain disease makes differentiation between new neurological pathology and systemic illness-related dysfunction challenging. Because the patient's brain was already affected by previous stroke episodes, the systemic effects of gastrointestinal infection and dehydration led to neurological deterioration mimicking stroke. Careful management was required: administering fluids and antibiotics while avoiding circulatory overload. In elderly patients, the brain often shows dysfunction first, even when the primary pathology originates elsewhere. **Conclusions:** Acute systemic infections in elderly patients may present with neurological symptoms resembling stroke. When a patient with prior brain disease becomes unresponsive, prompt evaluation for infection and metabolic disturbances is essential. Timely multidisciplinary management ensures accurate diagnosis and favorable outcomes.

Keywords: Mixed encephalopathy, Acute enteritis, Diagnostic overshadowing, Cerebrovascular disease

DIAGNOSTIC CHALLENGES IN LATE-ONSET PEDIATRIC NEUROBLASTOMA: A CASE REPORT

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Introduction: Neuroblastoma is a poorly differentiated neoplasm originating in neural crest cells, typically occurring in the adrenal glands. It accounts for more than 10% of all deaths caused by malignant diseases in childhood. The aim of this report is to present an atypical, late-onset stage III neuroblastoma and highlight the efficacy of a multimodal therapeutic approach. **Case Report:** We report the case of an 8-year-old boy who presented for a pediatric consultation following post-viral leukopenia. Laboratory tests revealed leukopenia with neutropenia, LDH 748 U/L, GOT 72 U/L, and a significantly elevated level of vanillylmandelic acid (60.78 mg/24h). Clinical examination revealed a slightly distended abdomen in the upper left flank, with palpation revealing a hard, painless tumor. An abdominal-pelvic ultrasound was performed, revealing the following: the left kidney is visible only in the lower third, where the renal parenchyma is preserved, the rest of the lodge being occupied by a heterogeneous, imprecisely delimited tumor formation that exceeds the renal capsule. The tumor measured approximately 85/124 mm, presenting mixed echogenicity, with no free fluid in the abdominal cavity. At the same time, an MRI examination was performed, confirming the expansive process of the left adrenal cavity, with a lesion diameter of 133/90 mm, displacing the left kidney posteriorly and presenting intratumoral patchy necrosis. No loco-regional lymph nodes or signs of vascular invasion were detected. Surgery was performed to remove the tumor (14x12x7 cm). Following histopathological examination, a diagnosis of left adrenal neuroblastoma, stage III, was made. After surgery, the patient underwent chemotherapy, followed by radiotherapy, with favorable clinical progression. The follow-up MRI scan showed no signs of local recurrence. **Discussions :** The late onset of neuroblastoma, with a mean age of presentation of 17 months, complicates a correct diagnosis, which is also a particular feature of the presented case. Only 15% of cases occur after the age of 5, associating an advanced stage of the tumor and loco-regional invasion. Due to the primary involvement of the adrenal glands, neuroblastoma leads to a rigorous differential diagnosis with Wilms' tumor, which would be much more specific for this age group. **Conclusions:** Addressing our aim, this case primarily highlights the remarkable advancements in modern anti-tumor therapies. Despite the late onset and remarkable size of the tumor, surgery combined with modern chemotherapy led to a favorable clinical outcome.

Keywords: neuroblastoma,, adrenal glands,, chemotherapy,, malignant.

DICOUMARINIC OVERDOSE IN A PATIENT WITH ATRIAL FIBRILLATION: A CASE REPORT

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Introduction: Atrial Fibrillation (AF) is the most common cardiac arrhythmia and needs a significant healthcare supervision. The pathophysiology of this disorder is based on the association between initiating triggers, in the form of rapidly firing ectopic foci located inside the pulmonary vein, and an abnormal atrial tissue substrate capable of maintaining the arrhythmia. The formation of ectopic foci within the atrium disrupts coordinated electrical activity, leading to impaired contraction and an increased susceptibility to thrombus formation. Therefore, anticoagulation therapy, usually vitamin K antagonists, such as acenocoumarin, is prescribed to reduce thromboembolic risk. **Case Report:** We report the case of a 85-year-old female patient diagnosed with Permanent Atrial Fibrillation and Congestive Heart Failure NYHA functional class III. The patient was prescribed oral anticoagulation with Acenocoumarin, requiring regular INR monitoring. At follow-up testing, the laboratory evaluation revealed a markedly supratherapeutic INR of over 10 and a Quick time of 136.4 seconds. Reversal therapy was initiated and upon retesting, the results after 6 hours revealed an INR decreasing to 4.88 and prothrombin time to 54.4 s, revealing a favorable response. **Discussions :** This case illustrates the importance of monitoring the International Normalized Ratio in patients receiving acenocoumarin, a vitamin K antagonist characterized by a narrow therapeutic index and significant inter-individual variability. Finding the right dosage for every patient is remarkably difficult, as individual responses are highly unpredictable and heavily influenced by genetics, diet, and drug interaction. The monitoring of the INR serves as a critical safeguard against dosing errors, preventing the

occurrence of complications, such as massive hemorrhage or skin necrosis. **Conclusions:** Despite their numerous limitations, dicoumarols are still heavily prescribed compared with newer oral anticoagulants that do not require routine INR monitoring. They remain indispensable in specific clinical settings, particularly in patients with renal impairment. Moreover, dicoumarols are most cost-effective, widely accessible, and are easily reversible. In contrast, the newer oral anticoagulants are not considered safe in advanced kidney failure, are more expensive, less accessible, and the reversal is expensive and not always available.

Keywords: Atrial fibrillation, Dicoumarols, International Normalized Ratio, Hemorrhage

DIFFICULTIES IN THE DIAGNOSIS OF CROHN DISEASE IN THE ELDERLY: A CASE REPORT

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Introduction: Crohn's disease is a chronic inflammatory bowel disease characterized by transmural inflammation that can involve any segment of the gastrointestinal tract. This condition exhibits a bimodal age distribution, with the first peak occurring between the ages 15 and 29 years and the second between 55 and 59 years. However, among elderly individuals, ischemic colitis is more commonly observed, surpassing other forms of inflammatory bowel disease in this age group. **Case Report:** We report the case of a 76-year-old woman who presented with diarrhea, lower abdominal pain, weight loss and vomiting, which occurred after an abdominal surgical intervention for a ruptured abdominal aortic aneurysm. Postoperatively, the patient developed paralytic ileus, bowel distension, and gastric stasis; however, these were managed successfully without complications. Based on the clinical presentation and medical history, the initial preliminary diagnosis was ischemic colitis, which was ruled out by CT angiography imaging. Further endoscopic examination findings raised suspicion of acute diverticulitis complicated by cecal stenosis or stenosing Crohn's disease of the ileum and cecum. Histopathological examination revealed mucosal hyperplasia, cryptitis, and moderate lymphoplasmacytic inflammatory infiltrate, confirming the diagnosis of Crohn's disease during an acute flare. **Discussions :** Considering the histopathological diagnosis, medication for Crohn's disease was prescribed to the patient, followed by clinical and endoscopic remission. Remarkable aspects of this case include the distinct phenotype of the disease in the elderly and the concomitant vascular disease history, impeding the clinical reasoning. A relevant observation was the variation in localization: Crohn's disease more commonly affects the small bowel in younger patients, whereas colonic involvement is more frequent in the elderly population. **Conclusions:** In conclusion, this clinical case underscores the importance of conducting a thorough process of differential diagnosis and investigations in cases with atypical presentation. A suggestive surgical history should not anchor clinical reasoning and epidemiological patterns should not dismiss consideration of less typical disease phenotypes.

Keywords: Stenosing Crohn's Disease, Abdominal Aortic Aneurysm, Histopathological Diagnosis

DIFFUSE CORONARY ARTERY ECTASIA AND RECURRENT NSTEMI: A CHALLENGING CASE OF POSSIBLE UNDERLYING CONNECTIVE TISSUE DISEASE

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Introduction: Coronary artery ectasia (CAE) represented a rare clinical entity defined by abnormal luminal dilation, which disrupted blood flow and increased risks of thrombosis and recurrent acute coronary syndromes (ACS). While atherosclerosis remained the primary etiology, diffuse ectasia in young patients suggested systemic pathologies like vasculitis or connective tissue disorders. **Case Report:** We present the case of a 45-year-old male smoker with dyslipidemia, known with chronic coronary syndrome, with triple-vessel disease, paroxysmal atrial fibrillation and heart failure with reduced ejection fraction (LVEF 40-45%). His history included three NSTEMIs, starting at age 29 (2009), managed conservatively. The second NSTEMI, in 2023, required PCI with a drug-eluting stent (DES) in the circumflex artery (LCX) and thromboaspiration. The third NSTEMI occurred in 2025, managed via repeated thromboaspiration. At the current presentation he complained of dyspnea on moderate exertion. Biology showed NT-proBNP of 145 pg/ml and borderline high potassium. Upon physical examination no signs of systemic or pulmonary congestion were detected. The ECG showed sinus rhythm (62 bpm), left axis

deviation, fragmented QRS (II, III, aVF), and T-wave inversions. Transthoracic echocardiography (TTE) revealed non-dilated left ventricle, improved LVEF (53%), inferior wall and basal septal hypokinesia, and a normal diameter of proximal aorta. Follow-up angiography confirmed a patent LCX stent, ectasia in the LAD (segments I-II), an aneurysmal LCX (segment I), and a recanalized thrombus in the RCA (segment II). Consequently, therapy transitioned from triple to dual antithrombotic treatment (DOAC and aspirin). Guideline-Directed Medical Therapy (GDMT) for both Chronic Coronary Syndrome (CCS) and Heart Failure (HF)-including beta-blockers, ACE inhibitors, and dapagliflozin-was maintained. Furthermore, to achieve aggressive lipid targets in this very-high-risk patient, maximal-dose statin therapy was combined with ezetimibe. However, spironolactone was withheld due to potassium levels. **Discussions** : This case illustrated an aggressive, recurrent pattern of coronary disease in a young patient. The prominent ectatic and aneurysmal features raised suspicion of cardiac vasculitis, prompting a rheumatological consultation. Inflammatory markers and an extended immunological profile were requested to identify a potential autoimmune etiology, necessitating a systemic approach beyond standard cardiological care.

Conclusions: Diffuse coronary ectasia with recurrent NSTEMI represented a significant diagnostic challenge. A multidisciplinary approach involving cardiology and rheumatology was vital to identify systemic etiologies, ensuring integrated management and a favorable long-term prognosis for young patients.

Keywords: coronary artery ectasia, Recurrent NSTEMI, Systemic inflammatory disease, Triple Antithrombotic therapy

DIFFUSE SUBARACHNOID HEMORRHAGE SECONDARY TO ACOM ANEURYSM RUPTURE: NEUROSURGICAL APPROACH AND CLINICAL INSIGHTS

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Introduction: Subarachnoid hemorrhage is a life-threatening neurovascular emergency, accounting for approximately 5-10% of all strokes, with a mortality rate approaching 30-40%. In up to 85% of cases, SAH results from rupture of an intracranial aneurysm, most commonly involving the anterior communicating artery. Clinical onset is typically abrupt, characterized by a sudden, severe "thunderclap" headache, altered level of consciousness, and focal neurological deficits. **Case Report:** A 50-year-old female with hypertension presented stuporous, with anisocoria (right > left), GCS 10, and a positive right Babinski sign. Brain CT demonstrated a right paramedian frontal intraparenchymal hematoma (56 × 38 × 49 mm) with perilesional edema, panventricular hemorrhage, and a 6 mm midline shift (Hunt&Hess 4, Fisher IV, WFNS 4). The patient underwent a right pterional craniotomy with evacuation of the hematoma, dissection of the Sylvian fissure, and clipping of a saccular anterior communicating artery aneurysm. Postoperatively, the CT scan showed right frontal bone flap with partial evacuation of a right frontal intraparenchymal hematoma; the residual hematoma measures approximately 27/11/19 mm (AP/LL/CC). It is associated with adjacent edema, minimal frontal and surgical bed pneumocephalus, and an ipsilateral parafalcine spontaneously hypodense area. Right frontoparietal epicranial hematoma with a thickness of up to 12 mm. Approximately one week postoperatively, the evolution was toward the complete resorption of the residual intracerebral hemorrhagic collections and the right frontal pneumocephalus. The patient's postoperative course was associated with prophylactic anticoagulation, antibiotics, hydration, and depletive therapy with mannitol, furosemide, and dexamethasone. **Discussions** : Postoperative recovery was complicated by MRSA bronchopneumonia, triggering a deleterious brain-lung interaction, subsequently treated aggressively with vancomycin (MIC = 0.75 mg/L). Systemic inflammation and pulmonary vascular stasis-manifesting as a diffuse bilateral reticulo-nodular interstitial pattern-exacerbated cerebral hypoxia and intracranial hypertension. This synergistic insult triggered blood-brain barrier disruption, marking a critical convergence of respiratory failure and neurosurgical trauma. **Conclusions:** This scenario necessitates a prompt, coordinated multidisciplinary approach involving neurosurgery, intensive care, infectious diseases, and pulmonary medicine to optimize antimicrobial stewardship, manage intracranial dynamics, and improve overall clinical outcomes.

Keywords: hemorrhage, craniotomy, aneurysm

DISTAL RADIO-BASILIC TRANSPOSITION FISTULA: A NEW OPTION IN HEMODIALYSIS VASCULAR ACCESS

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Introduction: Patients with end-stage kidney disease (ESKD) require durable vascular access (VA) to undergo hemodialysis. Current European guidelines recommend the arteriovenous fistula (AVF) as the first-choice VA, preferably created as distally as possible in the non-dominant upper extremity. Nevertheless, repeated hospitalizations often result in multiple peripheral venous cannulations and blood draws, which may lead to thrombophlebitis, venous occlusion, or poor vein quality. **Case Report:** We present the case of a 55-year-old patient diagnosed with ESKD, currently undergoing hemodialysis through a central venous catheter (CVC) placed in the right internal jugular vein, who was referred to the Vascular Surgery Department for AVF creation. The patient's medical history was significant for dilated cardiomyopathy with reduced ejection fraction (30-35%), associated valvular disease, and a bladder tumor. Preoperative vascular mapping showed a forearm cephalic vein with a mean diameter of 1.6 mm, presenting proximal forearm occlusion, followed by a diameter of 1.8 mm at the arm level. The basilic vein had a mean diameter of 2.2 mm in the forearm and 4.1 mm in the arm. Based on these findings, neither radiocephalic nor brachiocephalic AVF creation was considered feasible. Therefore, an innovative distal radio-basilic AVF with vein transposition was planned. Under axillary plexus block anesthesia, the forearm basilic vein was carefully dissected along its entire length through multiple stepwise incisions, and all collateral branches were ligated. To avoid twisting during transposition, the anterior wall of the vein was marked with a sterile marker. After preparation of the basilic vein, the radial artery was exposed at the distal third of the forearm. A distal radio-basilic AVF was then created, with transposition and subcutaneous tunneling of the basilic vein. At 12 hours postoperatively, ultrasound evaluation showed a basilic vein diameter of 3.2 mm and a flow of 320 ml/min at the level of the brachial artery. **Discussions :** Due to the adequate length of the vein and the straight subcutaneous trajectory of the transposed basilic vein, cannulation during hemodialysis can be easily achieved. Moreover, this type of AVF represents a new option for the patients. **Conclusions:** Distal radio-basilic AVF with vein transposition represents a valuable alternative for hemodialysis VA, as it is technically achievable, associated with good functional performance, and facilitates safe and reliable cannulation.

Keywords: Arteriovenous fistula, AVF, vascular access, ESKD

DOES THE ANXIETY PSYCHOSIS SPECTRUM EXIST? - CASE REPORT OF ATYPICAL TRANSITION WITH NO IDENTIFIABLE EXPLANATIONS

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Introduction: Acute psychosis is defined as the sudden onset of at least one of the following: delusions, hallucinations, disorganized thought/speech, catatonia. While anxiety within psychotic episodes is a fairly normal phenomenon, anxiety that progresses into psychosis has been described only scarcely by existing literature, and mostly as a theoretical possible cause. When no stressors are present, this atypical presentation raises some questions within our current understanding of the disorder. **Case Report:** We present the case of a 32-year-old woman with prior psychiatric history (acute psychosis in 2021, treated until the end of 2022), brought to the clinic by emergency services, exhibiting psychopathological symptoms consistent with delusion/hallucinations: simple visual hallucinations, vibratory tactile hallucinations, paranoid delusion of persecutory nature, anxious ruminations about her son's health, suspiciousness, interpretability, severe generalized anxiety, and hypertrophied maternal instincts. About 1-2 weeks prior to the hospitalization, the patient reported sudden feelings of generalized anxiety, with mild anxious ruminations on the well-being of her son. Within a few days, the anxious state devolved into delusional thoughts, which eventually led to the acute psychosis episode and the psychiatric commitment. Over the course of 28 days of hospitalization, the patient had been oscillating between periods of improvement and worsening, between the disappearance and reoccurrence of delusions and hallucinations. The patient's symptoms were difficult to treat, going through 3 different anti-psychotics over the course of 4 weeks, after which she has been discharged, continuing the treatment alongside psychotherapy. Only 6 months later, upon follow-up,

full remission was achieved. **Discussions** : Anxiety has been long associated with psychotic syndromes as a common comorbidity as well as a factor for assessing the severity of the disorder, but not usually associated with the typical presentation of psychosis' prodromal syndrome. Even in this case, it is not perfectly clear whether or not we are talking about a rapidly progressive anxiety with psychotic symptoms or an atypical debut of psychosis. However, this picture, paired with the relapse risk of patients with a previous psychotic episode could indicate a stronger link between anxiety and acute psychosis. **Conclusions**: In an acute psychotic episode, the sudden onset of a mood disorder may be the first sign of a prodromal syndrome. The symptoms of our patient may indicate that further study of the predictive value of such disorders may improve early detection, and ultimately, patient outcome.

Keywords: Acute Psychosis, Anxiety, Prodromal syndrome

DRUG-RESISTANT ACINETOBACTER BAUMANNII AND PSEUDOMONAS AERUGINOSA CO-INFECTION: A CHALLENGING AND FATAL CASE

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Introduction: Healthcare-associated infections have become a major challenge due to their high morbidity, mortality and increasing antimicrobial resistance. Two of the most frequently involved microorganisms in this infections are *Acinetobacter baumannii* and *Pseudomonas aeruginosa*. Both pathogens possess resistance mechanisms that severely restrict treatment options and demonstrate exceptional adaptability to the hospital environment. **Case Report:** We report the case of a 79-year-old female with a history of arterial hypertension, paroxysmal atrial fibrillation under anticoagulant therapy with rivaroxaban, and chronic bilateral venous insufficiency complicated by longstanding leg ulcers (for more than three years and several admissions in medical services), who presented with vertigo and generalized weakness progressively worsening over the previous three days. Laboratory investigations revealed severe microcytic, hypochromic anemia (hemoglobin 3.4 g/dL), leukocytosis (13,300/ μ L) with marked neutrophilia (90%), and renal impairment (creatinine 1.29 mg/dL, urea 74 mg/dL). Chest radiography demonstrated an inhomogeneous opacity in the left retrocardiac lung field, suggestive of pulmonary consolidation. The patient was admitted to the Internal Medicine Clinic No.1. A previously suspected sigmoid colon malignancy had remained uninvestigated due to patient refusal. During hospitalization, the patient developed fever and dyspnea, prompting microbiological investigations, including blood cultures and cultures from purulent secretions of the leg ulcers. Blood cultures yielded an extensively drug-resistant (XDR) strain of *Acinetobacter baumannii*, while wound cultures isolated XDR *Pseudomonas aeruginosa*. Both pathogens were susceptible only to colistin, prompting initiation of targeted therapy. The clinical course was further complicated by the onset of generalized edema and worsening dyspnea, with elevated NT-proBNP levels (3227 pg/mL), suggestive of cardiac decompensation. Given the severe anemia of unclear etiology, anticoagulation for atrial fibrillation was discontinued. The patient showed gradual clinical improvement and was discharged after one month of hospitalization. However, three weeks later, she was readmitted in critical condition with severe sepsis (procalcitonin 2318 pg/mL), bronchopneumonia, and a large right-sided pleural effusion, and died following cardiorespiratory arrest despite advanced resuscitative measures. **Discussions** : Although the individual infections with *Acinetobacter baumannii* and *Pseudomonas aeruginosa* are well documented, more attention should be paid to co-infections involving both pathogens considering their increasing incidence. The clinical evolution can be complicated when extensively drug-resistant strains are involved, even when targeted antimicrobial treatment is initiated early, especially in multimorbid patients. **Conclusions:** This case highlights the clinical impact of a healthcare-associated co-infection with extensively drug-resistant strains of *Acinetobacter baumannii* and *Pseudomonas aeruginosa* in a patient with unfavorable prognostic factors such as advanced age, multiple comorbidities and prolonged hospitalization.

Keywords: *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, healthcare-associated infections

DUAL INFLAMMATORY DERMATOSES: A RARE CASE OF CONCURRENT PSORIASIS VULGARIS AND LICHEN PLANUS

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Introduction: Psoriasis is a chronic immune-mediated disorder characterized by an accelerated skin turnover. In contrast, lichen planus is a chronic inflammatory condition characterized by basal keratinocyte apoptosis. Although both are relatively common dermatological conditions, their coexistence is rarely reported in the literature. **Case Report:** We present the case of a 55-year-old female with arterial hypertension, who presented to the Dermatology Clinic of Mures County Hospital with multiple, well-defined, erythematous plaques, covered by silvery scales and located on the trunk, limbs and the palmoplantar region. A punch biopsy confirmed the diagnosis of psoriasis vulgaris. Initial treatment with topical calcipotriol and betamethasone in combination with narrow-band ultraviolet B radiation (NB-UVB) phototherapy resulted in minor improvement. Due to the extent of the lesions, with a Psoriasis Area and Severity Index (PASI) of 13.8, palmoplantar involvement, and an Erythema, Scaling, Induration, Fissuring (ESIF) score of 39, systemic therapy with Methotrexate was initiated. After eight months of treatment with minimal improvement, biologic therapy with Guselkumab was initiated. Prior to this, the patient developed new lesions with a distinct morphology - pruritic, purple, polygonal papules, which were mainly located on the ankles and wrist. Clinical examination supported the diagnosis of lichen planus, without mucosal involvement. No underlying cause of lichen planus was identified. In this regard, the patient was treated with oral antihistamines and topical clobetasol, and further clinical improvement were noted. **Discussions :** This case highlights a diagnostic challenge, and emphasizes the need for careful evaluation to exclude drug-induced lichen planus. The coexistence of psoriasis vulgaris and lichen planus raises awareness to an immunopathological association, with common T-cell mediated inflammatory pathways and immune dysregulation linking the two diseases. **Conclusions:** This case underscores the importance of considering multiple concurrent inflammatory dermatosis in patients with polymorphic lesions. Proper clinicopathological assessment is necessary to ensure accurate diagnosis and optimal therapeutic management in such cases.

Keywords: Psoriasis vulgaris, Lichen planus, Inflammatory dermatoses

DUMONTIER TYPE I RADIOCARPAL FRACTURE-DISLOCATION: A CASE REPORT AND REVIEW OF THE LITERATURE

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Introduction: Radiocarpal Fracture-Dislocations (RCFDs) are rare and complicated injuries of the wrist, mainly caused by high-energy trauma. They account for around 3% of wrist injuries and males are more likely to be affected than females. Christian Dumontier and colleagues devised a classification system which separates RCFDs into two groups: Type I injuries are primarily ligamentous but may sometimes include a small radial styloid fracture. Type II, on the other hand, includes a much larger radial styloid fracture and is associated with at least one-third of the scaphoid fossa. **Case Report:** A 28-year-old male patient presented to the orthopaedics and traumatology department three weeks after a road traffic accident. The initial trauma sustained during the accident included a pneumothorax which was prioritised at the emergency department. After its resolution, focus was turned towards the wrist which was at first thought to be a severe sprain and so a closed reduction was attempted, which could not be maintained. Further imaging revealed volar dislocation of the radiocarpal joint as well as an associated ulnar styloid fracture. The displacement of the radiocarpal joint without a fracture of the radial styloid corresponds with a Type I Dumontier fracture. The patient subsequently underwent surgical intervention which included open reduction and fixation of the joint with two Kirschner wires (K-wires) via a dorsal approach. Post-operative course was favourable but after the most recent check-up, there was still some limitation regarding wrist flexion. **Discussions :** RCFDs remain challenging to diagnose and treat, often mistaken for simple sprains because of misinterpretation and subtle findings on radiographs. These injuries are commonly associated with ulnar styloid fractures, as seen in this case. This is important because the triangular fibrocartilage complex (TFCC) inserts into the base of the ulnar styloid and so injury suggests damage to the complex, leading to wrist instability and functional impairment. Due to the intricate anatomy of the wrist, management is difficult and this in turn indicates the increased risk of developing post-traumatic arthritis which explains the significance of long-term follow-up. **Conclusions:** The management of RCFDs remains complicated, with post-traumatic arthritis remaining a concern. Overall, prognosis is generally favourable but surgical intervention is often necessary to repair ligaments and fix fractures. This case highlights the importance of precise diagnosis and timely intervention to achieve positive outcomes.

Keywords: Radiocarpal fracture-dislocations, Dumontier Type I, Ulnar styloid fracture, Wrist instability

DYNAMIC CLAUDICATION IN A YOUNG FEMALE - GENDER BIAS AND THE MISSED DIAGNOSIS OF POPLITEAL ARTERY ENTRAPMENT SYNDROME

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Introduction: An uncommon vascular condition that compresses the popliteal artery by surrounding anatomical structures in the popliteal fossa - popliteal artery entrapment syndrome. Affected patients are mostly men which are healthy, young and physically active. Typical signs and symptoms are often misattributed to different pathologies such as chronic exertional compartment syndrome as well as musculoskeletal causes for a variety of pathologies. **Case Report:** A 25-year-old female cross-country athlete presented herself to the emergency room with severe left calf pain, described as an eight out of ten. She described the pain deep in the posterior calf with a cramping and tight character, triggered by exertion. Relief did not occur after minutes of rest as usual. The patient complained about numbness in the foot and a cold sensation in the left toes. Her left lower limb appeared with mild pallor compared to the right one. Presentation to an emergency room and three family physicians occurred in the last twelve months. Overtraining syndrome, shin splints, strains and anxiety-related pain got diagnosed. At physical examinations her vital signs as well as central and distal pulses of the affected limb appeared normal at rest. Provocative movements reviled immediate reproduction of pain and reduced peripheral pulse of the affected limb. An Ankle-Brachial-Index after treadmill exercise of 0.60 was obtained, compared with a ABI of 1.0 at rest. The Duplex ultrasound confirmed the compression of the left popliteal artery during active plantar flexion. The abnormal anatomy of the medial deviation of the artery and its compression by the gastrocnemius muscle was confirmed with a CT Angiography in a provocative position. **Discussions :** Vascular complaints are often under-evaluated in women. Lack of classical risk factors and otherwise a healthy human-being contribute to its frequent misdiagnoses. Delayed diagnosis significantly increases the risk of complications such as thrombotic events and distal embolisation, vascular wall damage and limb ischemia. **Conclusions:** This case highlights a classic presentation of Popliteal artery entrapment syndrome with symptoms, which were repeatedly attributed to incorrect musculoskeletal causes and psychological stress manifestations. Gender bias in clinical evaluation played a role in not being fully investigated earlier. Timely diagnosis prevents irreversible damage and allows patients of all genders to return to their active lifestyles.

Keywords: Claudication, Popliteal Artery Compression, Gender Bias

EARLY DIAGNOSED TYPE ONE DIABETES WITH OTHER ASSOCIATED AUTOIMMUNE DISEASES

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Introduction: Type 1 diabetes mellitus (T1DM) is an autoimmune condition characterized by the progressive destruction of pancreatic β -cells and severe insulin deficiency, most commonly diagnosed in children and young adults. Although it's onset is usually symptomatic, the disease can sometimes be identified at an early, asymptomatic stage. **Case Report:** We report a case of a young, asymptomatic 38 years old female who addressed to the Diabetes Outpatient Unit in 2012 (at the age of 24 years old), following routine laboratory tests that revealed a fasting blood glucose (FBG) of 115 mg/dL. The lipid profile, liver and renal parameters were within normal limits, as well as the anthropometric indices (weight=52.5 kg,height=1.62m,BMI=20 kg/m²). Given the slightly elevated FBG, further investigations were performed: HbA1c=5.99%; an oral glucose tolerance test (OGTT) with 75g glucose showing: FBG=134 mg/dL and 2-hour-post-load glucose levels(2hPG)=266 mg/dl, repeated at the patient initiative: FBG=120.9mg/dl, 2hPG=207.9mg/dl; C-peptide was decreased (0.99 ng/ml,NV=1,1-4,4ng/ml), and anti-GAD antibodies were strongly positive (>2000 U/mL,NV <10), while anti-insulin and anti-IA2 antibodies were negative. Thus, the diagnosis of T1DM was established, and low-dose basal-bolus insulin therapy was initiated, with doses adjusted according to carbohydrate intake, physical activity, and glycemic levels. Screening for other autoimmune diseases revealed positive anti-TPO antibodies (=58 IU/mL, NV<34IU/mL), with normal thyroid function, leading to the diagnosis of chronic autoimmune thyroiditis. Two years after the diagnosis of T1DM, the patient developed arthralgia in the small joints, and subsequent investigations confirmed seropositive rheumatoid

arthritis, stage I-II. Treatment with hydroxychloroquine was initiated. **Discussions** : Although insulin requirements fluctuated over the next 14 years of follow-up (ranging from 0.25U/kg to a maximum of 0.76U/kg), early diagnosis and appropriate insulin adjustment contributed significantly to a favorable metabolic evolution. Regular screening for microvascular complications has not identified any complications to date. In addition, HbA1c remained consistently below 7% over time. Even during pregnancy (which occurred at the age of 35 years old) optimal glycemic control parameters were observed on continuous glucose monitoring (time in range=91%, time below range=2%, time above range=6%, glucose management indicator=6.3), which significantly contributed to a full-term pregnancy, without any obstetric or neonatal complications. **Conclusions**: This case highlights the importance of early diagnosis of T1DM, which rarely can be established in asymptomatic patients. This leads to early monitoring and improved management to reduce the risk of long-term complications. Furthermore, systematic screening for other autoimmune diseases is essential, as more than one autoimmune condition may occur, particularly in women.

Keywords: Type 1 diabetes mellitus, early onset, chronic complications, other autoimmune diseases,

EARLY GESTATIONAL COMPLETE MOLE : WHEN MORPHOLOGY AND IMMUNOHISTOCHEMISTRY ARE NOT ENOUGH— A CASE REPORT

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Introduction: Molar pregnancy represents a form of gestational trophoblastic disease that may pose significant diagnostic challenges in early gestation. During the first trimester, distinguishing complete hydatidiform mole from non-molar hydropic abortion or partial mole may be difficult because morphological features are frequently subtle or overlapping. Accurate classification is essential due to differences in clinical management, surveillance strategies, and the risk of developing persistent trophoblastic disease. Molar pregnancy represents a form of gestational trophoblastic disease that may pose significant diagnostic challenges in early gestation. During the first trimester, distinguishing complete hydatidiform mole from non-molar hydropic abortion or partial mole may be difficult because morphological features are frequently subtle or overlapping. Accurate classification is essential due to differences in clinical management, surveillance strategies, and the risk of developing persistent trophoblastic disease. **Case Report:** We report the case of a 20-year-old patient presenting with 10 weeks of amenorrhea and a clinical diagnosis of missed abortion at 6 weeks, associated with suspicion of molar pregnancy. Uterine evacuation was performed, and approximately 15 ml of ovular tissue was submitted for histopathological examination. Microscopic evaluation revealed edematous chorionic villi of variable size, some showing hypocellular myxoid stroma and irregular contours. Fetal vessels were absent within the villi, and no embryonic or amniotic structures were identified. Occasional superficial villous inclusions were observed. Focal trophoblastic proliferation was present without circumferential distribution, significant nuclear atypia, or evidence of invasion. Free extra villous trophoblast was identified without infiltrative features. Immunohistochemical analysis for p57 demonstrated focal nuclear expression in proliferative trophoblast, with absence of expression in villous stromal and relevant villous compartments, while internal controls remained positive. The histopathological and immunohistochemical correlation suggested trophoblastic alterations with molar potential. **Discussions** : Early gestational trophoblastic lesions frequently display incomplete morphological criteria, making differentiation between complete mole, partial mole, and hydropic abortion challenging. Villous edema and trophoblastic proliferation may be limited at this stage, leading to diagnostic overlap. Although p57 immunohistochemistry provides important diagnostic guidance, it cannot definitively establish the genetic origin of conceptional tissue. Therefore, genetic testing using STR genotyping or FISH analysis is essential to determine androgenetic conception and to accurately classify the lesion, directly influencing patient monitoring and therapeutic decisions. **Conclusions:** Accurate diagnosis of early molar pregnancy requires integrated histopathological, immunohistochemical, and genetic evaluation. In equivocal cases, molecular confirmation remains mandatory to ensure appropriate follow-up and prevent potential complications associated with gestational trophoblastic disease.

Keywords: molar pregnancy, gestational trophoblastic disease, p57 immunohistochemistry, genetic testing

EARLY LOCOREGIONAL RECURRENCE OF TRIPLE-NEGATIVE BREAST CARCINOMA NST IN A YOUNG PATIENT: A CASE REPORT

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Introduction: The triple negative breast carcinoma of no special type (NST) is an aggressive subtype of breast cancer, particularly seen in young patients, because of its high proliferative index, lack of targeted therapeutic options, and increased risk of early recurrence. Despite the evolution of the treatment, outcomes remain unfavorable in cases where significant residual disease is seen. **Case Report:** We report the case of a 43-year-old woman who presented with a right breast mass associated with ipsilateral axillary lymphadenopathy. Histopathological examination of core biopsies established the diagnosis of invasive breast carcinoma of no special type (NST), grade 3. Immunohistochemical profiling revealed a triple-negative phenotype (ER 0%, PR 0%, HER2 0), accompanied by a markedly elevated proliferative index (Ki-67: 85-90%). The patient underwent neoadjuvant chemotherapy, followed by a right radical mastectomy with axillary lymph node dissection. Examination of the surgical specimen demonstrated residual multifocal invasive carcinoma, along with an associated high-grade ductal carcinoma in situ component (approximately 30%), predominantly of comedo type. The residual cancer burden was classified as RCB II. Additional adverse pathological features included lymphovascular and perineural invasion. Metastatic involvement was identified in 18 of 22 examined lymph nodes, several showing extracapsular extension. Despite initial treatment, the patient experienced rapid disease progression. At three months postoperatively, she developed locoregional recurrence involving the right chest wall and infraclavicular region, along with a suspicious lesion in the contralateral breast. Histopathological analysis of these lesions confirmed recurrent invasive NST carcinoma, maintaining the triple-negative phenotype and a persistently high proliferative index (Ki-67 approximately 80%). Genetic testing did not reveal pathogenic variants in BRCA1 or BRCA2 genes. **Discussions :** Triple negative breast cancer (TNBC) has aggressive characteristics, grows fast, and lacks targeted treatments. This case represents poor prognosis with high Ki-67 levels, high residual disease (RCB II), lymphovascular invasion, and widespread lymph node metastases. Early recurrence after multimodal therapy demonstrates the aggressive nature of the tumor and potential chemoresistance. Absence of BRCA mutations further limited treatment options; therefore, the heterogeneity of TNBC warrants the development of new biomarkers and therapies. **Conclusions:** This case illustrates the aggressive biological behavior of triple-negative breast carcinoma, with rapid progression and early recurrence despite multimodal treatment. It underscores the importance of early and comprehensive molecular characterization, as well as the urgent need for more effective therapeutic strategies.

Keywords: triple-negative breast cancer, invasive carcinoma NST, residual cancer burden, Ki-67

EARLY SEVERE HEPATIC FAILURE IN WILSON DISEASE: LONG TERM OUTCOME OF A PEDIATRIC PATIENT

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Introduction: Wilson disease is a rare autosomal-recessive disorder of copper metabolism characterized by hepatic and neuropsychiatric involvement, with some cases presenting as acute liver failure. The aim of this report is to explore the clinical course, management and evolution of a pediatric case with a severe hepatic presentation. **Case Report:** We report the case of a female patient who initially presented at the age of 6 years with massive upper gastrointestinal bleeding manifested as hematemesis associated with jaundice, ascites and anasarca. Laboratory investigations showed an advanced hepatic dysfunction with an INR of 4.13, total bilirubin of 15 mg/dL, hypoalbuminemia and severe anemia (Hb 6.8 g/dL). Abdominal ultrasound showed hepatosplenomegaly, a micronodular liver and signs of portal hypertension. Upper endoscopy exhibited portal hypertensive gastropathy and gastric varices (GOV1) confirming the source of bleeding. Additional observations included pleural and pericardial effusions with myocardial granular changes, suggesting systemic involvement in the context of acute hepatic failure. Etiologic assessment demonstrated a significantly low ceruloplasmin level and altered copper metabolism compatible with Wilson disease. Treatment with D-penicillamine was initiated, alongside transfusions, albumin, diuretics, beta-blockers and nutritional support. Over the following months the patient's condition

improved, with normalization of bilirubin and coagulation parameters. During the seven years of follow-up, liver enzymes remained within normal limits, hepatic synthetic function was preserved and growth and development were appropriate. Other findings included progressive improvement of liver aspect on ultrasound, along with mild splenomegaly and intermittent iron-deficiency anemia. Neurological and ophthalmological manifestations were absent. **Discussions** : According to the literature, pediatric presentations of Wilson disease vary considerably, ranging from asymptomatic transaminase elevation to fulminant hepatic failure, the latter being associated with high mortality in the absence of liver transplantation. In contrast, our patient stabilized quickly and maintained a compensated liver function once chelation was started. D-penicillamine remains widely used in symptomatic pediatric cases and clinical experience shows that copper removal under sustained therapy can be followed by gradual improvement in hepatic function. The persistent splenomegaly likely reflects residual portal hypertension related to the underlying liver disease rather than ongoing hepatic injury. In this context, the iron-deficiency anemia may be explained by hypersplenism or nutritional factors. **Conclusions**: This case shows a favorable long-term outcome following acute liver failure due to Wilson disease. Significant recovery of hepatic function and improvement in liver morphology were observed under copper-removal treatment. The absence of recurrence and major complications highlights the potential for meaningful hepatic recovery due to appropriate prolonged therapy.

Keywords: Wilson disease, acute liver failure, D-penicillamine, pediatric cirrhosis

EARLY-ONSET SCHIZOPHRENIA IN A HIGH-RISK FAMILY CONTEXT: A CASE REPORT

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Introduction: Schizophrenia is a chronic and complex psychiatric disorder with a profound impact on all domains of an individual's functioning. Its etiology is multifactorial, with genetic predisposition representing a significant risk factor. The disorder frequently manifests through auditory and visual hallucinations. Early onset of symptoms, particularly during adolescence, is associated with a more severe clinical course and greater functional impairment, highlighting the importance of considering both biological vulnerability and environmental triggers. The purpose of this case report is to present the psychopathological profile of schizophrenia and to examine the impact of its manifestations, with focus on early onset at age 16 and family history. **Case Report:** The case concerns a 19 year old female patient with a known psychiatric history from age 16, brought to the psychiatric clinic by her grandparents due to symptoms consistent with a delusional-hallucinatory syndrome. She reported that the disorder began after perceived telepathic communication with an imaginary partner. Her symptoms included complex imperative auditory hallucinations with alternating male and female voices and occasional visual hallucinatory elements. Thought processes were disorganized, with soliloquy, mystical-religious preoccupations, she experienced mental fading and difficulty maintaining focus. Affect was flattened and she exhibited social withdrawal. Regarding family history, the patient describes a strained relationship with her grandparents and mother which is diagnosed with schizophrenia. During psychiatric evaluation, the patient was calm, cooperative, and oriented to time and space but she continued to experience auditory hallucinations during the examination. **Discussions** : The case illustrates the interplay of maternal genetic predisposition, early adolescent onset, and adverse psychosocial factors such as father absence and affective deprivation, contributing to the severity and expression of psychotic symptoms. These factors emphasize the combined role of biological vulnerability and environmental factors in schizophrenia. **Conclusions:** Schizophrenia is a chronic psychiatric disorder that profoundly impairs social, occupational, and adaptive functioning. Early onset, particularly in the context of strong familial predisposition and early affective deprivation, is associated with increased severity and functional challenges. Early, sustained, and multidisciplinary therapeutic intervention is essential for maintaining long-term clinical stability.

Keywords: Early-onset schizophrenia, Genetic predisposition, Psychosocial factor

EKBOM SYNDROME IN THE CONTEXT OF DEPRESSIVE COMORBIDITY AND COGNITIVE DECLINE – CASE REPORT

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Introduction: Ekbom syndrome or delusional infestation, is a psychiatric disorder in which patients hold the fixed

false belief that their body is infested with parasites, despite medical evidence to the contrary. It is frequently associated with tactile hallucinations, such as sensations of bites, and formication, the feeling of insects crawling under the skin. Ekbom syndrome can occur in isolation or in the context of other psychiatric conditions, including depressive episodes and cognitive decline. **Case Report:** A 73-year-old female patient with a 15-year history of psychiatric illness, partially compliant with medication, was brought to the psychiatric emergency unit with symptoms dominated by delusional infestation. She reported sensations of insects crawling under the skin, accompanied by pricking and buzzing sensations, consistent with Ekbom syndrome. During evaluation, the patient exhibited multisensory hyperesthesia and global hypoprosopexia with selective hyperprosopexia, reflecting an excessive focus on bodily sensations. She also demonstrated self-devaluation and feelings of worthlessness. These somatic delusions were preceded and exacerbated by a depressive episode, as well as by recent cognitive decline. **Discussions :** The patient's heightened bodily preoccupation reinforced hypochondriacal ideation, anxiety, and further deepened depressive symptoms, creating a vicious cycle that maintained and strengthened the Ekbom delusions. These dynamics highlight the interplay between affective disturbances, cognitive vulnerability, and somatic preoccupation in the pathophysiology of Ekbom syndrome. **Conclusions:** Ekbom syndrome is a primary psychiatric disorder that can emerge in the context of depressive comorbidity and cognitive decline. Delusional infestation, manifesting through tactile and auditory hallucinations, requires timely recognition and management. Given that these patients often present first to dermatology, otolaryngology, or internal medicine, it is crucial for specialists across medical disciplines to be aware of this condition to ensure early referral and appropriate psychiatric care.

Keywords: Ekbom syndrome, depressive disorder, cognitive decline, hallucinations

EN BLOC RESECTION AND VRAM FLAP RECONSTRUCTION FOR RIGHT ILIAC FOSSA SARCOMA IN A PATIENT WITH HIGH CARDIOVASCULAR RISK

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Introduction: Soft tissue sarcomas, such as leiomyosarcomas, are aggressive mesenchymal malignancies where survival depends on achieving negative microscopic margins. In the anatomically confined iliac fossa, radical clearance is complicated by rigid bony boundaries and proximity to major neurovascular structures. This case highlights the surgical management of a primary tumor requiring a massive "en-bloc" compartmental resection in a patient with significant cardiovascular comorbidities, including prior coronary artery bypass grafting and stented myocardial infarction. **Case Report:** A 69-year-old male patient presented with a complex medical history, including a prior myocardial infarction (stented), aortocoronary bypass, and operated interatrial septal defect, classified as high cardiovascular risk. The patient presented with a mass in the right iliac fossa, diagnosed via ultrasound, contrast-enhanced CT and ultrasound-guided core needle biopsy (CNB). Histopathological examination confirmed a high-grade leiomyosarcoma. A radical "en bloc" resection was performed under general anesthesia. The procedure involved the excision of the tumor along with the proximal portions of the sartorius, tensor fasciae latae, iliacus, and gluteus medius muscles, including the underlying fascio-peritoneal plane. To address the massive parietal defect, a primary reconstruction was performed using a VRAM flap. The postoperative evolution was favorable, with minimal serosanguinous drainage. **Discussions :** Achieving R0 margins in the iliac fossa is challenging due to rigid pelvic boundaries and neurovascular proximity. Unlike less aggressive histologies, leiomyosarcomas exhibit local invasiveness and a propensity for early recurrence. Our results align with surgical oncology series (2012-2019) reporting a low 5.1% complete necrosis rate for VRAM flaps in such complex resections. By providing robust vascularization and bulk, the flap effectively obliterated the surgical dead space, avoiding common complications such as seroma (13.7%) or infection (5.1%). Furthermore, the use of postoperative radiotherapy (RT) is crucial. Literature indicates that RT significantly improves local control, with a five-year local recurrence-free survival (LRFS) of 77% compared to 39% without it. In this context, the VRAM flap not only reinforces the abdominal wall but also provides a vascularized tissue bed that tolerates RT better than synthetic meshes, ensuring a safer pathway for multimodal oncological treatment. **Conclusions:** Extreme cardiovascular fragility should not preclude gold-standard compartmental resection for soft tissue sarcomas. Surgical radicality remains feasible when paired with a reliable, single-stage reconstructive strategy that bridges the gap between aggressive oncological clearance and safe perioperative recovery. This approach validates the VRAM flap as a surgical "workhorse" capable of ensuring curative-intent outcomes even in the most hemodynamically and anatomically challenging scenarios.

Keywords: Right iliac fossa leiomyosarcoma, VRAM flap reconstruction, R0 margins, High cardiovascular risk

ENDOBRONCHIAL TUBERCULOSIS MIMICKING PNEUMONIA - DIAGNOSTIC CHALLENGES

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Introduction: Endobronchial tuberculosis in elder patients may often be misdiagnosed as pneumonia, malignancy and other differentials because of the absence of radiological lesions on chest radiogram, negative sputum and non-specific clinical presentation, such as fever, cough and systemic symptomatology. Under these circumstances, bronchoscopy is crucial in diagnosing endobronchial tuberculosis. **Case Report:** A 78-year-old female patient, known to have significant past medical history including asthma, chronic autoimmune thyroiditis, and a surgically treated benign right breast tumor, was admitted to our clinic accusing productive cough with mucopurulent sputum, shiver and right thoracic pain. Chest radiogram shows a right parahilar pulmonary opacity. Respiratory system examination reveals crackles in bilateral medio-basal areas. The induced sputum test is negative. The patient undergoes antibiotic therapy, after which only slight clinical improvement is observed. A chest CT scan and bronchoscopy are performed two weeks after completion of pneumonia treatment. CT examination demonstrates ground-glass opacities and atelectasis of the anterior segment of the RUL, with obstruction of the corresponding segmental bronchus. Bronchoscopy reveals destruction of the RUL bronchus with cartilage fractures and communication with a cavity at the level of the bronchus of the anterior segment of RUL. Additionally, the apical and posterior segmental bronchi present extrinsic compression. Biopsy specimens and bronchial aspirate were obtained from this level for BK examination. Histopathological examination confirms the absence of atypical cells or tumoral tissue. The GeneXpert test of the bronchial aspirate detects *Mycobacterium tuberculosis* DNA. **Discussions :** The patient undergoes antituberculosis therapy. Endobronchial tuberculosis might be considered more often in elderly patients, who follow antibiotherapy with weak to no response at all. Bronchoscopy is mandatory to confirm endobronchial tuberculosis and also in order to differentiate it from alternative diagnoses. **Conclusions:** Endobronchial tuberculosis may clinically present similar to pneumonia, complicating the accurate diagnosis, the selection of optimal therapy, and, consequently, the patient's recovery. Establishing a definitive diagnosis is essential, as therapeutic options differ completely and have a significant clinical impact.

Keywords: Tuberculosis, Pneumonia, GeneXpert, Fiberbronchoscopy

ENDOMETRIOSIS OF THE CESAREAN SCAR: A CLINICAL RARITY?

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Introduction: Endometriosis is a gynaecological condition, which consists of the abnormal growth of the endometrium outside of the uterine cavity, often involving other pelvic organs, such as the ovaries (in the form of so-called "chocolate cysts") and fallopian tubes; a rare manifestation of endometriosis is called extragenital endometriosis, in which endometrium-like tissue growth occurs in the abdominal cavity, affecting the gastrointestinal tract, umbilicus or even the abdominal wall following a surgery. **Case Report:** We report the case of a 32-year-old female patient, who has presented at our Obstetrics-Gynaecological Clinic in February 2024, following a Cesarean delivery, reporting abdominal and pelvic pain, swelling that increased in size during menstruation, dysmenorrhea, loss of appetite, nausea and vomiting. The pain and gastrointestinal distress was also closely related to the patient's menstrual period. Upon physical examination, a nonmobile, palpable mass was described at the middle of the cesarean section scar, near the linea alba. Following the examination, we have admitted the patient to the clinic, since surgical reintervention was required. After an adequate preoperative preparation, on the 12th of February 2024, the patient had undergone laparotomic surgery on the original Pfannenstiel surgical scar, with the excision of an endometriotic nodule from the subaponeurotic median line. Biopsy samples were taken for histopathological examination; surgical hemostasis and laparoraphy with intradermal suture has been also performed. The patient has received anticoagulant, antiinflammatory treatment and analgesics post-surgery. The postoperative period had been favorable, which allowed the discharge of the patient, in stable condition and with the resolution of her preoperative symptoms. **Discussions :** This case is part of a series of 271 endometriosis cases analyzed as part of an upcoming thesis work. Moreover, as previously

mentioned, endometriosis typically presents in the lesser pelvis, a rare but significant complication of cesarean incision is the extrauterine endometriosis of the surgical scar, a form of abdominal wall endometriosis - according to a previous study from 2023, the approximate incidence of this complication ranges between 0.03% and 0.4%. Notably, data analysis from the thesis work mentioned above revealed that isolated extragenital endometriosis only occurred in 2.95% of all studied cases from 2004, 2014 and 2024 (n=271). **Conclusions:** In conclusion, while extragenital endometriosis, especially endometriotic nodules at the surgical site are exceptionally rare, it remains a critical differential diagnosis to consider, alongside hernias and granulomas. Surgical excision with clear margins, as treatment of choice is also proven to be clinically efficient, with immediate relief of symptoms.

Keywords: endometriotic nodule, cesarean section scar, extragenital endometriosis, surgical excision

ENDOSCOPIC RADIAL ARTERY HARVESTING IN AORTOCORONARY BYPASS SURGERY: THE FIRST CASE REPORT FROM ROMANIA

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Introduction: One of the most common causes of mortality and morbidity worldwide is coronary artery disease, coronary artery bypass grafting (CABG) being the preferred method for myocardial revascularization. The harvesting of radial artery and internal mammary arteries grafts has been associated with improved long-term patency in comparison with saphenous vein grafts. Furthermore, endoscopic radial artery harvesting (ERAH) techniques have a low traumatic impact on the patient and fewer postoperative wound complications. **Case Report:** We present the case of a 56-year-old patient, with the medical history of complex multivessel coronary artery disease, NYHA class II/III, hypertension, type II diabetes mellitus and dyslipidemia was admitted to cardiovascular surgery. Electrocardiography showed sinus rhythm without significant repolarization abnormalities. Transthoracic echocardiography revealed a left ventricular ejection fraction of approximately 35-40%, apical hypokinesia, and mild mitral regurgitation. Coronary angiography showed severe multivessel coronary artery disease, including chronic occlusion of the left anterior descending artery and the obtuse marginal branch, as well as significant stenosis of the circumflex artery. Considering the extent of the lesions, surgical myocardial revascularization was recommended as the best option. The patient underwent coronary artery bypass grafting with total arterial revascularization under extracorporeal circulation. The right internal mammary artery was anastomosed to the right coronary artery, while the left internal mammary artery was grafted to the left anterior descending artery. A radial artery graft harvested endoscopically from the left forearm, the non-dominant arm, was used to revascularize the obtuse marginal branch. The postoperative course was favorable, and the patient was discharged in stable hemodynamic and respiratory condition. **Discussions :** The use of arterial grafts in coronary artery bypass surgery has been linked with improved long-term outcomes compared with venous grafts, mainly due to superior patency rates, better resistance to atherosclerosis and increased tolerance to systemic pressure. The radial artery has become an increasingly utilized method in myocardial revascularization, especially in patients with significant coronary stenosis. Additionally, endoscopic harvesting techniques allows a minimally invasive approach, reducing postoperative pain, wound complications, and improving healing and cosmetic results. **Conclusions:** Total arterial myocardial revascularization using an endoscopically harvested radial artery graft represents an achievable and effective surgical strategy in patients with complex coronary artery disease. This case highlights the successful application of ERAH in CABG, first in Romania from our knowledge, and supports its role as an innovative technique in modern cardiac surgery.

Keywords: radial artery, patency, myocardial revascularization

ENDOVASCULAR REPAIR OF AN ABDOMINAL AORTIC ANEURYSM EXTENDING INTO THE ILIAC ARTERIES

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Introduction: Abdominal aortic aneurysm (AAA) is a pathological condition that can be described as an enlarged segment of the abdominal aorta, greater than 3 cm or more than 50% of its original diameter. **Case Report:** A 55-year-old male patient is presenting to the hospital accusing abdominal pain and a pulsating sensation in the belly. An emergency CT scan is performed, that confirms an infra-renal abdominal aortic aneurysm that extends into the

iliac arteries. The patient is sent further for a vascular surgery check-up. They recommend EVAR, proceeding with a stent-graft sizing simulation and referring the patient to interventional radiology. The vascular surgery team starts the procedure by preparing the common femoral artery on each side. After that, the radiologist punctures the arteries by the Seldinger technique, using 18 G needles and 5F introducer sheath. The next step is the catheterization of the abdominal aorta with a 5F Pigtail catheter, followed by the injection of iodine contrast. This enhances a 4cm infrarenal fusiform aneurysm, which is further crossed by a 5F Pigtail catheter, guided by a 0,035 guidewire. The last step is placing the endoprosthesis in the aorta and 2 common iliac arteries extensions, one on each side. Both renal arteries are permeable. There are no procedural complications, so the vascular surgeons finish the procedure by doing a bilateral arteriorrhaphy and suturing the rest of the layers. **Discussions** : EVAR, as a minimally invasive technique, is associated with reduced risk and faster recovery than open surgery, making it particularly suitable for elderly and comorbid patients. Nevertheless, a disadvantage of EVAR is the need for lifelong postprocedural surveillance with CT angiography, unlike open surgery. **Conclusions**: This case highlights the benefits of a minimally invasive approach in the treatment of a potentially life-threatening vascular condition.

Keywords: Abdominal Aortic Aneurysm, Endovascular repair, minimally invasive technique, stent graft

ENDOVASCULAR STENTING FOR LATE-PRESENTATION AORTIC COARCTATION IN A SCHOOL-AGED CHILD

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Introduction: Aortic coarctation (CoA) is a congenital narrowing of the aorta that typically presents in the neonatal period or early infancy. Delayed diagnosis in school-aged children is less common and often occurs when the patient presents with secondary complications such as systemic hypertension. This case is significant because it highlights the clinical presentation of recurrent epistaxis as a red flag for underlying vascular malformations and demonstrates the efficacy of endovascular stenting in pediatric patients. **Case Report:** A 6-year and 7-month-old female was referred to Pediatric Cardiology for evaluation following a history of recurrent epistaxis. Although a systolic murmur had been noted since the neonatal period, it remained uninvestigated until October 2025. Clinical examination revealed a Grade III/6 systolic murmur at the left parasternal border and significantly weakened femoral pulses. The patient had persistent secondary arterial hypertension (HTN). Echocardiography identified a severe narrowing of the aortic isthmus (~5.7 mm) with a maximum pressure gradient of 74 mmHg. Associated findings included a Type IB bicuspid aortic valve (BAV). In February 2026, the patient underwent a therapeutic cardiac catheterization. An Optimus COCR XL 28 mm stent was successfully implanted at the coarctation site using an Armada balloon (9mm x 40 mm) followed by post-dilation with an Atlas Gold balloon (12mm x 40mm). The procedure achieved complete resolution of the pressure gradient with no residual stenosis or procedural complications. Postoperatively, the patient's blood pressure was managed with Metoprolol (12.5 mg twice daily), and she was discharged in stable condition. **Discussions** : This case aligns with existing literature suggesting that older children with CoA often present with "masked" symptoms like HTN or epistaxis rather than overt heart failure. While surgical repair was historically the gold standard, endovascular stenting is increasingly preferred for school-aged children due to its minimally invasive nature and excellent hemodynamic outcomes. The presence of BAV in this patient necessitates lifelong monitoring, as these patients are at increased risk for aortic root dilation and premature valve dysfunction. **Conclusions:** This case underscores the importance of routine blood pressure monitoring and femoral pulse palpation in pediatric physical exams, especially in children presenting with recurrent epistaxis. Endovascular stenting using high-radial-strength stents (e.g., Optimus COCR XL) provides an effective treatment for severe isthmic narrowing, significantly reducing the risk of long-term hypertensive complications.

Keywords: Aortic Coarctation (CoA), Endovascular Stenting, Secondary Hypertension, Bicuspid Aortic Valve (BAV)

ESOPHAGEAL ATRESIA AND COARCTATION OF THE AORTA IN A NEONATE: THERAPEUTIC PRIORITIZATION AND A MULTIDISCIPLINARY APPROACH

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Introduction: Coarctation of the aorta and esophageal atresia are congenital malformations that may coexist,

resulting in a complex neonatal condition requiring urgent multidisciplinary management. Coarctation consists of a narrowing of the aortic lumen causing systemic outflow obstruction, while esophageal atresia represents interruption of esophageal continuity, often associated with distal tracheoesophageal fistula. **Case Report:** We present a male infant at 39 weeks of gestation, born via cesarean section for a previous uterine scar, with a birth weight of 2720 g and Apgar scores of 8 at 1 minute and 9 at 5 minutes. Prenatal evaluation had raised suspicion of a congenital cardiac anomaly. After birth, the neonate developed cyanosis and hypotonia, requiring airway clearance due to abundant oral and nasopharyngeal secretions. Inability to advance a gastric tube and thoracoabdominal radiography confirmed esophageal atresia with distal tracheoesophageal fistula (Gross type C). Echocardiography revealed coarctation of the aorta with mild arch hypoplasia, septal defects, dilated right cardiac cavities, and a large patent ductus arteriosus (3.4 mm), consistent with duct-dependent systemic circulation. Prostaglandin E1 infusion and inotropic support were initiated to maintain ductal patency and systemic perfusion. Digestive surgery was prioritized, and the patient underwent fistula ligation with primary esophageal anastomosis. Postoperative evolution was favorable. On day 9 of life, a brief narrow-complex tachycardia (270-280 bpm) occurred and was treated with antiarrhythmic therapy. After stabilization, definitive cardiac surgery including coarctation repair was successfully performed. **Discussions :** Cardiac anomalies occur in approximately 40-60% of patients with esophageal atresia, most commonly septal defects. However, aortic arch anomalies such as coarctation, although less frequent, carry significant hemodynamic implications. Their association reflects the shared embryologic development of the foregut and aortic arch structures during early gestation. Esophageal atresia is immediately life-threatening due to feeding impossibility and aspiration risk, requiring urgent surgical correction, whereas duct- dependent coarctation can be temporarily stabilized with prostaglandin infusion, allowing staged surgical management. **Conclusions:** This case highlights the challenges posed by the coexistence of digestive and cardiovascular malformations in the newborn. Careful hemodynamic stabilization, appropriate prioritization of surgical interventions, and close collaboration between neonatologists, pediatric surgeons, pediatric cardiologists, and cardiovascular surgeons are essential to achieving optimal outcomes.

Keywords: Esophageal atresia, Coarctation of the aorta, Congenital heart defects, Multidisciplinary management

ESOPHAGEAL ATRESIA IN A LATE-PRETERM NEONATE: EARLY DIAGNOSIS AND MULTIDISCIPLINARY MANAGEMENT

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Introduction: Esophageal atresia is a congenital malformation that disrupts the normal development of the esophagus in the fetus. This condition results in the esophagus ending in a blind pouch rather than connecting to the stomach. As a consequence, oral feeding is not possible, and surgical correction is necessary after birth. Five main types (A-E) are described, categorized by anatomical structure. **Case Report:** I present the case of a premature male newborn from a monochorionic diamniotic twin pregnancy, delivered at 35 weeks of gestation, with a birth weight of 2250 grams. The Apgar score was 6 at 1 minute and 7 at 5 minutes. The pregnancy was complicated by polyhydramnios and prenatal suspicion of a congenital digestive malformation. Immediately after birth, an attempt to insert an orogastric tube was unsuccessful, confirming the suspicion of esophageal atresia. The newborn was transferred to the Neonatal Intensive Care Unit (NICU) for further evaluation. The infant exhibited respiratory distress requiring support with continuous positive airway pressure (CPAP). The diagnosis was later confirmed radiologically as esophageal atresia without an associated tracheoesophageal fistula (Type A). After a thorough cardiology evaluation, the newborn was diagnosed with an atrial septal defect (ostium secundum type), which exhibited a left-to-right shunt, as well as a patent ductus arteriosus that also presented a restrictive left-to-right shunt. Additionally, laboratory tests revealed a neonatal inflammatory syndrome, indicated by an elevated procalcitonin level of 1.24 ng/mL. The patient was treated in the NICU with parenteral nutrition, broad-spectrum antibiotics (Ampicillin and Amikacin), and supportive care. After an assessment by a multidisciplinary pediatric team, including neonatologists and surgeons, it was decided that the hemodynamically stable newborn would be transferred to the Emergency Clinical Hospital for Children "Marie Curie" in Bucharest for definitive surgical treatment. This decision was based on the lack of available beds in the NICU. **Discussions :** Esophageal atresia is a neonatal surgical emergency that is linked to significant postnatal morbidity. It is a primary reason for early surgical intervention, aimed at correcting the anatomical defect and restoring the normal connection between the esophagus and the stomach. **Conclusions:** Esophageal atresia is a neonatal surgical emergency that requires prompt intervention and a multidisciplinary management approach. Prenatal suspicion, followed by an accurate postnatal diagnosis and proper stabilization of the newborn, is crucial for a successful outcome.

Keywords: Esophageal atresia, Prematurity, Congenital malformation, Neonatal surgical emergency

ETHICAL DILEMMAS IN DOCTOR- PATIENT COMMUNICATION INVOLVING TREATMENT-RESISTANT SCHIZOPHRENIA AND SUICIDAL IDEATION

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Introduction: An efficient communication is the foundation of every medical history taking, especially in psychiatry. The lack of laboratory investigations makes the medical history and the use of certain tests the only diagnostic methods available. From a bioethical perspective, the major challenge lies in respecting the autonomy of the psychiatric patient and the management of such a patient, whose capacity to communicate is doubly impaired: the flattened affect overlapped by the cognitive deficits in the progressive stages of residual schizophrenia, as well as the suicidal ideation which affects the patient's perspective on life. **Case Report:** Patient F.A., a 50-year-old resident of Reghin, presented to our clinic with the following diagnoses: chronic schizophrenia with residual symptoms resistant to antipsychotic treatment, recurrent major depressive disorder, and a current severe depressive episode with suicidal ideation. On the Global Assessment Functioning Scale (GAFS), the patient scored 45, indicating severe symptoms and severe functional impairment, reaching the critical threshold for judgment. On the Hamilton Depression Rating Scale, she scored 28 points, indicating a severe depressive episode, along with a score of 17 points on the Hamilton Anxiety Rating Scale, indicating a severe level of anxiety. Despite the results of her evaluation, the patient refuses hospitalization and is advised to continue treatment with antipsychotics, antidepressants, sedatives and anxiolytics. **Discussions :** The case raises the issue of the "limits of autonomy". In our patient's case, what is the ethical course of action: respecting autonomy or applying medical paternalism? The patient exhibits cognitive impairment along with suicidal ideation serving as a red flag that could pressure the physician into adopting an authoritarian stance, which may be perceived as punitive and intrusive by the patient. This can worsen the communication with the patient, making them even less receptive to the doctor's advice. An empathetic and supportive approach encourages the prioritisation of the patient's immediate safety over the feeling that life is not worth living. **Conclusions:** Article 4 of the Code of Medical Ethics of the Romanian College of Physicians states that the entire professional practice of a physician is dedicated to protecting the life, health and physical and mental integrity of human beings. Whatever approach the physician decides to adopt, it shall be aimed at improving the patient's condition, and the results, both favourable and unfavourable, shall be communicated to the patient with empathy.

Keywords: Communication, Autonomy, Schizophrenia, Major depressive disorder

EXTENSIVE THYROID TISSUE IN THE SKELETAL MUSCLE OF THE NECK: ECTOPIC OR IATROGENIC? A DIAGNOSTIC DILEMMA

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Introduction: The presence of thyroid tissue within skeletal muscle is an exceptionally rare finding and may occur either as ectopic thyroid tissue or as postoperative implantation of residual thyroid tissue. However, malignant involvement should also be considered in the differential diagnosis, since neoplastic lesions are more commonly associated with skeletal muscle invasion. **Case Report:** We present the case of a 70-year-old female patient with a history of surgically treated multinodular goiter in 1998, who presented to the Endocrinology Department with a nodular mass in the anterior cervical region. Further investigations revealed recurrent multinodular goiter, and completion thyroidectomy was subsequently recommended and performed in 2026. Upon gross examination, multiple colloid nodules were identified in the resected specimens (pyramidal lobe nodule, left thyroid remnant, and right thyroid remnant). Microscopic examination revealed well-circumscribed thyroid nodules displaying microfollicular and macrofollicular architecture, composed of follicles lined by bland thyroid epithelium. Moreover, multiple well-defined nodules of varying shapes and sizes, displaying microfollicular and macrofollicular architecture, were identified bilaterally in the cervical skeletal muscle tissue, with focal adipose replacement present in some nodules. Given this unusual finding, immunohistochemical staining for thyroglobulin and TTF-1 was performed, confirming the thyroid origin of the tissue. **Discussions :** According to the literature, several

mechanisms can be involved to explain extensive thyroid tissue in skeletal muscles: abnormal thyroid descent during embryologic development along the thyroglossal duct in case of ectopic thyroid tissue (ETT); implantation of thyroid tissue into adjacent structures secondary to previous surgery; sequestration of a thyroid nodule in diffuse nodular hyperplasia; or a neoplastic process. Malignancy was excluded based on the presence of benign histopathological features, including normal-appearing thyroid follicles and focal adipose replacement within the nodules. In our case, the differential diagnosis was raised between ETT and postsurgical implantation. The most frequent location of ETT is the lingual thyroid, followed by sites along the thyroglossal duct tract, and less commonly in the lateral cervical regions. Postsurgical implantation is a rare complication of thyroid surgery, typically presenting years later as multiple nodules in the cervical skeletal muscle. Furthermore, both entities may develop pathological changes similar to those seen in the eutopic thyroid gland, including multinodular goiter.

Conclusions: The presence of thyroid tissue in the anterior or lateral cervical region is a rare and uncommon occurrence of thyroid pathology and is often asymptomatic. Establishing an accurate diagnosis is essential for appropriate therapeutic management, especially when the exclusion of malignancy may significantly affect the patient's life.

Keywords: thyroid, multinodular goiter, nodules, skeletal muscle

EXTRAPYRAMIDAL SYMPTOMS AS A SIDE EFFECT OF ESCITALOPRAM IN A PATIENT WITH NEUROCOGNITIVE DISORDER AND COMORBID DEPRESSION – A CASE REPORT

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Introduction: Selective serotonin reuptake inhibitors (SSRIs) are widely used in elderly patients with neurocognitive disorders and comorbid depression due to their favorable safety profile compared to other antidepressants. However, in rare cases, extrapyramidal symptoms have been reported, particularly in vulnerable populations. Recognition of this adverse effect is crucial, as it may be attributed to neurodegenerative progression and influence treatment options. **Case Report:** We report the case of a 72-year-old female patient diagnosed with major neurocognitive disorder and comorbid major depressive disorder, treated with escitalopram (20 mg/day). After several weeks of therapy, she developed intermittent postural tremor, bradykinesia, difficulty walking, without prior history of Parkinsonian symptoms. Neurological examination confirmed extrapyramidal signs. Laboratory investigations and neuroimaging excluded acute metabolic or structural causes. No antipsychotic or dopamine-blocking agents were part of her treatment regimen. The temporal association with escitalopram initiation raised suspicion of SSRI-induced extrapyramidal symptoms. Escitalopram was gradually discontinued, leading to significant clinical improvement within weeks. No dopaminergic therapy was required. The patient's depressive symptoms were subsequently managed with an alternative therapeutic approach, without recurrence of motor symptoms. **Discussions :** SSRIs may induce extrapyramidal symptoms through serotonergic modulation of dopaminergic pathways in the basal ganglia. Elderly patients with dementia may be particularly susceptible due to underlying neurodegenerative changes, altered pharmacokinetics, and increased blood-brain barrier permeability. Early identification is essential to prevent unnecessary diagnostic procedures and inappropriate escalation of therapy. **Conclusions:** Although rare, clinicians should remain vigilant for extrapyramidal adverse effects in elderly patients treated with SSRIs. Careful monitoring and prompt reassessment of pharmacological treatments are the foundation of prevention of such symptoms in neurocognitive disorders with comorbid depression.

Keywords: SSRI, extrapyramidal symptoms, neurocognitive disorder, depression

EXTREME ANEMIA IN HEREDITARY HEMORRHAGIC TELANGIECTASIA: CRITICAL MANAGEMENT OF RECURRENT BLEEDING AND SEVERE IRON-DEFICIENCY ANEMIA IN A PATIENT WITH MULTISYSTEMIC INVOLVEMENT

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Introduction: Hereditary hemorrhagic telangiectasia (HHT), also known as Rendu-Osler-Weber syndrome, is a rare autosomal dominant vascular disorder characterized by mucocutaneous telangiectasias and visceral arteriovenous malformations (AVMs). Recurrent epistaxis and gastrointestinal bleeding are the primary sources of chronic blood loss, frequently resulting in severe iron-deficiency anemia that can become life-threatening,

especially in patients with significant comorbidities. **Case Report:** A 54-year-old male with known hereditary hemorrhagic telangiectasia (HHT), hypertension, chronic obstructive pulmonary disease, toxic chronic hepatopathy, diffuse pulmonary fibrosis, mitral and tricuspid valvular insufficiency, and chronic alcohol use presented urgently with chest pain, recurrent epistaxis, progressive asthenia, and severe anemia. The patient had a history of recurrent upper gastrointestinal bleeding and epistaxis. At admission, clinical examination revealed altered general status, pale mucosae, dehydration, bilateral periorbital hyperpigmentation, telangiectasias on the lips and oral mucosa, bilateral wheezing. Laboratory investigations demonstrated profound normochromic normocytic anemia (hemoglobin 2.1 g/dL, hematocrit 7.8%), severe iron deficiency, mild inflammatory response, and stable other parameters. Serial hemograms showed persistent severe anemia with partial response to therapy (hemoglobin improved to 5.5 g/dL by discharge). The patient received urgent transfusion support, intravenous iron supplementation, intravenous fluids for rehydration, antihypertensive therapy, proton pump inhibitors, bronchodilators, diuretics, and hemostatic measures. No active gastrointestinal bleeding required endoscopic intervention during this admission. After stabilization, the patient was discharged in improved general condition, hemodynamically and respiratorily stable, without active external bleeding, with recommendations for continued oral/parenteral iron supplementation, hemoglobin monitoring, proton pump inhibitor therapy, and multidisciplinary follow-up (internal medicine, gastroenterology, pulmonology, and hepatology). **Discussions:** This case highlights the severe hematologic impact of HHT in the context of multisystemic involvement, where recurrent mucocutaneous and visceral bleeding led to extreme, transfusion-requiring anemia. Guidelines from the Second International HHT Guidelines emphasize routine screening for iron deficiency and anemia in all HHT patients, initial oral iron therapy, escalation to intravenous iron for non-response or severe cases, and red blood cell transfusions in settings of hemodynamic instability, acute needs, or failure to maintain hemoglobin targets despite aggressive iron replacement. The patient's partial anemia correction (to 5.5 g/dL) with transfusions and iron therapy aligns with recommendations for acute management, while comorbidities (pulmonary fibrosis, hepatopathy, valvular disease) likely exacerbated decompensation and required supportive care. **Conclusions:** Severe anemia in hereditary hemorrhagic telangiectasia represents a hematologic emergency requiring prompt recognition, aggressive transfusion and iron replacement support, hemodynamic stabilization, and targeted symptomatic therapy.

Keywords: Hereditary hemorrhagic telangiectasia, Severe anemia, Iron deficiency

EXTREME LEUKOCYTOSIS FOLLOWED BY RAPID REMISSION IN T-CELL ACUTE LYMPHOBLASTIC LEUKEMIA

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Introduction: T-cell acute lymphoblastic leukemia is a distinct neoplastic entity defined by the clonal proliferation of T-lineage lymphoid progenitors. This condition is characterized by a block in cellular maturation at various stages of thymocyte differentiation, leading to a fulminant clinical course. **Case Report:** We present the case of a 16-year-old male patient whose initial clinical presentation was dominated by marked leukocytosis, a key predictive factor for the subsequent pathological course. Immunophenotyping revealed an antigenic profile specific to T-cell acute lymphoblastic leukemia. The differential diagnosis from the B-cell lineage was confirmed by the detection of surface markers characteristic of the T-cell lineage, with the identification of cell populations positive for CD2, CD5, and CD7, along with the co-expression of the maturation markers CD4 and CD8. Following uncontrolled clonal expansion in the hematopoietic marrow, severe suppression of physiological hematopoiesis was observed. The clinical picture revealed functional pancytopenia marked by the classic triad-anemia, thrombocytopenia, and severe neutropenia—a phenomenon secondary to massive lymphoblast infiltration, which exponentially increases the risk of infectious and hemorrhagic complications. The coagulation profile revealed hypofibrinogenemia, decreased prothrombin activity, and prolonged coagulation times (aPTT, Quick time, INR), suggestive of a consumption coagulopathy in the context of extensive leukemic burden. However, the presence of isolated indirect hyperbilirubinemia does not allow the complete exclusion of an associated impairment in coagulation factor synthesis. Simultaneously, cerebrospinal fluid analysis revealed elevated protein levels, indicative of blood-brain barrier disruption and potential meningeal involvement. Changes in biological parameters were monitored over time during the first month of treatment, providing clinical insight into the response to treatment. Of particular importance is the drastic reduction in circulating tumor burden, progressing from extreme leukocytosis (456,000/ μ L) to marked leukopenia (0.55/ μ L), a phase of bone marrow aplasia secondary to chemotherapy, with

the onset of a major risk of infectious complications. **Discussions** : The case analysis highlights a significant prognostic discrepancy between the initial clinical presentation and the biological response to induction therapy. Although unfavorable prognostic factors-such as extreme leukocytosis, adolescent age, male sex, and biochemical changes in cerebrospinal fluid-would place the patient in a high-risk group, immunophenotyping contradicts this assertion. Following bone marrow aspiration, minimal residual disease was identified at 4%, placing the patient in an intermediate-risk group. **Conclusions**: This case highlights a rapid therapeutic response; changes in laboratory parameters confirm marked chemosensitivity and underscore the primacy of the dynamic biological response over conventional risk factors in T-cell acute lymphoblastic leukemia.

Keywords: Extreme Leukocytosis, T-Cell Lineage Differentiation, T-Cell Immunophenotyping, Minimal Residual Disease

EXTREME REACTIVE THROMBOCYTOSIS IN ACUTE GASTRIC OBSTRUCTION IN A NEUROLOGICALLY FRAGILE PATIENT

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Introduction: Acute abdominal emergencies in patients with severe neurological impairment often pose a diagnostic paradox, as chronic frailty masks sudden, life-threatening deterioration. This case focuses on the dramatic "biological storm" observed during a 24-hour window, marked by an extreme reactive thrombocytosis, a hematological phenomenon triggered by the synergistic impact of profound anemia and acute systemic inflammation. **Case Report:** An 18-year-old male, with a history of infantile cerebral palsy, spastic quadriplegia, and severe intellectual disability, was admitted to the emergency department presenting with acute abdominal pain and altered general condition. An abdominopelvic CT revealed pyloric stenosis caused by a giant gastric phytobezoar, accompanied by marked gastric stasis and a hiatal hernia. Endoscopic examination findings revealed severe reflux esophagitis (Los Angeles Class D) and massive gastric stasis. Laboratory investigations on the day of admission demonstrated an alarming biological profile: marked leukocytosis (32,380/ μ L), extreme thrombocytosis of 1,373,000/ μ L, accompanied by critical anemia with hemoglobin levels of 4.9 g/dL. This was characterized as hypochromic microcytic anemia, indicating severe chronic deficiency. Additionally, laboratory findings were suggestive for severe metabolic acidosis along with a blood glucose level of 177 mg/dL. Following treatment in the Intensive Care Unit, the patient showed rapid stabilization: after the transfusion of 1 unit of packed red blood cells, hemoglobin increased to 6.9 g/dL, and the platelet count significantly decreased to 458,000/ μ L. Endoscopic fragmentation and removal of the bezoar were then performed under analgesedation with airway protection via orotracheal intubation. **Discussions** : The favorable post-intervention evolution, was also reflected by laboratory results showing a clear corrective trend allowed for respiratory stabilization and discharge. A percutaneous endoscopic gastrostomy (PEG) tube was recommended for long-term nutritional support. **Conclusions:** The clinical complexity of this case stems from the sudden, life-threatening decompensation of a patient with significant pre-existing neurological frailty. The rapid normalization of blood counts and the patient's stabilization following the procedure highlight the importance of aggressive, coordinated care in reversing acute obstructive crises in complex patients.

Keywords: thrombocytosis, gastric obstruction, neurological frailty

FATAL PULMONARY EMBOLISM FROM POPLITEAL THROMBOSIS: CASE REPORT

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Introduction: Pulmonary embolism is a major cause of sudden death, frequently resulting from deep vein thrombosis of the lower limbs. Generally, it is associated with recognized risk factors such as trauma, immobilization, coagulopathies, but in certain cases it may occur in the absence of identifiable predisposing conditions. Up to 25% of pulmonary embolisms lead to sudden death. Thrombosis of the popliteal vein accounts for 16% of cases of lower limb deep vein thrombosis and is associated with a high risk of embolization. **Case Report:** We present the case of a 35-year-old male with unknown medical history, who was found unresponsive by the ambulance. Before that, he called the emergency services, but collapsed and could not be resuscitated. Blood

alcohol levels were zero, and further toxicological screening was negative. Post-mortem troponin was positive. External examination revealed minor excoriations and ecchymoses, consistent with the collapse of the patient. Fractures of the sternum and multiple ribs were present, secondary to the resuscitation maneuvers. No significant cranio-cerebral lesions were found. Internal examination showed dilatation of the left ventricle, consistent with dilated cardiomyopathy. The pulmonary arteries were obstructed by friable, adherent, dark thrombotic material. A 4/3cm subpleural, indurated, dark area was identified in the left lower lobe. Further histopathological analysis confirmed the pulmonary thromboembolism with secondary pulmonary infarction. Dissection of the lower limbs revealed complete thrombosis of the right popliteal vein by an organized, adherent mixed thrombus. Brain examination demonstrated acute cerebral edema consistent with hypoxic injury. The cause of death was acute respiratory failure due to massive pulmonary thromboembolism secondary to right popliteal vein thrombosis.

Discussions : Acute pulmonary thromboembolism is frequently underdiagnosed during life, with many cases being identified post-mortem. Symptoms such as sudden dyspnea, chest pain, syncope or hemoptysis may be absent or misinterpreted especially in young individuals without known risk factors. In this case, we cannot determine if the patient presented any of these, as the event evolved rapidly and led to sudden death. The positive troponins most likely reflected the acute right ventricular strain rather than primary coronary pathology. **Conclusions:** The case highlights the importance of thorough lower limb dissection in forensic autopsies of unexplained sudden death. The case was examined through a medico-legal autopsy performed in Sibiu County Forensic Medicine Service, in accordance with the applicable national legal framework. All data were anonymized, and the case is presented strictly for academic and educational purposes.

Keywords: pulmonary embolism, deep vein thrombosis, sudden death, post-mortem case report

FATAL RETROPERITONEAL HEMATOMA IN A POST-AORTIC VALVE REPLACEMENT PATIENT: DIAGNOSTIC AND MANAGEMENT CHALLENGES

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Introduction: Spontaneous retroperitoneal hemorrhage represents a medical emergency with high mortality, frequently associated with anticoagulant and/or antiplatelet therapy. Early diagnosis is difficult due to non-specific symptoms, and hemodynamic deterioration can be rapidly progressive. Patients who have recently undergone cardiovascular interventions, especially those under combined antithrombotic treatment, present an increased risk of severe hemorrhage, which necessitates early recognition and careful monitoring. **Case Report:** We present the case of a 71-year-old female patient with a history of recent cardiovascular interventions, including aortic valve replacement with a biological prosthesis and left internal carotid artery endarterectomy, during which she suffered a stroke. After discharge, the patient was monitored in a rehabilitation hospital, receiving anticoagulant treatment with enoxaparin (Clexane) 0.8 mg twice daily and antiplatelet therapy (Aspenter 75 mg/day), as well as analgesic and antibiotic therapy. Upon presentation to the ER (UPU SMURD), the patient was in serious general condition, with difficulty cooperating, arterial hypotension (BP 80/55 mmHg), tachycardia, and diaphoresis. The blood count revealed a progressive decrease in hemoglobin, suggesting active hemorrhage. The patient's condition deteriorated rapidly, requiring intubation following an Angio-CT scan. Imaging revealed a retroperitoneal collection, and emergency surgical intervention confirmed a tense retroperitoneal hematoma in the left laterocolic space, of venous etiology, with contents in various stages of organization. An exploratory laparotomy was performed, followed by the evacuation of the hematoma and surgical hemostasis, with cavity lavage, contact drainage, and laparorrhaphy. The intervention was followed by intensive monitoring, with complex voluric and hemodynamic support. Despite aggressive management, the patient's progress was slowly unfavorable, culminating in death. Dynamic clinical and paraclinical evaluations did not reveal other sources of active hemorrhage. **Discussions :** This case aligns with literature reporting spontaneous retroperitoneal hematomas in anticoagulated, post-cardiovascular surgery patients. High mortality, diagnostic difficulty, and rapid hemodynamic deterioration are consistent with prior studies, emphasizing early recognition, prompt imaging, and urgent surgical intervention, although outcomes remain poor despite optimal management. **Conclusions:** Spontaneous retroperitoneal hemorrhage, although rare, represents a potentially fatal complication in patients on anticoagulant and antiplatelet treatment, especially after major cardiovascular procedures. Early diagnosis, careful hemodynamic monitoring, and prompt surgical intervention are essential for the management of these cases. However, even with an optimal therapeutic strategy, the prognosis can remain severe, highlighting the importance of identifying risk factors and rigorous postoperative supervision.

Keywords: retroperitoneal hemorrhage,, anticoagulant therapy,, post-cardiovascular surgery,, emergency laparotomy

FATAL SEPSIS IN PEMPHIGUS VULGARIS WITH MULTIPLE COMORBIDITIES: A CASE REPORT

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Introduction: Pemphigus vulgaris is a rare autoimmune disorder characterized by the appearance of intraepidermal blisters and severe impairment of the skin barrier. Extensive cutaneous involvement predisposes patients to secondary infections, sepsis, and life-threatening complications, especially in the presence of significant comorbidities such as diabetes mellitus and liver cirrhosis. Early diagnosis and a multidisciplinary therapeutic approach are essential to improve outcomes. **Case Report:** A 57-year-old male patient with a history of type 2 diabetes mellitus, alcoholic liver cirrhosis, and arterial hypertension was admitted to the Emergency Department following a fall caused by severe hypoglycemia (22 mg/dL). The patient was hospitalized in the Internal Medicine Clinic No. 1. On admission, clinical examination revealed extensive bullous and erosive skin lesions involving the anterior and posterior thorax, sacral and gluteal regions, and both upper and lower limbs. Laboratory findings showed marked inflammatory syndrome, thrombocytopenia, and elevated liver enzymes. Imaging studies excluded acute traumatic injuries but revealed hepatomegaly. Initial microbiological cultures from skin lesions were negative. However, repeated sampling during hospitalization identified polymicrobial infection with *Escherichia coli*, *Acinetobacter baumannii*, and *Enterococcus faecalis*. Dermatological evaluation established the diagnosis of pemphigus vulgaris, and treatment with systemic corticosteroids and targeted antibiotic therapy (according to antibiogram) was initiated. Despite therapy, the clinical course was unfavorable, with progressive extension of cutaneous lesions and development of multiple severe complications, including sepsis of cutaneous origin, disseminated intravascular coagulation, and neuropsychiatric manifestations (hallucinations, agitation). The patient required broad-spectrum antibiotics, supportive care, transfusions, and vasoactive support. The condition further deteriorated, progressing to hemodynamic instability and cardiac arrest (asystole), with death occurring despite resuscitation efforts. **Discussions :** Pemphigus vulgaris is associated with a high risk of mortality, mainly due to infectious complications resulting from skin barrier disruption. The patient presented multiple established risk factors for poor outcome, including diabetes mellitus and hypoalbuminemia. Alcoholic liver cirrhosis further worsened the prognosis by impairing immune function, protein synthesis, and drug metabolism. Although corticosteroids remain the main therapeutic option in pemphigus, their use in cirrhotic patients increases the risk of infections, delayed wound healing, and metabolic complications. Additionally, the development of disseminated intravascular coagulation in this patient signified advanced multiorgan dysfunction and portended an extremely poor prognosis. **Conclusions:** This case highlights the complex interplay between immunosuppression and infection control in pemphigus vulgaris, particularly in patients with multiple comorbidities. Outcomes in pemphigus vulgaris depend critically on early detection and treatment of infections, careful monitoring, and integration of multidisciplinary expertise.

Keywords: pemphigus vulgaris, sepsis, diabetes mellitus, liver cirrhosis

FEAR OF HYPOGLYCEMIA: A CASE OF MALADAPTIVE GLYCEMIC MANAGEMENT

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Introduction: Achieving optimal glycemic control in patients with long-standing type 1 diabetes mellitus (T1DM) can be challenging, especially when it is complicated by psychological factors such as fear of hypoglycemia. This fear may lead to maladaptive self-management behaviors, including intentional insulin dose omission, delayed or incorrect dosing, and inappropriate dietary choices, resulting in marked glycemic variability and increased risk of both hypo- and hyperglycemic events. **Case Report:** We report the case of a 56-year-old male patient with T1DM for approximately 40 years, under treatment with basal-bolus insulin regimen, complicated with diabetic peripheral polyneuropathy and retinopathy. He was admitted to the Diabetology Department due to highly variable blood

glucose levels, ranging from 15 to 400 mg/dL. Further evaluation revealed that the patient had a pronounced fear of hypoglycemia, which led him to intentionally maintain his glucose around the value of 200 mg/dL by omitting insulin doses, consuming a diet high in rapidly absorbed carbohydrates without adjusting insulin accordingly, and administering short-acting insulin only after meals. To solve these issues, the patient received structured diabetes education, including instruction on proper insulin administration, counting of insulin doses based on carbohydrate intake, strategies for hypoglycemia prevention, and management of hypoglycemic episodes. Following this intervention, the patient demonstrated marked improvement in glycemic control, with more stable blood glucose values and a reduced risk of hypo- and hyperglycemic events. **Discussions** : This case highlights the significant impact of psychological factors on diabetes self-management in patients with long-standing T1DM, particularly the fear of hypoglycemia. The patient's maladaptive behaviors, including intentional insulin omission, delayed administration of short-acting insulin, and excessive carbohydrate intake without dose adjustment, may contribute to extreme glycemic variability and increased risk of acute complications. Structured diabetes education, focused on proper insulin administration, carbohydrate counting, and hypoglycemia prevention and management, was essential in correcting these behaviors. Following targeted intervention, the patient demonstrated improved adherence and more stable glycemic control, underscoring the importance of integrating psychosocial assessment and individualized education into the routine diabetes care. **Conclusions**: This case emphasizes that effective management of T1DM extends well beyond pharmacologic therapy alone. Integrating structured patient education, psychosocial assessment, and multidisciplinary support into routine diabetes care is essential to promote consistent self-management, to prevent acute and chronic complications, and to improve overall quality of life.

Keywords: hyperglycemia, type 1 diabetes mellitus, uncontrolled diabetes

FINDING THE BALANCE BETWEEN THROMBOSIS AND HEMORRHAGE: ANTICOAGULANT THERAPY IN STROKE COMPLICATED BY UGIB

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Introduction: Thromboembolic events are the most common cause of ischemic stroke, with secondary prevention achieved with antiplatelet and anticoagulant therapy. Upper gastrointestinal bleeding is a pathology with increased mortality, complicating the management of anticoagulated patients, especially those who also have peptic ulcer disease. **Case Report:** We present the case of a 63-year-old man with a history of repeated cerebral infarcts in the anterior left cerebral territory and right middle cerebral artery, NYHA class II heart failure and chronic ischemic heart disease, compliant with antihypertensive and statin treatment at home, but without antiplatelet therapy. He presents with significant deficits in comprehension and verbal expression. Physical examination reveals central facial paresis, sequelae tetraparesis, grade 4+/5 MRC on the left and 4-/5 on the right, brisk deep tendon reflexes more pronounced on the left, positive Babinski sign on the right, and mixed predominantly motor aphasia. He was admitted to the neurology ward with a diagnosis of cerebral infarction of the left middle cerebral artery. During hospitalization, the patient's condition worsened, presenting with a blood pressure of 93/56 mmHg and SpO₂ of 90%, positive rectal examination for large amounts of melena and secondary anemia (Hb value: 7.3 g/dl), leading to a diagnosis of hemorrhagic shock and upper digestive hemorrhage. After fluid volume rebalancing, upper digestive endoscopy is performed, revealing a Forrest IIa bulbar ulcer extending to a medium-sized vessel in the anterior wall. Adrenaline is injected for hemostasis, Argon plasma coagulation is performed, and two hemoclips are placed, stopping the bleeding. At endoscopic re-evaluation after 7 days, a healing fibrin-covered ulcer was visualized at the bulb level, associated with edematous stomach mucosa, secretory content, and hiatal hernia. Initiation of H. pylori eradication treatment was also recommended. **Discussions** : In this patient, the lack of antiplatelet therapy in the context of chronic ischemic heart disease and history of stroke, represents a risk factor for the current ischemic cerebral episode. Simultaneously, upper gastrointestinal bleeding with hemodynamic shock and anemia worsens the cerebrovascular event and slows recovery from neurological sequelae. **Conclusions:** This case highlights the importance of multidisciplinary management of patients with ischemic stroke and upper gastrointestinal bleeding. From a neurological point of view, due to atherothrombotic and cardioembolic risk factors, secondary prevention requires the administration of antiplatelet, anticoagulant, and statin therapy. However, given the recent active hemorrhagic bulbar ulcer, the risk is considered to outweigh the benefit, and treatment is recommended to be postponed until gastroenterological reevaluation.

Keywords: hemorrhage, antiplatelet therapy, stroke, peptic ulcer disease

FROM ABCESS TO SARCOMA: DIAGNOSTIC DELAY AND MULTIDISCIPLINARY MANAGEMENT OF FOREARM DERMATOFIBROSARCOMA PROTUBERANS

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Introduction: Dermatofibrosarcoma protuberans (DFSP) is a rare and locally aggressive form of cutaneous soft tissue sarcoma. It is often misdiagnosed because of its nonspecific clinical appearance and lack of symptoms. One of its characteristics is clinical mimicry, DFSP being easily mistaken for benign or inflammatory lesions, as was the case for this patient. This case report illustrates the surgical challenges of a misdiagnosed DFSP and the necessity for a multidisciplinary team for proper treatment. **Case Report:** A 55 year-old patient, working as an electrical technician, presented in 2021 to a surgery department complaining of a slow-growing nodule for one year, on the anterior region of the forearm, and of paresthesia. The lesion was excised as a presumed abscess without further investigations. In 2022, the lesion recurred at the excision site as a larger mass. Re-excision with 2 cm circumferential margins was performed and the histopathological exam (HP) revealed DFSP. The patient presented at the surgical department in Cluj-Napoca, where a multidisciplinary team was formed. The MRI revealed a superficial intradermal mass, measuring 2,1 cm by 1,5 cm with no deep tissue invasion and no signs of metastasis. Under general anesthesia, wide local re-excision of the recurrent DFSP was performed with 5 cm circumferential margins, measured from the previous excision scar. Intraoperatively, the tumor was found in direct contact with the muscular fascia and the radial artery; an en bloc resection of the affected segment occurred. An anterolateral thigh (ALT) free flap measuring 11 cm by 17 cm was planned in a flow-through configuration; however, due to insufficient anatomy of the lateral circumflex femoral artery, a saphenous vein interposition graft was harvested. Postoperatively, HP revealed 2mm positive profound margins; thus, adjuvant radiotherapy was indicated. The patient has been in remission for 3 years, has full function of his hand and presents for periodic MRIs every 6 months. **Discussions :** Clinical evolution of this patient is consistent with the findings in literature. David et al.(2019) reported that the most common prebiopsy clinical suspicion was cyst (47.2%), while sarcoma was suspected in only 1.9% of cases. Winer et al. (2025) demonstrated that only 69% of patients achieved R0 resection; these reports further illustrating the deceptive nature of this neoplasm. **Conclusions:** This case underscores the importance of clinical vigilance when suspecting DFSP, even when the presentation mimics benign lesions such as abscess, and the necessity for a multidisciplinary team for excellent outcomes.

Keywords: Dermatofibrosarcoma protuberans, flow-through flap, ALT flap

FROM ABNORMAL IMPLANTATION TO UTERINE RUPTURE: HISTOPATHOLOGICAL CONFIRMATION OF PLACENTA ACCRETA

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Introduction: Defective decidualisation causes unusual placental implantation in disorders of the placenta accreta spectrum (PAS), resulting in improper adhesion of the chorionic villi to the myometrium and a partial or complete absence of the decidua basalis. These diseases have been associated with increased maternal morbidity, uterine rupture and severe postpartum haemorrhage. Even when imaging tools increase antenatal detection, histopathological investigation still remains the gold standard for diagnostic confirmation. **Case Report:** A 37-year-old woman presented with severe abdominal pain and haemorrhaging shortly after giving birth. The clinical evaluation raised suspicion of incomplete uterine rupture, and an emergency exploratory laparotomy was performed. The placenta and fetal annexes were submitted for histopathological examination. Gross examination revealed a mature placenta of an appropriate weight and size for a full-term pregnancy. The umbilical cord showed marginal insertion and contained three vessels (two arteries and one vein). The fetal membranes were found to be translucent with no gross deposits . Microscopic evaluation revealed mature chorionic villi arranged in compact clusters, with extensive areas of intervillous haemorrhage . Notably, the chorionic villi were found to be in direct contact with dense fibrotic stromal tissue, in the absence of an intervening decidual layer. No myometrial tissue was identified in the examined sections. These findings were morphologically indicative of abnormal placental implantation, consistent with placenta accreta . **Discussions :** Placenta accreta is characterised by the abnormal adherence of the chorionic villi, which is caused by a partial or complete absence of the decidua basalis. This

interferes with the normal separation process of the placenta after delivery. Massive postpartum haemorrhage is a risk due to this defective interface, which can also lead to injury or rupture of the uterine wall. In the present case, direct villous attachment to fibrotic stromal tissue, together with the absence of a decidual layer, supports a diagnosis of placenta accreta. This correlation between the clinical presentation and pathological findings explains the patient's severe haemorrhage and incomplete uterine rupture, emphasising the importance of histopathological confirmation in life-threatening obstetric complications. **Conclusions:** This case highlights the critical role of histopathological examination in confirming placenta accreta and clarifying the underlying mechanism of severe postpartum complications. Recognising abnormal placental implantation is essential for appropriate surgical management and reducing maternal morbidity.

Keywords: Placenta accreta spectrum, Decidual deficiency, Abnormal placental implantation, Partial uterine rupture

FROM BRAIN METASTASIS TO LONG-TERM DISEASE CONTROL: SEQUENTIAL ALK INHIBITION IN METASTATIC ALK-POSITIVE LUNG ADENOCARCINOMA

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Introduction: Non-small cell lung cancer (NSCLC) accounts for about 85% of lung cancers. ALK gene rearrangements occur in 3-7% of patients and define a subtype characterized by increased incidence of brain metastases and high sensitivity to targeted therapy. The introduction of ALK tyrosine kinase inhibitors (TKIs) has improved outcomes, although resistance to first-generation agents such as crizotinib frequently develops, requiring next-generation inhibitors. **Case Report:** We report a 57-year-old male smoker with chronic obstructive pulmonary disease and hypertension who presented in 2019 with cough and progressive left-sided motor deficit. Brain imaging revealed a right parieto-occipital lesion measuring 69 × 47 mm with marked perilesional edema and a smaller parietal lesion. The pulmonary primary tumor measured 32 mm. The patient underwent right parieto-occipital craniotomy with tumor resection followed by cranial radiotherapy. Histopathology of the brain metastasis confirmed metastatic lung adenocarcinoma, with tumor cells TTF-1 and CK7 positive and CK20 negative, supporting pulmonary origin. Biopsy of the primary lung tumor confirmed concordant histopathological findings. Molecular testing demonstrated ALK rearrangement. Further staging revealed mediastinal lymphadenopathy, brain metastases and multiple bone metastases, corresponding to cT2aN2M1c disease. At systemic therapy initiation the patient had ECOG 1. Treatment with crizotinib 500 mg daily began in February 2020. Imaging between March and August 2020 showed progression with new vertebral bone metastases, indicating resistance to first-generation ALK inhibition. Treatment was switched to ceritinib 450 mg daily in August 2020, which continues to the present with good tolerance and no major toxicities. **Discussions :** ALK-rearranged NSCLC has a high incidence of brain metastases, making central nervous system control a major challenge. ALK-positive tumors are highly dependent on ALK signaling, explaining the durable responses observed with ALK inhibitors. Sequential ALK inhibition after progression on crizotinib is an established strategy. Our case illustrates a long-term responder, with early progression on crizotinib followed by more than five years of disease control on ceritinib. The case is notable for complete radiological response of the pulmonary lesion despite persistent stable sclerotic bone metastases, highlighting heterogeneous response patterns during targeted therapy. ALK inhibitors have markedly improved survival in this subtype, with studies reporting median survivals exceeding five years, emphasizing the role of molecular testing and sequential targeted therapy in advanced ALK-positive NSCLC. **Conclusions:** Sequential ALK inhibition may provide prolonged disease control in metastatic ALK-positive lung adenocarcinoma, illustrating how targeted therapy can transform advanced lung cancer into a long-term controllable disease.

Keywords: ALK rearrangement, Lung adenocarcinoma, Ceritinib, Targeted therapy

FROM CUTANEOUS LESIONS TO RENAL FAILURE: A CASE OF ANCA-ASSOCIATED VASCULITIS WITH RAPIDLY PROGRESSIVE GLOMERULONEPHRITIS

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Introduction: Anti-neutrophil cytoplasmic antibody (ANCA) associated vasculitis (AAV) compromise a rare group

of necrotizing small to medium vessel vasculitides that constitute three distinct disorders: granulomatosis with polyangiitis (GPA), microscopic polyangiitis (MPA), eosinophilic granulomatosis with polyangiitis (EGPA) and renal-limited pauci-immune vasculitis (RLV). The clinical presentation of AAV varies from non-severe (non-life threatening) to severe often with potentially life-threatening multi-organ involvement making early recognition and diagnosis crucial. **Case Report:** We report the case of a 29-year-old woman with a history of autoimmune thyroiditis, admitted to the dermatology department for the evaluation of nodular, erythematous, and indurated lesions on the forearm and left thigh, associated with periorbital edema and erythema, as well as a dry cough. Laboratory findings revealed an inflammatory syndrome, elevated serum creatinine and azotemia, subnephrotic-range proteinuria (2.6 g/24 h), and active urinary sediment with dysmorphic erythrocytes. Immunological workup showed elevated pANCA titers (145 IU/L), while chest CT demonstrated ground-glass opacities. A renal biopsy subsequently revealed predominantly cellular crescent formation, while the patient concurrently developed rapidly progressive renal insufficiency, prompting the immediate initiation of immunosuppressive therapy. Therefore, the treatment plan included cyclophosphamide (6 cycles) combined with corticosteroids and nephroprotective measures including RAAS inhibition and SGLT2 inhibitors. At 1-year follow-up, the patient exhibited worsening renal function, hematuria on urinary sediment, nephrotic range proteinuria and elevated pANCA titers, consistent with disease relapse, leading to a switch to rituximab treatment due to the high cumulated dose of cyclophosphamide and the risks associated. Following rituximab initiation, renal function improved, accompanied by reduction in proteinuria and pANCA seroconversion to negative. **Discussions :** Cyclophosphamide is a key component of induction therapy for AAV with major organ involvement, but its use is limited by significant adverse effects, including infections, malignancy, and infertility. To reduce toxicity, treatment strategies have shifted toward alternative agents for remission maintenance. Rituximab, an anti-B-cell therapy, has demonstrated high efficacy in both inducing and maintaining remission in AAV, with studies showing comparable renal outcomes to cyclophosphamide-based regimens. **Conclusions:** This case highlights the importance of early diagnosis of rapidly progressive glomerulonephritis in patients with pANCA associated vasculitis. Timely recognition and prompt initiation of appropriate therapy are essential to preserve renal function, prevent irreversible organ damage, and improve overall prognosis.

Keywords: vasculitis, rituximab, rapidly progressive glomerulonephritis, pANCA

FROM FEVER TO SEPTIC SHOCK: THE CRITICAL IMPORTANCE OF EARLY RECOGNITION – A CASE REPORT

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Introduction: Sepsis is a life-threatening, multifaceted condition that encompasses a dysregulated response between the pathogen infecting the host and its immune system's response, and can lead to septic shock, multiple organ malfunction, and ultimately, death. The current consensus is that sepsis and septic shock account for a significant mortality globally. **Case Report:** This is the case of a 22-year-old female patient, who presented in the Emergency Department on the 15th of November 2025 with complaints of general malaise, extreme fatigue, fever, and drowsiness. One week prior to admission, she developed a sore throat and mild fever, for which she self-medicated for four days. As symptoms persisted without improvement, her condition worsened on the 15th, leading to loss of consciousness and the development of purpura fulminans, prompting her presentation to the Emergency Department. Laboratory tests revealed: WBC 30,000/mm³, CRP 512 mg/L (reference 0-5), creatine 1.8 mg/dl, procalcitonin 14.2 mg/L, D-dimer 4.2, ESR 83 mm/h. Due to hypotension, the patient was admitted to the Intensive Care Unit with a preliminary diagnosis of septic shock. **Discussions :** Empirical broad-spectrum antimicrobial therapy with piperacillin-tazobactam, moxifloxacin, linezolid, and oseltamivir was initiated due to the severity of the clinical presentation. In addition to prompt initiation of broad-spectrum antibiotics, the patient received hemodynamic support with vasopressors and fluid resuscitation, as well as monitoring and management of organ dysfunction, highlighting the importance of integrated supportive care and source control in septic shock management. Follow-up imaging of the lungs revealed bilateral massive effusion and congestion findings, along with a moderate increase in troponin levels, pro-BNP of 20000, and eGFR of 37.6. In the tests performed, group A *Streptococcus* was detected positive in the respiratory panel PCR test, and an ASO of 1200 was obtained. Post-treatment surveillance revealed a mitral and tricuspid insufficiency grade two. **Conclusions:** The heterogeneous nature of septic shock requires more than a single intervention. Multidisciplinary management and rapid treatment improve survival outcomes. This case also demonstrates that even young patients without pre-existing comorbidities or immunosuppression can develop septic shock, highlighting the unpredictable and aggressive

pathophysiology of sepsis.

Keywords: Sepsis, Septic Shock, Infection

FROM FIXATION TO INFESTATION: CUTANEOUS WOUND MYIASIS FOLLOWING BIMALLEOLAR FRACTURE SURGERY

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Introduction: Cutaneous myiasis is a parasitic skin infestation caused by fly larvae that need living tissue to develop and lay eggs, resulting in an uncontrolled proliferation. It is usually encountered in patients who have visited tropical islands, but it can also be seen as a complication after surgical interventions (wound myiasis).

Case Report: A 49-year-old patient with a recent history of a fixated, left bimalleolar fracture presents at the emergency room, reporting severe pain in his left ankle and cutaneous myiasis. Incipently, wound secretion samples were collected for the bacteriological exam before the contaminated lesion underwent chemical and mechanical debridement and re-immobilization in ATG G-P in the ER. Initial orthopaedic management included thromboprophylaxis and antibioprophylaxis. Two days later, the patient underwent surgery for a complete chemical and mechanical debridement and removal of osteosynthesis material (plate and screws on the lateral malleolus and a lag orthopaedic screw on the medial malleolus). The wound was sutured on the medial side, while on the lateral side, sutures were applied for a delayed closure. Re-immobilization was properly done once again with ATG G-P. **Discussions :** Notably, the patient presented associated risk factors including chronic alcoholism and changes in mental status (depressive disorder) that might have contributed to developing a wound infection and later, myiasis. Due to unfavourable evolution on the lateral malleolus, as the surgical wound presented a considerable amount of serosanguineous fluid, the plaster cast and stitches were removed two days postoperatively, and a Vivano negative pressure wound therapy is applied for stimulating the granulation tissue and therefore, a proper healing of the wound. Conversely, the evolution on the medial malleolus was promising, since the incision showed no signs of infection and a per primam intentionem healing. **Conclusions:** This case highlights a rare complication that might occur if appropriate wound care is not provided after the patient is discharged. Furthermore, it emphasizes the importance of early diagnosis of a complication and developing a suitable, multidisciplinary management plan to restore the functionality of the affected limb.

Keywords: cutaneous myiasis, bimalleolar fracture, osteosynthesis material

FROM FRAGILITY FRACTURES TO SYSTEMIC COLLAPSE: A MISSED CASE OF SEVERE PRIMARY HYPERPARATHYROIDISM

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Introduction: Severe primary hyperparathyroidism can remain asymptomatic until catastrophic multisystem involvement occurs. Primary hyperparathyroidism (PHPT) is an endocrine disorder characterized by autonomous parathyroid hormone (PTH) hypersecretion and hypercalcemia. When left untreated, it may lead to advanced complications, including osteitis fibrosa cystica, a condition associated with extensive bone resorption and bone marrow fibrosis. This case highlights a rare, rapidly progressive PHPT, in which elevated PTH levels (>25× the upper limit) resulted in profound systemic impairment, manifested by recurrent pathological fractures and severe anemia. **Case Report:** A 55-year-old female patient, with a history of hypertension and advanced postmenopausal osteoporosis (T-score -3.5 SD), presented with a 5-year history of low-energy recurrent fractures: left patella (2021), right femur (2023, 2024), right humerus (2025), and left subtrochanteric femoral fracture (2026). Despite repeated surgical interventions, the patient developed chronic pseudoarthrosis and multiple well-defined osteolytic lesions consistent with Brown tumors. Biochemical analysis revealed a severe metabolic imbalance: intact parathyroid hormone (iPTH) 2214.9 pg/mL, serum calcium 13.2 mg/dL, alkaline phosphatase 900 U/L, hypophosphatemia (1.7 mg/dL), and significantly elevated bone turnover markers (osteocalcin 1433 ng/mL, beta-crosslaps >6000 pg/mL), indicating extreme bone remodeling activity. Cervical ultrasound identified a 52 mm nodule classified as TI-RADS V, initially suggestive of a thyroid lesion, but later correlated with a giant parathyroid adenoma. Systemic complications included microcytic hypochromic anemia (Hb 5.7 g/dL), secondary to PTH-induced marrow fibrosis and impaired erythropoietin production in the context of renal dysfunction (eGFR 47

mL/min). The patient was subsequently referred for parathyroidectomy, the treatment of choice. Preoperative management included aggressive intravenous hydration, red blood cell transfusion, iron supplementation, and antiresorptive therapy (alendronic acid). **Discussions** : Although PTH levels exceeding 300 pg/mL may raise suspicion for parathyroid carcinoma, this case was attributed to a giant parathyroid adenoma. It highlights the "orthopedic trap," where recurrent fractures are misinterpreted as isolated mechanical failures, delaying recognition of an underlying systemic disorder. The coexistence of hypercalcemia and pseudoarthrosis represents a key diagnostic clue. The development of brown tumors, marrow fibrosis, and marked anemia underscores the multisystem impact of advanced PHPT. Careful post-parathyroidectomy monitoring is essential to prevent "hungry bone syndrome". **Conclusions**: This case emphasizes the importance of a multidisciplinary approach in patients with recurrent pathological fractures. Early evaluation of calcium and PTH levels is critical for preventing irreversible skeletal damage and life-threatening metabolic complications.

Keywords: Primary hyperparathyroidism, Brown tumors, Pathological fractures, Pseudoarthrosis

FROM HYPOCALCEMIA TO GENETICS: A CASE REPORT OF PSEUDOHYPOPARATHYROIDISM IN PAEDIATRIC PATIENT

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Introduction: Pseudohypoparathyroidism (PHP) is a rare cause of hypocalcemia in paediatric patients, characterized by peripheral resistance to the action of parathyroid hormone (PTH). It is usually associated with mutations in the GNAS gene (20q13), which lead to dysfunction of the G protein-coupled receptor intracellular signaling pathway. PHP may also be associated with resistance to other pituitary-stimulating hormones. Due to its phenotypic variability and low prevalence, PHP is often not recognized early and requires a high index of clinical suspicion for diagnosis. **Case Report:** We present the case of a 6-year-old male patient with hypocalcemia with high PTH values, vitamin D deficiency and mild-to-moderate multihormonal resistance. At 19 weeks of gestation, shortened femur and humerus lengths were detected on fetal ultrasound, and the pregnancy was closely monitored thereafter. The patient was born at 37 weeks and 4 days, with an APGAR score of 8 and micropenis. In infancy, he had progressive weight gain, with short stature and moderate developmental delay, especially regarding language and behaviour. At the paediatrician's suggestion, the patient's hormone levels were measured, with the detection of low cortisol, subclinical hypothyroidism, hypocalcemia and hyperphosphataemia, and the patient was directed to the Endocrinology Clinic of Mures County Clinical Hospital for further investigations. The characteristic phenotype, together with laboratory findings (PTH: 149.2 ng/L; reference range: 15-68 ng/L) and bone age delayed by approximately one year, suggested pseudohypoparathyroidism type 1A. The diagnosis was genetically confirmed by Whole Exome Sequencing (WES), which identified a heterozygous GNAS gene mutation (NM_000516.7: c.719-1G>C). The patient is currently treated with hydrocortisone, levothyroxine, calcium, and vitamin D supplementation. At the most recent follow-up visit, growth hormone (GH) therapy was initiated due to confirmed GH deficiency. **Discussions** : The clinical, biochemical, and genetic features of our patient are consistent with previously reported cases of PHP type 1A in children. GNAS mutations may also be associated with PHP type 1B, type 1C, pseudopseudohypoparathyroidism, or McCune-Albright syndrome; therefore, careful clinical and biochemical evaluation is essential for accurate differential diagnosis. Treatment aims to maintain normocalcemia through calcium and active vitamin D supplementation, while associated endocrinopathies are managed according to established guidelines. GH replacement therapy is recommended in cases of confirmed deficiency to optimize growth outcomes. **Conclusions:** PHP should always be considered in the differential diagnosis of hypocalcemia in children. This case highlights the characteristic phenotypic, endocrine, and genetic features of PHP type 1A and underscores the importance of early recognition and appropriate management to prevent long-term complications.

Keywords: pseudohypoparathyroidism, GNAS gene mutation, hypocalcemia, hormone resistance

FROM INFLAMMATION TO FIBROSIS: WHEN CROHN'S DISEASE ESCAPES BIOLOGIC CONTROL

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Introduction: Crohn's disease (CD) is a chronic transmural inflammatory disorder affecting any part of the gastrointestinal tract which is characterized by a progressive course and a high risk of severe complications. Persistent inflammation leads to structural bowel damage such as strictures and penetrating complications involving adjacent organs. **Case Report:** We report the case of a 65-year-old female patient diagnosed in 2016 with inflammatory ileal disease, initially raising a differential diagnosis between ileal tuberculosis and Crohn's disease. In the context of a positive interferon-gamma release assay, empirical anti-tuberculous therapy was administered for nine months without sustained clinical or endoscopic response, supporting the diagnosis of CD. The disease course was complicated by small bowel obstruction in December 2016, requiring terminal ileal resection with right hemicolectomy. Endoscopic recurrence at the ileocolic anastomosis was documented in 2017. The patient was subsequently treated with multiple biologic agents, including adalimumab (discontinued due to leukocytoclastic vasculitis), ustekinumab (partial response), infliximab, and vedolizumab (persistent disease activity). In January 2026, magnetic resonance imaging revealed multiple distal ileal fibrostenotic strictures (30-120 mm) with entero-enteral fistulas, without signs of active inflammation, consistent with a chronic fibrostenotic phenotype. In February 2026, the patient underwent surgical intervention for extensive adhesions and a fibrostenosing ileal mass, consisting of adhesiolysis and resection of approximately 40 cm of ileum with proximal ascending colon, followed by entero-colic anastomosis. **Discussions :** This case illustrates progressive structural bowel damage despite sequential biologic therapy targeting different inflammatory pathways. The development of leukocytoclastic vasculitis further limited therapeutic options. It highlights the limited efficacy of current biologics in preventing or reversing intestinal fibrosis and raises concerns regarding delayed surgical intervention in fibrostenotic disease due to prolonged biologic cycling. **Conclusions:** Fibrostenotic progression in Crohn's disease may occur despite optimal biologic therapy. Early recognition of stricturing disease and timely surgical referral are essential, as anti-inflammatory therapies alone are insufficient to reverse established fibrosis. A multidisciplinary, individualized approach is critical to optimize patient outcomes

Keywords: Crohn's disease, Stricturing disease, Biologic therapy

FROM INFLAMMATORY MYOPATHY TO MALIGNANCY: LYMPH NODE BIOPSY UNCOVERING METASTATIC SQUAMOUS CELL CARCINOMA IN ANTI-NXP2 DERMATOMYOSITIS

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Introduction: Dermatomyositis is an autoimmune inflammatory myopathy that causes progressive proximal muscle weakness and marked elevation of muscle enzymes. In adults, it is strongly associated with malignancy and may represent a paraneoplastic syndrome. The presence of certain myositis-specific antibodies, particularly anti-NXP2 antibodies, has been linked to a higher risk of underlying cancer. In some patients, muscle symptoms may precede the diagnosis of a hidden neoplasm, making early suspicion essential. **Case Report:** A 65-year-old male, chronic smoker with multiple cardiovascular comorbidities, presented with progressive muscle weakness that had developed over approximately two weeks. He initially described diffuse muscle pain in the thighs and lower back, which gradually extended to the shoulders and upper limbs. Over time, simple daily activities such as climbing stairs or lifting objects became increasingly difficult. Initial laboratory evaluation revealed severe muscle injury, with creatine kinase values exceeding 9,000 U/L. The overall laboratory findings were consistent with extensive muscle breakdown. Given his comorbidities, a cardiac cause was carefully excluded. The persistence of proximal weakness together with the marked elevation of muscle enzymes raised suspicion for an inflammatory myopathy. Immunologic testing later confirmed anti-NXP2 antibody positivity. Considering the known association between this antibody and malignancy, further imaging was performed. Contrast-enhanced CT showed multiple enlarged mediastinal and right carotid-jugular lymph nodes with suspicious characteristics, although no obvious primary tumor was identified. Because of these findings, a cervical lymph node biopsy was carried out. Histopathological examination demonstrated metastatic keratinizing squamous cell carcinoma. These results established the diagnosis of paraneoplastic dermatomyositis secondary to metastatic squamous cell carcinoma of unknown primary origin. Following initiation of high-dose corticosteroid therapy, the patient's muscle strength gradually improved, and creatine kinase levels progressively decreased. He was subsequently referred for oncologic staging and further therapeutic planning. **Discussions :** Dermatomyositis in adults is strongly associated with malignancy, particularly in patients with anti-NXP2 antibodies, which indicate increased cancer risk. This condition is thought to result from an immune response triggered by tumor antigens that cross-react with

muscle tissue. In our patient, the absence of a detectable primary tumor despite suspicious lymphadenopathy illustrates the diagnostic challenge of paraneoplastic presentations. **Conclusions:** This case shows how anti-NXP2-positive dermatomyositis may uncover an otherwise silent malignancy. Although progressive muscle weakness dominated the clinical picture, further evaluation revealed metastatic squamous cell carcinoma. Lymph node biopsy established the diagnosis and clarified its paraneoplastic origin.

Keywords: Dermatomyositis, Anti-NXP2 antibodies, Squamous cell carcinoma, Lymph node biopsy

FROM MIGRATION TO MENINGOENCEPHALITIS: THE OVERLOOKED IMPORTANCE OF BCG VACCINATION

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Introduction: INTRODUCTION: TUBERCULOUS MENINGOENCEPHALITIS is a severe form of extrapulmonary tuberculosis caused by Mycobacterium tuberculosis that affects the brain and meninges, with high mortality. The symptoms are nonspecific, consisting of headache and fever, therefore requiring great vigilance in establishing the diagnosis. The aim of this presentation is to highlight the importance of BCG vaccination in children. **Case Report:** CASE REPORT: We present the case of a 9-year-old female, known to have delayed language development, who presented to the Emergency Department with multiple tonic seizures, associated with episodes of loss of consciousness in the last 12 hours; also reporting fever and diarrhea for 4 days prior to admission. A cranial CT scan is performed with negative results and a lumbar puncture reveals low glycorrachia, with no other cytological or biochemical changes. The presumptive diagnosis is acute meningoencephalitis, and the patient will be admitted to the Infectious Diseases Clinic. The persistence of seizures, unresponsive to treatment with Diazepam, requires the transfer to the Pediatrics I Department and subsequent transfer to the Pediatric ICU. Emergency treatment with Levetiracetam IV, Ceftriaxone, and Virolex IV, symptomatic and depletive, is instituted. The range of investigations is broadened with nasopharyngeal exudate, TORCH serology, anti-Borellia antibodies, negative CSF cultures. EEG and brain MRI show no pathological changes. However, examination of the CSF under BK microscopy yields a positive result - BAAR 1+, thus supporting the diagnosis of tuberculous meningoencephalitis. A pulmonological consultation is performed and emergency TSS is instituted in association with corticosteroid therapy and anticonvulsants. The evolution is favorable, with limited nonverbal and verbal communication, but with residual neurological sequelae. Subsequently, it's decided to transfer her to the Infectious Diseases Clinic. **Discussions :** DISCUSSION: In Romania BCG vaccination is performed in the early postnatal period and is included in the national immunization schedule, which has led to a significant decrease in the number of BK infections in the population. In this case, the patient was born in Germany, where the BCG vaccine is not included in the national immunization schedule, and did not receive vaccination against BK at birth. Consequently, upon settling in Romania, contact with the bacteria on a vulnerable organism led to the onset of tuberculous meningoencephalitis. **Conclusions:** CONCLUSION: This case highlights the importance of BCG vaccination not only for newborns, but also for children who settle in Romania at a later stage, thus addressing the aim of this study by emphasizing the risk of severe complications, including death.

Keywords: tuberculous meningoencephalitis, tonic seizures, Mycobacterium tuberculosis, vaccination against BK

FROM MINOR INTERDIGITAL ULCER TO MAJOR AMPUTATION: A CASE REPORT OF PROGRESSIVE DIABETIC FOOT DISEASE

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Introduction: Diabetic foot is a serious complication of diabetes mellitus, defined as infection, ulceration, or destruction of the deep tissues of the foot associated with peripheral neuropathy and peripheral arterial disease. It represents a major public health issue, affecting approximately 15-25% of patients with diabetes and accounting for most non-traumatic lower-limb amputations. Even minor lesions can progress rapidly if not managed properly, emphasizing the importance of early diagnosis, continuous monitoring, and comprehensive care. **Case Report:** We report the case of a 72-year-old male, former smoker, with a sedentary lifestyle and a history of type 2 diabetes mellitus (T2DM) diagnosed in 2018, under treatment with oral antidiabetic agents, complicated by peripheral arterial disease (angiography performed in 2024 revealed occlusion of the bilateral common femoral arteries for

which bilateral thromboendarterectomy was performed) and diabetic neuropathy, for which followed antioxidant therapy. In May 2025, the patient was evaluated in the Diabetology Department for bilateral lower limb pain, paresthesia, and localized pain of the third toe of the left foot. Clinical examination revealed a small interdigital ulcer without signs of infection, and local treatment was initiated. Laboratory investigations revealed good glycemic control (HbA1c 5.37%), total cholesterol 161 mg/dL, LDL cholesterol 70.1 mg/dL, HDL cholesterol 66.3 mg/dL, and triglycerides 123 mg/dL under statin therapy. In June 2025, severe pain in the left toes led to the diagnosis of gangrene in the third toe, and amputation was recommended after a vascular surgery consultation. By October 2025, the patient presented for follow-up after undergoing sequential surgical interventions, including third toe amputation, forefoot amputation, and ultimately transtibial amputation of the same limb. At presentation, wound dehiscence with purulent discharge was noted. Microbiological examination identified *Streptococcus agalactiae*, and combined surgical and antibiotic treatment resulted in a favorable outcome. **Discussions** : Although the patient maintained relatively good glycemic control, major risk factors such as a sedentary lifestyle, a history of smoking, diabetic neuropathy, and peripheral arterial disease played a decisive role in the poor outcome. Loss of protective sensation and impaired blood flow contributed to delayed healing and the progression of infection. Diabetic foot complications often evolve gradually, "slice by slice", with small lesions ultimately leading to major amputations if not managed continuously and appropriately. **Conclusions**: Diabetic foot care must be continuous, monitored by a multidisciplinary team, and not solely dependent on glycemic control. Even simple ulcers can lead to amputation; prompt and comprehensive management is essential for limb preservation.

Keywords: Diabetic foot, Peripheral neuropathy; Peripheral arterial disease, Diabetes mellitus, Lower-limb amputation

FROM PANSINUSITIS TO FATAL SEPSIS: THE RAPIDLY PROGRESSIVE EVOLUTION OF ACUTE LYMPHOBLASTIC LEUKEMIA IN A YOUNG ADULT

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Introduction: Acute B-cell lymphoblastic leukemia (B-ALL) is a malignant hematologic disorder characterized by the clonal proliferation of B-lymphoid precursors and the progressive replacement of normal hematopoiesis. The direct consequence is severe bone marrow failure, manifested by pancytopenia and profound immunosuppression. In this context, systemic infections rapidly progress to sepsis and septic shock, representing a major cause of mortality, especially in patients with severe neutropenia. **Case Report:** We report the case of a 40-year-old man with no significant medical history who presented on 04.03.2025 to the Emergency Department with persistent headache and diplopia on left lateral gaze. Non-contrast cranial CT revealed pansinusitis with a fluid collection in the left sphenoid sinus and a left maxillary retention cyst. Neurological evaluation identified an isolated right oculomotor nerve palsy. Initial labs showed leukopenia (3090/mm³) with neutropenia (1360/mm³), hemoglobin 12.4 g/dL, and platelets 147,000/mm³. Over the following weeks, his condition worsened. On 25.03.2025, he returned with high fever, severe headache, and profound fatigue. Labs revealed severe pancytopenia (leukocytes 720/mm³, platelets 51,000/mm³, hemoglobin 10.3 g/dL). Bone marrow biopsy showed 50-60% cellular infiltration, with an immunophenotype consistent with B-cell acute lymphoblastic leukemia (PAX5+, CD79a+, CD20+, BCL-2+, TdT negative) and no BCR-ABL mutation. The patient received broad-spectrum antibiotics, followed by induction chemotherapy tailored to cytopenia severity (cyclophosphamide, vincristine, epirubicin). He remained febrile, with worsening neutropenia (nadir 490/mm³). Blood cultures grew Gram-negative bacteria, and stool testing confirmed *Clostridioides difficile* infection. Despite escalated antimicrobial therapy (Cefiderocol, Tigecycline, oral Vancomycin) and intensive supportive care, he developed refractory septic shock, requiring vasopressors and mechanical ventilation. The course culminated in cardiorespiratory arrest unresponsive to resuscitation, and death was declared on 15.04.2025. **Discussions** : The particularity of this case is its atypical onset with neurological and ENT symptoms, which initially masked the underlying leukemia. The patient developed severe pancytopenia, predominantly profound neutropenia, indicating an severely impaired bone marrow reserve. This left the immune system unable to control infections, facilitating the development of Gram-negative septicemia. Although induction chemotherapy was necessary, it further exacerbated immunosuppression, and sepsis rapidly progressed to multi-organ dysfunction, despite intensive care and broad-spectrum antimicrobial therapy. **Conclusions:** This case highlights the devastating nature of septicemia in patients with acute leukemia and severe bone marrow failure. Profound neutropenia eliminated the body's ability to control the infectious aggression, and the progression to refractory septic shock proved irreversible. The delayed diagnosis and the critical biological status significantly

limited therapeutic options, ultimately leading to a fatal outcome.

Keywords: B-cell acute lymphoblastic leukemia, Neutropenia, bone marrow failure, Sepsis

FROM PNEUMONIA TO PULMONARY TUBERCULOSIS: THE IMPORTANCE OF RECOGNIZING ATYPICAL ONSET

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Introduction: Tuberculosis (TB) remains a major global health threat, with Romania reporting the highest incidence in the European Union. While early diagnosis is vital for limiting transmission, atypical clinical presentations often lead to significant diagnostic delays. This case is significant because it demonstrates how a common community-acquired pneumonia and viral co-infection can mask underlying pleural tuberculosis in an adolescent, leading to initial treatment failure. **Case Report:** A 16-year-old male presented with a 4-day history of dry cough and high fever (39.2°C). Physical examination revealed diminished breath sounds and crackles at the right lung base. Laboratory tests showed a significant inflammatory syndrome (CRP 107 mg/L, ESR 75 mm/h), and a respiratory PCR panel was positive for Bocavirus and Rhinovirus. Imaging identified a right basal pneumonia complicated by a 35 mm loculated pleural effusion. Despite escalating antibiotic therapy to broad-spectrum agents (Meropenem and Linezolid), the patient's clinical status and inflammatory markers failed to improve. An ultrasound-guided thoracentesis yielded serocitrin fluid. Pleural fluid analysis revealed an exudate with 96% lymphocytes and low glucose (28 mg/dL). Diagnosis was confirmed via a positive Quantiferon®-TB Gold Plus test. **Discussions :** In endemic areas, TB must be considered in the differential diagnosis of pneumonia with pleural effusion, especially when there is a torpid evolution under standard therapy. While viral co-infections are common in adolescents, they may act as a "mask" or a trigger for the reactivation of latent TB. This case highlights that therapeutic failure with reserve antibiotics should prompt immediate re-evaluation for non-classical etiologies. The biochemical profile of the pleural fluid (marked lymphocytosis and low glucose) was the clinical turning point, as it contradicted the typical neutrophilic profile of a bacterial empyema. **Conclusions:** This case underscores the necessity of maintaining a high index of clinical suspicion for TB in endemic regions. Rapid integration of pleural fluid analysis and immunological assays (IGRA) is essential when clinical progression deviates from the expected course of community-acquired pneumonia. Early diagnosis allowed for the timely initiation of antitubercular treatment, preventing irreversible pulmonary sequelae and further community transmission.

Keywords: Pulmonary Tuberculosis, Atypical Onset, Loculated Pleural Effusion, Quantiferon

FROM POLYDIPSIA TO PITUITARY DISEASE: ARGININE VASOPRESSIN DEFICIENCY IN THE CONTEXT OF HYPOPHYSITIS

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Introduction: Arginine vasopressin deficiency (AVP-D) is a rare endocrine disorder characterized by impaired secretion of antidiuretic hormone, resulting in polyuria and polydipsia. It may arise from a variety of causes, including idiopathic, neoplastic, and inflammatory conditions, with hypophysitis representing a rare inflammatory etiology. **Case Report:** This case presents a 41-year-old female patient with sudden onset of polydipsia, polyuria, nocturia, and xerostomia, significantly affecting daily activities. Laboratory evaluation revealed increased plasma osmolality (332 mOsm/kg), low urinary osmolality (100 mOsm/kg), a fluid intake of 9900 mL/day and urine output of 12,080 mL/day, suggestive of AVP-D. Serum electrolytes and blood glucose were within normal limits, excluding osmotic diuresis. Endocrine assessment showed no anterior pituitary hormone deficiencies. No signs of pituitary mass effect or optochiasmatic involvement were observed. Pituitary MRI demonstrated mild gland enlargement, thickening of the pituitary stalk, and absence of the normal posterior pituitary T1 hyperintense signal, suggestive of both hypophysitis and AVP-D. Treatment with desmopressin was initiated, resulting in normalization of fluid balance (intake 2.5-3 L/day, diuresis 2-2.5 L/day) and follow-up imaging suggested a stationary pituitary appearance. Further evaluation including beta-HCG and alpha-fetoprotein was considered to exclude germinoma. **Discussions :** Hypophysitis is a rare cause of central diabetes insipidus, more commonly associated with idiopathic, tumoral, or traumatic etiologies. It is an inflammatory disorder of the pituitary gland, classified as primary, most often autoimmune, or secondary to systemic diseases, infections, or neoplasms. Primary

hypophysitis includes several histological subtypes, with the lymphocytic form being the most frequent. Although it typically involves the anterior pituitary, leading to hypopituitarism, isolated posterior pituitary involvement is uncommon. In this case, the absence of anterior pituitary hormone deficiencies, together with suggestive imaging findings, supports predominantly neurohypophyseal involvement. The differential diagnosis of pituitary stalk thickening includes neoplastic, inflammatory, and infiltrative conditions, requiring careful evaluation and follow-up.

Conclusions: The diagnosis of hypophysitis remains challenging due to overlapping clinical and imaging features with other pituitary disorders. AVP-D represents an uncommon manifestation, particularly in the absence of anterior pituitary dysfunction, and requires careful evaluation, differential diagnosis, and follow-up.

Keywords: arginine vasopressin deficiency, hypophysitis, polyuria, polydipsia

FROM ROUTINE CT TO CARDIAC ARREST: UNPREDICTABLE ANAPHYLAXIS TO IODINATED CONTRAST

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Introduction: Anaphylaxis is a serious medical emergency that can be fatal if treatment is delayed. The use of iodinated contrast media has grown dramatically in the last few decades, and it is now a crucial component of oncologic patient monitoring and diagnosis algorithms. Due to their frequent exposure, which may encourage sensitization processes and raise the risk of hypersensitivity reactions, oncologic patients fall into a specific category. Fulminant episodes can happen even in the absence of a suggestive past background, and the intensity of these reactions is not always anticipated. **Case Report:** A patient with a history of lung cancer and multiple previous exposures to contrast media, with no history of drug hypersensitivity, suddenly developed cardiopulmonary arrest, cyanosis, gasping, and hypersalivation during a CT TAP scan using the iodinated contrast agent iohexol. Upon admission to the Intensive Care Unit, the patient was hemodynamically unstable: BP 95/62 mmHg, with a drug-induced GCS of 3, and presented general erythema, important angioedema of face, lips and farynx/larynx. Under intensive treatment: including vasoactive support, corticosteroid therapy, and bronchodilators, the patient's condition improved rapidly, and he was extubated after 24 hours with intact neurological status. At least 6 weeks after the acute event, the patient was scheduled for a comprehensive allergy evaluation to determine the protocol for further investigations necessary for oncological monitoring. **Discussions:** With approximately 20.3 cases per 100,000 CT scans, anaphylaxis to iodinated contrast media is clinically significant. Of these, up to 13% are fatal, and approximately 10% may be refractory, requiring repeated administration of epinephrine. It is noteworthy that up to 34.6% of cases may occur upon first exposure; however, repeated administrations are associated with more severe cases, particularly in elderly patients. These findings demonstrate how unpredictable anaphylaxis can be and how important it is to be prepared to provide immediate advanced life support, even in patients who have never experienced an allergic reaction. They also underscore the importance of conducting a post-event allergy evaluation to aid in future case management. **Conclusions:** Prior tolerance does not eliminate the possibility of severe anaphylactic events following re-exposure since iodinated contrast media sensitization might develop quietly. In this situation, quick action is crucial because full neurological recovery depends on timely resuscitation and early advanced life support. Allergological evaluation is still essential in the long run because it makes it possible to create a safe diagnostic and treatment plan for cancer patients who need additional contrast-enhanced procedures.

Keywords: anaphylaxis, iohexol, oncologic patient

FROM SINGLE TRUNK TO SURGICAL RECONSTRUCTION: THE EVOLVING ARCHITECTURE OF TRUNCUS ARTERIOSUS

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Introduction: Truncus arteriosus is a rare cyanotic congenital conotruncal malformation in which a single arterial trunk supplies systemic, pulmonary and coronary circulations. Classified according to Collett-Edwards into three types based on pulmonary artery origin, it requires surgical correction. Yet correction does not signal structural resolution. In conotruncal disease, vascular architecture remains dynamic, demanding longitudinal imaging surveillance. **Case Report:** We present the serial CT angiographic follow-up of a male patient diagnosed at nine

months of age with truncus arteriosus type I Collett-Edwards; A1 Van Praagh. Initial ECG-gated angio-CT demonstrated a single arterial trunk overriding a large subaortic ventricular septal defect, with a short main pulmonary artery arising from the posterior ascending aorta before bifurcation. Surgical repair included aortoplasty, ventricular septal defect closure and right ventricle-to-pulmonary artery valved conduit placement. Early postoperative CT confirmed conduit patency and satisfactory pulmonary artery flow. However, long-term ECG-gated CT follow-up revealed persistent and progressive neo-aortic root dilation consistent with conotruncal pathology, focal ascending aortic calcification and supra-segmental pulmonary artery stenoses despite preserved conduit patency. Coronary origins and arch anatomy were precisely delineated. **Discussions** : Surgical repair restores circulatory separation, but it does not confer structural stability. In truncus arteriosus, the neo-aorta remains biologically predisposed to dilation and reconstructed pulmonary pathways may remodel unpredictably. CT angiography offers more than structural visualization; it documents vascular evolution. ECG synchronization enables precise and repeatable measurements of aortic dimensions, while high-resolution multiplanar reconstructions reveal subtle pulmonary artery irregularities that may precede clinical decline. This case illustrates a fundamental tension of congenital cardiac surgery: physiological correction does not eliminate anatomical progression. The repaired heart continues to adapt, and sometimes to diverge. **Conclusions**: In truncus arteriosus type I, surgical repair restores physiology, but anatomy continues to change. Longitudinal CT angiography captures this evolution, redefining follow-up from verification to vigilance.

Keywords: Truncus arteriosus, Congenital heart disease, CT angiography, Postoperative vascular remodelling

FULLY LAPAROSCOPIC MANAGEMENT OF A GIANT BILOBAR SEROUS HEPATIC CYST ASSOCIATED WITH SYMPTOMATIC GALLSTONE DISEASE: A CASE REPORT

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Introduction: Hepatic cystic lesions represent a heterogeneous group of disorders, most commonly asymptomatic and incidentally diagnosed. However, large non-parasitic cysts may produce significant compressive symptoms and require surgical intervention. Lesions exceeding 10 cm are classified as giant hepatic cysts and raise important differential diagnostic considerations, including hydatid disease and cystic neoplasms. We report a case of a giant bilobar non-parasitic hepatic cyst associated with symptomatic gallstone disease, successfully managed through a fully laparoscopic approach. **Case Report:** A 69-year-old patient was electively admitted with symptomatic cholelithiasis and a large hepatic cyst detected on imaging. Contrast-enhanced CT confirmed a giant non-parasitic cyst measuring approximately [12× 21 cm], involving both hepatic lobes (segments IV, V, and VIII), without features suggestive of hydatid disease or malignancy. A fully laparoscopic approach was undertaken. Following careful adhesiolysis, standard antegrade cholecystectomy was performed. Attention was then directed to the hepatic cyst. Controlled puncture and evacuation of cystic content were followed by wide laparoscopic fenestration (deroofing) using an energy device, ensuring adequate resection of the cyst wall to minimize recurrence. No biliary communication was identified intraoperatively. A liver biopsy was obtained for histopathological confirmation. The postoperative course was uneventful, and the patient was discharged on postoperative day six with favorable clinical evolution. **Discussions** : Giant hepatic cysts with bilobar involvement represent a technical challenge due to their size, location, and proximity to major vascular and biliary structures. Preoperative imaging plays a critical role in excluding parasitic etiology and guiding surgical planning. Wide laparoscopic fenestration is considered the treatment of choice for symptomatic non-parasitic cysts, offering low morbidity and rapid recovery. Even in complex cases with bilobar extension and associated pathology, minimally invasive surgery can be safely performed in experienced centers. **Conclusions:** This case demonstrates that, with adequate preoperative evaluation and intraoperative decision-making, a laparoscopic approach can be safely applied, allowing simultaneous definitive management of both hepatic and gallbladder disease. Careful surgical planning allows minimally invasive wide fenestration combined with cholecystectomy, resulting in favorable outcomes, rapid recovery, and minimal morbidity.

Keywords: Giant hepatic cyst, Bilobar involvement, Laparoscopic fenestration

GIANT PERFORATED ANTRAL ULCER IN A HOSTILE ABDOMEN: SEQUENTIAL OMENTAL AND ROUND LIGAMENT PATCH REPAIR

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Introduction: Perforated peptic ulcer remains a life-threatening surgical emergency associated with significant morbidity and mortality. Giant gastric perforations (>2 cm) present additional technical challenges, particularly in patients with prior extensive abdominal surgery and dense adhesions. While Graham omental patch repair represents the standard approach, alternative vascularized tissue reinforcement may be required in cases of repair failure or inadequate omentum. This report highlights the management complexities of a giant antral perforation in a hostile abdomen requiring sequential reconstructive strategies. **Case Report:** A 57-year-old male presented to the Emergency Department with sudden-onset diffuse abdominal pain and signs of generalized peritonitis. Medical history was significant: splenectomy and segmental small bowel resection following blunt abdominal trauma 40 years prior. Laboratory findings showed leukocytosis and elevated inflammatory markers. Contrast-enhanced CT scan demonstrated pneumoperitoneum and free intraperitoneal fluid. Emergency exploratory laparotomy revealed extensive dense adhesions requiring prolonged adhesiolysis. A giant perforated ulcer measuring approximately 2.5-3 cm was identified on the anterior wall of the gastric antrum. After debridement and peritoneal lavage, primary repair using a Graham omental patch (epiploonoplasty) was performed. On postoperative day 7, the patient developed acute abdominal pain and bilious drainage. Re-exploration identified jejunal volvulus with secondary disruption of the initial repair. Following volvulus reduction, definitive repair was achieved using a pedicled round ligament of the liver (ligamentum teres hepatis) patch, also described as hepatoligamentoplasty. Postoperative recovery was favorable, and the patient was discharged seven days after the second intervention. **Discussions :** Giant gastric perforations are associated with higher rates of leakage and increased mortality. Hostile abdomens further complicate surgical management. The round ligament patch provides a well-vascularized alternative when omentum is insufficient or prior repair fails. Literature describing its use in reoperative settings remains limited. **Conclusions:** Sequential patch strategies using omentum followed by round ligament reinforcement represent a viable solution in complex giant gastric perforations. Early recognition of complications and timely surgical reintervention are critical for favorable outcomes.

Keywords: Perforated gastric ulcer, Graham patch, Round ligament patch, Hepatoligamentoplasty

GIANT PULMONARY HAMARTOMA – CT IMAGING FEATURES

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Introduction: Pulmonary hamartomas are prevalent benign neoplasms derived from mesenchymal tissue, usually appearing as small, peripheral, and slowly growing lesions, often less than 3 cm in diameter. They are often discovered incidentally in patients who have no symptoms, while endobronchial variants can lead to obstructive complications. A "giant" pulmonary hamartoma is defined by a diameter exceeding 10 cm. The significance of this case lies in the discovery of a massive intrathoracic lesion in a geriatric patient. This case report highlights the diagnostic challenges posed by such voluminous benign masses in patients presenting with acute respiratory failure and multiple comorbidities. **Case Report:** An 86-year-old female patient presented to the ER with intestinal sub-obstruction, traumatic head injury under unspecified circumstances, and acute respiratory failure. For diagnostic purposes, a native thoracic CT was performed, revealing a voluminous, well-defined space-occupying lesion measuring 13x18x20.5 cm, predominantly solid in structure, with gross internal calcifications, exerting mass effect on the mediastinal structures and indenting the right superior and inferior lobar bronchi. Associated findings include bilateral pleural and pericardial effusion. Based on the imagistic findings, a diagnosis of giant pulmonary hamartoma was established. Further investigations or treatment could not be carried out as the patient subsequently passed away in the Emergency Department. **Discussions :** While most hamartomas are small, giant variants, ranging up to 20 cm, can cause significant symptoms like dyspnea due to the compression of adjacent structures. In this case, the patient's respiratory distress is directly correlated with the massive bronchial compression visualised on CT. For hamartomas, the presence of "popcorn" or "comma-shaped" calcifications is thought to be characteristic, helping to distinguish them from malignant tumours. Additionally, the widespread

edema and effusions indicate systemic cardiovascular impairment. **Conclusions:** Although pulmonary hamartomas are typically benign and grow slowly, this case highlights how they can grow to enormous sizes and cause acute, potentially fatal respiratory failure. The gold standard for detecting distinctive characteristics like coarse calcifications and determining the degree of mediastinal involvement is comprehensive CT imaging. For the management of such complex cases in elderly patients with substantial comorbidities, a multidisciplinary approach is crucial.

Keywords: Pulmonary hamartoma, Mass effect, Thoracic CT

GIANT RETROPERITONEAL LIPOSARCOMA: A CASE OF SILENT GROWTH AND COMPLEX SURGICAL MANAGEMENT

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Introduction: Retroperitoneal sarcomas are rare malignant mesenchymal tumors, among which liposarcomas represent a complex and heterogeneous group of neoplasms derived from adipocytic lineages. As one of the most common soft tissue sarcomas in adults, they encompass a broad spectrum of clinical behaviors, ranging from non-metastatic, well-differentiated tumors to highly aggressive, dedifferentiated, or pleomorphic subtypes. Understanding their distinct histopathological and molecular profiles is crucial for effective diagnosis and therapeutic intervention. Currently, radical en bloc surgical resection remains the gold standard of treatment. **Case Report:** We report the case of a 59-year-old male who was incidentally diagnosed with a retroperitoneal mass during a thoracic CT scan performed for a chronic cough. Subsequent thoraco-abdomino-pelvic CT scan revealed a massive left-sided tumor (22 x 17.5 x 23 cm) which appeared to involve the spleen and the left kidney. A xiphoid-pubic laparotomy was performed, achieving a radical en-bloc resection of the specimen (approx. 30 x 20 x 20 cm) combined with a total left nephrectomy and a splenectomy. Histopathological examination confirmed a dedifferentiated liposarcoma, characterized by mature adipocytes and high-grade spindle cell components. While the tumor invaded the renal capsule, perirenal and perisplenic fat, the renal and splenic parenchyma remained uninvolved. Radical resection achieved R0 margins, with a final pathologic stage of pT4 L0 V0. The postoperative period was complicated by a moderate left hydropneumothorax, secondary to a small diaphragmatic defect, along with pneumoperitoneum. Additionally, the patient developed a high mechanical bowel obstruction, requiring further clinical management. **Discussions :** This case underscores the insidious nature of giant retroperitoneal liposarcomas, which typically evade detection until reaching a significant size. While CT imaging is pivotal for preoperative mapping of organ involvement, histopathological analysis remains the gold standard for identifying dedifferentiated components. To achieve optimal oncological outcomes (R0 margins), an aggressive surgical approach was mandatory, involving the resection of adjacent organs like the kidney and spleen. The subsequent postoperative challenges emphasize the high-stakes nature of such extensive procedures and the necessity of a rigorous, multidisciplinary follow-up protocol. **Conclusions:** The particularity of this case is that retroperitoneal liposarcomas often remain asymptomatic or present with non-specific symptoms until reaching advanced stages, making incidental diagnosis common. This case highlights radical en-bloc resection (R0) as the definitive treatment, even when multivisceral involvement (spleen, kidney) is suspected. Despite successful surgery, the risk of complex postoperative complications necessitates a vigilant, multidisciplinary approach to ensure long-term oncological control.

Keywords: retroperitoneal liposarcoma, nephrectomy, splenectomy, en bloc resection

GOLDEN HOUR: AN ULTRA-ACUTE STROKE THROMBOLYSIS CASE

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Introduction: Acute ischemic stroke is characterized by a loss of brain tissue function caused by the sudden interruption of cerebral blood supply, and it represents one of the leading causes of mortality and disability worldwide. The treatment for this condition can be initiated in the first hours of onset through interventions such as thrombolysis and thrombectomy. This report illustrates the critical importance of "Golden Hour" in stroke management. **Case Report:** We present the case of a 50-year-old female smoker with a history of hypertension and obesity. The patient was already in the hospital when she experienced a sudden onset of motor deficit in the

right limbs and understanding and expression issues. The neurological examination revealed the following: right central facial paresis, right hemiparesis grade 0/5 MRC in the upper limb, grade 2/5 MRC in the lower limb, Babinski sign on the right, global aphasia, with a NIHSS of 16 points. The patient had a native CT scan that showed no acute or chronic heterodense lesions, with a perfect ASPECTS score of 10 points. Next, a CT perfusion scan was performed that showed modified cerebral perfusion parameters in the left middle cerebral artery territory showing a hypoperfused volume of 114 cm³ with 80% salvageable tissue. CT angiography showed no large or medium vessels occlusions of the cerebral arteries. Laboratory tests were within normal parameters. Intravenous fibrinolysis with Metalyse 5000 IU was administered 25 minutes from symptom onset. Following thrombolysis, the patient showed rapid clinical improvement, the NIHSS score decreased from 16 to 3. Residual deficits were limited to a minor right central facial palsy, right hemiparesis grade 4+/5 MRC, without elements of aphasia. Until discharge the patient fully recovered and had no neurological deficits left. **Discussions** : The presented case highlights the primary role of rapid management in ischemic stroke for the complete recovery of neurological function. The patient was already in the hospital at the time of onset which is why she received treatment in less than 30 minutes. The importance of this prompt intervention is reflected in the favorable evolution of the case with complete remission of most neurological deficits. **Conclusions**: Thrombolysis remains an essential therapeutic approach in the management of acute ischemic stroke, ensuring rapid cerebral reperfusion. The efficacy of thrombolysis is closely related to the onset-to-needle time, showing why solutions are needed to ensure the reduction of this interval, both in pre-hospital settings and in emergency departments.

Keywords: Hypertension,, Obesity,, Golden Hour,, Thrombolysis.

GUILLAIN-BARRÉ SYNDROME IN A PATIENT WITH MULTIPLE COMORBIDITIES: A DIAGNOSTIC CHALLENGE

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Introduction: Guillain-Barré syndrome (GBS), most commonly presenting as acute inflammatory demyelinating polyradiculoneuropathy (AIDP), is an immune-mediated disorder characterized by inflammatory demyelination of peripheral nerves. **Case Report:** We present the case of a 74-year-old female patient with a history of breast cancer, chronic axonal polyneuropathy following chemotherapy, severe osteoporosis with L5 vertebral body compression fracture, and moderate lumbar spinal canal stenosis, who was brought to the emergency department for acute onset of lower limb motor deficit and distal paraesthesia. Upon admission, the neurological examination revealed flaccid quadriparesis with predominance of paraparesis, inability to walk, abolished deep tendon reflexes, hypoesthesia and hypopalesthesia in the lower limbs and distal upper limbs. A lumbar puncture was performed, revealing elevated protein concentration (1185 mg/dL). On the first day after admission, nerve conduction studies revealed bilateral carpal tunnel syndrome and bilateral conduction blocks in the peroneal nerves. Given the patient's history, the acute neurological deterioration prompted a broad differential diagnosis. The first hypothesis was bilateral brain lesions or secondary spinal cord metastases, which were ruled out by brain CT and thoracoabdominal-pelvic CT. The second hypothesis, related to the history of L5 compression fracture, was evaluated by lumbar MRI, which confirmed the compression fracture but showed no direct nerve root compression, making this hypothesis unlikely. Finally, the presence of acute flaccid quadriparesis with predominance of paraparesis and lower distal MRC grades strongly suggested AIDP. The cerebrospinal fluid examination demonstrated classical albuminocytologic dissociation, further supporting the diagnosis. A second nerve conduction study performed one week later demonstrated increased distal latencies in all motor nerves, unexcitable sensory nerves, and reduced motor conduction velocities, findings suggestive of demyelination and confirming the evolving pattern of AIDP. The patient was started on intravenous immunoglobulin therapy for 4 days, with favorable clinical evolution and improvement of the motor deficit. She was subsequently able to stand and walk a few steps with bilateral support. **Discussions** : Diagnosing acute neuromuscular deterioration in a patient with a complex oncologic and orthopedic history carries a high risk of attributing symptoms to existing conditions rather than considering new causes. In this case, the patient's baseline post-chemotherapy axonal neuropathy and severe L5 compression fracture provided plausible, yet misleading, explanations for her acute motor deficit and sensory involvement. **Conclusions:** Early in GBS, nerve conduction studies and cerebrospinal fluid findings may initially be normal. Therefore, longitudinal follow-up and repeated investigations are essential when clinical suspicion persists, in order to initiate appropriate treatment.

Keywords: Guillain-Barré Syndrome, Tetraparesis, Demyelinating neuropathies

HEMATURIA AS A WARNING SIGN - PROGRESSION OF AN UNTREATED BLADDER LESION

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Introduction: Bladder cancer is one of the most common urological malignancies in older patients, with hematuria being a key sign. Early detection and accurate diagnosis are crucial for disease progression. **Case Report:** A 71-year-old male patient, previously diagnosed with a millimetric lesion on the left wall of the urinary bladder, presented to the urologist with recurrent hematuria and back pain. One year earlier, a pelvic ultrasound identified a 3 mm lesion in the same location, but the patient refused any follow-up or therapeutic interventions. Therefore, the current presentation raised concern for a possible progression of the previously documented bladder lesion. The abdominal ultrasound revealed a prominent mass within the urinary bladder, prompting further evaluation with contrast-enhanced computed tomography of the abdominal and pelvic regions, with delayed-phase imaging, to better assess the urinary tract. The CT scan confirmed a tumor mass on the left posterolateral wall of the bladder, measuring 58 × 30 mm, with infiltration of the adjacent bladder wall. The mass caused obstruction of the left ureter at the ureteropelvic junction, resulting in left-sided hydronephrosis and grade III hydronephrosis. No regional lymphadenopathy or distant metastases were identified on CT imaging. Lab tests (creatinine level, GFR, PSA) were within normal limits. Surgical intervention was recommended and is planned to be performed immediately.

Discussions : This case highlights the critical importance of prompt evaluation and investigation of hematuria and any suspicious bladder abnormalities, as well as the potential consequences of delayed diagnosis. Early intervention would have been crucial to prevent the progression of the disease and the development of uretero-hydronephrosis. **Conclusions:** It is vital to consider the importance of adherence to follow-up recommendations and the critical role of continuous doctor-patient communication in ensuring appropriate monitoring and early detection of disease progression.

Keywords: Bladder carcinoma, Macroscopic Hematuria, Hydronephrosis, Bladder tumor

HEMODYNAMIC AND RESPIRATORY STABILIZATION IN NEAR-DROWNING WITH SEVERE HYPOXEMIC RESPIRATORY FAILURE

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Introduction: Drowning remains a significant global cause of accidental mortality and morbidity, particularly among young individuals. Its main pathophysiological mechanism involves water aspiration causing surfactant dysfunction, alveolar-capillary membrane injury, pulmonary edema, and severe hypoxemia that may progress to acute respiratory distress syndrome (ARDS). Sometimes laryngospasm appears with severe hypoxia and dry lung (dry drowning). Early restoration of oxygenation and hemodynamic stability is essential in the emergency management of near-drowning patients, with treatment primarily based on supportive care, oxygen therapy, lung-protective ventilation, and intensive monitoring. **Case Report:** : We report the case of a 19-year-old male found unconscious floating face-down in a swimming pool and transported to the emergency department by ambulance. According to prehospital information, the estimated submersion time was approximately two minutes. On admission the patient presented severe hypoxemia and hemodynamic instability: blood pressure 81/60-90/65 mmHg, heart rate 131-142 bpm, respiratory rate 33-34 breaths/min, and oxygen saturation 81-83% on room air. The patient was triaged as a red-code emergency. Primary assessment revealed a patent airway, bilaterally diminished breath sounds with basal ronchi, cyanotic cold skin, and prolonged capillary refill time, suggesting combined respiratory and circulatory instability. Arterial blood gas analysis confirmed severe hypoxemia with metabolic acidosis and elevated lactate levels (4 mmol/L). Electrocardiography showed wide QRS complexes with ST-segment elevation in leads V5-V6. Immediate management focused on rapid respiratory and hemodynamic stabilization through high-flow oxygen therapy, vascular access, monitoring, and supportive treatment. Additional investigations, including thoracic and cranial CT scans and multidisciplinary consultations, were performed to evaluate potential complications. The final diagnosis was severe hypoxemic acute respiratory failure secondary to

aspiration syndrome following submersion, associated with ARDS and transient loss of consciousness. **Discussions** : Immediate management focused on rapid respiratory and hemodynamic stabilization through high-flow oxygen therapy, vascular access, monitoring, and supportive treatment was the key to complete recovery. The case raised the possibility of a seizure leading to secondary drowning. The presence of pulmonary rales also required the exclusion of acute cardiac decompensation. Sometimes it is difficult to assess the evolution of a drowning in the context of associated neurological or cardiac pathology. The evolution was favorable excluding neurological or cardiac problems. The patient was transferred to a pulmonology department for the therapy of aspiration pneumonia. **Conclusions** : Near-drowning represents a time-critical emergency requiring rapid evaluation and aggressive supportive care. Early stabilization of respiratory and hemodynamic function is essential to improve outcomes and prevent severe complications such as ARDS or secondary organ injury.

Keywords: drowning, acute hypoxemic respiratory failure, acute respiratory distress syndrome, hemodynamic stabilization

HEMORRHAGIC ILEAL GASTROINTESTINAL STROMAL TUMOR MANAGED BY LAPAROSCOPIC SEGMENTAL RESECTION-CASE REPORT OF A 70-YEAR-OLD PATIENT PRESENTING WITH ACUTE GASTROINTESTINAL BLEEDING

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Introduction: Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal neoplasms of the gastrointestinal tract, accounting for approximately 1-3% of all gastrointestinal malignancies. They can arise anywhere along the gastrointestinal tract, with the stomach being the most frequent site, followed by the small intestine. Clinical manifestations are variable and depend on tumor size and location, with the most common symptoms including anemia, weight loss, gastrointestinal bleeding, abdominal pain, and mass-related symptoms. In some cases, patients may present with acute complications such as acute abdomen, intestinal obstruction, perforation, tumor rupture, or peritonitis. Surgical resection remains the gold standard treatment for GIST, providing optimal local disease control and prevention of complications. **Case Report:** A 70-year-old patient presented with acute gastrointestinal bleeding caused by a hemorrhagic ileal tumor, highly suggestive of a gastrointestinal stromal tumor (GIST). A laparoscopic exploration confirmed the ileal lesion, and a segmental ileal resection was performed with adequate oncological margins, followed by an intracorporeal mechanical latero-lateral entero-enteric anastomosis. The resected bowel segment and tumor were extracted through the epigastric hernia defect using an endobag. The epigastric hernia was subsequently repaired with polypropylene mesh. The postoperative course was uneventful. **Discussions** : Small bowel GISTs are rare but often present with complications such as gastrointestinal bleeding. Surgical resection with negative margins remains the gold standard treatment, and laparoscopic approaches are increasingly preferred in selected cases. This case highlights the successful laparoscopic management of a hemorrhagic ileal GIST with concomitant hernia repair and favorable outcome. **Conclusions:** Ileal GIST presenting with acute hemorrhage is a rare but important cause of gastrointestinal bleeding. Laparoscopic segmental resection is a safe and effective treatment, offering good oncological control and favorable outcomes.

Keywords: Gastrointestinal stromal tumor (GIST), Laparoscopic resection, Minimally invasive surgery

HEPATIC ALVEOLAR ECHINOCOCCOSIS IN A HIV-POSITIVE PATIENT: A CASE REPORT

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Introduction: Hepatic alveolar echinococcosis, a rare and aggressive parasitic infection, is particularly uncommon in immunocompromised populations, including HIV-positive patients. With an incidence of 0.03-1.2 cases per 100,000 in endemic regions, this disease's infiltrative growth mimics malignant tumors, posing significant diagnostic and therapeutic challenges. **Case Report:** This report presents a 44-year-old HIV stage C3 female patient who presented with mild symptoms, including right upper quadrant pain and low-grade fevers, without other systemic signs. Abdominal MRI revealed a 13 cm multilocular hepatic cyst with central necrosis in segments IV, V, and VI, a smaller lesion in segment VIII, and additional cysts of 2-3 cm in the left lobe. The patient received a four-week preoperative course of Albendazole. Surgical intervention included atypical hepatic resection in segments V

and VI, cholecystectomy, and extensive drainage. **Discussions** : Histopathology confirmed alveolar echinococcosis, with granulomas and Langhans giant cells. Both intraoperative and postoperative courses were uneventful, with no complications encountered. Intestinal transit resumed by day 3, and surgical drains were removed at discharge. Postoperative Albendazole therapy continued for two months, along with follow-up care. **Conclusions:** Alveolar echinococcosis in HIV-positive patients requires a customized approach. This case highlights the importance of combined surgical and antiparasitic therapy to manage the infection effectively and prevent complications. Interdisciplinary collaboration and diligent postoperative monitoring are essential to optimize outcomes.

Keywords: HIV stage C3, hepatic alveolar echinococcosis, hepatic surgery

HEREDITARY MOTOR AND SENSORY NEUROPATHIES- POSSIBLE AXONAL VARIANT OF CHARCOT-MARIE-TOOTH

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Introduction: Hereditary motor and sensory neuropathies (HMSN) represent a group of chronic conditions caused by the degeneration of motor and sensory nerve fibers, leading to distal muscle atrophy, strength deficits, and areflexia, predominantly in the lower limbs, subdivided into axonal and myelinic forms. They have a hereditary character, which is why genetic testing, alongside clinical and electrophysiological aspects, constitutes an essential element in their classification. **Case Report:** A 17-year-old patient, without significant medical history, presented with onset at 3-4 years of age: gait difficulties, trophic disorders, and distal deformities of the upper limbs. Subsequently, distal contractures, myalgia, cramps, and functional impairment appeared. Electromyographic examination highlights a moderate-to-severe pure motor axonal polyneuropathy. The suspicion of Charcot-Marie-Tooth (CMT) disease is confirmed via whole exome sequencing: a heterozygous missense mutation in the GARS gene: c.893C>T (p.Pro298Leu), possibly pathogenic. Neurological reevaluation showed: possible gait, right-sided steppage, sketches hammer toes, minimal Achilles tendon retraction, distal peroneal atrophy ("stork legs"), and thenar and interosseous atrophy with clawed fingers of the upper limbs. Distal segmental strength was reduced, reflexes were preserved in the upper limbs but absent at the Achilles and medioplantar levels, with no sensory disturbances. Treatment is conservative: orthopedic evaluation, adapted orthoses, and physical therapy to maintain autonomy and limit the progression of disability. **Discussions** : The c.893C>T mutation in the GARS gene is associated with various phenotypes: CMT type 2D, Distal Hereditary Motor Neuropathy type V-A, and James-type infantile spinal muscular atrophy; however, the neurological presentation allows for classification as CMT2D. Few cases related to GARS gene mutations are reported in the literature. CMT2D is an autosomal dominant disease with variable expressivity, debuting in the first decades of life. Characteristic is the weakness and atrophy of the small muscles of the hands, with lower limbs being affected in approximately 50% of patients. At the base of the neurodegenerative processes lies the missense mutation in the GARS gene. The mutation in a critical structural domain of glycyl-tRNA synthetase induces a conformational change that allows the enzyme to interact neomorphically with the Neuropilin-1 (Nrp1) receptor on motor neurons, antagonizing vascular endothelial growth factor (VEGF), activating the integrated stress response and disrupting cellular metabolism, triggering progressive degeneration, only symptomatically treatable. **Conclusions:** HMSN represents a heterogeneous group of degenerative diseases in which genetic testing allows for exact etiological classification and establishes a correct prognosis, offering essential milestones regarding clinical evolution and personalized disease management.

Keywords: Hereditary motor and sensory neuropathies, Charcot-Marie-Tooth type 2D, Genetic testing

HIDDEN BENEATH THE SURFACE: A CASE OF MYOCARDIAL BRIDGE

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Introduction: Myocardial bridge is a congenital heart condition where a segment of epicardial coronary arteries is passing through the myocardium. This phenomenon most frequently manifests within the mid-segment of the left anterior descending artery (LAD). "Tunneled" artery can get compressed during systole, which may reduce blood flow, leading to various ischemic conditions for example: angina, arrhythmias and rarely, more severe issues.

Case Report:

I would like to present the case of a 72-year-old male patient who reports episodes of constrictive chest pain and progressive dyspnea accompanied by marked fatigability during physical activities. The patient was admitted in our department presenting: HTA-grade 2 and having a history of treated prostate adenocarcinoma (2022). With a baseline medication regimen consisting of: Acid acetilsalicylic 75 mg , Atrovastatina 20 mg. Electrocardiographic evaluation revealed flattened T waves in DIII and aVF, corresponding to the inferior wall of the left ventricle and raising suspicion of myocardial ischemia in this territory. Computed tomography (CT) imaging studies did not reveal any cardiac abnormalities, while hematological evaluations indicate cholesterol levels at the upper limit of the normal range. **Discussions** : Based on the patient's clinical and paraclinical findings, including electrocardiographic changes, the clinical picture was consistent with unstable angina, classified as class IIIB according to the Braunwald Classification. Following the patient's informed consent, Coronary angiography was performed, which demonstrated the presence of a Myocardial bridging producing 100% systolic compression of the Left Anterior Descending Coronary Artery (LAD). In this context a conservative medical management strategy was adopted. The patient was initiated on dual antiplatelet therapy, lipid-lowering therapy , angiotensin-converting enzyme inhibitor and a calcium channel blocker . Gastric protection and prophylactic antibiotic therapy were also administered. The patient showed a favorable clinical response, with complete resolution of symptoms, and was subsequently discharged in a stable condition. **Conclusions:** In conclusion, medical therapy with beta-blockers or calcium channel blockers remains the first-line treatment for patients with Myocardial bridging. However, in symptomatic patients who remain refractory to standard optimal medical treatment, invasive therapeutic options may be considered to relieve the hemodynamic obstruction of the tunneled coronary segment.

Keywords: Myocardial bridge, Compressed, Left anterior descending artery, Systolic

HIDDEN IN PLAIN SIGHT: AN ATYPICAL LEFT ATRIAL MYXOMA IN AN ASYMPTOMATIC PATIENT

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Introduction: Cardiac myxoma is the most common primary cardiac neoplasm, typically arising in the left atrium. Most myxomas present with embolic and obstructive manifestations, but some cases can remain clinically silent, posing a diagnostic challenge and a risk of sudden complications. **Case Report:** We present the case of a 72-year old female who was asymptomatic at presentation, with a recent history of nonspecific symptoms. Her medical history was notable for multiple comorbidities, including hypertension, HF NYHA II, mild mitral valve regurgitation, dyslipidemia, thyroid papillary follicular carcinoma. Physical examination was within normal limits, aside from obesity and elevated blood pressure. Laboratory tests showed elevated D-dimer and fibrinogen levels. ECG revealed sinus rhythm with T-wave inversion in leads V1-V3. Transthoracic echocardiography identified a mobile intracardiac mass associated with left atrial enlargement, further evaluated by transesophageal echocardiography and cardiac CT, which demonstrated a polylobulated lesion in the left atrium, attached to the posteroinferior wall. The patient underwent surgical resection, followed by histopathological analysis. **Discussions** : Cardiac myxomas most commonly originate from the interatrial septum, at the level of the fossa ovalis. In this case, the tumor was located on the posteroinferior wall of the left atrium, representing an atypical implantation site. Although most myxomas are sporadic, this patient presented features suggestive of Carney complex, including mucocutaneous hyperpigmentation of the conjunctiva and lips, cardiac myxoma and thyroid pathology. These findings are suggestive of a potential syndromic association and highlight the importance of appropriate long-term follow-up, including consideration of genetic counseling given the potential hereditary nature of the condition. **Conclusions:** Atypical localization and nonspecific clinical presentation may delay the diagnosis of cardiac myxomas. Multimodal imaging plays a central role in accurate identification and risk stratification, while early surgical intervention is key to preventing embolic events. Awareness of potential syndromic associations has important implications for long-term management.

Keywords: Myxoma, Atypical presentation, Carney complex

HIDDEN RISK: ANEMIA IN ACUTE CORONARY SYNDROME

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Introduction: Coronary artery disease is less frequent in women under 50 years of age than in men, and the risk may be underestimated in the absence of traditional risk factors (diabetes, smoking, dyslipidemia). Patients under 45 years account for 8% of acute coronary syndromes (ACS), with only 15.8% women. Presentation is often atypical and under-recognized. Anemia, present in 15-30% of ACS patients, is associated with a 2-fold increase in mortality and may precipitate myocardial infarction due to oxygen supply-demand mismatch. **Case Report:** We present the case of a 44-year-old woman, with a known hypertension, presenting in the Emergency Department with 5 days of non-specific left hemithorax pain and marked fatigue. No history of diabetes, smoking or dyslipidemia. Upon admission, patient is hemodynamically stable (blood pressure 153/98 mmHg, heart rate 92 bpm). Electrocardiogram shows sinus rhythm with ST-segment depression in DI, DII, DIII, aVF, V3-V6. High-sensitivity troponin I rose dynamically (from 1.42 ng/mL to 3.24 ng/mL), confirming non-ST-elevation myocardial infarction. Laboratory tests revealed moderate microcytic hypochromic anemia (hemoglobin 9.7 g/dL, serum iron level 18 µg/dL), mild hypokalemia, leukocytosis, and elevated inflammatory markers (C-reactive protein 42.5 mg/L). Echocardiography illustrates mildly reduced left ventricular ejection fraction (45%) with anterior wall hypokinesia and concentric left ventricular hypertrophy suggestive of hypertensive cardiopathy and grade I mitral regurgitation. Coronary angiography revealed a critical 99% subocclusive stenosis in the proximal-mid left anterior descending artery, with no significant disease in the remaining coronary arteries (right-dominant system). Percutaneous coronary intervention with drug-eluting stent implantation was successfully performed. The patient received guideline-directed medication, including dual antiplatelet therapy, beta-blocker, ACE inhibitor, statin and intravenous iron supplementation. Cultures from the nose, throat, urinary and genital systems were negative. ASLO, fibrinogen and VSH within normal limits. Clinical evolution was favorable and hospital stay was 4 days. **Discussions :** Acute coronary syndromes in younger women are frequently underestimated, particularly in absence of traditional risk factors. Clinical presentation can be atypical or prolonged, which can delay medical evaluation. Despite lacking diabetes, smoking and dyslipidemia, this 44-year-old woman presented with critical left anterior descending artery stenosis, a lesion with high ischemic burden. Moderate iron-deficiency anemia may have contributed by reducing the oxygen-carrying capacity and lowering ischemic threshold. Although we cannot establish the exact cause, anemia likely precipitated the event. **Conclusions:** This case underscores the need for comprehensive cardiovascular risk assessment in younger women, including routine anemia screening, as identifying and correcting it may help prevent ischemic events and improve patient outcomes.

Keywords: anemia, acute coronary syndrome, atypical presentation, young female patient

HIGH RISK OF RECURRENT PATELLAR DISLOCATION AFTER REVISION TOTAL KNEE ARTHROPLASTY

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Introduction: Patellofemoral instability after total knee arthroplasty (TKA) is uncommon, but when it happens after revision TKA, it is harder to treat. The surgical management depends on whether the components are malpositioned or the medial soft tissues have failed. When imaging shows acceptable implant alignment, MPFL (Medial Patellofemoral Ligament) reconstruction has been used to restabilize the patella. **Case Report:** A 72-year-old female presented in our department described recurrent dislocation of left patella. Medical history revealed hypertension, type 2 diabetes, obesity, right primary TKA and left revision TKA. On clinical examination, the patella tracked laterally and dislocated with little provocation. X-Ray exams showed the revision prosthesis was well-fixed, with no loosening. We attributed the instability to medial soft-tissue failure from repeated surgical exposure and the MPFL reconstruction using a dedicated fixation system was performed. At six weeks, the patella tracked centrally and the patient reported no further instability episodes. **Discussions :** Component malrotation is the usual suspect when the patella dislocates after TKA, but multiple knee surgeries can affect directly the soft tissues causing recurrent dislocation. A handful of case reports and small series show that MPFL reconstruction works in these

patients, provided the implant is not loose or grossly malrotated and the problem is soft-tissue failure rather than mechanical malalignment. **Conclusions:** Recurrent patellar dislocation after revision TKA is rare and can leave the patient unable to walk reliably. When loosening and gross malposition have been excluded and the medial tissues are the weak link, MPFL reconstruction can stabilize the patella.

Keywords: Revision TKA, Patellar dislocation, MPFL reconstruction

HIGH-GRADE CERVICAL INTRAEPITHELIAL NEOPLASIA ASSOCIATED WITH HPV IN A PATIENT WITH PRIMARY IGG DEFICIENCY

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Introduction: HPV is a DNA virus that infects the skin of the genital area and the surface of the mucous membranes, producing condylomas or flat lesions known as squamous intraepithelial lesions (high-risk oncogenic types). Most cervical tumors have an epithelial origin and are caused by oncogenic strains of HPV, which are diagnosed on the Babes Papanicolaou cervical smear. Many HPV infections are transient, with the virus being eliminated within a few months through an acute or chronic inflammatory response. **Case Report:** We present the case of a 36-year-old patient with two previous pregnancies and IgG deficiency. She presented for gynecological consultation due to acute pelvic and perineal pain, vaginal bleeding, and lower urinary tract symptoms. Pap smear examination revealed HPV-16, HSIL, with a recommendation for colposcopy, which revealed findings suggestive of a high-grade intraepithelial lesion, but the procedure was interrupted due to profuse bleeding. Based on these findings, a LEEP (Loop Electrosurgical Excision Procedure) was performed with tumor excision, followed by cervical biopsy, which confirmed HSIL corresponding to CIN3 and changes suggestive of adenocarcinoma in situ with a high proliferative index throughout the epithelium. **Discussions :** The HSIL/CIN3 stage represents the last preinvasive stage of cervical squamous carcinoma, while the association with adenocarcinoma in situ indicates concurrent precancerous glandular involvement. Wide conization with careful evaluation of margins, endocervical curettage, and careful follow-up is recommended in young, fertile patients, but given the patient's IgG deficiency, the risk of recurrence and progression to invasive carcinoma after conservative treatment is significantly higher. In this case, after discussion with the patient, who did not desire further pregnancies, total hysterectomy was performed, with a favorable outcome. **Conclusions:** This case illustrates the complexity of managing high-grade cervical lesions when HSIL/CIN3 is associated with adenocarcinoma in situ, especially in the context of IgG immunodeficiency. Although LEEP remains the standard treatment for CIN3, the presence of glandular lesions and the increased risk of recurrence may warrant a more radical approach. Total hysterectomy in this case allowed complete excision of the lesion and a significant reduction in the risk of malignant progression, demonstrating that the therapeutic plan must be individualized, taking into account both histopathological features and patient context.

Keywords: virus, oncogenic, deficiency, hysterectomy

HIP FRACTURE AS A LIFE-THREATENING EVENT IN PATIENTS WITH INTELLECTUAL DISABILITY: CASE REPORT

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Introduction: Hip fractures are among the most common injuries in older adults and are associated with high morbidity and mortality worldwide each year. However, in comparison to cognitively intact individuals, the management of these fractures can become an orthopedic challenge in patients with intellectual disability, as they represent a high-risk subgroup due to increased perioperative complications and mortality risk. For these patients, hip fracture is not only an orthopedic injury, but also a life-threatening geriatric event. **Case Report:** We present the case of a 64-year-old man, diagnosed with moderate intellectual disability associated with severe chronic adaptive functioning impairment and generalized anxiety disorder, who was admitted to the emergency department following a ground-level fall. The patient presented with severe right hip pain, a shortened right lower limb, externally rotated, with functional impairment and inability to walk. Clinical examination and paraclinical investigations were challenging due to the patient's limited communication abilities and reduced cooperation;

however, the pelvic radiography established the diagnosis of a right femoral neck fracture. After appropriate preoperative preparation and spinal anesthesia, the patient underwent cemented bipolar hemiarthroplasty through an anterolateral approach using a Stryker system with antibiotic-loaded bone cement. The procedure was followed by lavage, hemostasis and layered anatomical closure. Postoperatively, the patient remained hemodynamically and respiratory stable, with decreased pain levels and no fever. The surgical wound remained clean, without signs of local inflammation or pathological secretions. However, mobilization and functional recovery required multidisciplinary support due to cognitive impairment. Six weeks after surgery, radiographic evaluation showed no signs of postoperative complications. **Discussions** : Management requires individualized surgical planning in order to optimize both functional outcomes and quality of life. Cemented fixation allows for immediate stability of the implant and early mobilization. A bipolar prosthesis may decrease wear of the acetabular cartilage and postoperative pain. Antibiotic-loaded bone cement was employed to reduce the risk of periprosthetic joint infection. Using anterolateral approach may prevent the postoperative dislocation. **Conclusions:** Even a common hip fracture from a ground-level fall can become a challenge in elderly patients with cognitive dysfunction, due to delayed diagnosis and postoperative recovery. Therefore, individualized management and appropriate surgical approach is essential in reducing mortality in this high-risk population.

Keywords: femoral neck fracture, intellectual disability, cemented bipolar hemiarthroplasty

HISTOPATHOLOGICAL CORRELATION IN AN EMERGENCY CASE OF RUPTURED RIGHT TUBAL PREGNANCY WITH HEMATOSALPINX

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Introduction: Ectopic pregnancy represents approximately 2% of all pregnancies and remains the leading cause of maternal mortality in the first trimester. Tubal implantation accounts for the vast majority of these cases. This report describes the clinical and histopathological findings of a ruptured tubal pregnancy in a 39-year-old patient.

Case Report: A 39-year-old female from a rural environment presented with acute abdominal pain and hemodynamic instability. The clinical diagnosis was a ruptured right ectopic pregnancy complicated by hemoperitoneum. An emergency salpingectomy was performed. Macroscopically, the right fallopian tube was distended and filled with blood (hematosalpinx). Microscopic examination revealed a dilated tubal lumen containing a massive hematic collection. Crucial for the diagnosis was the identification of chorionic villi, delimited by a characteristic bilayered trophoblast (cytotrophoblast and syncytiotrophoblast), alongside fragments of decidualized stroma. These features confirmed a right tubal pregnancy. **Discussions** : The diagnosis of tubal pregnancy is often a challenge, requiring a correlation between clinical signs, beta-hCG levels, and ultrasound. In this case, the presence of hematosalpinx and hemoperitoneum indicated a late presentation, common in patients with limited access to early prenatal care. From a pathological standpoint, the identification of trophoblastic tissue is the "gold standard" for diagnosis, distinguishing it from other causes of acute salpingitis or tubal hemorrhage. The bilayered trophoblast found in this case is a pathognomonic marker for early gestational structures, ensuring the exclusion of a gestational trophoblastic disease. **Conclusions:** Although imaging and laboratory tests point toward an ectopic pregnancy, the histopathological examination remains the definitive diagnostic tool. This case highlights the necessity of systematic microscopic evaluation of all salpingectomy specimens to confirm the site of implantation and to provide an accurate diagnosis in emergency gynecological surgery.

Keywords: Ectopic pregnancy, Tubal pregnancy, Hematosalpinx, Chorionic villi

HYDATID CYST OF THE ILIOPSOAS MUSCLE: A RARE CASE OF RETROPERITONEAL PARASITIC INFECTION

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Introduction: A hydatid cyst is a fluid-filled lesion caused by the larval stage of *Echinococcus granulosus*. Humans become infected through ingestion of eggs, usually from contact with infected dogs. The cysts most commonly affect the liver and lungs and may cause symptoms due to pressure or rupture, which can lead to anaphylaxis. Treatment includes albendazole, surgery, or PAIR (Puncture, Aspiration, Injection, Re-aspiration). **Case Report:**

We present the case of a 63-year-old male patient who was admitted to our service with a right iliopsoas abscess identified on abdominal and pelvic CT scan performed one week prior to hospitalization. Imaging revealed encapsulated collections located at the level of the right psoas major and iliacus muscles, extending to involve the iliopsoas muscle, with the superior pole in the right iliac fossa and proximal extension into the thigh. The collections measured approximately 13 cm in cranio-caudal length, demonstrated exudative native attenuation values, diffuse non-specific contrast enhancement, and no associated intralesional gas densities. The lesion was most likely developed within or adjacent to the tendon sheath. Following appropriate preoperative preparation, the patient underwent surgical intervention. Intraoperatively, a right iliopsoas muscle hydatid cyst was confirmed, consistent with a cystic parasitic lesion involving the affected musculature. The procedure was performed through a right pararectal incision, allowing adequate access to the retroperitoneal space. The hydatid cyst was carefully evacuated with strict precautions to avoid spillage and secondary dissemination. Thorough debridement of the residual cavity was performed, followed by irrigation with ethanol solution as a scolicidal agent. A contact drain was placed for postoperative evacuation and monitoring, and the wound was closed in anatomical layers. The postoperative course was favorable, with appropriate wound healing without pathological discharge or signs of local infection, and the patient was discharged on the third postoperative day with a good general state. The histopathological exam confirms hydatid nature of the cyst. **Discussions** : Managing rare iliopsoas hydatid cysts requires a multimodal approach focused on careful surgical evacuation to prevent rupture and secondary dissemination. Current protocols emphasize combining surgical excision with perioperative antiparasitic drugs (e.g., albendazole) and intraoperative scolicidal agents, such as ethanol, to effectively minimize the high risk of local recurrence. **Conclusions**: The successful management of this rare iliopsoas hydatid cyst through careful surgical evacuation and scolicidal irrigation underscores the importance of considering parasitic etiologies in retroperitoneal masses to ensure a favorable recovery and prevent recurrence.

Keywords: Iliopsoas muscle, Hydatid cyst, Retroperitoneal mass, Encapsulated collection

HYPEROSMOLAR HYPERGLYCEMIC STATE AS THE FIRST MANIFESTATION OF TYPE 2 DIABETES MELLITUS

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Introduction: Hyperosmolar hyperglycemic state (HHS) is a life-threatening acute metabolic complication characterized by severe hyperglycemia, hyperosmolarity, and profound dehydration. It occurs predominantly in patients with type 2 diabetes mellitus (T2DM) and it is associated with a significantly higher mortality rate in comparison with diabetic ketoacidosis. HHS is frequently precipitated by infections, acute cardiovascular events, and some severe comorbidities, particularly in elderly patients. **Case Report:** : We report the case of a 59-year-old male patient who had been bedridden since 2018 following a stroke and traumatic brain injury. In May 2025, he was brought by the ambulance to the Emergency Department due to altered general status and impaired consciousness. Laboratory investigations revealed markedly elevated blood glucose (1019 mg/dL), increased inflammatory markers, azotemia, and normal blood gas values except the hyperosmolarity (400 mOsm/kg), subsequently the patient was admitted to the Diabetology Department where HbA1c (8.55%), C-peptide (3.24 ng/mL, 1.1-4.4), and GAD antibodies (5.77 IU/mL, 0-10) were determined. Physical examination revealed an infected stage IV sacral pressure ulcer. These findings supported the diagnosis of HHS in the context of newly diagnosed type 2 diabetes mellitus precipitated by infection. **Discussions** : In some cases, HHS may represent the first clinical manifestation of previously undiagnosed diabetes mellitus, especially in patients with limited access to medical care or prone to dehydration. Chronic immobilization, neurological deficits, and pressure ulcers further increase the risk of metabolic decompensation due to systemic inflammation, and delayed recognition of symptoms. An important aspect of this case is the relatively young age of the patient compared to the typical HHS population, which more commonly includes elderly individuals. However, functional dependency and severe comorbidities may confer a similar risk profile regardless of chronological age. This underscores the importance of metabolic screening in chronically immobilized patients, particularly those with recurrent infections or poor wound healing. Early detection of metabolic imbalance is essential in neurologically impaired, bedridden individuals. Routine glycemic monitoring in high-risk populations, prompt identification of infections, and multidisciplinary management are essential to prevent life-threatening complications such as HHS. **Conclusions:** Systematic metabolic screening in high-risk, functionally dependent individuals and early multidisciplinary management of chronic wounds are crucial strategies to prevent severe, potentially fatal complications such as HHS. Greater clinical vigilance in this population may allow earlier diagnosis of diabetes and timely therapeutic intervention.

Keywords: Type 2 Diabetes Mellitus, Diabetes Mellitus, Hyperosmolar hyperglycemic state

HYPEROSMOLAR HYPERGLYCEMIC STATE PRECIPITATED BY ACUTE URINARY RETENTION: AN UNUSUAL TRIGGERING FACTOR

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Introduction: Hyperosmolar hyperglycemic state (HHS) represents a severe, potentially life-threatening acute complication of type 2 diabetes mellitus (T2DM), characterized by profound hyperglycemia, increased serum osmolality, and dehydration. It is commonly triggered by infections, inadequate glycemic control, or other precipitating factors. Prompt diagnosis and identification of the underlying cause are crucial for appropriate management. We report a case of HHS associated with acute urinary retention, highlighting the role of uncommon triggers in its development. **Case Report:** In November 2025, a 75-year-old male patient with a 10-year history of T2DM, under treatment with oral antidiabetic agents, presented to the Emergency Department with anuria over the preceding 24 hours, fatigue, and markedly elevated blood glucose levels. Laboratory investigations revealed severe hyperglycemia 1088 mg/dL, HbA1c 18.4%, creatinine 3.52 mg/dL, and urea 102.72 mg/dL. Arterial blood gas analysis was within normal parameters, except for significantly increased serum osmolality (341 mOsm/L), findings consistent with HHS. Given the presence of anuria, abdominal ultrasound was performed revealing prostatic hyperplasia with acute urinary retention, which required urinary catheterization. Urinalysis and urine culture were negative, excluding an infectious etiology. Following fluid replacement therapy, renal function improved, with normalization of creatinine and eGFR, thereby excluding underlying chronic kidney disease. Subsequently, the patient was admitted to the Diabetology Department. Further history revealed good adherence to treatment, but with irregular blood glucose monitoring. Given the severe metabolic imbalance, insulin therapy in a basal-bolus regimen was initiated, resulting in improved glycemic control. **Discussions :** HHS is typically triggered by infections, cardiovascular events, or poor adherence to antidiabetic therapy. In contrast, obstructive uropathy and acute urinary retention are rarely reported as precipitating factors. In this case, prostatic hyperplasia without urinary infection, as confirmed by negative urine exam and culture, suggests that acute urinary retention was a key contributing factor in the development of HHS. Urinary retention may cause significant dehydration due to reduced fluid intake, discomfort, and possible osmotic diuresis before complete obstruction, which can worsen blood glucose levels and increase serum osmolality. In elderly patients, especially those with long-standing diabetes, autonomic neuropathy may further predispose them to bladder dysfunction and delayed recognition of urinary retention. **Conclusions:** This case highlights acute urinary retention as a rare but potentially reversible precipitating factor of HHS. In elderly patients with poorly controlled diabetes, thorough evaluation for atypical triggers is essential. Prompt recognition and management of the underlying cause, including relief of urinary obstruction, may significantly improve clinical outcomes.

Keywords: Hyperosmolar hyperglycemic state, Type 2 diabetes mellitus, Acute urinary retention

HYPONATREMIA-INDUCED DELIRIUM AS AN INITIAL PRESENTATION OF SMALL-CELL LUNG CANCER

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Introduction: Delirium is a psychiatric emergency frequently caused by underlying organic conditions, particularly metabolic disturbances. Hyponatremia secondary to the syndrome of inappropriate antidiuretic hormone secretion (SIADH) can mimic primary psychiatric disorders, potentially delaying diagnosis and appropriate management. In oncological settings, SIADH may represent a paraneoplastic manifestation, especially in small-cell lung carcinoma (SCLC). **Case Report:** We present the case of a 55-year-old patient with no previous relevant psychiatric history, admitted for the acute onset of psychiatric symptomatology. The clinical picture was dominated by psychomotor agitation, disorganised behaviour, delusional ideation, impaired attention, and marked disorientation. The patient exhibited fluctuating levels of consciousness and significant behavioural changes, initially raising suspicion of a psychiatric condition. Paraclinical findings showed severe hyponatremia, with further investigations revealing a biological profile compatible with SIADH. Given the absence of prior psychiatric history and the sudden onset of symptoms, an organic etiology was suspected. Based on this new information, further investigation was needed,

such as a chest-abdomen-pelvis CT, which identified a pulmonary lesion suggestive of malignancy. The diagnosis of SCLC was subsequently confirmed following surgical intervention and pathological examination of the lesion. After proper correction of the electrolyte imbalance, the patient showed a remarkably complete remission of all psychiatric symptoms, without the need for specific antipsychotic therapy. This strongly supports the causal relationship between hyponatremia and the patient's psychiatric symptoms. **Discussions** : Differentiating delirium from primary psychotic disorders is particularly challenging in patients without prior psychiatric history. Acute onset, fluctuating clinical course, and impaired attention and consciousness are key features suggestive of delirium. In the context of SCLC, SIADH is a well-recognized paraneoplastic syndrome, and neuropsychiatric manifestations may precede the oncological diagnosis, complicating initial assessment. Early recognition of hyponatremia as the underlying cause is crucial, as appropriate treatment can lead to rapid symptom resolution and facilitate identification of the underlying malignancy. **Conclusions**: Acute psychiatric symptoms may represent the first manifestation of an underlying organic disorder. Comprehensive clinical and paraclinical evaluation is essential for accurate diagnosis. Recognizing SIADH as a potential paraneoplastic syndrome can enable earlier oncological diagnosis and significantly improve patient outcomes.

Keywords: SIADH, delirium, hyponatremia, small-cell lung carcinoma

IGG4-RELATED RETROPERITONEAL FIBROSIS: A CASE OF PROGRESSIVE URETERAL OBSTRUCTION

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Introduction: Retroperitoneal fibrosis (RPF) is a rare fibro-inflammatory disorder characterized by the development of dense fibrotic tissue in the retroperitoneal space, frequently leading to bilateral ureteral compression, obstructive uropathy, and progressive renal impairment. A growing proportion of cases previously considered idiopathic are now recognized as manifestations of IgG4-related disease (IgG4-RD). Early diagnosis is essential to prevent irreversible organ damage. **Case Report:** We present the case of a 51-year-old female patient with a long-standing retroperitoneal fibrosis, initially diagnosed at the age of 36 during evaluation for left-sided hydronephrosis and right kidney atrophy without obstruction (differential renal function of 9% on renal scintigraphy). Initial management was conservative, consisting of periodic ureteral stent placement on the left ureter, with replacements performed every 6-8 months. Fifteen years after diagnosis, the patient presented with clinical deterioration, including right lower limb deep venous thrombosis and severe right-sided hydronephrosis (grade V). Imaging revealed significant ureteral compression due to progression of the fibrotic mass. Given persistent obstruction despite stenting and disease progression, intraoperative biopsy of the fibrotic tissue was performed, together with concomitant right nephrectomy. Histopathological examination of the surgical specimen revealed morphological features compatible with IgG4-related disease, supporting an immune-mediated etiology of the retroperitoneal fibrosis. Systemic therapy was initiated with oral corticosteroids (prednisone, approximately 0.6 mg/kg/day) followed by gradual tapering. Long-term management may include maintenance low-dose corticosteroids or immunosuppressive agents such as azathioprine or methotrexate, with regular imaging and laboratory follow-up to monitor disease activity. **Discussions** : Retroperitoneal fibrosis remains a diagnostic challenge due to its insidious onset and nonspecific presentation. Increasing evidence supports its association with IgG4-RD, a systemic condition with potential multiorgan involvement. Progressive fibrosis may lead to recurrent bilateral ureteral obstruction and renal damage, emphasizing the importance of early recognition and treatment. **Conclusions:** This case illustrates the progressive nature of retroperitoneal fibrosis and the importance of considering IgG4-related disease in patients with chronic RPF. Early diagnosis and appropriate therapeutic strategies are essential in order to prevent severe complications such as irreversible renal loss.

Keywords: Retroperitoneal fibrosis, IgG4-related disease, Hydronephrosis, Ureteral obstruction

ILEO-COLIC INTUSSUSCEPTION: CT FINDINGS AND A CASE REPORT

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Introduction: Intussusception is a condition in which a segment of the intestine invaginates into the lumen of an

adjacent distal segment, resulting in bowel obstruction and possible vascular compromise. If left untreated, it may progress to ischemia, necrosis, perforation, and peritonitis. In adults, ileo-colic intussusception is usually associated with a pathological lead point, most commonly bowel neoplasms, polyps, or Meckel's diverticulum, whereas in children it is more frequently idiopathic. **Case Report:** A 75-year-old patient with a known history of bilateral hip osteoarthritis, not receiving chronic medication, presented to the emergency department with diffuse severe abdominal pain, generalized weakness, fatigue, loss of appetite, and marked abdominal distension. Symptoms had begun 6 days earlier, with recurrent diarrhoea and progressively worsening abdominal distension. Abdominal radiography demonstrated multiple air-fluid levels, prompting an abdomino-pelvic CT examination. CT revealed pneumoperitoneum, free intraperitoneal fluid, and multiple air-fluid levels in both the small and large bowel. In addition, a conglomerate of oedematous bowel loops with wall thickening was identified, showing spontaneous hyperdensity on non-contrast images, suggestive of a possible intramural haematoma. Mesenteric vessels and multiple enlarged mesenteric lymph nodes, likely reactive, were also identified within the affected bowel segment. Correlation of the clinical, laboratory, and imaging findings led to the diagnosis of an acute surgical abdomen. The patient underwent surgery, and intraoperative examination revealed a perforated neoplastic lesion at the hepatic flexure, for which a right subtotal hemicolectomy with ileostomy was performed. The postoperative course was favourable. **Discussions :** This case illustrates the close correlation between CT findings and the patient's clinical course. CT played a central role in identifying the severity of the disease, assessing bowel involvement, detecting complications, and guiding surgical management. **Conclusions:** This case highlights the diagnostic value of CT in the evaluation of ileo-colic intussusception and in the detection of associated complications requiring prompt surgical treatment.

Keywords: ileo-colic intussusception, computed tomography, bowel obstruction, pneumoperitoneum

ILIOPSOAS ABSCESS: A RARE CAUSE OF HIP PAIN IN CHILDREN

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Introduction: Iliopsoas abscess (IPA) is a purulent collection in the iliopsoas compartment. Its reported incidence ranges from 0.4 to 1.2 cases per 100,000 population annually. Secondary abscesses account for 70-80% of cases, while primary forms represent 20-30%. Mortality ranges from 5-15%. Prompt imaging, drainage, and targeted antibiotics are essential to reduce morbidity and mortality. **Case Report:** We present an 11-year-old female accusing of left hip pain and limping one week after a fall. Examination revealed a positive psoas sign and antalgic posture. Laboratory tests showed increased white blood cells and elevated inflammatory markers. Biochemistry revealed elevated hepatic enzymes, with decreased amylase and creatinine. Contrast-enhanced CT revealed fluid collections within the left sacroiliac joint, that extend into the left pelvis, which suggested a superinfected hematoma. No bone lesions were detected. Surgically, approximately 700 mL of purulent material were evacuated and 2 drains were placed. Intraoperatively, the pathological product was collected for microbiological diagnostic, which identified methicillin-sensitive *Staphylococcus aureus* (MSSA). Primary treatment consisted of broad-spectrum antibiotics and analgesics. After the Infectious Diseases consultation, the treatment changed to oxacillin and amikacin to target the infection. The patient showed a favorable outcome. **Discussions :** IPA is rare in pediatrics, especially without predisposing factors such as immunosuppression, diabetes or renal failure. Clinical presentation is subtle, emphasizing the need for high suspicion and imaging. The identification of MSSA highlighted the importance of microbiological analysis. Multidisciplinary management was crucial for a successful treatment. **Conclusions:** Iliopsoas abscesses require prompt recognition, imaging, and surgical drainage. Targeted antibiotherapy, along with multidisciplinary care, is essential to achieve favourable outcomes.

Keywords: Iliopsoas, Abscess, MSSA

IMBALANCES BETWEEN COGNITIVE CONTROL AND EMOTIONAL REACTIVITY IN ALCOHOL-INDUCED ORGANIC PERSONALITY DISORDER: A CASE REPORT

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Introduction: Organic personality disorder is a psychiatric condition characterized by a significant and persistent alteration of premorbid behavioral patterns, with a demonstrable organic cerebral etiology. Chronic alcohol

consumption and traumatic brain injuries (TBI) represent major risk factors that interact synergistically, leading to neurocognitive deficits, cerebral atrophy, and profound changes in psychological functioning. Prolonged exposure to psychoactive substances frequently promotes behavioral disinhibition and irritability. **Case Report:** We present the case of a 49-year-old male patient with known psychiatric history (TBI at the age of 16, in the context of a road traffic accident, and ethanol dependence). He presented for evaluation of an exacerbated mental status on a situational background. At admission, the psychopathological picture was dominated by emotional instability, irritability, impulsivity with episodes of verbal heteroaggressivity toward family members, social withdrawal, and decreased overall functioning. The mental status examination revealed multisensory hyperesthesia, concentrative hypoprosia, fixation and recall hypomnesia, slowed ideational tempo, associated with ideas of incapacity, uselessness, and self-devaluation. The diagnosis of organic personality disorder with mixed etiology (alcohol-related and post-TBI) was established, associated with recurrent depressive affective disorder and insomnia. Treatment included antidepressants, antiepileptics, and non-benzodiazepine hypnotics as needed. The evolution was favorable, the patient becoming calm and cooperative, and was discharged in an improved condition under treatment. **Discussions :** From a psychological perspective, the patient's personality underwent marked destructuring, evolving toward an organic profile characterized by affective lability, cognitive inertia, low frustration tolerance, and major adaptive deficit. Changes associated with chronic alcohol consumption include loss of cortical inhibitory control, facilitating acting out and reactive aggressivity in conflictual contexts. TBI sequelae amplify these pathological traits, generating a functional decline that affects socio-professional integration. Neurobiological vulnerability is thus accentuated by toxic factors, leading to impairment of attentional and affective mechanisms. **Conclusions:** Organic personality disorder with dual etiology represents a diagnostic and therapeutic challenge. Early identification of psychological changes (impulsivity, dysphoria, mnemonic impairment) and the initiation of appropriate psychopharmacological treatment are essential for psychobehavioral stabilization and for improving the quality of life of the patient and caregivers, as well as for a positive impact on the social support network.

Keywords: organic personality disorder, traumatic brain injury, chronic alcoholism, psychological changes

IMMEDIATE TISSUE EXPANDER RECONSTRUCTION FOLLOWED BY POSTMASTECTOMY RADIOTHERAPY IN LOCALLY ADVANCED BREAST CANCER: A MULTIDISCIPLINARY CASE REPORT

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Introduction: In patients with positive lymph nodes, postmastectomy radiation (PMRT) significantly decreases the risk of locoregional recurrence and breast cancer-specific death. However, as radiation can negatively impact prosthetic results, combining PMRT with immediate implant-based breast reconstruction (IBR), especially with tissue expanders (TE), remains controversial. **Case Report:** A 40-year-old premenopausal woman presented with a palpable left breast mass following recurrent mastitis. Core needle biopsy confirmed invasive breast carcinoma NST, Nottingham grade II, ER 100%, PR 100%, HER2-negative (score 0), Ki-67 up to 45%, consistent with luminal B-like biology. Clinical exam revealed a 3 × 7 cm mass with palpable axillary lymphadenopathy. Imaging showed no metastases, stage cT3N2M0 (stage IIIA). The patient achieved a partial clinical response after dose-dense neoadjuvant chemotherapy with four cycles of epirubicin + cyclophosphamide and four cycles of docetaxel (75 mg/m²). Surgery consisted of left nipple-sparing mastectomy with two-stage immediate reconstruction using a TE and axillary lymph node dissection. Pathology revealed residual invasive carcinoma (15 mm) with extensive DCIS (65%), RCB class II (2.70), and persistent nodal disease (4/26 lymph nodes with macrometastases, one with extracapsular extension), corresponding to ypT1cN2aMx. High-risk features warranted PMRT to the chest wall and regional lymphatics, administered with the TE in situ after recovery. Radiotherapy started 10 weeks postoperatively, following TE inflation with 250 mL of saline. The patient received hypofractionated radiotherapy to a total dose of 40.05 Gy in 15 fractions using an expander-sparing approach. Treatment was well tolerated, with grade I radiation dermatitis noted. **Discussions :** IBR with a TE during mastectomy involves gradual expansion and permanent implant replacement, providing psychological and aesthetic benefits while preserving the breast skin envelope. PMRT increases the risk of complications in IBR with TE, such as early complications (surgical site infections, skin flap necrosis following mastectomy, seroma/hematoma) and late complications (capsular contracture, revision surgery, reconstruction failure). Main radiotherapy options for immediate reconstruction are: irradiation of the permanent implant post-DTI surgery; irradiation of the expander after the first TE reconstruction stage; and irradiation of the permanent implant after the second stage. PMRT-treated patients face a higher cumulative risk of complications due to the need for final implant replacement. However, two-stage reconstruction

corrects asymmetries, contour deformities, and capsular contracture during device replacement. **Conclusions:** PRMT is crucial for patients at high risk of locoregional recurrence, prioritizing oncological outcomes over reconstruction aspects. Individualized treatment planning, open communication with patients, counseling on complications, and interdisciplinary collaboration are key to ensuring oncological safety and reconstructive success.

Keywords: breast cancer, breast reconstruction, tissue expander, postmastectomy radiotherapy

IMPACT OF DISEASE CONCEALMENT ON GLYCEMIC CONTROL IN A PATIENT WITH TYPE 1 DIABETES MELLITUS

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Introduction: Optimal glycemic control in type 1 diabetes mellitus (T1DM) depends on strict adherence to insulin therapy and effective self-management. However, psychosocial factors, including stigma and disease-related distress, can significantly affect treatment adherence and result in poor metabolic control. Patients who conceal their condition may engage in maladaptive behaviors, such as improper insulin storage and irregular administration, increasing the risk of glycemic variability. We present a case illustrating the impact of disease-related stigma on insulin adherence and glycemic control. **Case Report:** We report the case of a 52-year-old male patient known with T1DM since 2018, under treatment with a basal-bolus insulin regimen, complicated by diabetic neuropathy and peripheral artery disease, who presented to the Diabetology Department with both hypoglycemic and hyperglycemic imbalance. Laboratory investigations revealed HbA1c of 9.69%, indicating poor glycemic control. A detailed history revealed significant stigma related to the disease, leading him to not accept his condition and to avoid informing his family and spouse. As a result, he stored insulin in inappropriate conditions and administered it while avoiding any family members, without adhering to the recommended timing. This behavior led to irregular dosing, including missed administrations, which contributed to the observed glycemic imbalance. **Discussions :** Achieving optimal glycemic control in T1DM requires consistent adherence to insulin therapy, proper storage, and correct timing of administration. In this case, poor glycemic control was not primarily due to therapeutic failure but to behavioral and psychosocial factors. Disease-related stigma has played a central role, leading the patient to conceal his diagnosis and adopt maladaptive coping mechanisms. This has resulted in improper insulin storage, which could affect its efficacy, as well as irregular administration and missed doses. These behaviors significantly contribute to glycemic variability, increasing the risk of both hypoglycemic and hyperglycemic episodes. Psychosocial barriers, including denial, embarrassment, and fear of social judgment, are increasingly recognized as important factors influencing treatment adherence in patients with diabetes. Patients who hide their condition may avoid insulin administration in appropriate settings, leading to suboptimal disease management. **Conclusions:** This case underscores the importance of a patient-centered approach, including history taking and assessment of psychosocial factors. Identifying stigma-related behaviors is essential, as education and psychological support may significantly improve adherence and metabolic outcomes.

Keywords: Type 1 diabetes mellitus, Diabetes, Stigma

IMPACT OF DOMESTIC VIOLENCE ON MENTAL HEALTH: MAJOR DEPRESSIVE EPISODE ASSOCIATED WITH SUICIDE ATTEMPT

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Introduction: Domestic abuse, also called domestic violence or intimate partner violence, can be defined as a pattern of behavior in any relationship that is used to gain or maintain power and control over an intimate partner. Exposure to chronic interpersonal trauma is strongly associated with the development of depressive disorders, anxiety, and suicidal behavior. Identifying victims of domestic violence in medical settings is essential for preventing severe psychiatric complications. We present a case illustrating the relationship between domestic violence and the onset of a major depressive episode associated with a suicide attempt in a patient without a previous psychiatric history. **Case Report:** A 49-year-old female patient with no known psychiatric history

presented to the emergency department of the Psychiatry Clinic following a suicide attempt by intentional ingestion of 20 tablets of Zolpidem. The depressive episode occurred after repeated exposure to intrafamilial conflict and chronic domestic violence perpetrated by her husband. The psychiatric assessment revealed multiple symptoms secondary to physical abuse : depressive mood, generalized anxiety, emotional lability, mixed insomnia, ruminative thoughts focused on family conflict, and reduced tolerance to psychosocial stress. The general examination identified multiple lesions suggestive of physical aggression, represented by ecchymoses and contusions, and the psychometric evaluation indicated severe depression and severe anxiety, with a moderate suicide risk. The patient was administered pharmacotherapy consisting of Escitalopram, Alprazolam, and Quetiapine, leading to a favorable evolution and a substantial reduction in depressive symptoms and suicide risk.

Discussions : Previous studies have demonstrated a strong association between domestic violence and the development of depressive disorders, anxiety, and suicidal behavior. Intimate partner violence persists to be a frequently underreported and inadequately addressed phenomenon in Romania, as many victims do not seek medical or legal assistance due to fear, shame, or emotional and economic dependence on the aggressor. As a result, psychiatric symptoms may represent one of the first clinical indicators of ongoing domestic trauma.

Conclusions: This case highlights the impact of domestic violence on mental health, emphasizing the role of psychosocial factors in triggering severe depressive episodes and suicidal behavior. It is essential to recognise the early stages of abuse and integrate domestic violence screening into routine medical evaluations as it may contribute to preventing severe psychiatric outcomes and improving access to multidisciplinary support.

Keywords: domestic violence, major depression, suicide attempt, anxiety

IMPACT OF DOMESTIC VIOLENCE ON MENTAL HEALTH: SEVERE DEPRESSIVE EPISODE IN BIPOLAR DISORDER

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Introduction: Psychological domestic violence refers to a pattern of non-physical abusive behaviors, such as emotional manipulation, verbal aggression, coercive control, and social isolation, used to dominate or control an intimate partner. Although less visible than physical abuse, it can have profound and long-lasting effects on mental health, particularly in individuals with pre-existing psychiatric conditions. **Case Report:** We present the case of a 63-year-old female patient with a long psychiatric history. She has been diagnosed with bipolar affective disorder since 1996, with multiple past hospitalizations and suicide attempts. The reason for admission was worsening depressive symptoms including low mood, anxiety, insomnia, fatigue, anhedonia and impaired functioning. The clinical deterioration occurred in the context of chronic psychological domestic violence characterized by emotional abuse , verbal aggression, coercive control, social isolation and financial dependence on her spouse , who also had a history of alcohol abuse. The exacerbation of the depressive symptoms resulted from a recent episode of a family conflict involving verbal and physical aggression, combined with lack of support from her partner . The psychiatric evaluation revealed a severe depressive episode without psychotic features, associated with significant functional impairment. Psychometric assessment confirmed severe depression. The patient also presented multiple somatic comorbidities such as type 2 diabetes mellitus, autoimmune thyroiditis, cardiovascular disease, and bilateral gonarthrosis. The psychopharmacological treatment was initiated, including Clozapine, Aripiprazole, Venlafaxine, Lamotrigine, Clonazepam and Zolpidem, leading to gradual clinical improvement. **Discussions :** Due to absence of visible physical injuries, psychological domestic violence is often underrecognized and underdiagnosed. Unsurprisingly, it significantly impacts the mental health and worsens the course of chronic psychiatric disorders. This case highlights how prolonged exposure to emotional domestic abuse and coercive control may contribute to the recurrence of depressive episodes in patients with bipolar disorder. **Conclusions:** This case illustrates the significant impact of domestic violence on mental health and emphasizes the need for early recognition of non-physical forms of abuse. It is necessary to integrate screening for psychological abuse into routine psychiatric evaluation as it may improve diagnosis, treatment and access to appropriate support services.

Keywords: psychological domestic violence, bipolar disorder, suicide risk, emotional abuse

IMPLANTATION OF A DUAL-CHAMBER PACEMAKER IN A PARTICULAR CASE OF CONGENITAL INTERMITTENT ATRIOVENTRICULAR BLOCK

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Introduction: Binodal disease is a condition characterized by dysfunction of the sinoatrial node and conduction abnormalities at the atrioventricular node. It usually affects elderly patients due to degeneration of the conduction system associated with cardiac diseases, cardiac surgery, or aging. Although it may be asymptomatic, the disease can cause clinical manifestations such as dizziness, severe fatigue, palpitations, syncope and bradycardia. **Case Report:** We report the case of a 22-year-old female patient, without chronic medication, known medical history or previous cardiac surgery, who denied toxic substance use and presented with a cardiorespiratory arrest that was rapidly and successfully resuscitated, preceded by a vasovagal reaction. Cranial MRI and EEG were normal. ECG and echocardiography showed no pathological findings. Electrophysiological study revealed: PQ 202 ms; AH 134 ms; HV 68 ms; QRS 378 ms; SNRT 1450 ms; PW 500 ms. Programmed electrical stimulation at the right atrium induced self-limited atrial fibrillation. Diagnosis: Binodal disease, paroxysmal atrial fibrillation. Interventional treatment consisted of implantation of a pacemaker with leads in the right atrium and right ventricle, programmed in "DDDR" mode with a minimum pacing threshold of 0.25 V. **Discussions :** Compared to the specialized literature, this case is remarkable due to the patient's young age and the absence of structural heart disease. Most studies indicate that binodal disease results from progressive degeneration of the conduction system, usually associated with aging. However, rare cases have been reported in young patients, involving congenital anomalies or genetic mutations. In such cases, electrophysiological study is essential for diagnosis and arrhythmic risk assessment. From a therapeutic perspective, pacemaker implantation remains the standard treatment for patients with significant conduction system dysfunction, syncope, or increased risk of severe bradycardia. **Conclusions:** This case highlights binodal disease in a young patient without structural heart disease, demonstrating that the condition is not exclusive to the elderly. Electrophysiological study identified simultaneous involvement of the sinoatrial and atrioventricular nodes, enabling diagnosis and guiding pacemaker implantation. This case emphasizes the importance of electrophysiological evaluation and individualized therapeutic management of conduction disorders, even in young patients.

Keywords: Binodal disease, Cardiorespiratory arrest, Electrophysiological study, Pacemaker

IMPRESSIVE EVOLUTION OF A LARGE CELL NEUROENDOCRINE LUNG CARCINOMA ON A CHEMICAL EXPOSED AND LONG-TERM SMOKER

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Introduction: Large-cell neuroendocrine carcinoma of the lung is a rare and highly aggressive malignancy, associated with a limited survival median overall. The main risk factor is long-term tobacco use, followed by genetic predisposition and exposure to chemical carcinogens. This type of tumor mostly presents with late-onset, nonspecific clinical manifestations and demonstrates an early propensity for metastasis. It is most frequently diagnosed at advanced stages of disease. **Case Report:** We present the case of a 71-year-old male, long-term smoker (50 pack- years), with significant pulmonary history such as chronic obstructive pulmonary disease and a bronchopulmonary neoplasm, confirmed by imaging in April 2025, measuring 33 × 30 mm and no endobronchial involvement at that time. The patient did not follow any oncological or surgical treatment up to the time of presentation. His history is also notable for chronic hypertrophic pseudotumoral laryngitis, histopathologically confirmed following bronchoscopy and ENT examination (benign laryngeal tumor - papilloma), as well as prolonged occupational exposure to industrial chemical substances. The patient presented 9 months later to the emergency department with recurrent small-volume hemoptysis, mucopurulent productive cough, dyspnea on minimal exertion, and significant weight loss. Chest CT imaging confirmed considerable progression in size of the tumor located in the LUL, now measuring 9.5 × 6.5 × 12 cm. Bronchoscopy revealed tumoral infiltration of the left main bronchus by a bleeding, infiltrative, proliferative, stenosing process originating from the LUL bronchus,

causing subtotal stenosis, with extension into the LLL bronchus. A biopsy of the lesion was performed. Histopathological examination identified a non-small cell carcinoma, specifically large cell neuroendocrine carcinoma. Appropriate oncologic treatment was recommended in accordance with the established diagnosis.

Discussions : The presented case highlights the rapid progression and aggressive nature of large-cell neuroendocrine carcinoma, emphasizing the importance of early suspicion in patients with risk factors. The absence of specific symptoms may delay diagnosis, allowing significant tumor progression and reducing the effectiveness of available therapeutic strategies. **Conclusions:** Large-cell neuroendocrine carcinoma of the lung is an aggressive neoplasm, characterized by a fast and remarkable progression over a relatively short period of time, as well as late-onset symptomatology. In the absence of early therapeutic intervention, the tumor may demonstrate dramatic enlargement, significantly limiting available treatment options and adversely affecting patient survival.

Keywords: Large-cell carcinoma, Neuroendocrine, Infiltration, Fiberbronchoscopy

IMPULSIVE SUICIDE ATTEMPTS IN AN ADOLESCENT WITH ADHD AND ANTISOCIAL TRAITS: DIAGNOSTIC CHALLENGES AND MANAGEMENT CONSIDERATIONS

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Introduction: ADHD is a common psychiatric disease defined as a neurodevelopmental condition characterized by symptoms of hyperactivity, impulsivity and lack of attention. Beyond the symptoms previously stated, studies confirmed that ADHD can be associated with antisocial traits, which is the major source of functional impairment in affected individuals. This presentation is regarded as ADHD been a significant risk factor for later externalizing disorders, including conduct disorder, criminality, and substance use disorders, and associated in our case with multiple suicidal attempts. **Case Report:** We hereby report the case of a 15-year-old male patient, with familial history of psychiatric illness, and history of conflictual family environment, declaring a highly problematic relationship with the stepfather. The stated patient presented for admission to the Pediatric Neuropsychiatry Clinic in Targu mures following a prior appointment for behavioral disturbances. He reported behavioral problems including verbal auto- and hetero-aggression, running away from home, theft (from parents), suicidal attempts by poly-medication ingestion, low tolerance to frustration and stress, and phone dependence (7-8 hours a day) for approximately 2 years. In the psychiatric evaluation, the patient presented appropriate hygiene and appearance. He appeared cooperative, conscious and correctly oriented, with no perceptual disturbances and no memory impairment. He showed hyperprosexia focused on intrafamilial problems, also exhibited irritability, low frustration and stress tolerance, and episodes of psychomotor agitation. Phone tendency was also noted. Psychological evaluation stated affective and behavioral dysregulation related to an unstable personality, with aspects of possible ADHD diagnosis. ASEBA-YSR test was done, showing as results subclinical attention and rule-breaking problems. Also visible signs of emotional suppression and depressive characteristics. For following management psychological counseling was recommended. Medication regimen was also introduced during hospitalization and for discharge plan **Discussions :** Recognition of heightened suicide risk in patients with ADHD is clinically significant. A key element mediating the relationship the relationship between ADHD and suicide risk is impulsivity. Impulsivity is a central characteristic in the structure of ADHD, and is known to correlate also with suicidal behavior. Nowadays, studies emphasize the importance of education about the increasing suicide risk in ADHD, and its awareness. Using this methods, outcomes of ADHD patients with suicidal traits will demonstrate clinical improvement. **Conclusions:** Although ADHD may appear clinically subtle, it is associated with an increased risk of suicidal behavior, a link that has gained recognition in more recent studies.

Keywords: Adolescent, ADHD, Suicide, Impulsivity

IN VITRO ANTIMICROBIAL ACTIVITY OF HAND DISINFECTANTS AGAINST STAPHYLOCOCCUS AUREUS

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Introduction: Staphylococcus aureus is an opportunistic Gram-positive pathogen that colonizes human skin and mucosal surfaces and can cause both community and hospital acquired infections. Hand hygiene and antiseptics

are key measures to prevent transmission. This study evaluated the bacteriostatic or bactericidal activity of selected antiseptics against methicillin-sensitive (MSSA) and methicillin-resistant *S. aureus* (MRSA), by determining the minimum inhibitory concentration (MIC). **Case Report:** Two *Staphylococcus aureus* strains, MSSA ATCC 29213 and MRSA ATCC 43300, were tested against three disinfectants based on: polyaminopropyl biguanide 0.1%, benzalkonium chloride-chlorhexidine digluconate, and ethanol 70%. Serial 1:2 dilutions were prepared in Mueller-Hinton broth, inoculated with bacterial suspension, and incubated at 37 °C for 24 hours in 96 microwell plates. MIC was determined by visually observing growth inhibition, while bactericidal activity was assessed by subculture on Mueller-Hinton agar from the MIC wells. **Discussions :** Polyaminopropyl biguanide demonstrated bactericidal activity against both MSSA and MRSA at 6.25% v/v. Ethanol showed bacteriostatic activity against MSSA at 12.5% v/v and bactericidal activity at 50% v/v, whereas against MRSA it exhibited bactericidal activity at 12.5% v/v. The benzalkonium chloride-chlorhexidine combination displayed the highest antimicrobial activity, with bactericidal effects observed at 0.049% v/v. Similar observations have been reported in studies evaluating disinfectant efficacy against *S. aureus*, where antimicrobial activity varies according to the chemical composition of the disinfectant and combinations of agents may enhance bactericidal effects. **Conclusions:** The synergistic effect of benzalkonium chloride and chlorhexidine offers a clear advantage over traditional single-agent disinfectants like ethanol. By leveraging dual-mechanism membrane disruption, this combination achieves superior efficacy against *S. aureus* at lower concentrations, presenting a more robust solution for long-term infection control and the prevention of healthcare-associated infections.

Keywords: hand disinfectants, minimum inhibitory concentration, MSSA, MRSA

INCIDENTAL ACTIVE PULMONARY TUBERCULOSIS IN TRAUMA ASSESSMENT

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Introduction: Pulmonary tuberculosis (TB) remains a major global health problem, with a wide spectrum of clinical presentations ranging from asymptomatic disease to severe respiratory compromise. Atypical or paucisymptomatic forms frequently lead to delayed diagnosis and sustained community transmission. Incidental detection of active TB during hospitalization for unrelated conditions highlights the importance of systematic imaging and maintaining clinical suspicion, particularly in high-risk individuals. **Case Report:** We report the case of a 58-year-old male, active smoker (28 pack-years), with occupational exposure to cold, humidity, and dust, admitted following a fall from standing height, presenting with thoracic pain. Associated symptoms included night sweats, intermittent dry cough with mucoid expectoration, and fatigue, without significant prior chronic pulmonary disease. On admission, the patient was hemodynamically and respiratory stable. Physical examination revealed localized thoracic tenderness and limited chest expansion due to pain. Chest computed tomography performed for trauma assessment identified multiple left rib fractures (VIII-XI) with minimal displacement and a small hemoperitoneum. In addition, bilateral apical fibronodular infiltrates with associated reticulonodular thickening and a "tree-in-bud" pattern were observed, raising suspicion of active pulmonary tuberculosis. Microbiological evaluation revealed sputum smear positivity for acid-fast bacilli (BAAR-positive), later confirmed by culture. Chest radiography supported the diagnosis, demonstrating bilateral apical fibro-nodular changes without pleural effusion. Laboratory investigations showed no significant inflammatory or hematological abnormalities. The diagnosis of active pulmonary tuberculosis associated with thoracic trauma was established. Conservative management of rib fractures was initiated, including analgesics and respiratory support. Anti-tuberculous therapy was promptly started according to national guidelines, and contact tracing was initiated due to confirmed contagiousness. Clinical evolution was favorable, with improvement of respiratory symptoms and pain control. The patient was transferred to a specialized pneumology unit for continuation of anti-tuberculous treatment and follow-up. **Discussions :** This case illustrates the incidental diagnosis of active pulmonary tuberculosis during hospitalization for thoracic trauma. Trauma-related imaging played a key role in revealing radiological features suggestive of active infection, enabling early microbiological confirmation. Such presentations emphasize the heterogeneous and often subtle clinical manifestations of TB and underline the importance of maintaining diagnostic vigilance, especially in patients with epidemiological risk factors. **Conclusions:** Incidental detection of active pulmonary tuberculosis during evaluation for unrelated conditions can facilitate early diagnosis and timely public health interventions. Systematic imaging and awareness of atypical presentations are essential to reduce diagnostic delay and prevent ongoing transmission.

Keywords: Pulmonary tuberculosis, Incidental diagnosis, Thoracic trauma

INCIDENTAL DETECTION OF AN ABERRANT RIGHT SUBCLAVIAN ARTERY ON CT EXAMINATION: A CASE REPORT

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Introduction: Arteria lusoria represents the most common congenital anomaly of the right subclavian artery, with a reported incidence ranging from 0.4% to 2% in the general population. It is characterized by the aberrant origin of the right subclavian artery distal to the left subclavian artery, following a retroesophageal course in the majority of cases. In 12% of cases, arteria lusoria is associated with congenital heart disease (Tetralogy of Fallot, coarctation of the aorta, or ventricular septal defect). Although frequently asymptomatic, this vascular variant may produce digestive or respiratory symptoms, collectively known as dysphagia lusoria, and in rare cases may be complicated by aneurysmal dilation, dissection, or tracheobronchial compression. Recognition of this anomaly is particularly important in the context of thoracic surgical or endovascular procedures. **Case Report:** We present the case of a 62-year-old female patient, without significant comorbidities, who underwent a CT scan in the emergency department following trauma. An aberrant right subclavian artery with a retroesophageal course was discovered incidentally. The patient reported intermittent dysphagia; cough or hoarseness may rarely occur. Contrast-enhanced thoracic CT angiography with three-dimensional reconstruction revealed a mild dilatation at the origin of the artery, suggestive of a small diverticulum, without significant compression of the esophagus or trachea. The 3D reconstruction allowed precise visualization of the arterial course and its relationship with mediastinal structures. No additional anomalies were identified. Management consisted of conservative monitoring, with no immediate intervention required. **Discussions :** Aberrant Right Subclavian Artery may remain clinically silent or may manifest through esophageal or respiratory compression, depending on its anatomical course and associated vascular features. Imaging diagnosis is crucial, with CT angiography and vascular MRI providing precise details regarding its course and anatomical relationships. Although surgical management is indicated in cases with severe symptoms or risk of vascular complications, the majority of patients can be managed conservatively. Differentiation from other arterial malformations and early identification are important when planning thoracic or endovascular interventions. Furthermore, recognition of arteria lusoria is relevant in the context of endoscopic or catheter-based procedures, helping to prevent iatrogenic injury. **Conclusions:** Arteria lusoria is a rare but clinically significant congenital vascular anomaly. Modern imaging techniques are essential for accurate diagnosis and management planning. Careful monitoring and an individualized approach, whether conservative or surgical, optimize clinical outcomes and reduce the risk of complications. Reporting and disseminating such cases facilitate improved recognition and optimal management of arteria lusoria in both clinical and surgical practice.

Keywords: arteria lusoria, diverticulum, CT scan, incidental detection

INCIDENTAL DISCOVERY OF AN APPENDICULAR METASTASIS FROM SMALL CELL LUNG CARCINOMA IN A CASE OF PERFORATED GANGRENOUS APPENDICITIS

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Introduction: Metastasis of the appendix originating from extra-abdominal primary tumors are rare. This case describes a patient with known Small Cell Lung Carcinoma (SCLC) presenting with an acute abdomen, where the surgical emergency was the direct result of metastatic infiltration. **Case Report:** A 68-year-old female with a significant medical history of Small Cell Lung Carcinoma (undergoing chemo-immunotherapy), Type 2 Diabetes, and Essential Hypertension presented to the Emergency Department with an acute onset of pain in the right iliac fossa, nausea, and vomiting. Clinical examination and a native CT scan of the abdomen/pelvis revealed a distended appendix (13 mm) with an apical coprolith, pericecal fluid, and locoregional lymphadenopathy, consistent with acute appendicitis. The patient underwent an emergency laparoscopic surgery. Intraoperatively, surgeons discovered a gangrenous, perforated appendix with localized peritonitis, typhlitis, and a dense adherence syndrome involving the epiploon and the right uterine adnexa. A laparoscopic appendectomy, extensive adhesiolysis, and peritoneal lavage were performed. The postoperative evolution was favorable, with the resumption of intestinal transit for stool and flatus, normal spontaneous urination and appropriate healing of the

surgical wound without pathological discharge. The macroscopic examination of the specimen showed two fragments (80x9x9 mm and 15x10x10 mm) with a blackish-brown serosa and whitish deposits. The diagnosis shifted from "simple" appendicitis to an oncological finding during the histopathological analysis. Microscopic analysis revealed a neoplastic infiltrate involving the entire thickness of the appendicular wall, reaching the mucosa and causing ulceration. The tumor was composed of small, round-to-oval cells with scant cytoplasm, "salt and pepper" chromatin, and a very high mitotic rate. Immunohistochemical (IHC) staining confirmed the cells were positive for CD56, TTF-1, and focal Chromogranin, with a Ki-67 proliferation index of approximately 90-95%. These findings were morphologically and immunophenotypically identical to the patient's primary bronchial SCLC, confirming a diagnosis of appendicular metastasis. **Discussions** : The case can be interpreted in a clinical context considering the diagnosis of small cell lung carcinoma confirmed by lung biopsy performed three years earlier. While metastases are an uncommon cause of appendiceal obstruction and inflammation, they should be considered as part of the differential diagnosis when a patient with known malignancy presents with symptoms consistent with appendicitis. **Conclusions**: Appendicular metastasis from SCLC is a rare but clinically significant finding. Routine histopathological examination of all appendectomy specimens is essential, as unexpected metastatic disease may alter staging, prognosis, and subsequent oncological management.

Keywords: Small Cell Lung Carcinoma, Appendicular Metastasis, Acute Appendicitis, Incidental Discovery

INCISIONAL HERNIA PRESENTING AS CHRONIC ABDOMINAL PAIN

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Introduction: An eventration is a defect of the abdominal wall that occurs at the site of a previous surgical incision, where the normal integrity of the muscular and fascial layers is disrupted. The incidence rate is higher in patients with risk factors such as obesity, wound infection, advanced age or increased intra-abdominal pressure. Patients with incisional hernias also have a risk of incarceration, obstruction or strangulation. **Case Report:** This case report describes a 58-year-old female who came to the General Surgery Department in Cluj-Napoca with supraumbilical and left paraumbilical pain, accompanied by swelling in the left paraumbilical region, which started 6 months ago, with the pain worsening when lifting heavy objects. Medical history included an appendectomy, a partial hysterectomy for fibroids in 1995, followed by a total hysterectomy with bilateral adnexectomy in 2010, postoperative surgical wound dehiscence associated with a surgical wound abscess and thrombophlebitis of the right great saphenous vein. Clinical examination revealed an abdomen with a midline postoperative scar, epigastric tenderness on palpation, and protrusion of a left paraumbilical swelling on coughing. Also, intestinal transit was normal, with no pathological findings. The patient is under treatment for management of cardiovascular risk and cardiac rhythm disturbances with electrolyte support, these being identified following the electrocardiogram and also treatment for hypercholesterolemia. **Discussions** : Incisional hernia is a common complication after abdominal surgery caused by weakening of the abdominal wall at the site of a previous incision. Although often, not immediately severe, it can lead to chronic pain, discomfort, and reduced quality of life, with a risk of complications such as incarceration or strangulation. For diagnosis, clinical examination is essential, while imaging methods such as ultrasound or CT can be useful in selected cases. In terms of management, surgical repair is the treatment of choice, especially in symptomatic patients. **Conclusions:** This case illustrates how chronic abdominal pain can sometimes hide a structural cause, especially in patients with a long surgical history. The repeated interventions likely contributed to weakening of the abdominal wall and the formation of adhesions, both of which played a role in her symptoms. It is important to note that the symptoms did not have a sudden onset, but rather an insidious course: persistent, moderately intense abdominal pain for 6 months, aggravated by physical effort.

Keywords: Chronic pain, Incisional hernia, Protrusion, Swelling

INFECTION-TRIGGERED ATRIAL FIBRILLATION IN A NONAGENARIAN WITH SEVERE STRUCTURAL HEART DISEASE: REVERSIBILITY DOES NOT ELIMINATE THROMBOEMBOLIC RISK

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Introduction: Atrial fibrillation (AF) is the most common sustained arrhythmia in clinical practice and is strongly

associated with advanced age and structural heart disease. Although frequently managed as a primary cardiac disorder, AF may also occur secondary to systemic conditions such as infection or inflammation. Identifying reversible triggers is essential, yet restoration of sinus rhythm does not necessarily eliminate thromboembolic risk.

Case Report: We report the case of a 91-year-old female with multiple comorbidities, including chronic obstructive pulmonary disease on long-term oxygen therapy, severe aortic stenosis, arterial hypertension, prior transient ischemic attack, Parkinson's disease, mixed dementia, and right bundle branch block. She presented to the emergency department with resting dyspnea, palpitations, fatigue, and bilateral lower limb edema. Electrocardiography revealed atrial fibrillation with rapid ventricular response. Transthoracic echocardiography showed severe aortic stenosis (aortic valve area 0.63 cm²), moderate-to-severe mitral and tricuspid regurgitation, left ventricular hypertrophy, and reduced left ventricular ejection fraction (30%). Chest radiography demonstrated bilateral pleural effusions and right-sided pulmonary consolidations. Treatment included rate control, diuretics, anticoagulation, heart failure therapy, and broad-spectrum antibiotics for suspected pulmonary infection. Within several days, spontaneous conversion to sinus rhythm occurred alongside clinical improvement. On day 6, the patient developed fever and leukocytosis with elevated inflammatory markers. Antibiotic therapy was escalated following infectious disease consultation, resulting in normalization of laboratory parameters and maintenance of sinus rhythm. A subsequent infectious relapse required further antimicrobial adjustment, after which the patient showed favorable clinical evolution. Given a CHA₂DS₂-VASc score of 6, indicating high thromboembolic risk, long-term anticoagulation with reduced-dose apixaban was initiated, despite restoration of sinus rhythm. **Discussions :** In elderly polymorbid patients, AF may be triggered by systemic infection and inflammation rather than representing a primary arrhythmic disorder. In this case, the temporal association between infectious exacerbations and AF episodes supports inflammation-driven arrhythmogenesis. However, even when AF appears transient and reversible, thromboembolic risk persists. Current evidence supports anticoagulation based on thromboembolic risk stratification rather than AF reversibility. This case underscores the importance of comprehensive assessment, treatment of underlying triggers, and strict adherence to stroke prevention strategies. **Conclusions:** Infection-triggered atrial fibrillation may resolve with adequate treatment, but elevated thromboembolic risk remains. In high-risk elderly patients, long-term anticoagulation is essential regardless of apparent rhythm normalization.

Keywords: Atrial fibrillation, Infection-triggered arrhythmia, Elderly patient, CHA₂DS₂-VASc score

INFECTIOUS COMPLICATIONS OF ATYPICAL ULCERATIVE COLITIS UNDER BIOLOGIC THERAPY

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Introduction: Ulcerative colitis is a condition within the spectrum of inflammatory bowel diseases, whose clinical expression is represented by a diarrheal syndrome associated with the presence of pathological stool products. Characterized by an evolving course, often with alternating episodes of activity and remission, the disease may involve infectious complications that significantly influence prognosis. Our aim is to highlight the sinusoidal course of the disease and the challenge posed by septic intercurrent events in a patient undergoing immunosuppressive therapy. **Case Report:** We present the case of a 23-year-old patient diagnosed with ulcerative pancolitis in 2019, requiring corticosteroid therapy, with a total of 7 courses administered, who subsequently experienced sequential decompensation, documented endoscopically by progression from minimal mucosal changes to extensive colitis. At the same time, histopathological examination of biopsy specimens confirmed the diagnosis. The disease course was marked by multiple flare-ups, clinically manifested by diarrheal stools - more than 10 per day - accompanied by rectal bleeding and mucus, along with diffuse, intense abdominal pain, accentuated in the lower abdomen. Inflammatory activity was biologically supported by systemic inflammatory syndrome, with markedly elevated fibrinogen levels (900 mg/dL), iron-deficiency anemia, and elevated fecal calprotectin levels (957 µg/g). The severity of the condition required initiation of biologic therapy, with subsequent loss of therapeutic response to multiple agents introduced successively- Upadacitinib, Vedolizumab, Infliximab and Tofacitinib - resulting in a series of chained relapses. **Discussions :** The defining element of this case is the presence of recurrent infectious complications. The patient experienced three episodes of enterocolitis caused by *Clostridioides difficile*, confirmed by stool testing for toxins A+B, requiring targeted therapy with Vancomycin, Metronidazole, and Rifaximin. These episodes contributed to the difficulty in distinguishing disease flare from superimposed infection. The course was later complicated by severe perianal disease, with development of recurrent abscesses with

fistulous tracts, confirmed by abdominopelvic MRI. Bacteriological examination of purulent secretions revealed the presence of *Proteus mirabilis*, requiring dual antibiotic therapy and surgical drainage, along with staged interruption of immunomodulatory treatment. **Conclusions:** This case highlights the complex interrelationship between intestinal inflammatory activity with systemic impact, prolonged exposure to immunosuppressive therapies, and increased susceptibility to opportunistic infections. Integrated clinical and biological monitoring and the prompt initiation of appropriate antibiotic therapy are essential for optimizing therapeutic management and improving prognosis.

Keywords: Ulcerative colitis, biologic therapy, *Clostridioides difficile*, *Proteus mirabilis*

INFECTIVE ENDOCARDITIS: A DIAGNOSIS OR A THREAT?

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Introduction: Infective endocarditis (IE) is a potentially lethal disease, referring to infection of the heart valves or the cardiac inner lining, caused by infectious agents entering the bloodstream. It has a relatively low incidence, but poses substantial morbidity and mortality, this case being particularly significant because only 14% of patients present three or more complications. **Case Report:** We report the case of a 75-year-old male patient who was referred to our unit to evaluate the feasibility of an aortic valve (AV) implantation. He was recently diagnosed with severe calcific aortic stenosis, right frontal and occipital ischemic stroke and cerebral lacunar infarcts. He has a history of atrial flutter with variable ventricular conduction, paroxysmal atrial fibrillation, hypertension, and dyslipidemia. He presented with episodes of chest pain, night sweats, and fever. Laboratory tests reported a mildly elevated NT-proBNP, neutrophilia, elevated levels of C-reactive protein, and three negative blood cultures. We performed a transthoracic echocardiogram, supplemented by transesophageal examination, which revealed a mass on the posterior mitral valve (MV) leaflet, highly suggestive of infective vegetation and a periannular abscess. Moreover, it confirmed severe calcific aortic stenosis, moderate mitral regurgitation, mitral annular calcifications, and preserved left ventricular function. The CT scan showed MV vegetation, mitral annular abscess with extension into the myocardium, and indicated a possible focal myocarditis/abscess at the apex, without any new evidence of embolization. The case was interpreted as MV IE with negative blood cultures, and the HeartTeam decided to initiate empiric antibiotherapy and to reevaluate for the need of MV or AV intervention. At follow-up, he complains of dyspnea on mild exertion. We evaluated the suitability for TAVI and six months later he received a biological valve. Shortly, the patient developed complete atrioventricular block, thus a single-chamber pacemaker was implanted. **Discussions :** Culture negative IE limits pathogen identification and delays targeted therapy, requiring reliance on imaging and clinical criteria in which the aortic stenosis and mitral annular calcification may obscure or mimic vegetations. Due to the high operative risk and considering the high morbidity and mortality, the medical team decided to perform a TAVI. **Conclusions:** The case highlights the complexity of the treatment of IE which requires continuous adaptation to the multiple complications. The cardiac associated comorbidities were rapidly evolving and the patient had to be periodically monitored in order to obtain optimal results.

Keywords: infective endocarditis, abscess, atrioventricular block

INFERIOR ST-SEGMENT ELEVATION MYOCARDIAL INFARCTION MIMIC DUE TO ACUTE CHOLECYSTITIS

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Introduction: STElevation myocardial infarction (STEMI) is a timecritical diagnosis usually caused by acute coronary occlusion, but several noncardiac conditions can mimic STEMI on electrocardiography and mildly elevate troponin, leading to unnecessary invasive procedures and delayed treatment of the true etiology. Inferior STEMI mimics due to acute abdominal pathology with completely normal coronary angiography remain uncommon and diagnostically challenging, especially in relatively young patients. **Case Report:** A 46yearold woman with no known cardiovascular disease presented to the emergency department one hour after sudden onset of severe epigastric and lower chest pain radiating to the back, associated with nausea and diaphoresis. On arrival, blood pressure was 135/80 mmHg, heart rate 92 bpm, and oxygen saturation 98% on room air. The initial 12lead ECG

showed 2-3 mm STsegment elevation in leads II, III and aVF with subtle STsegment depression in leads I and aVL, fulfilling criteria for inferior STEMI. Highsensitivity troponin I at presentation was 120 ng/L (reference <28 ng/L). Given the STEMI pattern and ongoing pain, emergent coronary angiography was performed, revealing smooth, nonobstructive coronary arteries without plaque rupture or thrombus. Abdominal ultrasound and contrastenhanced CT demonstrated acute calculous cholecystitis with pericholecystic edema, but no biliary obstruction or perforation. The patient was managed conservatively with intravenous fluids, broadspectrum antibiotics and analgesia, without immediate surgery. Over the next 48 hours, her symptoms resolved, inflammatory markers decreased, and serial ECGs showed complete normalization of STsegment changes; troponin values declined in parallel. **Discussions** : This case illustrates an acute abdominal condition masquerading as inferior STEMI, with dynamic STsegment elevation and mild troponin rise but entirely normal coronary arteries, consistent with a STEMI mimic rather than myocardial necrosis. Similar reports suggest that gallbladder and other intraabdominal pathologies may produce transient ECG changes and biomarker elevations via autonomic imbalance, referred pain, and possible mechanical or inflammatory effects on the heart, underscoring the need for careful physical examination and consideration of alternative diagnoses in atypical presentations. **Conclusions:** Acute abdominal disease can present with a convincing inferior STEMI pattern and modest troponin elevation in relatively young patients with normal coronary arteries. Awareness of STEMI mimics and systematic reassessment after negative angiography are essential to avoid misdiagnosis, optimize management, and prevent unnecessary interventions.

Keywords: STEMI mimic, cholecystitis, STsegment elevation, troponin, coronary angiography

INNOVATIVE APPLICATION OF THE NASAL SMAS FLAP IN ORBITAL RECONSTRUCTION: A CASE REPORT

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Introduction: Squamous cell carcinoma of the eyelid is a rare malignant condition characterized by slow, painless progression, typically presenting as nodular or plaque-like lesions. Surgical excision is the mainstay of treatment, while orbital exenteration is reserved for cases with orbital invasion. This procedure is a radical surgical intervention involving removal of the entire orbital contents, including the globe, eyelids, retrobulbar tissues, and periosteum. **Case Report:** We report the case of a 64-year-old female patient who presented to the oncology department with a moderately differentiated (grade 2) squamous cell carcinoma located at the right medial canthus. Due to tumor invasion, a type IIa orbital exenteration was performed, requiring resection of a segment of the lamina papyracea. The resulting defect between the orbital and nasal cavities was initially reconstructed using a flap harvested from the inferior portion of the orbicularis oculi muscle. One month postoperatively, the patient presented with a wound infection caused by multidrug-resistant *Staphylococcus aureus*, necessitating surgical reintervention. Intraoperatively, a wide communication measuring approximately 1.5 cm was identified between the nasal and orbital cavities. Reconstruction of the defect was achieved using a pedicled nasal Superficial Musculoaponeurotic System (SMAS) flap incorporating perichondrium, the ipsilateral transverse nasalis muscle, and the adjacent aponeurosis located superior to the Pitanguy ligament, based on the dorsal nasal artery, and harvested through a midline nasal incision. To ensure stable coverage, a contralateral paramedian forehead flap based on the supratrochlear artery was also performed. **Discussions** : After orbital exenteration, most patients require reconstruction, as healing by secondary intention is slow and may delay adjuvant treatments such as radiotherapy, and is also associated with an increased risk of sinonasal fistula formation. The main objective of reconstruction is to restore the anatomical separation between the orbit, nasal cavity, paranasal sinuses, and skull base. In addition, achieving an acceptable aesthetic outcome through restoration of facial contours is also an important goal. Several reconstructive options are available, ranging from split-thickness skin grafts and regional flaps to free tissue transfer. **Conclusions:** This case highlights a novel application of the nasal SMAS flap for medial orbital wall reconstruction following orbital exenteration, demonstrating its potential as a reliable and well-vascularized option for selected medial orbital wall defects.

Keywords: orbital exenteration, nasal SMAS flap, reconstruction, squamous cell carcinoma

INTRAOPERATIVE DISCOVERY OF ENDOGENOUS OCHRONOSIS DURING TOTAL HIP ARTHROPLASTY IN A PATIENT WITH ANKYLOSING SPONDYLITIS: A CASE REPORT

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Introduction: Alkaptonuria is a rare autosomal recessive genetic disorder, caused by the incapacity to break down Homogentisic acid (HGA) and as a result, can lead to Endogenous Ochronosis. It is mainly caused by a deficiency of an enzyme that breaks down HGA. Endogenous Ochronosis is characterized by the accumulation of HGA in skin, cartilages, connective tissues and heart valves and can lead to a blue-dark pigmentation of the body parts that are affected. Alkaptonuria, can commonly be found in Central Europe (Slovakia). Ankylosing spondylitis is a type of severe arthritis that affects mainly the spine and sacroiliac joints, resulting in chronic back pain and stiffness, but also in the fusion of the vertebrae (bamboo spine). **Case Report:** In this case, a 71-year-old female with history of Ankylosing spondylitis; type 2 diabetes and high blood pressure, both controlled-on medication, is presented to the orthopedic clinic of the Emergency Country Clinical Hospital of Tîrgu Mureş, complaining of chronic back pain and severe peripheral arthritis that limited her back mobilization. Clinical and imaging examinations revealed that the patient has limited mobility of the lower limb, a deformed spine and primary osteoarthritis of the left hip (discovered post-radiography). Routine laboratory investigations were within normal limits except a slightly high fasting glucose (120mg/dL) and fibrinogen at the upper limit of normal that indicates a mild systemic inflammation. A left total hip arthroplasty with uncemented prosthesis was performed as the definitive surgical treatment. Postoperative management included thromboprophylaxis (LMWH), multimodal analgesia (Tramadol/ Doreta) and early mobilization through physiotherapy. Patient's prognostic was excellent, with significant reduction of the pain and a better mobilization compared to her preoperative status. **Discussions :** This case demonstrates the complexity of the diagnosis between Alkaptonuria and Ankylosing spondylitis, where the joint pain and the classic "bamboo spine" can easily be mistaken as the primary pathological condition. Only intraoperative visualization of the dark cartilage could confirm ochronosis, despite laboratory findings. In conclusion, the benefits of broad differential diagnoses are very important for achieving optimal functional outcomes. **Conclusions:** The purpose of this presentation is to highlight the diagnostic trap between these two conditions that can mimic or even coexist with each other. As shown before, the final diagnosis of endogenous ochronosis was achieved incidentally, marked by the characteristic dark-gray cartilage pigmentation. Ultimately the case shows that successful surgical management is vital for a functional recovery of the patient.

Keywords: Alkaptonuria, Cartilage pigmentation, Endogenous ochronosis, Differential diagnoses

INTRAOPERATIVE IDENTIFICATION OF HYDATID OF MORGAGNI DURING CAESAREAN DELIVERY FOR ANTEPARTUM BLEEDING: A CASE REPORT

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Introduction: In the setting of antepartum bleeding, intraoperative findings may introduce diagnostic ambiguity. Incidental adnexal lesions identified during caesarean section can be misinterpreted as contributory pathology, potentially altering surgical decision-making. Hydatid of Morgagni is a benign paratubal cyst arising from Müllerian duct remnants, typically located at the fimbrial end of the fallopian tube. It is usually asymptomatic and identified incidentally during gynecological surgery. The aim of this case is to highlight an incidental intraoperative diagnosis of Hydatid of Morgagni in a term pregnancy complicated by antepartum bleeding at the onset of labour, and to emphasise the importance of differentiating incidental adnexal pathology from true obstetrical causes. **Case Report:** A 26-year-old primigravida was admitted as an emergency with irregular uterine contractions and metrorrhagia at the onset of labour. Clinical and ultrasonographic assessment confirmed a singleton term pregnancy with a live fetus in cephalic presentation. Due to persistent vaginal bleeding of unclear origin, a lower segment transverse caesarean section was performed. Intraoperatively, a small pedunculated paratubal cyst was incidentally identified and excised. The specimen was submitted for histopathological evaluation, to exclude haemorrhagic or torsive complications. Both maternal and neonatal postoperative courses were uneventful. Histopathological examination described a small cystic structure lined by flattened epithelium, without evidence of haemorrhage, inflammation, or malignancy, and consistent with a Hydatid of Morgagni. No intraoperative or

pathological findings supported a causal link between the lesion and the antepartum bleeding. **Discussions :** Hydatid of Morgagni is predominantly described in gynecologic literature as an incidental Müllerian remnant, with few reports in obstetric practice. Cases documented during pregnancy are rare and most commonly relate to torsion rather than bleeding. In this case, the absence of macroscopic or histopathological evidence of vascular compromise supports its incidental nature. Considering that antepartum bleeding at term is usually associated with placental or cervical causes, careful clinicopathological correlation remains essential in emergency obstetric settings. **Conclusions:** This case illustrates the importance of careful intraoperative assessment of incidental adnexal findings during obstetric emergencies. Recognition of Hydatid of Morgagni supports appropriate surgical decision-making, preventing misattribution of bleeding to unrelated pathology and overtreatment.

Keywords: Hydatid of Morgagni, antepartum bleeding, caesarean section, adnexal diseases

INTRAVENTRICULAR HEMORRHAGE WITH PROGRESSIVE HYDROCEPHALUS IN A PRETERM NEONATE: CLINICAL COURSE AND MANAGEMENT

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Introduction: Intraventricular hemorrhage (IVH) is the bleeding that occurs in the brain's ventricles, primarily affecting premature infants born before 32 weeks of gestation due to the fragility of the blood vessels in the germinal matrix. **Case Report:** We present the case of a very low birth weight (VLBW) neonate, born at 30 weeks of gestation with a birth weight of 1,350 grams. The infant was delivered via cesarean section from a well-monitored twin pregnancy. The Apgar scores were 7 at 1 minute, 8 at 5 minutes, and 8 at 10 minutes, and the preterm infant immediately developed respiratory distress syndrome after birth. Exogenous surfactant was given through orotracheal intubation, followed by mechanical ventilation. At 12 hours after birth, his condition worsened, with oxygen saturation dropping to 70%. Chest radiography showed a left-sided pneumothorax, which required the insertion of a chest drain. On the second day of life, a head ultrasound was conducted, revealing bilateral intraventricular hemorrhage, classified as Grade III, which was complicated by posthemorrhagic ventriculomegaly. This condition became clinically apparent on the 17th day of life when the infant's overall condition suddenly deteriorated. A lumbar puncture was performed to drain cerebrospinal fluid (CSF). Neurosurgical consultation recommended the insertion of a subcutaneous ventricular reservoir (ventricular access device) for repeated reservoir taps and CSF evacuations (20-60 mL/day). The ventriculomegaly progressed to hydrocephalus, and head ultrasounds were utilized to monitor the condition. On day 58, the patient exhibited pallor and psychomotor agitation. Laboratory evaluations revealed severe hyponatremia (<100 mEq/L), which was effectively treated with intravenous electrolyte correction. A ventriculoperitoneal shunt was placed on day 72 of life when CSF protein decreased to less than 1.5 g/L to relieve ventricular pressure, with no postoperative complications. **Discussions :** Posthemorrhagic ventriculomegaly can progressively worsen, potentially causing neurological damage and structural brain injury. Regular monitoring and prompt neurosurgical intervention are essential to prevent long-term deficits. Premature birth can lead to complications due to the incomplete development of anatomical structures, particularly in the intracranial vessels, germinal matrix, and supporting tissues. This increases the risk of intraventricular hemorrhage and can result in progressive posthemorrhagic hydrocephalus. These conditions require careful monitoring and may necessitate repeated cerebrospinal fluid drainage, particularly in cases of reservoir-dependent hydrocephalus. **Conclusions:** Preterm infants have a higher risk of developing severe intraventricular hemorrhage and hydrocephalus that may require neurosurgical intervention. The optimal management involves a multidisciplinary approach.

Keywords: Intraventricular hemorrhage, VLBW, Posthemorrhagic hydrocephalus, Pneumothorax

INVASIVE LOBULAR CARCINOMA WITH AN INITIALLY UNIDENTIFIED PRIMARY TUMOR AND AN UNFAVORABLE POST-TREATMENT COURSE – A CASE REPORT

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Introduction: Invasive lobular breast carcinoma exhibits morphological features that can complicate imaging detection and histopathological diagnosis and is frequently associated with clinicopathological discrepancies and

atypical presentations. **Case Report:** We present the case of a 52-year-old female patient in whom breast MRI revealed suspicious lesions in the right breast, associated with right axillary lymphadenopathy (BI-RADS 4). Tru-cut breast and lymph node biopsies were performed. The breast biopsy revealed atypical lobular hyperplasia without evidence of invasion, while the lymph node biopsy confirmed metastatic lobular invasive breast carcinoma; immunohistochemically: strongly positive for estrogen and negative for E-cadherin. Following the oncology committee's review, it was recommended to determine the primary or secondary origin based on clinical and imaging findings. The patient underwent systemic oncological treatment, followed by a right mastectomy with axillary dissection. Histopathological examination revealed post-treatment residual invasive lobular carcinoma, with a classic lobular in situ component (20%) and an RCB III score (3.664), corresponding to extensive residual disease at stage ypT2N1aMx. The tumor exhibited lymphatic, vascular, and perineural invasion, as well as post-treatment changes. Of the 23 lymph nodes examined, 3 showed metastases, one with extracapsular extension. The immunohistochemical profile of the residual tumor showed ER 80%, PR 70%, Ki-67 35%, and HER2 score 2+ (equivocal). The posterior resection margin was less than 1 mm from the invasive component. **Discussions :** This case highlights the diagnostic challenges of invasive lobular carcinoma, which may remain unrecognized on primary breast biopsy and initially present as lymph node metastases. It also illustrates an incomplete therapeutic response and an aggressive profile, underscoring the importance of clinical-imaging correlation and multidisciplinary management in these situations. **Conclusions:** Invasive lobular carcinoma is still a challenge, but the multidisciplinary approach has led to increasingly better results for the prognosis of patients.

Keywords: Lobar carcinoma, Metastases, Recurrence

INVASIVE MACROPROLACTINOMA PRESENTING WITH CENTRAL HYPOGONADISM AND SECONDARY OSTEOPOROSIS: A CASE REPORT

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Introduction: Prolactinomas are the most common functioning pituitary tumors and may cause hypogonadism, infertility, and mass effects when large or invasive, posing diagnostic and therapeutic challenges in clinical practice

Case Report: A 53-year-old man with type 2 diabetes, a history of chronic smoking, and alcohol abuse was admitted to the endocrinology clinic for erectile dysfunction. In 2020, he was diagnosed with a pituitary macroadenoma measuring 37 mm. The tumor extended into the surrounding area and exhibited significantly elevated prolactin levels (2696 ng/mL), leading to central hypogonadism. He started treatment with cabergoline but stopped after one year without follow-up. In December 2024, he returned to the endocrinology clinic with recurring hyperprolactinemia (870 ng/mL) and persisting central hypogonadism. Pituitary MRI revealed tumor growth to 44 mm with invasion of the sphenoid sinus and the left cavernous sinus. The patient did not report headache or cerebrospinal fluid rhinorrhea. The visual field examination showed absolute scotomas in both eyes. Cabergoline therapy was restarted and gradually titrated to 2.5 mg/week, leading to normalization of prolactin levels and restoration of gonadal function. During evaluation, central adrenal insufficiency was considered, but the stimulation test with synthetic ACTH ruled it out. The patient was also found to have secondary osteoporosis with grade I T7 vertebral compression fracture, for which treatment with bisphosphonates was initiated. At the last evaluation, one year after cabergoline reinitiation, prolactin and testosterone levels were within the normal range. Pituitary MRI confirmed tumor reduction to 31 mm, indicating both biochemical and structural response to therapy.

Discussions : This case highlights the challenges of managing a large invasive prolactinoma in a male patient with multiple comorbidities. Despite aggressive features such as cavernous sinus invasion and partial carotid artery encasement with sphenoid sinus extension, reintroduction of cabergoline resulted in significant tumor shrinkage and normalization of prolactin levels. This demonstrates the effectiveness of dopamine agonists, even in invasive macroprolactinomas. **Conclusions:** In cases of invasive macroprolactinomas, treatment with dopamine agonists can lead to significant biochemical normalization and tumor shrinkage. Treatment interruption may lead to tumor progression; therefore, long-term therapy and strict adherence are essential. This case highlights the importance of prompt diagnosis and strict adherence to treatment to avoid complications like central hypogonadism and secondary osteoporosis.

Keywords: prolactinoma, invasive pituitary macroadenoma, hyperprolactinemia, cabergoline

ISCHEMIC STROKE IN THE VERTEBROBASILAR TERRITORY JUXTAPOSED WITH OPIOID ADMINISTRATION: CLINICAL OVERLAP AND DIAGNOSTIC COMPLEXITY

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Introduction: Ischemic stroke is a major contributor to global morbidity and mortality. The cerebral vasculature depends on two essential circulatory systems, the anterior and posterior circulations, which are connected through the circle of Willis. The posterior circulation has particular features, and its clinical presentation is often more diverse, frequently involving disturbances of consciousness, psychomotor changes, and other brainstem or cerebellar symptoms. **Case Report:** We present the case of a 66-year-old woman with a history of smoking, hypertension, and chronic obstructive pulmonary disease, who presented to the emergency department of a community-level center with headache, dizziness, nausea, and coordination disturbances during a hypertensive episode. The patient received fentanyl for severe headache, after which she developed altered mental status, prompting transfer the following day to the emergency department in Târgu Mureș. After administration of naloxone, her neurological examination revealed anisocoria with right-sided mydriasis, right homonymous hemianopia, partially reducible oculocephalic deviation to the left, mild right central facial paresis, right ataxic hemiparesis, bilateral positive Babinski sign, and right limb dysmetria. The Glasgow Coma Scale score was 10 (M5, E2, V3). Emergency cranial computed tomography (CT) demonstrated a subacute ischemic stroke in the territory of the left posterior cerebral artery and the ipsilateral cerebellar hemisphere. Follow-up CT revealed subacute ischemic lesions involving the left insula and thalamus, and bilateral cerebellar infarction. The patient was hospitalized and treated with antiplatelets, statins, blood pressure control, and daily physiotherapy. The clinical course was favorable, and the patient was discharged after 13 days with the following status: anisocoria with right-sided mydriasis, right homonymous hemianopia, right central facial palsy, right hemiparesis, truncal ataxia, severely impaired gait requiring bilateral assistance for even a few steps, right limb dysmetria, and preserved consciousness and orientation. **Discussions :** The posterior circulation, particularly when the thalamus is involved, can produce distinctive syndromes that include disturbances of consciousness. In this case, the sedative effects of fentanyl overlapped with the evolving neurological deficits. The involvement of multiple vascular territories led to a complex presentation with altered mental status and cerebellar, sensorimotor, and visual disturbances. **Conclusions:** Careful neurological examination remains essential in patients presenting with altered mental status or other acute neurological symptoms, as posterior circulation strokes may present with subtle or atypical clinical signs and can be easily overlooked in the presence of confounding factors such as sedative medication.

Keywords: ischemic stroke, altered mental status, opioids, neurological examination

ISOLATED CONGENITAL PULMONARY AIRWAY MALFORMATION (CPAM) TYPE II DIAGNOSED AT 21 WEEKS OF GESTATION: PATHOLOGICAL CONFIRMATION FOLLOWING THERAPEUTIC ABORTION

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Introduction: Congenital pulmonary airway malformation (CPAM), known previously as congenital cystic adenomatoid malformation (CCAM), is a rare respiratory tract development anomaly that is part of the congenital lung malformations (CLM). CPAM type II, according to the Stocker classification, comprises 15-30% of cases and is associated with a higher incidence of other congenital anomalies, leading to a poorer prognosis. **Case Report:** A 29-year-old woman with a scarred uterus underwent prenatal ultrasound at 21 weeks + 1 day gestation, revealing fetal left lung cystic adenomatoid malformation. A therapeutic abortion was performed after interdisciplinary counseling. The product of conception consisted of a male fetus weighing 553 g and the placenta. Pathological examination of the fetus revealed an enlarged left lung (6 g) with multiple small cystic lesions. Microscopic examination demonstrated distorted pulmonary architecture with multiple cystic structures lined by cuboidal epithelium, focally columnar, without atypia. Reduced bronchiolar components and alveolar hypoplasia were present, confirming CPAM type II, according to the Stocker classification. The right lung showed normal canalicular-stage development and no abnormalities. The placenta (143 g) demonstrated immature and intermediate chorionic

villi without evidence of maternal vascular malperfusion or infection. All other visceral organs (heart, thymus, kidneys, liver, stomach) showed morphology appropriate for gestational age without abnormalities. **Discussions :** Congenital pulmonary airway malformation results from abnormal airway development, characterized by defective cell proliferation in the tracheobronchial structures and inadequate differentiation of epithelial and mesenchymal components. CPAM type II lesions are defined by cysts lined by ciliated columnar epithelium, measuring up to 2.5 cm, interspersed in apparently normal parenchyma and slightly malformed alveolar spaces. CPAM type II is also associated with other congenital anomalies in approximately 26% of cases, most commonly involving the cardiovascular system. This case is unusual because it lacks associated congenital anomalies, which is clinically significant. Furthermore, recent molecular studies have elucidated distinct pathogenic mechanisms for different types of CPAM. Thus, unlike type I and III CPAM, which present KRAS mutations, type II CPAM is consistently KRAS-negative and probably results from bronchial obstruction during development. This difference is also supported by the histological features in our case, including the simple cyst architecture and the absence of epithelial complexity typical of KRAS-mutated lesions. **Conclusions:** Early prenatal detection of congenital lung malformations enables informed multidisciplinary decision-making. Pathological documentation confirms prenatal diagnosis and contributes to the understanding of CPAM morphology, providing a verosimilar diagnosis of CPAM subtype through meticulous microscopic evaluation of the fetus and placenta.

Keywords: congenital pulmonary airway malformation, congenital cystic adenomatoid malformation, fetal lung anomaly, prenatal diagnosis

LAPAROSCOPIC MANAGEMENT OF A BOSNIAK IV RENAL CYST WITH ATYPICAL PRESENTATION IN A 28-YEAR-OLD PATIENT: A CASE REPORT

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Introduction: The widespread availability of routine ultrasound has led to a dramatic increase in the number of incidentally diagnosed asymptomatic renal masses. We describe a 28-year-old patient whose first ultrasound revealed a complicated cystic lesion in the right kidney's upper pole. An abdominal CT scan was carried out to properly diagnose the lesion and inform treatment choices because such results represent a significant risk of cancer. This instance highlights the value of ultrasonography screening and genetic testing in situations of early-onset illness, since 70% of hereditary kidney malignancies manifest before the age of 46. **Case Report:** Clinically, the patient was asymptomatic, with no signs of hematuria or lower back pain, and was in good general health with normal laboratory values. Abdominal-pelvic CT imaging revealed a 40x33 mm fluid-filled mass at the right upper pole of the kidney. This mass contained a 10x6 mm solid nodule, which took up iodine quickly. The diagnosis of Bosniak IV complex cyst was later confirmed by MRI, which confirmed the presence of a gadolinium-enhancing endocystic mural nodule and multiple septa. The absence of pathological lymphadenopathy and suspicious bone lesions led to the diagnosis to a localized renal tumor, necessitating differentiation from a hemorrhagic cyst or other benign renal masses given the high risk of malignancy. The therapeutic management involved a right laparoscopic partial nephrectomy using a transperitoneal approach under general anesthesia. The procedure involved mobilization of the ascending colon, identification of the renal hilum, and selective clamping of the superior renal artery, followed by resection of the Bosniak IV lesion with safety margins. Reconstruction of the renal parenchyma was performed in two layers using self-locking sutures and Hem-o-lok clips. The procedure was successfully completed after verifying hemostasis after declamping, placing a drainage tube in the renal fossa, and performing anatomical suturing, ensuring preservation of renal function and optimal postoperative monitoring. **Discussions :** The rarity of a Bosniak IV cyst at age 28 highlights the significance of regular imaging. A partial nephrectomy was carried out in accordance with EAU standards. WHO/ISUP grade 2 clear cell renal cell carcinoma with tumor-free margins was verified by histopathology, supporting the surgical treatment of these complicated lesions. **Conclusions:** This case demonstrates the importance of routine ultrasound in the early detection of asymptomatic renal masses in young people. Laparoscopic partial nephrectomy was the most appropriate therapeutic strategy to achieve complete removal of the lesion with necessary preservation of renal function in a 28 years old patient.

Keywords: Bosniak IV renal cyst, Laparoscopic partial nephrectomy, Young adult, Asymptomatic renal mass

LAPAROSCOPIC MANAGEMENT OF A RUPTURED CORPUS LUTEUM CYST IN EARLY PREGNANCY

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Introduction: Corpus luteus cyst rupture is an uncommon but serious cause of emergency room presentation in women, with excruciating abdominal pain, leading to the suspicion of acute surgical abdomen. Pregnancy state adds to the severity of the presentation, with the risk of fetal distress. Prompt and accurate clinical evaluation is key to correct management and quick surgical intervention. **Case Report:** We present the case of a 28-year-old, 5-week pregnant female patient who presented in the ER with severe abdominal pain. Relevant patient history: 5 pregnancies (including the current), three 1st trimester miscarriages, and a caesarean birth. An ultrasound scan detected peritoneal fluid, with low haemoglobin and haematocrit levels indicating anaemia and blood loss, and imaging suggestive of clots in the Morrison and Douglas recesses. With the added risk of a pregnant uterus, an emergency laparoscopy was performed, with the detection of massive hemoperitoneum, subsequently drained, and an ovarian cyst, associated with ruptured haemorrhagic corpus luteus. Several clots were extracted, and the histopathological exam revealed suggestive changes for a haemorrhagic corpus luteus cyst. At the moment, the patient is 14 weeks pregnant, with no further complications. **Discussions :** Corpus luteus cysts are common findings during pregnancy, but their rupture, which can lead to significant hemoperitoneum, is quite rare. Despite its low prevalence, it represents an important differential diagnosis in pregnant patients, mostly for the exclusion of an ectopic pregnancy. The serum beta-human chorionic gonadotropin level helps in obtaining the correct diagnosis. In other case reports, hemoperitoneum was detected by CT despite the risk of radiation exposure to the foetus, or by MRI. Surgical treatment on a pregnant uterus is risky, but it can be necessary to prevent complications and to preserve the pregnancy. **Conclusions:** Ruptured corpus luteus cysts represent a cause of acute surgical abdomen in women in their fertile period, with an increased danger in pregnant patients. Surgical management is a must, despite the fetal risk, and it represents a difficult but satisfying procedure. Our patient will be monitored periodically to prevent additional complications and ensure a successful delivery.

Keywords: Corpus luteus cyst, Pregnancy, Laparoscopy, Hemoperitoneum

LARGE BILATERAL OVARIAN TUMORS WITH SUSPECTED TERATOMA – SURGICAL MANAGEMENT AND FAVORABLE OUTCOME

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Introduction: Ovarian tumors represent a common pathology in gynecological practice, ranging from benign cystic formations to lesions with malignant potential. According to data reported in PubMed-indexed literature, ovarian teratomas and dermoid cysts are among the most frequent benign tumors in young women and may become large and symptomatic due to mass effect and compression of pelvic organs. **Case Report:** We present the case of a 30-year-old patient admitted to the Obstetrics and Gynecology Clinic for abdominal pain and bilateral adnexal masses. Imaging investigations and clinical evaluation revealed large bilateral ovarian tumors with compressive phenomena. After adequate preoperative preparation, surgery was performed under general anesthesia consisting of left oophorectomy and right ovarian cystectomy. The intraoperative findings suggested cystic formations with dermoid content. **Discussions :** Intraoperatively, the left ovary was found to be almost entirely transformed into a cystic mass of approximately 15×15 cm with heterogeneous content, therefore a left oophorectomy was performed. On the right ovary, several dermoid cysts were identified and cystectomy was carried out with preservation of ovarian parenchyma. Postoperative evolution was favorable, and the patient was discharged in good general condition with normal biological parameters and a healing surgical wound. **Conclusions:** Large bilateral ovarian tumors may raise diagnostic and therapeutic challenges and require an individualized surgical approach. Preservation of ovarian function whenever possible remains a major objective in young patients. Early diagnosis and appropriate surgical management significantly contribute to a favorable prognosis and prevention of complications.

Keywords: ovarian tumors, ovarian teratoma, dermoid cyst, cystectomy

LETROZOLE-INDUCED SEVERE MIXED HEPATOCELLULAR/CHOLESTATIC DRUG-INDUCED LIVER INJURY CONFIRMED BY BIOPSY: A SIX-MONTH LATENCY DIAGNOSTIC CHALLENGE

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Introduction: Aromatase inhibitors are standard adjuvant therapy for oestrogen-receptor-positive breast cancer and are considered hepatologically safe. Reported letrozole hepatotoxicity is rare (<1 % of users), typically mild and transient. Biopsy-documented letrozole-induced liver injury (DILI) has been reported only in isolated case reports, predominantly with hepatocellular patterns. We present a diagnostically challenging case of severe mixed-pattern DILI attributed to letrozole. **Case Report:** A 70-year-old woman with hypertension, type-2 diabetes and right-breast carcinoma (surgery 08/2022, adjuvant radiotherapy) had received letrozole 2.5 mg/day for six months alongside perindopril/indapamide, amlodipine and sitagliptin/metformin. She presented to the emergency department with watery diarrhea (7-8 episodes/day), low-grade fever, fatigue and jaundice. Examination revealed scleral icterus only. Biochemistry showed severe mixed injury: alanine aminotransferase 554 U/L, aspartate aminotransferase 717 U/L, alkaline phosphatase 650 U/L, γ -glutamyl transferase 676 U/L, total/direct bilirubin 2.5/1.8 mg/dL; R-ratio=3.3, confirming mixed hepatocellular-cholestatic pattern. CT and MR-cholangiopancreatography showed steatotic but lesion-free liver with normal bile ducts. Infectious screening (hepatitis A-E, CMV, EBV, leptospira, C. difficile, SARS-CoV-2) was negative. Autoimmune markers (ANA, AMA, ASMA, anti-LKM-1, SLA/LP) and immunoglobulins were negative. Ceruloplasmin, ferritin and transferrin saturation were normal. Sitagliptin/metformin was stopped and replaced with insulin without biochemical improvement. Enzymes peaked at ALT 891 U/L, AST 931 U/L, bilirubin 16 mg/dL, GGT 1333 U/L and ALP 953 U/L. Ultrasound-guided liver biopsy demonstrated canalicular cholestasis, multinucleated regenerative hepatocytes and eosinophil-rich portal infiltrates compatible with drug-induced hepatitis. Letrozole was withdrawn. Biochemistry improved steadily: ALT 95 U/L and bilirubin 1.56 mg/dL at two weeks, ALT 42 U/L and bilirubin 0.87 mg/dL at four weeks. Cautious letrozole re-introduction under strict biochemical surveillance was planned given ongoing oncologic need. **Discussions :** This case expands the phenotypic spectrum of letrozole hepatotoxicity by demonstrating severe mixed injury with pronounced cholestasis, contrasting sharply with previously reported mild hepatocellular patterns. The six-month latency aligns with the recognised onset window for aromatase-inhibitor DILI and underscores the need for sustained clinical vigilance well beyond the initial prescribing period. The R-ratio at presentation proved instrumental, directing simultaneous hepatitic and cholestatic work-up and preventing premature diagnostic closure. Exhaustive exclusion of viral, autoimmune, metabolic and obstructive etiologies combined with eosinophil-rich biopsy findings and near-complete biochemical normalisation within four weeks of withdrawal provided compelling de-challenge causality evidence. **Conclusions:** Letrozole can provoke clinically significant mixed-pattern DILI despite its favourable hepatic safety profile. A disciplined stepwise algorithm: R-ratio phenotyping, comprehensive exclusion of alternatives, liver biopsy, and documented de-challenge response secures diagnosis and guides safe ongoing oncologic management.

Keywords: Letrozole, Drug-induced liver injury, Mixed hepatocellular-cholestatic hepatitis, Breast cancer adjuvant therapy

LIFE-SAVING RADICAL GASTRECTOMY FOR EXULCERATED GASTRIC CARCINOMA IN A PATIENT WITH DECOMPENSATED PRIMARY BILIARY CIRRHOSIS: A RARE CASE REPORT

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Introduction: Upper Gastrointestinal Bleeding (UGIB) in patients with liver cirrhosis is typically associated with ruptured esophageal varices. The occurrence of non-variceal bleeding due to advanced gastric malignancy in the context of Primary Biliary Cirrhosis (PBC) represents an extremely rare and complex clinical entity. The surgical management of these patients is fraught with high mortality risks due to the triad of coagulopathy, portal hypertension, and hypoalbuminemia. This is a challenging case where emergency gastrectomy may be the only

viable option for such complex situations to control hemorrhagic shock in a decompensated cirrhotic patient, emphasizing the importance of multidisciplinary management. **Case Report:** A 63-year-old female was admitted to the emergency department with hematemesis, melena, and signs of hemorrhagic shock (BP 100/80 mmHg, HR 141 bpm). Her medical background revealed Primary biliary cirrhosis (Child-Pugh score B, MELD 6), portal hypertension, hypersplenism, and mixed dyslipidemia. Admission laboratory findings indicated severe anemia (hemoglobin 6.0 g/dL, hematocrit 19.8%) and coagulation disturbances. Emergency upper endoscopy identified a large, friable, exulcerated tumor extending from the gastric angle to the cardia along the lesser curvature, with active bleeding. Initial conservative management included fluid resuscitation, blood transfusions, high-dose intravenous Pantoprazole, and hemostatic agents (Tranexamic acid). Although this conservative approach was attempted, the bleeding persisted despite maximal pharmacological and endoscopic measures, necessitating emergency surgical intervention. An explorative laparotomy was performed, revealing a macronodular cirrhotic liver, significant carcinomatous ascites, and an 8x6 cm tumor penetrating the serosa. Given the proximal extension of the tumor and the failure of conservative hemostasis, a total gastrectomy of necessity with D1+ lymphadenectomy was performed. Reconstruction was achieved via a Roux-en-Y esophago-jejunostomy. Intraoperative challenges included extensive adhesiolysis and management of diffuse bleeding secondary to portal hypertension. Postoperatively, the patient was managed in the ICU, extubated at 24 hours, and demonstrated a favorable evolution. She was discharged in a stable condition, with nutritional recommendations and oncological referral. **Discussions :** This case highlights that while PBC significantly elevates surgical risk, it is not an absolute contraindication for a radical gastrectomy in emergency circumstances. Total gastrectomy with D1+ lymphadenectomy remains the gold standard for refractory neoplastic bleeding, even in decompensated patients. **Conclusions:** Survival relies heavily on rapid surgical decision-making and precise intraoperative technique to mitigate the effects of coagulopathy and portal hypertension, underlining the necessity of a multidisciplinary approach in such complex cases.

Keywords: Primary biliary cirrhosis, total gastrectomy, gastric cancer, UGIB

LIMB SALVAGE IN REFRACTORY TYPE 1 DIABETES: THE ROLE OF ADVANCED HYBRID CLOSED-LOOP SYSTEMS IN OVERCOMING SEVERE MEDIOCALCINOSIS AND MULTI-ORGAN FAILURE

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Introduction: Long-standing Type 1 Diabetes Mellitus (T1DM) complicated by severe macrovasculopathy and glycemic instability often leads to major limb loss. This case highlights the role of Advanced Hybrid Closed-Loop (AHCL) technology in achieving limb salvage for a patient with non-compressible arteries and persistent polymicrobial infections, where traditional intensive insulin therapy failed for nearly a decade. **Case Report:** A 61-year-old male with a 35-year history of T1DM presented with numerous multi-organ complications, including severe proliferative diabetic retinopathy requiring bilateral anti-VEGF therapy and laser photocoagulation, KDIGO G3aA1 chronic kidney disease, and Stage III sensory-autonomic polyneuropathy with a Toronto Clinical Neuropathy Score of 9. Lower-extremity status was critical, characterized by profound mediocalcinosis with non-compressible arteries, indicated by an Ankle-Brachial Index (ABI) of 2.0 and a history of successive digital amputations of the left foot involving toes I, IV, and V. Historically, management under multiple daily injections was marked by extreme glycemic lability between 50 mg/dL and 500 mg/dL and chronic decompensation with HbA1c levels reaching 9.63%. This unstable metabolic environment facilitated persistent polymicrobial colonization, yielding cultures positive for *Staphylococcus aureus*, *Klebsiella* spp., *Pseudomonas aeruginosa*, *Proteus mirabilis*, and *Enterococcus faecalis*. In August 2025, the patient transitioned to the Medtronic MiniMed 780G AHCL system. By February 2026, the AHCL system achieved a Time in Range (TIR) of 77%, a Glucose Management Indicator (GMI) of 7.2%, and a Coefficient of Variation (CV) of 29.7% under 97% SmartGuard™ usage, correlating with a laboratory HbA1c of 7.0%. This attainment of glycemic stability facilitated the successful cicatrization of the surgical stump, halting a 7-year cycle of recurrent sepsis. **Discussions :** The AHCL system effectively compensated for the patient's severely impaired glycemic counter-regulation. While mediocalcinosis often complicates limb salvage by rendering traditional perfusion assessments unreliable, attaining a consistent TIR > 70% likely disrupted the pro-inflammatory cycle fueled by chronic hyperglycemia. By automating real-time insulin modulation to mitigate nocturnal hypoglycemia and postprandial hyperglycemia, the technology provided a stable biochemical environment that finally allowed for wound closure in a high-risk surgical candidate. Systemic stability from the MiniMed 780G extends clinical benefits far beyond the diabetic foot, protecting against progression of

retinopathy, nephropathy, and polyneuropathy. **Conclusions:** For T1DM patients with advanced multi-organ complications, AHCL technology is a limb-salvage necessity. This case proves that technological metabolic stabilization can override even profound structural macrovascular constraints, preventing imminent major lower-extremity amputation and reversing a multi-year cycle of septic and surgical failure.

Keywords: Type 1 Diabetes, MiniMed 780G, Limb Salvage, Mediocalcinosis

LIVER VIRAL C CIRRHOSIS COMPLICATIONS AFTER OBTAINING SUSTAINED VIROLOGICAL RESPONSE (SVR) AFTER DIRECT-ACTING ANTIVIRAL TREATMENT

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Introduction: Chronic hepatitis C infection is an important cause of liver cirrhosis and is associated with systemic complications. DAAs helps to achieve sustained virological response (SVR) and slow down disease progression. Despite treatment, patients with advanced cirrhosis remain at risk of long-term hepatic and systemic complications. It is necessary to carry out appropriate monitoring post treatment in these patients. **Case Report:** A 71-year-old male patient was diagnosed with chronic viral infection C, and liver cirrhosis at the moment of diagnosis of infection. The patient was prescribed a 12-week antiviral treatment regimen with Ombitasvir/Paritaprevir/Ritonavir (Viekirax) and Dasabuvir (Exviera), achieving SVR. The patient presented with a four-month history of reduced appetite after six years during follow up. The patient had also reported unintentional weight loss of approximately 6 kg. Personal medical history revealed several comorbidities, including advanced cardiovascular disease and chronic kidney disease. Clinical and paraclinical investigations revealed liver cirrhosis and associated systemic complications despite viral eradication. **Discussions:** Evaluation of this case confirms that SVR does not necessarily means complete reversal of hepatic damage particularly in patients with known cirrhosis. Replication of virus is decreased with use of DAA, but liver structure and functions remain impaired. This leads to serious complications like portal hypertension and multisystemic involvement. The persistence of cardiovascular comorbidities like heart failure, valvular disease and chronic kidney disease further complicate management of such patients and worsens prognosis. This highlights the need for long term surveillance even after SVR. It also emphasizes the management of cirrhosis, CVD and CKD related complications using multidisciplinary approach. **Conclusions:** The risk of liver cirrhosis related complications is not completely abolished even after the achievement of Sustained virological response (SVR). Patients who are suffering from advanced stages of liver fibrosis or cirrhosis need lifelong monitoring and care. Initiation of DAA in the early course of disease is very important to improve long term results and overall survival.

Keywords: Hepatitis C, SVR, Liver Cirrhosis, DAA

LOCALLY ADVANCED ESOPHAGEAL SQUAMOUS CELL CARCINOMA WITH SUBCARDIAL GASTRIC EXTENSION: A CASE REPORT

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Introduction: Esophageal squamous cell carcinoma (ESCC) is known as an aggressive malignancy often diagnosed at advanced stages. Subcardial extension with synchronous gastric involvement and limited metastatic burden presents diagnostic and therapeutic challenges. We report a case of infiltrative ESCC with gastric extension in an elderly patient, highlighting the importance of multimodal imaging and histopathological confirmation for accurate staging and management. **Case Report:** A 69-year-old male presented following computed tomography (CT) revealing suspicious esophageal wall thickening. Upper gastrointestinal endoscopy demonstrated a friable, hemorrhagic vegetating tumor with subcardial extension up to the Z-line, actively bleeding on contact; multiple biopsies were obtained. Histopathological examination confirmed moderately differentiated keratinizing squamous cell carcinoma infiltrating the esophageal and cardiac gastric mucosa. PD-L1 immunohistochemistry showed a combined positive score of 0. Thoracic CT excluded pulmonary metastases but revealed minimal mediastinal lymphadenopathy and periesophageal fat densification. Abdominal magnetic resonance (MRI) imaging showed irregular parietal gastric thickening of the cardia with extension to the fornix and lesser curvature (up to 28 mm), with diffusion restriction and inhomogeneous contrast enhancement, suggestive of serosal invasion and possible pancreatic extension due to loss of the cleavage plane. Multiple perigastric and

lower paraesophageal lymph nodes were identified, some partially necrotic, measuring up to 20x18mm. Some periportal and mesenteric lymph nodes with dimensions up to 6,5mm in short axis were seen, without free liquid at the level of abdominal peritoneal recesses. Brain MRI excluded secondary intracranial lesions. The patient remained hemodynamically stable and was referred for oncologic and surgical evaluation. **Discussions** : This case illustrates locally advanced ESCC with gastric extension and limited systemic spread. Accurate characterization required integration of endoscopy, histopathology, immunohistochemistry, and multimodal imaging. PD-L1 negativity may influence eligibility for immunotherapy, emphasizing the relevance of molecular profiling in treatment planning. Early identification of locoregional extension is essential for staging and determining surgical versus systemic therapeutic strategies. Multidisciplinary management is mandatory to optimize outcomes, particularly in elderly patients with complex anatomical involvement. **Conclusions**: ESCC with subcardial gastric extension represents a challenging presentation requiring a comprehensive diagnostic assessment. Combined endoscopic, pathological, and radiological evaluation is crucial for precise staging and individualized management.

Keywords: Esophageal squamous cell carcinoma, gastric extension, lymph nodes, PD-L1

LONG-TERM MANAGEMENT AND EVOLUTION OF AN INFANT: TETRALOGY OF FALLOT ASSOCIATED WITH HEMITRUNCUS

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Introduction: Tetralogy of Fallot (TOF) is a congenital cardiac malformation characterized by four anatomical components: ventricular septal defect (VSD), overriding aorta, right ventricular outflow tract (RVOT) obstruction and right ventricular (RV) hypertrophy. The resulting right-to-left shunt leads to reduced pulmonary blood flow and systemic hypoxemia, clinically manifesting with cyanosis and hypercyanotic spells. Hemitruncus, defined as the anomalous origin of one pulmonary artery from the ascending aorta, is a rare congenital anomaly that can occasionally be associated with TOF, resulting in a complex and atypical hemodynamic profile. **Case Report:** We report the case of an 11-month-old male infant referred to our center for recurrent lower respiratory tract infections, growth failure and severe cyanosis (SaO₂ ~80%). Echocardiography and angio-CT revealed TOF with severe valvular and subvalvular stenosis, a hypoplastic pulmonary valve annulus, left pulmonary artery (LPA) hypoplasia and a right-sided hemitruncus. After resolution of severe bronchopneumonia, the patient underwent primary total surgical correction under cardiopulmonary bypass. The procedure involved VSD closure with heterologous pericardial patch, RV infundibular resection, RVOT augmentation with a heterologous pericardial patch and side-to-side anastomosis of the right pulmonary artery (RPA) to correct the hemitruncus. The early postoperative course was marked by biventricular systolic-diastolic dysfunction, requiring prolonged inotropic support and pulmonary vasodilator therapy for residual pulmonary hypertension. Long-term follow-up (echocardiography, CT and MRI) showed preserved biventricular function despite right-sided heart dilation and significant residual pulmonary insufficiency revealing progressive stenosis at the RPA anastomosis site and moderate hypoplasia of the LPA. Additionally, a Kommerell diverticulum was identified on angio-CT. By the age of 6 years, due to declining exercise tolerance and worsening pressure gradients, a multidisciplinary team indicated percutaneous stenting of the RPA and a dilation curve/stenting for the LPA. **Discussions** : Hemitruncus alters classical pathophysiology of TOF by creating asymmetric pulmonary circulation, with one lung exposed to systemic pressure and increased flow, predisposing to early pulmonary hypertension, while the other remains underperfused due to pulmonary stenosis. In our patient, this imbalance contributed to branch pulmonary artery stenosis and persistent pulmonary hypertension, necessitating staged catheter-based reinterventions. Early complete repair remains essential but is often limited by pulmonary artery hypoplasia and reconstruction complexity, predisposing to residual lesions. Advanced imaging was crucial for accurate diagnosis and long-term follow-up. **Conclusions:** Successful primary correction of TOF-hemitruncus is achievable despite late presentation and comorbidities. Multimodal imaging and lifelong surveillance are mandatory for identifying the residual lesions and optimizing the timing of reinterventions.

Keywords: Tetralogy of Fallot, Hemitruncus, Angio-CT, Residual Pulmonary Artery Stenosis

LONG-TERM RECURRENCE OF CHOLESTEATOMA AND POSTOPERATIVE SIGMOID SINUS EXPOSURE: A 40-YEAR FOLLOW-UP CASE

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Introduction: Cholesteatoma is a benign but locally destructive lesion of the middle ear that may be congenital or acquired. Multiple theories have been proposed to explain its pathogenesis, with the retraction pocket theory being the most widely accepted. Surgical management often involves mastoidectomy, particularly when the disease extends to the mastoid bone. Such procedures carry risks, including injury to the facial nerve, hearing loss, and vascular complications, especially involving the sigmoid sinus. **Case Report:** We report the case of a 68-year-old woman with a history of chronic middle ear cholesteatoma on the left side, surgically treated 40 years ago with a canal wall up mastoidectomy. This technique preserves the posterior canal wall and normal ear anatomy but is associated with higher recurrence risk due to limited visualization of hidden recesses. The patient presented with persistent otorrhea and otalgia, her audiogram also revealing marked hearing loss (severe mixed hearing loss on the left, normal hearing on the right), most likely of multifactorial etiology. Endoscopy revealed chronic infection and recurrent cholesteatoma, as well as a pulsatile tubular structure visible through the posterior canal wall, initially suspected to be a bony defect with visible dura and a cerebrospinal fluid leak. MRI confirmed the structure corresponded to the sigmoid sinus. The patient declined further surgery and is managed conservatively with local hygienisation and topical antibiotics. **Discussions :** Recurrence of cholesteatoma can occur decades postoperatively, emphasizing the challenges of long-term management. Many patients were historically treated with canal wall up mastoidectomy, which preserves the posterior canal wall but carries higher recurrence risk due to limited visualization of hidden recesses. In our case, mastoidectomy performed 40 years ago resulted in exposure of the sigmoid sinus through a thinned mastoid bone, initially raising suspicion of a cerebrospinal fluid fistula. Although such exposure represents a surgical risk in revision procedures, no intervention is planned as the patient declined further surgery. Untreated or recurrent cholesteatoma may progress, causing serious complications involving intracranial structures, peripheral cranial nerves-particularly the facial nerve-and the labyrinthine system. **Conclusions:** This case highlights the potential for extremely late recurrence of cholesteatoma following canal wall up mastoidectomy and emphasizes the importance of long-term surveillance. Postoperative anatomical changes, such as exposure of the sigmoid sinus, can complicate diagnosis and surgical planning. Management decisions must carefully balance the risks of revision surgery against the potential complications of untreated recurrent disease when patients decline operative intervention.

Keywords: cholesteatoma, canal wall up mastoidectomy, sigmoid sinus exposure

LONGITUDINAL VAGINAL SEPTUM ASSOCIATED WITH UTERUS DIDELPHYS IN A MULTIPAROUS WOMAN WITH PRIOR VAGINAL DELIVERIES — DELAYED SURGICAL MANAGEMENT

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Introduction: A longitudinal vaginal septum is a congenital müllerian anomaly resulting from incomplete fusion of the müllerian ducts that may remain undiagnosed for years, especially in asymptomatic patients. It is frequently associated with uterine malformations, like uterus didelphys. Although such abnormalities are identified during adolescence, obstetric complications, like labor dystocia, some people may experience normal reproductive outcomes. The coexistence of a longitudinal vaginal septum with uterus didelphys in a patient with vaginal deliveries is uncommon and clinically noteworthy. **Case Report:** A 38-year-old multiparous woman was admitted to the Obstetrics and Gynecology department with a known diagnosis of vaginal septum. Her obstetric history included two previous vaginal deliveries and a caesarean section followed by tubal ligation. Remarkably, both vaginal births occurred in the presence of an undiagnosed longitudinal vaginal septum. Her medical history was significant for previous major abdominal surgeries, angina pectoralis and nutritional deficiencies necessitating careful perioperative planning. Clinical and imaging evaluation confirmed uterus didelphys with a 4 cm myoma and a complete longitudinal vaginal septum. The indication for surgical intervention was symptomatic vaginal

obstruction and dyspareunia. Intraoperatively, a longitudinal vaginal septum approximately 7 cm length and 5 cm width, with increased thickness and fibrosis in the superior portion. The inferior segment was resected first, followed by the meticulous dissection of the superior portion to avoid bladder or cervix injury. Vaginal wall reconstruction was performed carefully, with no intraoperative complications. After three days the patient was discharged in a stable condition, without bleeding or any signs of infection. **Discussions :** Longitudinal vaginal septum associated with uterus didelphys represents a rare müllerian anomaly with variable clinic presentation. Although, vaginal delivery is possible it is relatively uncommon in the presence of an uncorrected complete septum. Rare documented cases in medical literature describe women with a complete longitudinal septum who achieved vaginal births, with surgical removal occurring years later. This case highlights the remarkable reproductive capacity despite significant anatomical variations. The patient's obstetric history underscores the heterogeneity of clinical presentation and it challenges the assumption that surgical correction is universally required before childbirth. **Conclusions:** Significant müllerian anomalies such a uterus didelphys with a complete longitudinal septum may remain compatible with successful vaginal delivery. Awareness of such anomalies is essential for accurate diagnosis, individualized management and appropriate reproductive counseling. Surgical resection remains the definitive treatment for symptomatic patients.

Keywords: longitudinal vaginal septum, müllerian anomaly, uterus didelphy, vaginal surgery

LOW-GRADE APPENDICEAL MUCINOUS NEOPLASM MIMICKING AN ENTERIC DUPLICATION CYST – CASE REPORT

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Introduction: Low-grade appendiceal mucinous neoplasm (LAMN) is a rare epithelial tumor arising from the appendiceal mucosa, characterized by low-grade cytologic atypia and abundant mucin production. Progressive appendiceal dilation may occur, and in cases of wall rupture, mucin dissemination within the peritoneal cavity can develop, potentially leading to pseudomyxoma peritonei. **Case Report:** We report the case of a 61-year-old male patient with a history of cardiovascular comorbidities controlled with medication, obesity, benign prostatic hyperplasia managed medically, and previously surgically excised vocal cord polyps. He was admitted to the Department of General Surgery for evaluation and surgical management of an intra-abdominal cystic lesion. The patient's symptoms began two years prior to admission and consisted of intermittent abdominal discomfort. Laboratory investigations were within normal limits. Magnetic resonance imaging demonstrated a lesion suggestive of an enteric duplication cyst located in the right iliac fossa, measuring approximately 7 cm in length and 2.7 cm in diameter. Abdominal ultrasonography confirmed the presence of an intraperitoneal cystic lesion. Based on these findings, surgical intervention was indicated. Intraoperative laparoscopic exploration revealed a markedly enlarged and distended appendix in the right iliac fossa. The proximal 2-2.5 cm at the level of the cecal base appeared macroscopically normal. The mesoappendix was carefully skeletonized, and the appendix was dissected up to its base. Two Hem-o-lok clips were applied at the base prior to appendiceal resection. The specimen was placed in an EndoBag and extracted through an enlarged supraumbilical port. It was subsequently sent for histopathological examination. At the end of the procedure, pneumoperitoneum was released and the abdominal wall was closed in layers. Histopathological analysis revealed a LAMN with acellular mucin extravasation confined to the appendiceal wall, without serosal involvement. **Discussions :** LAMNs are uncommon tumors with an indolent clinical course and often nonspecific symptomatology, which may delay diagnosis. In the present case, the long-standing mild abdominal discomfort and imaging findings suggestive of an enteric duplication cyst illustrate the difficulty in establishing a definitive preoperative diagnosis. Radiological features may overlap with other cystic lesions of the right iliac fossa, making histopathological examination essential for definitive diagnosis. **Conclusions:** LAMNs should be considered in the differential diagnosis of cystic lesions located in the right iliac fossa. Preoperative imaging findings may be misleading, and definitive diagnosis relies on histopathological evaluation. In cases without serosal involvement or peritoneal spread, the prognosis is favorable; however, careful postoperative surveillance is recommended.

Keywords: Low-grade appendiceal mucinous neoplasm, Right iliac fossa cyst, Enteric duplication cyst, Appendiceal tumor

LOWER EYELID BASAL CELL CARCINOMA RECONSTRUCTION IN A RENAL TRANSPLANT RECIPIENT

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Introduction: Basal cell carcinoma (BCC) is a common skin malignancy that predominantly affects the head and neck region. Approximately 20% of BCCs occur in the periocular area, with the lower eyelid being the most frequently affected site. These eyelid tumors present a significant clinical challenge due to their local invasiveness; left untreated, they can destroy surrounding tissues, compromise eyeball protection, and cause severe aesthetic disfigurement. The clinical complexity is further amplified in immunosuppressed individuals, such as renal transplant recipients, who face an elevated risk of developing skin cancers with a more aggressive clinical course.

Case Report: We present the case of a 44-year-old male, with a history of a renal transplant, who was admitted to the plastic surgery department for a right lower eyelid skin tumor. The patient underwent surgical excision under general anesthesia. To ensure complete oncological clearance while preserving maximum healthy tissue, multiple surgical margins (medial, lateral, and conjunctival) were immediately evaluated via extemporaneous biopsy (frozen section). Intraoperative histopathological analysis confirmed that all excised margins were free of tumor cells. Following this confirmation, immediate periocular reconstruction was performed using a local tissue flap. The procedure involved the preparation and application of the flaps, padding, and tegumentary suture, resulting in a favorable postoperative evolution with no inflammatory signs. **Discussions :** Managing periocular BCC requires a delicate balance between complete oncological resection and functional tissue preservation. Extemporaneous biopsy (frozen section control) is the gold standard in eyelid surgery. It allows the surgeon to confirm negative margins in real-time before proceeding with complex flap reconstructions, effectively minimizing the risk of recurrence while optimizing functional outcomes. This rigorous approach is particularly critical in organ transplant patients, whose chronic immunosuppression significantly predisposes them to aggressive local recurrences.

Conclusions: The successful treatment of lower eyelid BCC demands precise margin control. Utilizing intraoperative extemporaneous biopsy ensures complete tumor eradication while sparing healthy tissue, which is fundamental for successful flap reconstruction and the long-term preservation of ocular protection.

Keywords: Basal Cell Carcinoma, Eyelid Reconstruction, Frozen Section, Renal Transplantation

MALIGNANT DUALITY ON AN ENDOMETRIAL POLYP: UTERINE CARCINOSARCOMA WITH HETEROLOGOUS DIFFERENTIATION

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Introduction: Uterine carcinosarcoma is a highly aggressive biphasic malignant neoplasm characterized by the co-existence of epithelial and mesenchymal components, arising through transdifferentiation of a high-grade carcinoma. **Case Report:** A 71-year-old woman presented with moderate vaginal bleeding (fluid blood and clots) of approximately three months' duration. MRI revealed a heterogeneous endometrial cavity occupied by a 16 × 12 × 20 mm polypoid lesion, hypointense on T2-weighted images, with heterogeneous contrast enhancement. The patient underwent total hysterectomy with bilateral salpingo-oophorectomy and omentectomy. Gross examination identified a separately submitted whitish polypoid mass with focal gelatinous areas, presumably originating from the endometrial cavity. Histopathological evaluation demonstrated a biphasic tumor comprising a high-grade serous endometrial carcinoma component (approximately 10%), which was AE1/AE3 positive, and a sarcomatous component with heterologous differentiation (rhabdomyosarcomatous and leiomyosarcomatous). The sarcomatous elements showed positivity for desmin, myogenin, and smooth muscle actin (SMA). The underlying endometrium was atrophic, with no evidence of myometrial invasion. The findings were consistent with carcinosarcoma arising within an endometrial polyp (pT1a, FIGO Stage IA [2023]). **Discussions :** This case is remarkable due to the rarity of this tumor subtype, representing approximately 5% of all uterine malignancies. Its distinctiveness lies in the exclusively polypoid localization within an atrophic endometrium, highlighting a clinical paradox: a morphologically 'early-stage' lesion (pT1a L0 V0 Pn0) that possesses a highly aggressive IHC profile. Although the absence of myometrial invasion is traditionally favorable, the presence of rhabdomyosarcomatous elements (Desmin+/Myogenin+) indicates a biological aggressiveness that often supersedes local staging. Under the FIGO

2023 update, this emphasizes that histological type and molecular risk are paramount, underscoring the need for radical surgical management followed by adjuvant therapy. **Conclusions:** This case highlights the importance of maintaining a high index of suspicion in cases of postmenopausal vaginal bleeding, even when the clinical presentation suggests a benign polypoid lesion. From a histopathological standpoint, familiarity with this entity is essential to ensure adequate sampling of the specimen, in order to identify the biphasic nature of the lesion, which may often be subtle.

Keywords: Uterine Carcinosarcoma, Endometrial Polyp, Heterologous Differentiation, FIGO Staging

MALIGNANT GASTRIC OUTLET OBSTRUCTION CAUSED BY EXTRINSIC COMPRESSION FROM ADVANCED OVARIAN CANCER

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Introduction: Malignant gastric outlet obstruction (MGOO) is a medical condition in which tumor infiltration or extrinsic compression of the pylorus or duodenum leads to partial or complete obstruction. As a result, patients typically present with symptoms of persistent nausea, abdominal pain, recurrent vomiting and early satiety. In severe cases, due to reduced or absent oral intake, progressive weight loss and malnutrition can occur. MGOO is most commonly associated with advanced gastric or pancreatic cancers, while its association with primary ovarian cancer is rare, with only a few cases described in the literature. Patients with advanced ovarian cancer who develop MGOO have a poor prognosis, with a significant impact on quality of life. **Case Report:** We present the case of a 64-year-old hypertensive woman with anemia who was admitted to the emergency department with persistent abdominal pain, nausea and vomiting. The abdominal-pelvic CT scan revealed a giant right ovarian cyst located in the umbilical and pelvis, measuring 225/182/247 mm, associated with stage III right ureterohydronephrosis and a hiatal hernia. Laboratory investigations showed high levels of CA125 (57.70 u/mL). An exploratory laparotomy was performed, including adhesiolysis, cyst removal, total hysterectomy and closure of the vaginal stump. Multiple biopsies were obtained from the degenerated ovarian cyst, uterus, cervix, regional adipose tissue with lymph nodes and omentum. Histopathological examination revealed endometrioid ovarian carcinoma with transitional-like differentiation. Carcinomatous metastases exceeding 1cm were found in five lymph nodes from the iliac fossa. The omentum showed tumor proliferation represented by solid areas and micropapillae, as well as one lymph node with carcinomatous metastasis. **Discussions :** Although the gynecological team was not involved, the surgery was successfully performed by the general surgery team. Postoperatively, the patient experienced temporarily inadequate oral intake; however, the clinical evolution was favorable, with hemodynamic and respiratory stability, restoration of bowel transit and normal urine output. Following recovery, the patient was referred to medical oncology and initiated on systemic oncologic therapy. **Conclusions:** This case highlights the rarity of advanced ovarian cancer manifesting through extrinsic compression as malignant gastric outlet obstruction, as well as the importance of considering ovarian malignancy in the differential diagnosis of female patients presenting with obstructive upper gastrointestinal symptoms and large abdominopelvic masses.

Keywords: malignant gastric outlet obstruction, endometrioid ovarian cancer, total hysterectomy

MALIGNANT PLEURAL EFFUSION REVEALING OCCULT BREAST CANCER

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Introduction: Breast cancer is a heterogeneous malignant neoplasm, arising from the ductal-terminal unit of the mammary gland, associated with a cluster of genetic mutations that will transform the normal glandular epithelium into a rapidly growing, invasive and autonomous cell population, which presents a high potential for systemic metastasis. One of the most frequent localizations of secondary determinations is at the pleural level. **Case Report:** We present the case of a 55-year-old patient, without pathological history, who complains of acute respiratory symptoms with dyspnea, persistent dry cough and pleuritic chest pain. The patient is admitted to the Pulmonology department for treatment of the acute event and specialized diagnosis. Conventional imaging examinations reveal a massive left pleurisy, thoracocentesis was performed and the effusion fluid was sent to the Pathology department for cito-histological analysis. Macroscopically, the effusion fluid was straw-yellow and

slightly cloudy in appearance. The effusion fluid was processed using the cytoblock technique. On the examined sections, the presence of a small chronic inflammatory infiltrate was identified, with the presence of normal and reactive mesothelial cells; and a second cell population, represented by tumor cells, of medium and large size, with intensely eosinophilic cytoplasm and irregular, hyperchromic and enlarged nuclei; arranged singly, in small groups or in the form of pseudoglandular structures. To determine the primary origin of these cells, immunohistochemical reactions were performed with anti-TTF1 antibodies (negative reaction in tumor cells), anti-GATA3 antibodies (positive reaction in tumor cells) and anti-Calretinin antibodies (positive reaction in mesothelial cells). **Discussions** : According to the Springer 2020 International System for Reporting Smears from Effusion Fluids, the effusion fluid was classified as Category V: Malignant Smear. Malignant pleural effusions may represent the first manifestation of an occult neoplasia, including breast carcinoma. The cytoblock technique allows for a detailed morphological evaluation and immunohistochemistry, facilitating the identification of the primary tumor origin. GATA3 expression, associated with TTF1 negativity, supports a breast origin and excludes a pulmonary origin. **Conclusions:** Cytological evaluation using the cytoblock technique on pleural effusion fluids, additionally with immunohistochemistry, to identify the malignant nature and tumor origin, with direct impact on diagnostic and therapeutic conduct; especially in the absence of a known oncological history.

Keywords: pleural effusion, immunohistochemistry, secondary determination, breast cancer

MANAGEMENT OF A GIANT OVARIAN CYST IN AN 87-YEAR-OLD PATIENT

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Introduction: Benign ovarian tumors are common non-cancerous growths that occur more frequently during the reproductive years due to repeated ovulation and hyperestrogenism, which promote ovarian epithelial proliferation. What makes this case particularly rare and unusual is advanced age of the patient. Most ovarian tumors occur in women of reproductive age, whereas in elderly patients, ovarian malignancies are more common, which makes this case particularly unusual. **Case Report:** An 87-year-old woman presented with a large pelvic-abdominal mass suspected to originate from the right adnexa, associated with a cervical polyp. Surgical management was performed under general endotracheal anesthesia. Intraoperative findings revealed a large right adnexal cyst with signs of torsion, measuring approximately 20 × 20 cm, containing clear fluid and with preserved integrity, as well as a 4 × 4 cm left adnexal cyst. A median laparotomy with paraumbilical and supraumbilical extension was performed, followed by right adnexectomy and total extra fascial hysterectomy (Wiar type) with bilateral adnexectomy. No other intra-abdominal pathology was identified. Histopathological examination was requested for definitive diagnosis. Histopathological analysis confirmed a benign ovarian serous cystadenoma and an atrophic endometrial glandular polyp. **Discussions** : The considerable size of the tumor (20 x 20 cm) had a substantial impact on surgical management. Giant ovarian masses are associated with increased operative complexity due to limited intra-abdominal working space, displacement of adjacent organs, and a higher risk of intraoperative rupture. In very elderly patients, these technical challenges are further compounded by reduced physiological reserve and increased anesthetic risk. Therefore, tumor size not only influenced the choice of surgical approach but also required meticulous perioperative planning to minimize complications. **Conclusions:** This case underscores the need to consider benign lesions in advanced age and demonstrates successful surgical management. Tumor size significantly influences surgical planning and perioperative management, particularly in geriatric patients with reduced physiological reserve. Careful preoperative evaluation and individualized management are essential to achieve favorable outcomes.

Keywords: ovarian cyst, benign tumor, hysterectomy

MANAGEMENT OF A SUSPECTED DUAL VIRAL INFECTION IN A 3-MONTH-OLD INFANT

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Introduction: Bronchiolitis is common in infants, especially among 6 months-old, caused frequently by respiratory viruses. Hepatitis is an inflammatory condition of liver caused by viral, bacterial, toxic or autoimmune agent. Usually, it is associated with a hepato-cellular syndrome with elevated transaminases in serum. The coexistence of respiratory and hepatic involvement in early infancy raises important diagnostic and therapeutic considerations,

particularly in the context of possible dual viral etiologies. **Case Report:** A 3-month-old infant, with a birth weight of 2880 grams and an Apgar score of 7 at 1 minute and 9 at 5 minutes, with a current weight of 6300 g, presented to the emergency department with a one-week history of serous rhinorrhea, productive cough, respiratory distress, subfebrile temperature, and semi-consistent stools, which required hospitalization. At clinical examination, the following findings were noted: spasmodic cough, prolonged expiration, and auscultation, bilateral vesicular breath sounds with bilateral wheezing. Paraclinical investigations revealed a significant increase in liver enzymes: ALT: 1199 U/l, AST: 1530 U/L, GGT:171 U/l, LDH: 1473 U/l, suggesting hepatocytolysis syndrome, elevated inflammatory markers: leucocytes: 22.87 10^9 / μ L, neutrophils: 10.64 10^9 / μ L, thrombocytes 650 10^9 / μ L, LDH: 379.00 U/L. The stool testing was positive for Adenovirus. Therapy was initiated with dexamethasone 2x1,5 mg, nebulization with Ventolin 3 drops + 2 ml physiologic serum, arginine 65 ml/day iv, aminoven 10% 65 ml i.v., glucose 5% 65 ml, paracetamol 3x6 ml/day iv, alvotor 3x2 pic po, essentin 2,5 ml/day po, bifido baby., The patient had a favorable response to the treatment, with a gradual decline in transaminase levels and improvement of respiratory symptoms. **Discussions :** Acute bronchiolitis is a common viral illness in infants, most frequently caused by respiratory viruses such as RSV and rhinovirus, while adenovirus is typically associated with gastrointestinal infections and may be linked to hepatic injury. This case suggests the coexistence of two distinct viral processes: a respiratory viral infection responsible for bronchiolitis and adenoviral infection confirmed by stool antigen testing, associated with enteric symptoms and hepatocytolysis syndrome. The management involved close monitoring of liver enzymes, respiratory status, clinical evolution and guiding therapeutic decisions, including respiratory therapy for bronchiolitis and hepatoprotective medication for hepatic injury. **Conclusions:** The coexistence of respiratory and hepatic involvement in early infancy requires careful clinical correlation and an appropriate diagnostic and therapeutic approach. This case underlines the importance of dynamic assessment and proper management in the context of possible concurrent viral etiologies.

Keywords: bronchiolitis, hepatitis, hepato-cytolysis

MANAGEMENT OF ACUTE RESPIRATORY FAILURE IN AN ELDERLY PATIENT REQUIRING REPEATED BRONCHOSCOPIC AIRWAY CLEARANCE

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Introduction: Acute respiratory failure in elderly patients is frequently associated with multiple pulmonary pathologies and may require prolonged ventilatory support, leading to increased morbidity and mortality. Age-related physiological changes and numerous comorbidities further complicate the clinical course and negatively influence outcomes. Identification and management of reversible causes of airway obstruction are essential for improving respiratory function. **Case Report:** An 82-year-old patient was admitted to the intensive care unit with acute respiratory failure requiring endotracheal intubation and mechanical ventilation. Chest computed tomography revealed complete obstruction of the left main bronchus, associated with loculated left pleural effusion and multiple pulmonary opacities. Therapeutic bronchoscopy was performed to relieve the obstruction of the left main bronchus, resulting in radiological improvement. A repeat CT scan performed two days later showed persistent obstruction of the left lobar bronchus. A second bronchoscopic intervention was therefore undertaken, during which thick whitish secretions were aspirated, raising suspicion of a fungal infection. Microbiological examination, however, did not confirm fungal etiology. Because of the persistent need for ventilatory support and the inability to perform extubation, a percutaneous tracheostomy was performed. After cessation of sedation, the patient became conscious and cooperative while remaining on ventilatory support. The tracheostomy was removed 4 days later. **Discussions :** This medical pathology explains the complexity of acute respiratory failure in elderly patients, particularly when associated with airway obstruction. The need for repeated bronchoscopic interventions highlights the importance of dynamic evaluation. Despite suspicion of a fungal infection after secondary bronchoscopic intervention, microbiological findings were negative, emphasizing the importance of accurate diagnosis. As the problem persisted and the patient's clinical status remained unchanged, a percutaneous tracheostomy was the next medical intervention to improve breathing. The favorable outcome supports an individualized therapeutic approach. **Conclusions:** This case illustrates the complexity of managing acute respiratory failure in elderly patients and highlights the role of bronchoscopic airway clearance and tracheostomy in the management of prolonged mechanical ventilation.

Keywords: acute respiratory failure, airway obstruction, percutaneous tracheostomy, therapeutic bronchoscopy

MANAGEMENT OF DIGESTIVE BLEEDING IN A PATIENT WITH MULTIPLE COMORBIDITIES

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Introduction: Gastrointestinal bleeding is a condition that, if not managed properly, can increase the risk of mortality. In cases where we are faced with simultaneous upper and lower gastrointestinal bleeding, associated with multiple comorbidities such as heart failure, liver cirrhosis, kidney damage, and complicated by sepsis, clinical assessment becomes more difficult. The management of such cases becomes considerably more complex.

Case Report: We present the case of patient P.M., aged 81, who was brought to the emergency department complaining of dyspnea and edema in the lower limbs that had started 2-3 weeks earlier. The patient was known to have permanent atrial fibrillation, chronic kidney disease, and a history of hepatitis B virus infection, with non-compliance with treatment at home. Biological tests upon presentation revealed Nt proBNP>20,000, GOT 99U/L, and creatinine 2.73, for which diuretic and anticoagulant treatment was initiated immediately after admission. A few hours after admission, he presented with large amounts of melena, followed by multiple episodes of hematochezia. In order to establish the bleeding etiology, EDS was performed, which revealed: Forrest 1b vascular fistula, treated by mechanical hemostasis, grade I esophageal varices, and Forrest 3 gastric ulcer. Impaired renal function required a native abdominal-pelvic CT scan, which revealed bilateral basal pleural effusions, pericardial effusion, sclerotic-atrophic kidneys, perihepatic ascites, and hemorrhagic fluid in the transverse colon extending to the rectum. Although the patient was administered multiple units of transfusion, hematochezia caused a progressive decrease in hemoglobin to 3.7 g/dL. In the context of the patient's and family's refusal for an endoscopic reevaluation, vasopressors were administered, and hemoglobin levels increased progressively. Subsequently, the patient's neurological status deteriorated and he developed encephalopathy and acute respiratory failure, being transferred to the ICU. Following multidisciplinary consultations, sepsis originating in the lungs was confirmed, with multi-resistant germs: *Pseudomonas aeruginosa* and *Acinetobacter baumannii*, for which specific antibiotic treatment was initiated. During his stay in the ICU, the patient's condition progressively deteriorated, culminating in his death. **Discussions :** In this case, the management of gastrointestinal bleeding was complicated by the presence of multiple comorbidities (HF, liver cirrhosis, BCR) that created an unfavorable environment for healing. At the same time, age-related immunodeficiency worsens the prognosis of these systemic conditions, predisposing to the onset of sepsis, as was the case with our patient. **Conclusions:** The combination of systemic imbalances, upper and lower gastrointestinal bleeding, and sepsis with multidrug-resistant bacteria led to an unfavorable outcome, highlighting the need for an early multidisciplinary approach.

Keywords: Gastrointestinal bleeding, Patient management, Multiple comorbidities, Heart failure

MANAGEMENT OF FERTILITY PRESERVATION IN A YOUNG PATIENT WITH ENDOMETRIAL INTRAEPITHELIAL NEOPLASIA

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Introduction: Endometrial intraepithelial neoplasia (EIN) is a precursor lesion of the endometrium that affects the endometrial glands and frequently precedes endometrioid-type endometrial adenocarcinoma. An important risk factor for EIN is obesity, primarily through increased estrogen production, chronic inflammation and insulin resistance. Additionally, it may negatively impact fertility, particularly in patients with underlying hormonal imbalances. **Case Report:** I present the case of a 34-year-old female patient, with obesity as a significant risk factor, who presented to the gynecology clinic complaining of persistent menometrorrhagia over the past three months. Speculum examination revealed minimal menstrual-like blood in the vaginal canal. Transvaginal ultrasound demonstrated a thickened endometrium, a Doppler score of 3 and an image suggestive of endometrial polyps. The patient underwent operative hysteroscopy with evacuative and hemostatic uterine curettage, followed by insertion of a levonorgestrel-releasing intrauterine device (Mirena). Hysteroscopically guided biopsy initially revealed endometrial hyperplasia with atypical features, consistent with EIN. A repeat biopsy was performed, with histopathological findings showing glandular endometrium under exogenous hormonal influence. Follow-up ultrasound confirmed the intrauterine device in normal position, with an apparently intact junctional zone and a

significant reduction in endometrial thickness. **Discussions** : Treatment strategies for EIN are primarily dictated by the patient's desire for fertility preservation. In this clinical scenario, conservative management was initiated via the insertion of a LNG-IUS or oral progestins. Mandatory monitoring involves serial endometrial biopsies every 3-6 months and rigorous imaging. In cases refractory to medical therapy, total hysterectomy remains the definitive surgical indication. As a strategy for future fertility, options such as oocyte donation combined with gestational surrogacy may be considered. **Conclusions**: EIN is a recognized premalignant lesion with a high risk of progression to adenocarcinoma, necessitating meticulous clinical management. The therapeutic approach must strike a balance between oncological safety and the patient's reproductive goals. Furthermore, achieving a healthy BMI through weight loss is a critical factor in improving long-term prognosis.

Keywords: endometrial hyperplasia, fertility preservation, obesity, atypical cells

MANAGEMENT OF NEONATAL TRANSPOSITION OF THE GREAT ARTERIES COMPLICATED BY SEPSIS IN A PRETERM INFANT

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Introduction: Transposition of the great arteries is a critical congenital heart defect requiring early recognition and prompt intervention to ensure survival. In neonates, systemic and pulmonary circulations run in parallel, making ductal patency and intercirculatory mixing essential. Prematurity and associated complications, such as neonatal sepsis, further complicate management and increase morbidity. Optimal outcomes depend on rapid stabilization, prostaglandin infusion, respiratory support, infection control, and timely referral for definitive surgical correction. **Case Report:** A female neonate born at 33 weeks of gestation was admitted shortly after birth for respiratory distress and persistent central cyanosis. Despite oxygen supplementation, peripheral oxygen saturation remained suboptimal. The newborn presented with tachypnea, mild intercostal retractions, and signs of compromised perfusion. Urgent echocardiography confirmed transposition of the great arteries with patent ductus arteriosus and intercirculatory mixing. Prostaglandin E1 infusion was initiated immediately to maintain ductal patency and support systemic circulation. Continuous cardiorespiratory monitoring was established in the neonatal intensive care unit. Respiratory support was provided and adjusted according to blood gas analysis and clinical response. During hospitalization, the infant developed clinical and laboratory signs of sepsis. Blood cultures isolated ESBL-producing *Klebsiella pneumoniae*. Empiric antibiotic therapy was promptly started and later tailored according to the antibiogram. Hemodynamic parameters, inflammatory markers, and metabolic status were closely monitored. Fluid therapy was carefully balanced to avoid volume overload while maintaining adequate perfusion. Under combined cardiac and infectious management, gradual stabilization was achieved. Oxygenation improved, inflammatory markers decreased, and the patient remained hemodynamically stable under prostaglandin infusion. After infection control and overall clinical improvement, the neonate was transferred to a tertiary pediatric cardiac surgery center for definitive correction. **Discussions** : Transposition of the great arteries in a preterm neonate represents a critical clinical situation, as both cardiac physiology and systemic adaptation are compromised. Prematurity reduces cardiopulmonary reserve and increases susceptibility to complications. The occurrence of neonatal sepsis adds further hemodynamic stress and may delay definitive surgical intervention. In such cases, close surveillance and timely therapeutic adjustments are crucial to prevent deterioration. **Conclusions:** This case highlights the complex interaction between congenital heart disease, prematurity, and infection in the early neonatal period. The coexistence of these conditions significantly increases clinical vulnerability and therapeutic complexity. Early diagnosis, continuous monitoring, and timely interdisciplinary intervention are fundamental in achieving stabilization and enabling definitive surgical management.

Keywords: Transposition of the great arteries, Prematurity, Neonatal sepsis, Prostaglandin E1

MANAGEMENT OF SEVERE CONGENITAL NASAL HYPOPLASIA WITH SEPTORHINOPLASTY AND COSTAL CARTILAGE GRAFTING. A CASE REPORT.

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Introduction: The rare genetic defect known as congenital nasal hypoplasia is characterized by insufficient development of the nasal framework, which may include the septum, lower lateral cartilages, and nasal bones. This disorder frequently manifests as both functional impairment, especially nasal airway obstruction and aesthetic deformity, particularly in adolescence and early adulthood. The absence of natural structural support and the scarcity of septal cartilage make surgical management difficult. The preferred method for restoring nasal morphology and function is still septorhinoplasty combined with autologous transplantation. **Case Report:** A thorough clinical and functional evaluation was performed on a 19-year-old female patient who had a history of congenital nasal hypoplasia. Physical examination showed septal deviation linked to severe nasal blockage, severe underdevelopment of the nasal tip, and insufficient tip projection. Restoring airway patency and rebuilding the damaged nasal framework were the main goals of preoperative planning. Under general anesthesia, an opened septorhinoplasty procedure was carried out. To enhance nasal airflow, septal correction was implemented. Autologous costal cartilage was removed and utilized for structural grafting because there was not enough native septal cartilage. In order to restore the nose tip, give sufficient projection, and guarantee long-term structural stability, costal cartilage grafts were sculpted and for the achievement of practical durability and facial equilibrium, special attention was paid. **Discussions :** A combination between functional and reconstructive strategy was necessary for the management of congenital nasal hypoplasia. Septic cartilage is insufficient for nasal framework repair in severe situations. Costal cartilage is particularly appropriate for congenital abnormalities because of its many benefits, which include strength, availability, and long-term stability. In complicated situations requiring significant structural support, the advantages of rib cartilage harvesting exceed the dangers. The patient's airway obstruction and aesthetic deficiencies were successfully corrected by using costal cartilage. The improvement in respiration and nasal shape emphasizes how crucial customized surgical planning is for congenital nasal abnormalities. **Conclusions:** A dependable and successful method for treating congenital nasal hypoplasia linked to functional impairment is septorhinoplasty utilizing autologous costal cartilage. This method produces good aesthetic results and long-lasting airway improvement in young individuals with significant structural deficiencies. Both physiological function and quality of life can be greatly improved by early surgical intervention.

Keywords: congenital nasal hypoplasia, septorhinoplasty, rib cartilage, nasal abnormalities

MANAGING SEVERE PEDIATRIC PSORIASIS WITH IXEKIZUMAB: A CASE-BASED PERSPECTIVE

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Introduction: Psoriasis is a chronic immune skin disease that is clinically defined by well-demarcated erythematous plaques covered with multilayered silvery scales. Biological therapies are highly effective in treating severe psoriasis by inhibiting inflammatory cytokines secreted in excess cause keratinocyte hyperproliferation and the of psoriatic plaques. The aim of this paper is to highlight the importance of biologics in managing severe psoriasis in the pediatric population. **Case Report:** A 16-year-old patient, with an 8-year history of chronic plaque psoriasis presented to the Dermatology clinic with extensive lesions covering the entire skin surface. Dermatological examination revealed multiple erythematous round-oval plaques on the trunk, upper and lower limbs covered with white, easily detachable scales, and post-inflammatory hypochromic macules, respectively. Additional extensive erythematous-squamous lesions were noted on the hairy scalp. The patient previously underwent prolonged courses of various active topicals, which proved to be ineffective. Systemic treatment with Metotrexate 15 mg/week was started. Due to limited efficacy, Metotrexate was stopped 6 months later. The follow-up evaluation identified persistent lesions on the skin and the hairy scalp, with designated severity scores of 19.8, 11, and 28 for PASI, DLQI, and PSSI, respectively. Biological therapy with Ixekizumab was started. The patient presented with no residual lesions after three months and a clinically sustained effectiveness to date **Discussions :** The particularity of this case lies in the complete and fast clearance of cutaneous lesions after 3 months of biological therapy in a previously unresponsive patient with longstanding psoriasis. Various biologics are currently approved for pediatric patients with psoriasis. Their usefulness lies mainly in the identification of extensive refractory cases and highlights, once more, the need for a tailored approach to these patients. **Conclusions:** Administered under careful medical monitoring, biologics are a safe, effective, and life-changing treatment option in psoriasis, targeting the multifactorial etiopathogenesis of this complex disease and drastically improving patients quality of life.

Keywords: plaques, Ixekizumab, biological therapy, severe psoriasis

MANIFESTATIONS OF PSYCHOMOTOR AGITATION AND AGGRESSION IN ALCOHOL DEPENDENCE: A CASE REPORT

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Introduction: Chronic ethanol consumption and the associated withdrawal frequently correlate with psychomotor agitation and aggression as the alcohol facilitates violent behavior through cortical disinhibition, alteration of prefrontal function, and neurochemical imbalances involving the serotonergic, dopaminergic, and glutamatergic systems. The alcohol-induced effect of increasing the pain sensitivity threshold acts as a mediator that exacerbates aggressive reactions and in the long term, neurotoxicity and chronic thiamine deficiency can trigger Korsakoff psychosis, a severe neuropsychiatric condition characterized by brain lesions, amnesia, and confabulations. **Case Report:** We present the case of a 57-year-old male patient, a chronic ethanol consumer, with a history of Korsakoff psychosis (diagnosed in 2022) and recurrent moderate depressive episodes. The patient was brought to the emergency department with alcohol withdrawal delirium, manifesting generalized tremors, profuse sweating, tachycardia, elevated blood pressure, and hallucinations. Upon admission, the aggression risk assessment indicated a Broset score of 3 and the psychiatric examination revealed temporospatial disorientation, anterograde and retrograde amnesia, mnesic confabulations, bradypsychia, and marked irritability. Secondary diagnoses included alcoholic hepatitis, hypokalemia, rib fracture, and unspecified dementia. Due to extreme psychomotor agitation and exacerbated aggression, the patient required physical single point restraint at one point during hospitalization to prevent self-harm and hetero-aggression. Treatment consisted of fluid and electrolyte rebalancing, benzodiazepines administration and vitamin B1 and B6 substitution. Although the hallucinatory phenomena subsided, the clinical condition at discharge was stationary, with the overall picture remaining dominated by severe cognitive deficits, bradypsychia, and apatho-abulia. **Discussions :** Delirium-complicated withdrawal triggers central nervous system hyperexcitability (decreased GABAergic tone and increased glutamatergic tone), favoring violent episodes. The patient's aggression is accentuated by pre-existing lesions specific to Korsakoff psychosis, which lead to a cortical inability to regulate emotions. The Broset score of 3 reflects this cumulative effect: physiological disinhibition induced by frontal lobe impairment, diminished response to nociceptive stimuli, and the confusional state during withdrawal. Physical restraint was a mandatory measure imposed by the imminent risk generated by his state of agitation. **Conclusions:** The management of psychomotor agitation in alcohol dependence requires an understanding of the neurobiology of aggression, given that neurotoxic effects and neurotransmitter imbalances amplify aggressive reactions, necessitating careful monitoring of violence risk. Thus, knowledge of a Korsakoff psychosis history is vital for the emergency initiation of thiamine and benzodiazepine therapy to halt neurocognitive decline, manage delirium, and maintain safety.

Keywords: psychomotor agitation, alcohol dependence, Korsakoff psychosis, Broset score

MARGIN ASSESSMENT AND NASOLABIAL FLAP RECONSTRUCTION IN NASAL APEX SKIN CANCER

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Introduction: Cutaneous tumors of the nasal apex represent a complex clinical entity due to the anatomical specificity and high aesthetic relevance of this nasal subunit. Achieving oncologic radicality while preserving nasal contour and function remains challenging. Therapeutic options include standard surgical excision, Mohs micrographic surgery, and reconstruction through primary closure, skin grafts, or local flaps. Among reconstructive techniques, the nasolabial flap provides reliable vascularity, good color and texture match, and favorable cosmetic outcomes for medium-sized defects. Intraoperative histopathological examination allows immediate margin assessment and may reduce recurrence rates. **Case Report:** We report the case of a 73-year-old female presenting with an ulcerated cutaneous tumor of the nasal apex. Her medical history included grade II arterial hypertension with moderate cardiovascular risk, mild mitral and tricuspid regurgitation, mild secondary pulmonary hypertension, ascending aortic ectasia, isolated supraventricular extrasystoles, chronic venous disease of the

lower limbs, and thoracic pain syndrome. The patient underwent surgical excision under general anesthesia with orotracheal intubation. A circumferential excision of the lesion was performed. Three specimens (main tumor, deep re-excision, and right-margin re-excision) were submitted for histopathological analysis. After confirmation of tumor-free margins, the resulting defect was reconstructed using a left nasolabial flap secured with interrupted sutures. Intraoperative histopathological evaluation confirmed negative margins. The postoperative course was uneventful. The flap remained viable, with preserved capillary refill and no evidence of infection or vascular compromise. Functional and aesthetic outcomes were satisfactory. The patient was discharged with antibiotic and anti-inflammatory therapy and scheduled for follow-up and definitive histopathological evaluation. **Discussions** : The nasal apex is a high-risk aesthetic subunit where incomplete excision may result in tumor recurrence and suboptimal cosmetic outcomes. Intraoperative histopathological control ensures oncologic safety by allowing immediate re-excision if necessary. The nasolabial flap remains a reliable reconstructive option due to its robust vascular supply and favorable tissue characteristics. This case demonstrates that safe and effective surgical management is feasible even in elderly patients with multiple cardiovascular comorbidities. **Conclusions**: Excision with histopathological margin control followed by nasolabial flap reconstruction represents a safe and effective strategy for the management of nasal apex cutaneous tumors, ensuring both oncologic radicality and satisfactory aesthetic-functional outcomes.

Keywords: Nasal apex tumor, Cutaneous neoplasm, Nasolabial flap

MARKEDLY ELEVATED FECAL CALPROTECTIN WITHOUT ENDOSCOPIC EVIDENCE OF CROHN'S DISEASE: A DIAGNOSTIC CHALLENGE

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Introduction: Fecal calprotectin is widely used as a non-invasive marker of intestinal inflammation and is commonly employed in the evaluation of suspected inflammatory bowel disease (IBD). However, increased levels are not specific for IBD and may also occur in other inflammatory or infectious conditions, which can complicate the diagnostic process. **Case Report:** A 60-year-old woman with a previously established diagnosis of Crohn's disease in the United Kingdom presented with a two-week history of abdominal pain, vomiting, and diarrhea. Laboratory investigations showed elevated inflammatory markers, including thrombocytosis, C-reactive protein of 125 mg/L and markedly increased fecal calprotectin (1363 µg/g). Abdominal computed tomography revealed multiple air-fluid levels and mesenteric lymphadenopathy, findings that initially raised suspicion of an inflammatory bowel disease flare. Colonoscopy was performed to assess disease activity, but the endoscopic examination did not reveal typical Crohn's disease features such as ulcerations, strictures or skip lesions. Multiple biopsies were obtained from several colonic segments. Histopathological examination did not demonstrate granulomas, transmural inflammation, or other changes suggestive of Crohn's disease. Additional investigations, including stool cultures, *Clostridioides difficile* testing, and parasitological examination, were negative. The patient received symptomatic treatment consisting of rifaximin and probiotic therapy, with gradual clinical improvement. **Discussions** : This case highlights the difficulty of interpreting markedly elevated fecal calprotectin levels in clinical practice. Although fecal calprotectin is a sensitive indicator of intestinal inflammation, it is not specific for inflammatory bowel disease. Elevated values should therefore always be interpreted together with clinical findings, endoscopic evaluation and histopathological results. **Conclusions:** Markedly elevated fecal calprotectin levels may strongly suggest intestinal inflammation but cannot confirm inflammatory bowel disease on their own. Accurate diagnosis requires correlation between clinical presentation, laboratory findings, endoscopic evaluation and histopathological analysis.

Keywords: inflammatory bowel disease, fecal calprotectin, endoscopic examination

MASSIVE ASCITES ASSOCIATED WITH PERIHEPATITIS SUGGESTING FITZ-HUGH-CURTIS SYNDROME IN A YOUNG MALE PATIENT: AN AUTOPSY REPORT

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Introduction: Fitz-Hugh-Curtis syndrome is a form of perihepatitis characterized by inflammation of the hepatic capsule without significant parenchymal involvement, most commonly occurring as a complication of pelvic

inflammatory disease. The process may produce fibrous "violin-string" adhesions between the Glisson capsule and the parietal peritoneum. Although classically associated with *Chlamydia trachomatis* and *Neisseria gonorrhoeae*, similar inflammatory patterns may occur in other peritoneal conditions. **Case Report:** We report the autopsy findings of a 26-year-old institutionalized male with severe intellectual disability, sequelae of infantile encephalopathy, and spastic tetraparesis. A medico-legal autopsy was performed at the Institute of Legal Medicine in Târgu Mureș, in accordance with a police ordinance, without requiring relatives' consent. During life, the patient had been diagnosed with decompensated liver cirrhosis of unknown etiology, with ascites and presumed hepatic encephalopathy. He was admitted with progressive abdominal distension, altered mental status, and clinical deterioration, and died four days later despite supportive therapy. Post-mortem examination revealed massive ascites (≈12 L) and bilateral pleural effusion (300 mL left, 1000 mL right), associated with pulmonary dystelectasis, acute pulmonary edema, and bronchopneumonia. Macroscopic and histopathological findings did not confirm cirrhosis. Instead, microscopy showed dense lymphoplasmacytic infiltrates localized to the hepatic capsule, consistent with chronic perihepatitis, with mild perisinusoidal fibrosis and minimal parenchymal changes. **Discussions :** The absence of cirrhosis suggests that ascites and pleural effusion were unlikely due to portal hypertension. Chronic inflammation of the hepatic capsule and peritoneum may have impaired lymphatic drainage, promoting fluid accumulation. The morphological pattern resembles Fitz-Hugh-Curtis-type perihepatitis occurring outside its typical clinical setting. **Conclusions:** This case highlights the value of autopsy in clarifying clinicopathological discrepancies. Chronic perihepatitis may represent an underrecognized mechanism of impaired lymphatic drainage leading to massive ascites and pleural effusion, mimicking decompensated cirrhosis.

Keywords: Fitz-Hugh-Curtis syndrome;; chronic perihepatitis;; massive ascites.

MASSIVE METASTATIC EWING SARCOMA PRESENTING WITH SEVERE SPINAL FRACTURES IN A YOUNG ADULT

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Introduction: Ewing Sarcoma is a highly aggressive primary bone tumor predominantly affecting children and adolescents. Early imaging-based characterization is essential, particularly in cases complicated by structural instability such as pathological fractures. **Case Report:** A 19-year-old male presented with severe left thigh pain and upper limb numbness for two months. MRI of the limb revealed a large heterogeneous mass with high STIR signal, restricted diffusion on DWI/ADC, and a significant soft tissue component. CT of the chest, abdomen, and pelvis demonstrated an extensive 27 cm osteolytic femoral lesion with cortical destruction, Codman triangle periosteal reaction, and a 13.5 cm extraosseous extension. Diffuse skeletal metastases and hepatosplenomegaly were also identified, without pulmonary involvement. Spinal MRI revealed extensive bone marrow infiltration with multiple metastatic foci and severe pathological fractures at C7 (70% vertebral height loss with retropulsion) and T11. Histopathology confirmed a small round cell sarcoma (CD99+, ERG+, Ki67 ~55%), with EWSR1 rearrangement detected in 88% of tumor cells, establishing a diagnosis of Ewing Sarcoma, stage T2N0M1b (Stage IVB). The patient was started on VDC/IE chemotherapy. Due to chemotherapy-induced aplasia and high surgical risk, conservative management of the cervical spine with a semi-rigid brace was recommended. **Discussions :** This case highlights the pivotal role of multimodal imaging in advanced Ewing Sarcoma. MRI and CT were essential for accurately defining tumor extent, detecting diffuse skeletal involvement, and identifying critical spinal instability. Imaging findings directly influenced the decision to avoid high-risk surgery and pursue conservative management. **Conclusions:** In metastatic Ewing Sarcoma, comprehensive imaging is crucial for staging, risk stratification, and management planning. It enables early detection of life-threatening complications, such as spinal fractures, and supports safe, individualized treatment strategies within a multidisciplinary framework.

Keywords: Ewing Sarcoma, bone metastasis, spinal fracture, multimodal imaging

MECHANICAL VENTILATION AND RECRUITMENT MANEUVERS IN SEVERE COPD EXACERBATION WITH PNEUMONIA IN A MORBIDLY OBESE PATIENT

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Introduction: Chronic obstructive pulmonary disease (COPD) increases the risk of acute respiratory failure (ARF),

especially during infectious exacerbations. Morbid obesity worsens respiratory mechanics by reducing chest wall compliance, decreasing functional residual capacity, and increasing work of breathing. When paired with cardiometabolic comorbidities, these characteristics increase the likelihood of fast decompensation, difficult breathing, and extended recovery. Early detection and immediate ventilatory assistance are therefore critical to preventing severe hypoxemia, hypercapnia, and multiorgan failure in this high-risk population. **Case Report:** A 45-year-old critically man was hospitalized to the intensive care unit (ICU) with ARF caused by COPD exacerbation due to pneumonia. His medical history included morbid obesity, type 2 diabetes, heart failure with diminished ejection fraction due to a past myocardial infarction, and a previous pulmonary embolism. He was an active smoker and reported regular alcohol consumption. On admission, the patient had severe dyspnea, hypoxemia, and hypercapnic respiratory acidosis as established by arterial blood gas measurements. Due to increased respiratory distress and poor spontaneous ventilation, invasive mechanical ventilation was started. Deep sedation and neuromuscular blockade were required to establish ventilator synchronization and allow for repeated lung recruitment maneuvers targeted at increasing alveolar ventilation and oxygenation. Advanced hemodynamic and respiratory monitoring, serial arterial blood gas measurements, and bedside lung ultrasonography were used to guide ventilator management and therapeutic modifications, allowing for assessments of aeration, consolidation, and recruitment response. Gas exchange and respiratory mechanics showed gradual improvement, with respiratory acidosis corrected and oxygenation values stabilized. Weaning began once clinical and biochemical improvements had occurred. The patient passed three spontaneous breathing tests and was extubated. After extubation, breathing assistance was provided via a high flow nasal cannula for 12 hours before transitioning to a basic nasal cannula. The outcome was positive, with no recurrence of ARF and no need for non-invasive or invasive ventilatory assistance. The patient's respiratory condition remained stable, and he was transferred to the internal medicine ward for further treatment and rehabilitation. **Discussions :** This example emphasizes the significance of prompt invasive mechanical ventilation and recruitment maneuvers in severe COPD exacerbations due to pneumonia, particularly in a patient with morbid obesity and numerous comorbidities. **Conclusions:** Recruitment maneuvers, used with proper monitoring and neuromuscular control, can dramatically increase ventilation and gas exchange. Standard monitoring, organized weaning, and high-flow oxygen therapy, all contributed to a successful outcome with no relapse of ARF.

Keywords: mechanical ventilation, recruitment maneuvers, critically ill patient, COPD

MELANOMA: DIAGNOSTIC AND SURGICAL MANAGEMENT CHALLENGES

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Introduction: Melanoma is the most aggressive form of skin cancer, accounting for approximately 80% of deaths associated with cutaneous malignancies, despite its low incidence (1%). The nodular subtype is characterized by accelerated vertical growth and early dermal invasion, representing a significant challenge to effective therapeutic management. **Case Report:** We present the case of a 69-year-old male patient residing in a rural area who presented with a large tumoral mass in the right temporal region. The lesion exhibited classic features of malignancy: asymmetry, irregular borders, polychromy and ulceration with spontaneous bleeding. Post-excisional histopathological examination confirmed the diagnosis of ulcerated nodular melanoma, revealing a critical Breslow thickness of **11 mm (pT4b)**, **Clark level V**, and a **mitotic index of 3/mm²**. Surgical management required a wide re-excision with **2 cm safety margins** and complex reconstruction using a **local rotation flap** combined with a **full thickness skin graft (FTSG)**. Staging was completed through **sentinel lymph node biopsy (SLNB)** which confirmed the absence of lympho-vascular invasion. **Discussions :** The case represents a diagnostic paradox: despite high visibility of the facial region, the fulminant growth of the nodular subtype led to an advanced pT4b stage. Histologically, the moderate mitotic index and absence of lympho-vascular invasion provide unique prognostic nuances for such a tumor. Therapeutic success depended on balancing the requirement for **oncological radicality** with the **preservation of noble structures** in the temporal region. **Conclusions:** Giant nodular melanoma requires a prompt, multidisciplinary approach. Early diagnosis remains deficient in certain demographics, where the severe histopathological indices (Breslow 11 mm) requires rigorous oncological surveillance and the integration of modern adjuvant therapies.

Keywords: nodular melanoma, Breslow Thickness, temporal region, local rotation flap

METABOLIC IMBALANCE IN THE CONTEXT OF NEUROPSYCHIATRIC DISORDER – A CHALLENGING CASE

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Introduction: Type 2 diabetes mellitus (T2DM) is a complex chronic disease that requires consistent self-management and adherence to therapeutic regimens. Psychiatric comorbidities, cognitive impairments, and functional neurological symptoms can significantly compromise glycemic control and complicate disease management. Multidisciplinary interventions, including medical, psychological, and social support, are increasingly recognized as essential for optimizing outcomes in patients with multiple vulnerabilities. **Case Report:** An 44-year-old female patient with a 6-year history of T2DM, treated with oral antidiabetic agents and a basal-bolus insulin regimen, who was admitted to the Diabetology Department with a reported blood glucose level of approximately 400 mg/dL and HbA1c of 10.4%, indicating poor long-term glycemic control. The patient stated that she had been admitted multiple times to the Neurology Department for stroke. On physical examination, left-sided hemiparesis, left central facial palsy, and stuttering were observed. However, the patient refused to provide any medical documentation. During the first days of hospitalization, the left hemiparesis was noted to be inconsistently present, the facial palsy appeared predominantly when the patient was aware of being examined, and the stuttering occurred intermittently. Given these findings, a neurological consultation was requested. The evaluation revealed that the patient was known to have functional left hemiparesis, functional stuttering, depressive disorder, and behavioral impairment, while stroke was excluded. Regarding her poorly controlled diabetes, the patient's husband reported poor adherence to both pharmacological treatment and dietary recommendations, which likely contributed to her marked hyperglycemia. A psychiatrist and a psychologist were subsequently involved in the patient's management, with initiation of psychiatric treatment and structured psychotherapy focused on adherence and coping strategies, leading to improved treatment adherence and a favorable outcome, reflected by improvement of glycemic values during hospitalization. **Discussions :** The management of T2DM can be particularly challenging in the presence of psychiatric comorbidities and functional neurological symptoms. Early recognition of these psychosocial and neurobehavioral factors is critical, as they have a direct impact on self-management and metabolic control. Multidisciplinary interventions, including psychiatric and psychological support, have been shown to improve adherence and clinical outcomes in patients with complex comorbidities. **Conclusions:** This case underscores that optimal management of T2DM extends beyond glycemic monitoring and pharmacological therapy, highlighting the need for a holistic, patient-centered, multidisciplinary approach when psychosocial and functional challenges are present. Addressing psychiatric and social factors is essential for improving adherence and clinical outcomes in patients with T2DM and complex comorbidities.

Keywords: Type 2 diabetes mellitus, Psychiatric disorders, Metabolic imbalance

METASTATIC GASTRIC GIST ASSOCIATED WITH SEVERE UPPER GASTROINTESTINAL BLEEDING

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Introduction: Gastrointestinal stromal tumors (GISTs) are the most frequent mesenchymal neoplasms of the gastrointestinal tract, arising from the interstitial cells of Cajal and characterized by c-KIT (CD117) expression. Gastric involvement predominates. Clinical presentation is heterogeneous, ranging from vague symptoms to acute, life-threatening upper gastrointestinal bleeding. Advanced disease may include hepatic metastases, which confer a poor prognosis. **Case Report:** We report the case of a 44-year-old woman admitted following syncope secondary to severe anemia (hemoglobin 5 g/dL) caused by acute upper gastrointestinal bleeding, manifested as hematemesis and melena. Initial management included hemostatic therapy, red blood cell transfusions, fresh frozen plasma, and intravenous proton pump inhibitors. Upper gastrointestinal endoscopy revealed an ulcerated submucosal mass located at the gastric fornix and greater curvature, associated with diffuse bleeding (Forrest IIc). Abdominal ultrasonography demonstrated multiple large hepatic lesions with abscess-like features, measuring up

to 12 cm, and a left subdiaphragmatic mass of approximately 9 cm. Contrast-enhanced computed tomography confirmed a gastric tumor highly suggestive of GIST, accompanied by extensive hepatic metastases. Persistent and recurrent bleeding prompted surgical exploration; however, definitive hemostasis was unachievable due to advanced local and metastatic tumor spread. **Discussions** : This case illustrates the diagnostic challenge of gastric GIST presenting primarily as acute upper gastrointestinal bleeding. Ulcerated submucosal gastric lesions should raise suspicion for GIST, particularly when bleeding is severe or recurrent. Early cross-sectional imaging is essential for accurate staging, as the detection of hepatic metastases profoundly influences therapeutic decision-making and precludes curative surgical approaches. **Conclusions**: Gastric GIST may present with severe upper gastrointestinal bleeding as the first clinical sign and can be metastatic at diagnosis, even in young patients, resulting in limited therapeutic options and poor prognosis.

Keywords: Gastrointestinal stromal tumors, gastric, hepatic metastases, anemia

MILIARY PULMONARY, LYMPHATIC, PLEURAL, AND PERITONEAL TUBERCULOSIS IN A YOUNG PATIENT WITH IATROGENIC IMMUNOSUPPRESSION

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Introduction: Miliary tuberculosis (TB) is a severe form of hematogenous dissemination of *Mycobacterium tuberculosis* that typically affects immunocompromised individuals. Impaired immune containment facilitates systemic spread, most commonly involving the lymphatic system and adrenal glands. Patients frequently present with vague constitutional symptoms, though the condition can rapidly progress to multi-organ dysfunction. **Case Report:** A 53-year-old male with a history of Crohn's disease, treated with Infliximab, was admitted to the Gastroenterology Department for routine evaluation of his underlying condition. Detailed clinical history revealed a preceding constitutional syndrome characterized by persistent fever, nocturnal diaphoresis, and significant weight loss, raising suspicion of an opportunistic infection or a lymphoproliferative disorder. Thoracic CT imaging demonstrated extensive mediastinal lymphadenopathy involving multiple nodal stations, including the right pulmonary hilum. In conjunction with a positive QuantiFERON-TB Gold assay, these findings strongly supported the suspicion of tuberculosis, and prompted transfer to the Thoracic Surgery Department. The diagnostic workup included bronchoscopy with bronchoalveolar lavage, mediastinoscopy, and pleural biopsy. Etiological confirmation was obtained through GeneXpert testing, which identified a low bacillary burden of *Mycobacterium tuberculosis* DNA in the absence of Rifampicin resistance. The patient was subsequently transferred to the Pneumology Department for specialized care. Follow-up imaging confirmed miliary dissemination, characterized by diffuse pulmonary micronodules, extensive systemic lymphadenopathy (mediastinal, hilar, periceliac, and retroperitoneal), and adrenal nodular involvement. Initiation of standard antitubercular therapy was complicated by severe hepatocytolysis. Persistence of liver dysfunction following treatment discontinuation prompted further investigations, ultimately leading to the diagnosis of concomitant cytomegalovirus (CMV) hepatitis, successfully treated with Valganciclovir. After achieving clinical and biochemical stabilization, a cautious, stepwise reintroduction of antitubercular therapy was undertaken. An initial low-hepatotoxicity regimen consisting of Ethambutol and Amikacin was initiated, followed by the addition of Isoniazid. However, re-exposure to Rifampicin resulted in recurrence of hepatocytolysis, necessitating an individualized therapeutic approach. **Discussions** : Anti-TNF- α therapy impairs granuloma formation, favoring disseminated and atypical TB presentations with low sputum bacillary loads but positivity in tissue specimens, requiring high diagnostic vigilance. Intolerance to Rifampicin and Pyrazinamide necessitates second-line agents such as Amikacin, Linezolid, and Levofloxacin. Long-term management remains challenging, requiring a careful balance between Crohn's disease control and the risk of TB relapse under future immunosuppression. **Conclusions**: This case highlights the importance of multidisciplinary collaboration in managing opportunistic infections in immunocompromised patients. The coexistence of drug-induced hepatotoxicity and viral co-infection requires individualized therapeutic strategies based on close and continuous monitoring.

Keywords: Miliary tuberculosis, CMV hepatitis, Crohn's Disease

MILLISECOND-PULSED 532-NM KTP LASER IN THE TREATMENT OF EXTENSIVE POST-BURN ERYTHEMATOUS KELOIDS IN A CHILD

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Introduction: Following burn trauma, the formation of active, erythematous keloids is a frequent and challenging clinical condition. The prominent erythema and active growth pattern in keloids are directly related to excessive neovascularization during wound healing. The KTP (Potassium-Titanyl-Phosphate) laser is a powerful, non-invasive option for targeting vascular proliferation due to its proximity to the absorption peak of oxyhemoglobin (542 nm). This study aims to present the efficacy and safety of millisecond-pulsed KTP laser treatment for keloidal lesions in a 7-year-old female patient. **Case Report:** A 7-year-old female patient presented to our clinic with widespread erythematous keloids distributed across her trunk and upper and lower extremities. These lesions had developed after a severe thermal burn caused by exposure to a hot solution of Vicks® four months earlier. Given the extensive nature of the scars and the patient's young age, she underwent four sessions of millisecond-pulsed 532-nm KTP laser therapy under sedation. An intralesional combination of 5-fluorouracil and triamcinolone acetonide was administered, with the concentration of triamcinolone acetonide standardized to 10 mg/mL in the final mixture. The intralesional treatment was combined with 532-nm KTP laser therapy and performed for a total of three sessions. The treatments were well tolerated, and no adverse effects or complications were observed following the procedures. Following the treatment course, a remarkable regression of approximately 90% in both erythema and induration of the keloidal lesions was observed. This significant clinical improvement also resulted in a substantial enhancement in the patient's overall quality of life. **Discussions :** The non-Q-switched 532-nm KTP laser operates via the principle of selective photothermolysis, targeting the increased microvasculature present in keloid tissue. This laser creates a "microvascular suffocation" effect without inducing peripheral thermal necrosis in the pathological scar tissue. Consequently, it decreases the vascular supply, leading to localized hypoxia and suppression of excessive collagen synthesis. The literature demonstrates that KTP laser therapy is effective in reducing scar erythema and thickness, offering clinical results comparable to those achieved with the Pulsed Dye Laser. In the treatment of our patient's widespread keloids, the active vascularization was successfully reduced by utilizing the 532-nm wavelength's high affinity for oxyhemoglobin. **Conclusions:** Because traditional intralesional therapies are painful and require repeated sessions in children, compliance may be limited. The 532-nm KTP laser provides a faster, well-tolerated and effective alternative for keloid treatment.

Keywords: KTP laser, keloid treatment, burn trauma

MINIMALLY INVASIVE APPROACH FOR URETEROPELVIC JUNCTION OBSTRUCTION IN ADULTS: A CASE REPORT

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Introduction: Ureteropelvic Junction Obstruction (UPJO) is a medical condition either congenital or acquired, characterized by impaired flow of urine from the renal pelvis to the ureter. The increased pressure inside the kidney, left untreated, can cause deterioration of the kidney function. It is the main cause of Hydronephrosis that affects children, and it can be asymptomatic until adulthood. Hydronephrosis is a condition characterized by the dilatation of the pyelocaliceal system. It is mainly caused by an obstruction of the urinary outflow at any level of the urinary tract. Grade V Hydronephrosis represents the most severe stage of this condition, it is characterized by a massive dilatation of the pyelocaliceal system and a severe damage of the renal parenchyma. **Case Report:** A 30-year-old female with history of chronic gastritis and hepatic steatosis, well controlled on medication is presented to the urology clinic at the Târgu Mureş County Emergency Clinical Hospital with persistent left flank pain, nausea and vomiting. Routine laboratory investigations revealed leukocyturia in the absence of nitrites, suggesting an inflammatory process while urine culture showed <1000 CFU/mL. Ultrasound and contrast-enhanced computed tomography examination revealed a left renal grade IV hydronephrosis, likely of congenital origin; uro-CT imaging did not identify an inferior polar vessel. Functional renal scintigraphy proved that the kidney retained 34% of its function having an indication for surgical treatment. Laparoscopic Left Pyeloplasty was performed with minimal

blood loss in 75 minutes. The patient's postoperative recovery went well, without complications, with excellent prognostic. **Discussions** : This case highlights the importance of using imaging examinations such as scintigraphy to determine surgical intervention and preserve renal function. The degree anatomical dilatation of the kidney may not accurately reflect the functional impairment, that is why supplementary investigations such as functional renal scintigraphy were needed to confirm that 34% of the kidney remained unaffected, and laparoscopic pyeloplasty was performed to provide a solution to relieve the symptomatic obstruction. **Conclusions**: The aim of this presentation is to illustrate the management of Grade IV hydronephrosis caused by a congenital UPJ obstruction in an adult female patient prioritizing functional data before coming to a treatment conclusion. This case also shows the importance of minimally invasive surgery in treatment and preservation of kidney functionality and patient's fast recovery.

Keywords: Ureteropelvic Junction Obstruction, Hydronephrosis, Functional scintigraphy, Laparoscopic pyeloplasty

MINIMALLY INVASIVE BRIDGE PLATING (MIPO) AS A TISSUE-SPARING STRATEGY FOR DISTAL THIRD TIBIAL FRACTURE IN A FRAIL ELDERLY PATIENT: A CASE REPORT

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Introduction: Distal-third tibial fractures in geriatric patients present a challenging problem because of soft-tissue vulnerability, limited distal segment length, and comorbidity-related frailty that increase the risk of wound complications, delayed mobilization, and loss of independence. Surgical goals are to restore alignment and stability while minimizing soft-tissue damage. Minimally invasive plate osteosynthesis (MIPO) with bridge plating is a tissue-sparing strategy that preserves periosteal blood supply and fracture biology, advantageous in fragile patients. **Case Report:** We present the case of a 85 year woman who sustained a left lower-limb injury after a vertigo-related fall. Comorbidities included chronic anemia, irritable bowel syndrome, polycystic kidney disease, type II diabetes mellitus, vertigo syndrome, and hypoacusis. Radiographs (lateral view) demonstrated a displaced extra-articular fracture of the distal third of the tibial shaft/supramalleolar region. Based on the intraoperative radiographic images provided, management consisted of plate osteosynthesis using a long bridging plate with multiple screws: 3 in the distal fragment to improve angular stability, and 4 in the proximal segment to secure the plate to the diaphysis and maintain alignment. The central portion of the plate overlying the fracture site was intentionally left without screws, creating an appropriate working length and promoting bone healing through callus formation. The screws are consistent with a minimally invasive fixation concept (MIPO/bridge plating) to stabilize the distal segment and maintain alignment. **Discussions** : This case illustrates how patient factors can be the primary source of complexity in a common fracture pattern. Advanced age, diabetes, anemia, renal disease, and vertigo (predisposing to recurrent falls) increase perioperative vulnerability and increase the importance of choosing a fixation method that limits soft-tissue disruption and surgical stress. Distal tibial fractures are particularly prone to skin and wound problems due to thin soft-tissue coverage, making extensive open reduction less desirable in selected elderly patients. Bridge plating performed through small incisions allows indirect reduction and relative stability, promoting callus formation while protecting the fracture hematoma and periosteal perfusion. The radiographic postoperative appearance supports adequate fixation with a long plate, a construct designed to control alignment and resist deforming forces across the distal tibia. **Conclusions:** In elderly diabetic comorbid patients with displaced distal-third tibial fractures, minimally invasive bridge plating is a rational tissue-sparing surgical strategy to achieve alignment and stability while respecting soft tissues and fracture biology.

Keywords: Distal-third tibial fracture, Minimally invasive plate osteosynthesis (MIPO), Bridge plating, Soft-tissue preservation

MINIMALLY INVASIVE ENDOSCOPIC RESECTION OF A GIANT LEFT ATRIAL MYXOMA

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Introduction: Cardiac myxoma represents the most common benign tumor of the heart, accounting for about 50% of all cardiac tumors, and is found in the left atrium in over 75% of cases. Although it is a rare pathology, its clinical

importance is significant because of its high risk for systemic embolization, valvular obstruction, and heart failure. Treatment is exclusively surgical, with median sternotomy being the classical approach, especially in cases of large tumors. Minimal invasive endoscopic approaches for massive myxoma are rarely reported and represent a significant technical challenge especially in elderly patients. **Case Report:** We present the case of a 81 year old patient who was transferred to our clinic accusing dyspnea and fatigue at minimal effort (NYHA III). Recent medical history included a cerebrovascular accident with residual sequelae suggesting a previous embolic complication potentially related to the cardiac mass. Clinical examination did not reveal signs of advanced right-sided heart failure. Transthoracic echocardiography detected a mobile hyperechoic mass in the left atrium, attached to the interatrial septum, measuring approximately 74 × 24 mm. The mass occupied more than 75% of the atrial cavity and prolapsed through the mitral valve during diastole, causing significant functional mitral stenosis. Complete tumor excision was performed using a minimally invasive endoscopic approach with cardiopulmonary bypass and right femoral arterial and venous cannulation. The postoperative outcome was excellent. Histopathological examination confirmed the diagnosis of myxoma. **Discussions :** Median sternotomy remains the standard surgical approach for cardiac myxoma resection, providing excellent access but associated with longer hospital stays, higher blood loss and increased complication rates including stroke. Complete tumor resection through a minimally invasive endoscopic approach can be a safe alternative to conventional sternotomy, especially in experienced centers. Median sternotomy provides excellent surgical exposure but is often associated with longer hospital stays, higher blood loss, and increased risk of complications, while minimally invasive techniques have demonstrated similar surgical safety with several postoperative advantages, including reduced blood loss and less postoperative pain. These benefits are especially important in elderly patients, where faster recovery and earlier mobilization can significantly improve outcomes **Conclusions:** Our case shows that left atrial myxomas can be safely treated with a minimally invasive endoscopic approach, even in elderly patients. A careful preoperative evaluation and experienced surgical team are important in achieving a complete resection and minimizing complications. Minimally invasive surgery offers faster recovery, and excellent long-term outcomes, making it a real alternative to conventional sternotomy in selected patients.

Keywords: Cardiac Myxoma, Minimally Invasive Surgery, Endoscopic Resection

MINIMALLY INVASIVE ETEP-TAR FOR COMPLEX POST-TRAUMATIC INCISIONAL HERNIA FOLLOWING EMERGENCY LAPAROTOMY

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Introduction: High-energy blunt abdominal trauma often necessitates emergency laparotomy, creating a trade-off between life-saving intervention and long-term abdominal wall integrity. Large post-laparotomy incisional hernias remain a challenging sequela, particularly in patients requiring reoperation. The Enhanced-View Totally Extraperitoneal (eTEP) approach combined with Transversus Abdominis Release (TAR) allows anatomical reconstruction through a minimally invasive, extraperitoneal route. This case is notable as it illustrates the use of eTEP-TAR in a post-traumatic setting, following prior emergency laparotomy and subsequent development of a complex reoperative field. The combination of damage control surgery outcomes with advanced, fully extraperitoneal reconstruction is still relatively underreported. Importantly, this approach avoids intraperitoneal adhesiolysis while preserving neurovascular integrity. **Case Report:** A 58-year-old male sustained a Grade IV splenic laceration following a fall from height, requiring emergency splenectomy. Initial recovery was uneventful. However, he subsequently developed a large midline incisional hernia associated with diastasis recti. Reconstruction was performed using a minimally invasive eTEP-TAR technique. The retromuscular space was developed through an extraperitoneal approach, avoiding intra-abdominal adhesions. Posterior component separation was achieved through transversus abdominis release, enabling tension-free medialization of the rectus complexes. The inferior epigastric vessels and lateral neurovascular bundles were preserved throughout. A large macroporous mesh was deployed in the retromuscular plane. Operative time was 180 minutes, with no intraoperative complications. The postoperative course was uneventful, with early mobilisation and discharge on postoperative day 3. **Discussions :** eTEP-TAR enables prosthetic reinforcement in an extraperitoneal position, reducing the risk of mesh-related visceral complications while utilising preserved retromuscular planes, even after prior laparotomy. This approach combines the biomechanical advantages of posterior component separation with those of minimally invasive surgery. Although technically demanding and associated with longer operative times, it is associated with reduced postoperative pain, faster recovery, and avoidance of re-entry into a scarred peritoneal cavity. In this context, eTEP-TAR represents a step forward from damage control toward definitive functional

reconstruction. **Conclusions:** Current literature supports eTEP-TAR as an effective minimally invasive alternative to open posterior component separation, with benefits including reduced postoperative pain, shorter hospital stay, and lower wound morbidity. It appears to be a safe and effective option for complex post-traumatic incisional hernias. The combination of extraperitoneal mesh placement and anatomical reconstruction facilitates durable abdominal wall restoration and rapid postoperative recovery in appropriately selected patients.

Keywords: eTEP-TAR, Incisional Hernia, Abdominal Wall Reconstruction, Splenic Trauma

MINIMALLY INVASIVE FIXATION AS AN EFFECTIVE SURGICAL STRATEGY FOR PERTROCHANTERIC FEMORAL FRACTURE IN A HIGH-RISK PATIENT WITH CONCURRENT HEMATOLOGIC AND GASTROINTESTINAL INSTABILITY: A CASE REPORT

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Introduction: Pertrochanteric femoral fractures are among the most common fractures in the elderly, carrying significant morbidity and one-year mortality rates exceeding 20% in high-risk populations. Management becomes substantially more complex when patients present with overlapping systemic instabilities that elevate perioperative risk beyond the orthopedic injury itself. In such scenarios, the surgical strategy must balance mechanical stability against the patient's biological tolerance. Cephalomedullary nailing has emerged as a preferred technique, offering intramedullary load-sharing with minimal surgical exposure, making it particularly suited for biologically fragile patients. **Case Report:** A 71-year-old female presented following a ground-level fall with pain and functional impairment of the right lower limb. Radiography revealed a right pertrochanteric femoral fracture. Her medical history included type 2 diabetes mellitus, arterial hypertension, chronic kidney disease, and an inferior esophageal ulcer with episodes of hematemesis. Laboratory studies demonstrated anemia (hemoglobin 8.2 g/dL), thrombocytopenia (74,000/ μ L), prolonged coagulation times (INR 1.6), and elevated creatinine (2.1 mg/dL). Preoperative optimization included packed red blood cell transfusion, fresh frozen plasma, and proton pump inhibitor therapy to mitigate gastrointestinal hemorrhage risk. Surgery was performed on hospital day seven after hemodynamic and coagulation stabilization. The patient underwent closed reduction under fluoroscopic guidance followed by osteosynthesis using a dynamically locked cephalomedullary Gamma nail (Stryker system) with distal static locking. The minimally invasive approach required only a small proximal incision. Operative time was 45 minutes with minimal blood loss. Intraoperative fluoroscopy confirmed anatomical reduction, correct cephalic lag screw positioning, and stable fixation. Thromboprophylaxis was initiated postoperatively, and assisted weight-bearing mobilization began on postoperative day two. **Discussions :** This case illustrates cephalomedullary nailing as an optimal strategy in high-risk geriatric patients with pertrochanteric fractures. The Gamma nail provides controlled fracture compression through its dynamic lag screw mechanism while the intramedullary position allows load-sharing with the medial cortex, reducing implant stress and promoting biological healing. The technique requires minimal soft-tissue disruption, short operative time, and limited blood loss which are critical in a patient with coagulopathy, thrombocytopenia, and upper GI bleeding risk. The multidisciplinary preoperative stabilization protocol enabled safe intervention, while the efficiency of the technique minimized perioperative vulnerability. **Conclusions:** Cephalomedullary nailing represents an effective fixation strategy for pertrochanteric fractures in high-risk comorbid patients. Its minimally invasive profile, biomechanical efficiency, and short operative time make it advantageous when reducing surgical stress is a primary objective. Patient-tailored perioperative optimization combined with appropriate fixation technique can achieve safe outcomes even in a biologically hostile clinical setting.

Keywords: Pertrochanteric femoral fracture, Cephalomedullary nail, Minimally invasive fixation, Perioperative coagulopathy management

MINIMALLY INVASIVE FIXATION WITH MAXIMUM IMPACT: CENTROMEDULLARY OSTEOSYNTHESIS OF THE HUMERUS

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Introduction: Centromedullary osteosynthesis systems have become an increasingly used option in the modern management of humeral fractures, due to their adaptability and biomechanical performance for different types of fractures. Among these, the implants developed by Smith & Nephew stand out through the versatility of their locking options and the stability they provide, representing a therapeutic alternative of interest in current practice.

Case Report: In this case, we have a 90-year-old female patient who presented to the emergency department. She had functional impairment of the left upper limb, associated with intense pain, occurring secondary to a fall from standing height. Following clinical and paraclinical investigations, including X-rays, laboratory tests and an electrocardiogram, the decision was made to admit her to the Orthopedics and Traumatology department in order to institute the appropriate specialized surgical treatment. In her medical history, we can note the presence of arterial hypertension. Preoperatively, the patient received anti-inflammatory drugs, analgesics, gastroprotective agents, and intravenous hydration was ensured. The surgical intervention was performed after adequate anesthetic preparation. Afterwards, the fracture was reduced in a closed focus, followed by osteosynthesis with a Smith & Nephew centromedullary system, locked proximally with two static screws and distally with a single screw, all under fluoroscopic (RTG-TV) control. Finally, lavage, suturing, and application of a sterile dressing to the wound were performed. **Discussions :** The centromedullary method, which utilizes an intramedullary nail, is considered superior in many humeral fractures because it stabilizes the bone from the inside, resulting in smaller incisions and minimal damage to muscles and vascular structures, which promotes natural healing. Compared to cast immobilization, it offers a better balance between stability and early mobilization, reducing the risk of complications and joint stiffness. In practice, it allows for faster functional recovery while preserving the normal biomechanics of the bone. **Conclusions:** Centromedullary osteosynthesis emphasizes the importance of integrating biomechanical and biological principles in the treatment of humeral fractures, demonstrating that controlled internal stabilization enables the maintenance of the bone axis, limits tissue damage, and facilitates early resumption of upper limb function. The analysis of this method emphasizes the value of minimally invasive techniques in increasing therapeutic efficiency and reducing postoperative morbidity. By systematizing the technical and clinical aspects, the paper contributes to consolidating the theoretical and practical basis regarding modern osteosynthesis approaches in orthopedic traumatology.

Keywords: Centromedullary osteosynthesis, Intramedullary nail fixation, Biomechanical stability, Axis restoration

MINIMALLY INVASIVE MCKEOWN ESOPHAGECTOMY FOR MID-THORACIC SQUAMOUS CELL CARCINOMA IN A 72-YEAR-OLD PATIENT WITH ARTERA LUSORIA

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Introduction: Esophageal squamous cell carcinoma often requires complex surgical intervention following neoadjuvant therapy. Surgical management is further complicated by rare anatomical variations, such as an aberrant right subclavian artery (artera lusoria), which can be closely adherent to the esophageal tumor. This report presents the successful multidisciplinary management of a geriatric patient undergoing a minimally invasive triple-approach McKeown esophagectomy. **Case Report:** A 72-year-old male patient with multiple comorbidities, including chronic ischemic cardiomyopathy and grade 2 hypertension, was diagnosed with a mid-thoracic squamous cell carcinoma (cT3N2M0). Following neoadjuvant radiochemotherapy (45Gy), he underwent a minimally invasive McKeown esophagectomy. Intraoperatively, an artera lusoria was identified, with the tumor found to be tightly adherent to this aberrant vessel. The procedure involved a thoracoscopic esophageal dissection, laparoscopic gastric conduit formation, and a manual cervical esogastric anastomosis. Postoperatively, the patient's recovery was complicated by bronchopneumonia and transient psychomotor agitation, managed in the Intensive Care Unit (ICU) with broad-spectrum antibiotics and dexmedetomidine. Despite an initial period of hemodynamic instability requiring vasopressor support, the patient stabilized. Imaging on postoperative day 13 confirmed a patent 15 mm anastomosis with no evidence of fistulization. The patient was transitioned to oral intake and discharged in a stable condition 25 days after admission. **Discussions :** The presence of an aberrant right subclavian artery represents a rare but important anatomical variation that may complicate esophageal surgery. Close adherence between the tumor and the aberrant vessel increases the technical difficulty of dissection and the risk of vascular injury. Minimally invasive McKeown esophagectomy allows adequate oncologic resection while providing improved visualization of mediastinal structures. In elderly patients with multiple comorbidities, careful perioperative management and early treatment of postoperative pulmonary complications are essential to ensure favorable outcomes. **Conclusions:** The McKeown triple-approach esophagectomy remains a viable and effective

treatment for mid-thoracic esophageal cancer even in the presence of significant vascular anomalies like arteria lusoria. Successful outcomes in high-risk geriatric patients are dependent on thorough preoperative prehabilitation, precise surgical technique to navigate anatomical variations, and proactive management of postoperative pulmonary complications.

Keywords: McKeown Esophagectomy, Arteria Lusoria, Esophageal Squamous Cell Carcinoma

MINIMALLY INVASIVE SURGICAL APPROACH FOR PROSTATE ADENOCARCINOMA WITH A LARGE MEDIAN LOBE. CASE REPORT

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Introduction: Prostate adenocarcinoma represents the most common form of prostate cancer, developing neoplastically from the glandular cells of the prostate. Radical surgical treatment is represented by radical prostatectomy which, when performed using a minimally invasive approach, offers multiple advantages for both the patient and the urologic surgeon. **Case Report:** A 75-year-old patient, sexually inactive, diagnosed with prostate adenocarcinoma in the right lobe, confirmed by biopsy, with a Gleason score of 3+4=7, clinical stage cT2bN0M0, PSA 2.3 ng/ml, classified as intermediate risk. Pelvic MRI revealed two suspicious PIRADS 4 lesions, apical and medial right, in the context of an enlarged prostate (approximately 70 cm³), associated with a median lobe with intravesical protrusion. Clinically, the patient was in good condition, presenting chronic incomplete urinary retention under treatment. Digital rectal examination revealed an enlarged prostate with an obliterated median sulcus and nodules in the right lobe. In such a patient, alternative therapeutic options may be considered, including active surveillance in selected cases, external beam radiotherapy or brachytherapy, androgen deprivation therapy, or combined modalities depending on life expectancy, comorbidities, tumor characteristics, and patient preference. The particularity of the case was represented by the increased prostate volume and the median lobe protruding intravesically, altering anatomical landmarks at the bladder neck and trigone, complicating dissection and increasing the risk of complications. A 3D laparoscopic radical prostatectomy was performed, allowing visualization of anatomical structures and complex maneuvers under direct control. Bladder neck dissection was performed carefully, preserving adjacent structures and identifying anatomical planes modified by the median lobe. Reconstruction of the bladder neck and urethrovesical anastomosis were carried out safely, without tension. The duration of surgery was approximately 85 minutes, without intraoperative incidents. Postoperative evolution was favorable, without complications, with drain removal on postoperative day three and discharge on day four. At 14 days, after catheter removal, the patient resumed spontaneous voiding with minimal stress urinary leakage. At 3 months, the patient regained continence. Postoperative histopathological examination revealed bilateral prostate adenocarcinoma, stage pT2cN0M0R0. **Discussions :** The 3D laparoscopic approach provides significant benefits in such complex cases, offering clear three-dimensional visualization of the surgical field and improved control of surgical maneuvers. This allows easier identification of anatomical planes, even when altered, facilitating careful prostate dissection and more accurate reconstruction of the bladder neck. **Conclusions:** Prostate adenocarcinoma is a condition with progressive risk, which, when diagnosed early through screening methods, can be treated radically. The minimally invasive approach provides both intraoperative and postoperative advantages.

Keywords: Prostate adenocarcinoma, 3D laparoscopic radical prostatectomy, Enlarged prostate with median lobe, Intermediate-risk prostate cancer

MULTI-DISCIPLINARY MANAGEMENT OF CRITICAL METABOLIC ACIDOSIS IN SUSPECTED AMANITA PHALLOIDES POISONING

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Introduction: Extreme lactic acidosis represents a life-threatening metabolic emergency, typically associated with profound tissue hypoxia, shock or toxic exposure. Mycotoxin-induced metabolic dysfunction is rare, but carries high mortality, particularly in cases of Amanita phalloides poisoning. We report a case notable for survival, despite an initial arterial pH of 6.98 and lactate level of 24.6 mmol/L, in the context of accidental Amanita Phalloides ingestion. **Case Report:** A 39-year-old male with a history of chronic alcoholism and Wernicke-Korsakoff syndrome

presented with a 3-4-day history of diffuse abdominal pain, nausea, and persistent vomiting. On admission, he was hemodynamically unstable (blood pressure 88/53 mmHg, heart rate 124 bpm), in acute respiratory failure. After the initial assessment and hemodynamic stabilization, laboratory investigations revealed: Severe lactic acidosis (pH 6.98, HCO_3^- 6.8 mmol/L, lactate 24.6 mmol/L) Acute kidney injury (creatinine 2.15 mg/dL) Hepatocytolysis (AST 215 U/L). A computed tomography was performed for suspected intestinal infarction, which revealed marked hepatic steatosis and findings suggestive of ischemic colitis. Given the results and the high suspicion of toxic-alcohol ingestion or mushroom poisoning (heteroanamnesis, the patient ingested wild mushrooms 3 days prior), immediate management included aggressive intravenous fluid resuscitation (0.9% sodium chloride), intravenous bicarbonate therapy, high dose N-Acetylcysteine, high dose Penicillin G and opioid analgesia. Due to persistent metabolic instability and worsening renal function, a femoral dialysis catheter was inserted under ultrasound guidance, and urgent renal replacement therapy was initiated. The patient had a favorable evolution, with improvement of metabolic, renal and hepatic function and was later on discharged, having the presence of Amanitin confirmed on toxicological tests. **Discussions** : The delayed gastrointestinal symptoms followed by acute hepatorenal dysfunction raised strong suspicion for Amanita phalloides intoxication. Differential diagnosis included toxic alcohol ingestion and shock-related lactic acidosis, particularly given the patient's pre-existing liver disease. Compared with published literature, lactate levels exceeding 20 mmol/L are associated with extremely high mortality. Survival in this case underscores the importance of early recognition and rapid multi-disciplinary coordination between Emergency Medicine, Internal Medicine, Nephrology, and Intensive Care teams. Prompt correction of severe acidemia, early initiation of empiric pharmacotherapy and renal replacement therapy likely contributed to favorable outcome. **Conclusions**: Severe lactic acidosis secondary to suspected mycotoxin exposure requires immediate, coordinated intervention, at the slightest suspicion of poisoning. This case emphasizes the importance of maintaining a high index of suspicion for environmental toxins in patients presenting with unexplained hepatorenal failure and highlights the critical role of early renal replacement therapy in refractory metabolic acidosis.

Keywords: Amanita Phalloides, Acute Kidney Inj., mycotoxicosis, mushroom poisoning

MULTI-DISCIPLINARY MANAGEMENT OF SEVERE POLYTRAUMA SECONDARY TO CHAINSAW HETERO-AGGRESSION

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Introduction: Chainsaw-related injuries represent a rare but devastating form of high-energy trauma, characterized by extensive soft tissue destruction, contamination, and complex reconstructive requirements. Simultaneous craniofacial and distal upper limb involvement poses a major surgical challenge, requiring immediate, coordinated multi-disciplinary intervention. This case is notable for the mechanism of injury (intentional hetero-aggression) and the successful preservation of neurological integrity and hand functionality in an elderly patient. **Case Report:** A 72-year-old female presented to the Emergency Department following an assault with a chainsaw. Initial evaluation revealed a right frontal depressed skull fracture and a severe mangled injury of the right hand. Emergency surgical management involved both Neurosurgery and Plastic & Reconstructive Surgery teams. Neurosurgical intervention: Intraoperative findings confirmed a depressed right frontal fracture with a 2-3 cm dural laceration. Management included extensive debridement, copious irrigation, duraplasty, and meticulous hemostasis to reduce the risk of intracranial infection and secondary neurological complications. Plastic and reconstructive intervention: The right hand injury involved a complete lesion of the flexor pollicis longus tendon and damage to the ulnar neurovascular bundle. Surgical procedures included radical wound excision, exploration and repair of the ulnar artery, neurotomy of the ulnar nerve, tenorrhaphy of the flexor tendon, and coverage using local skin flap reconstruction. A contaminated occipital scalp defect was similarly managed through aggressive debridement and reconstructive flap techniques. **Discussions** : Chainsaw trauma differs from conventional sharp injuries due to high rotational energy, irregular tissue loss, and significant contamination. The presence of bone fragmentation and dural breach increased the risk of central nervous system infection, necessitating urgent stabilization and watertight dural repair. In the distal extremity, early microsurgical repair of vascular, neural, and tendinous structures was essential to preserve limb viability and functional outcome. Literature supports immediate reconstruction in select contaminated wounds when thorough debridement and irrigation are performed, reducing the need for staged procedures and improving recovery potential. This case underscores the importance of rapid coordination between neurosurgical and reconstructive teams in managing complex multi-regional trauma. **Conclusions:** Severe chainsaw-induced polytrauma requires aggressive debridement, prompt cranial stabilization,

and early microvascular and tendon reconstruction. Even in elderly patients, a coordinated multi-disciplinary surgical strategy can result in favorable neurological and functional outcomes.

Keywords: Polytrauma, chainsaw injury, reconstructive surgery, neurorrhaphy

MULTIDISCIPLINARY DIAGNOSTIC CHALLENGES: ANKYLOSING SPONDYLITIS ASSOCIATED WITH INFLAMMATORY BOWEL DISEASE AND HEPATIC INVOLVEMENT

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Introduction: Ankylosing Spondylitis (AS) is a chronic inflammatory disease that predominantly affects the axial skeleton but frequently presents with complex extra-articular manifestations. We present the case of a 51-year-old male patient whose clinical picture included not only joint pain but also marked weight loss (20 kg in 2 months), severe anemia, and the suspicion of either a concomitant autoimmune pathology or an underlying malignancy. This case serves as a prime example of the diagnostic hurdles encountered when systemic symptoms overshadow primary rheumatological complaints. **Case Report:** The patient sought medical attention for inflammatory low back pain, limited spinal mobility, nocturnal sweats, and a significantly deteriorated general state. Imaging investigations, including pelvic MRI and spinal CT, revealed stage II bilateral sacroiliitis and modifications typical of ankylosing spondylitis, such as syndesmophytes and sacral erosions. Biological tests confirmed the presence of the HLA-B27 antigen and a marked inflammatory syndrome, with an ESR of 105mm/h and positive CRP. To address the severe weight loss, malignancy was excluded through thoraco-abdominal-pelvic CT scans and specific tumor markers. The uniqueness of this case lies in the coexistence of inflammatory bowel disease (confirmed by endoscopic evaluation, biopsy, and a fecal calprotectin level of 541µg/ml) and autoimmune hepatitis, indicated by positive anti-LC-1 antibodies. Furthermore, CT imaging identified a horseshoe kidney and mesenteric lymphadenopathy. Therapeutic management was initiated with Sulfasalazine, titrated up to 3g/day, with recommendations for further evaluation for biological therapy. **Discussions :** This case highlights the imperative for a multidisciplinary approach when facing a patient with chronic back pain and systemic symptoms. While the association between AS and inflammatory bowel disease is well-documented, the simultaneous presence of autoimmune hepatitis markers and congenital renal anomalies complicates both the prognosis and the long-term therapeutic strategy. **Conclusions:** The complexity of this clinical scenario underscores that Ankylosing Spondylitis must be viewed as a systemic disease requiring vigilance beyond the musculoskeletal system. Rigorous monitoring of liver function and nutritional status is critical for treatment success and the prevention of progressive ankylosis. Ultimately, the integration of rheumatological, gastroenterological, and hepatological perspectives is essential to optimize patient outcomes in cases with such diverse comorbidities

Keywords: Ankylosing spondylitis, Inflammatory bowel disease, Autoimmune hepatitis, HLA-B27

MULTIDISCIPLINARY MANAGEMENT OF ACUTE ACALCULOUS CHOLECYSTITIS IN AN ELDERLY PATIENT WITH COMPLEX COMORBIDITIES: CHALLENGES IN THERAPEUTIC DECISION-MAKING

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Introduction: Acute cholecystitis is a major cause of morbidity in elderly patients with multiple comorbidities. Although 90% of cases are lithiasic in origin, the acalculous form is significantly more aggressive, with higher rates of gangrenous transformation, increased mortality, and more severe clinical presentations. The importance of this case lies in the therapeutic challenge of managing abdominal sepsis in a patient with chronic kidney disease (CKD) stage IIIb with acute exacerbation, along with an increased bleeding risk due to treatment with direct oral anticoagulants. **Case Report:** A 84-year-old male patient, known with arterial hypertension, permanent atrial fibrillation, ascending aortic ectasia, and type 2 diabetes mellitus, presented to the emergency department with severe right upper quadrant pain, with postprandial onset. Physical exam revealed altered status, scleral icterus, and an irregular heart rhythm with a grade III/VI mitral systolic murmur. Pulmonary examination revealed bilateral basal crackles and decreased tactile fremitus. Initial laboratory investigations substantiated the severity of the systemic inflammatory response, with a marked elevation of C-reactive protein (CRP 61 mg/dL) and presepsin

(4649 pg/ml). Diagnostic workup identified significant multisystemic involvement, including: acute kidney injury (AKI 2.39 mg/dL) superimposed on known CKD, moderate thrombocytopenia (64,000/ μ L), and an impaired coagulation profile (INR 1.83). Furthermore, a profound hepatobiliary and pancreatic insult was evident, characterized by hepatocytolysis (AST 267 U/L, ALT 226 U/L), severe hyperbilirubinemia (9.2 mg/dL), cholestasis (ALP 227 U/L, GGT 152 U/L), and a significant secondary pancreatic reaction (amylase 2068 U/L). Concurrently, a critical elevation of NT-proBNP (16029 pg/ml) underscored acute cardiac strain in the context of the septic focus. The diagnosis was refined through a multimodal imaging approach. Abdominal ultrasound initially detected a hypotonic gallbladder with wall thickening and millimetric calculi/sludge. Subsequent CT and MRI exams confirmed acute acalculous cholecystitis, characterized by diffuse wall hypertrophy and pericolecystic edema, without macrocalculi in the common bile duct. **Discussions** : This case reflects the therapeutic dilemma ("clinical equipoise") described in the literature regarding the management of cholecystitis in patients with multimorbidity. Although surgery is often associated with reduced 30 and 90-day mortality, this patient's perioperative risk was exponentially increased by renal dysfunction and anticoagulant therapy. Management required a multidisciplinary approach (gastroenterology, internal medicine, cardiology). A key challenge was balancing the bleeding risk with the need for rapid control of the septic source. **Conclusions**: This case highlights the importance for early diagnosis and personalized management of acalculous cholecystitis in elderly cardiac patients, balancing systemic stability with infection control and coagulopathy.

Keywords: acalculous cholecystitis, sepsis, chronic kidney disease, multidisciplinary management

MULTIDISCIPLINARY MANAGEMENT OF GASTROSCHISIS IN A FULL-TERM SGA NEONATE WITH PERIPARTUM DISTRESS: A CASE REPORT.

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Introduction: Gastroschisis is a congenital defect characterized by herniation of abdominal viscera through an abdominal wall defect, typically found on the right side, without a protective membrane. While it can be diagnosed prenatally as soon as the 10th week of gestation and numerous surgical techniques have been perfected as for treatment, gastroschisis remains associated with significant morbidity and mortality (Rustemov D, 2025). **Case Report:** We present the case of a full-term male who was born via cesarean section at 40 weeks gestation. His Apgar scores were 6 at 1 minute and 8 at 5 minutes. He was born small for gestational age (SGA), with a birth weight of 2310 g. He was born to a 26-year-old woman, gravida 1, para 1. At the clinical exam the eventration of the small intestines through a defect in the anterior abdominal wall was noted, and thus gastroschisis was confirmed. Adequate stabilizing measures were taken and at 3.5 hours of life, the infant was transferred to the surgical ward, where a staged correction surgery was performed, namely a minimal laparotomy, lavage and placement of a silo bag (endobag) for abdominal visceral containment. Post-op the patient was transferred back to the neonatal intensive care unit. The post-op course was complicated by severe hypothermia (33°C), metabolic acidosis and globally decreased cardiac contractility, requiring dopamine. From his evolution we also mention the presence of transient biliary ocular secretions, most probably due to the reflux of the gastric contents from the nasogastric tube into the nasolacrimal canals. It is also mentionable that serial cranial ultrasounds showed progression from cerebral edema to periventricular microcysts. The abdominal wall was closed after 10 days, with good further outcome, the baby being discharged on day 25 of life on total enteral feeding and ascending weight curve. **Discussions** : This case highlights the importance of proper management of gastroschisis. With the rightly timed surgical intervention and appropriate therapeutic measures, the neonate has shown a swift recovery with minimal long-term complications. The particularity of this case is characterized by the fact that despite the unfavorable start of life given by the low Apgar score, abdominal wall defect and cardiac decompensation, at discharge the patient was clinically stable and showed an ascending weight curve. **Conclusions:** Gastroschisis is a potential life-threatening congenital malformation, but a coordinated, multidisciplinary approach can ensure a positive outcome even in high-risk gastroschisis cases complicated by perinatal hypoxia and multi-organ involvement.

Keywords: gastroschisis, SGA, siloplasty

MULTIDISCIPLINARY MANAGEMENT OF POST-HEMORRHAGIC HYDROCEPHALUS IN AN EXTREMELY LOW BIRTH WEIGHT NEONATE: A CASE REPORT

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Introduction: Extremely low birth weight (ELBW) neonates face significant survival challenges due to a complex interplay of multisystemic pathologies. High-grade intraventricular hemorrhage (IVH) and the subsequent development of post-hemorrhagic hydrocephalus represent critical neurological milestones that often mandate invasive surgical intervention. Beyond these neurological risks, clinical management is further complicated by severe respiratory failure and cardiovascular instability. **Case Report:** The patient, a male neonate with a birth weight of 800 grams, was delivered at 27 weeks gestation via emergency Cesarean section due to acute fetal distress. The clinical course began with severe birth asphyxia, evidenced by Apgar scores of 1 at one minute, 3 at five minutes, and 4 at ten minutes, necessitating extensive resuscitation including cardiac massage and adrenaline administration. Initial stabilization required mechanical ventilation and surfactant therapy for severe Respiratory Distress Syndrome. The primary clinical challenge emerged through serial neurological monitoring. At 40 hours of life, a transfontanellar ultrasound revealed a Grade II intraventricular hemorrhage on the right side. By the fifth day, the pathology progressed significantly to Grade III on the right and Grade IV on the left, accompanied by tonic-clonic seizures managed with Phenobarbital. Although the acute hemorrhage eventually underwent resorption, bilateral ventriculomegaly persisted as a critical complication. The definitive neurosurgical intervention was strategically timed following a 114-day period of nutritional rehabilitation and the management of systemic comorbidities, including a patent ductus arteriosus and bronchopulmonary dysplasia. On August 15, 2025, a ventriculo-peritoneal shunt was successfully implanted to treat the post-hemorrhagic hydrocephalus. Post-operative imaging confirmed symmetrical, communicating ventricles with normalized dimensions. At the time of discharge, the infant demonstrated a favorable clinical status with a significant weight gain to 4080 grams, reflecting successful multidisciplinary stabilization. **Discussions :** This case highlights ELBW vulnerability, where high-grade IVH and hydrocephalus are primary determinants of neurodevelopmental outcomes. Achieving the physiological stability required for neurosurgery necessitated a 114-day multidisciplinary period. Critical interventions included treating neonatal sepsis, correcting secondary anemia via transfusions, and transitioning from invasive ventilation to nCPAP/SNIPPV. Successful VP shunt implantation, followed by normalized imaging, demonstrates that favorable outcomes in complex IVH cases depend on precisely timed, staged interventions. **Conclusions:** Successful ventriculo-peritoneal shunting was pivotal in stabilizing the infant's neurological status and halting hydrocephalus progression. Achieving a discharge weight of 4080g and hemodynamic stability demonstrates the efficacy of this staged, multidisciplinary approach. Ultimately, favorable long-term neurodevelopmental outcomes remain dependent on continuous shunt monitoring and early sensory stimulation.

Keywords: ELBW neonate, Post-hemorrhagic hydrocephalus, Ventriculo-peritoneal shunt, Multidisciplinary neonatal care

MULTIDISCIPLINARY SURGICAL AND PSYCHOLOGICAL MANAGEMENT OF COMPLEX POLYTRAUMA

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Introduction: High-energy road traffic trauma, which is mainly managed by emergency and orthopedic services, is often associated with an overwhelming need for immediate stabilization. However, the longer-term management of secondary complications such as multiple organ system failure and psychological effects is of paramount importance. **Case Report:** A 38-year-old man was brought into UPU SMURD Tîrgu Mureș (Unified Emergency Service and Mobile Emergency Service for Resuscitation and Extrication) after his car crashed head-on. He was admitted with a Grade 0 cranio-cerebral trauma, retrograde amnesia and multiple complex fractures. The CT polytrauma series and serial X-rays of the patient showed a comminuted left femoral shaft fracture, right acetabular transverse fracture, right pilon fracture, and a left foot Lisfranc injury. The clinical evolution of the case required three major surgery procedures on November 2nd, 5th, and 15th, 2025 using advanced surgical techniques of osteosynthesis such as intramedullary nailing and titanium plate osteosynthesis. Transfusion to achieve

hemodynamic parameters included erythrocyte concentrate and fresh frozen plasma. Postoperatively, the patient's recovery was complicated by a situational depressive episode, generalized anxiety, and panic attacks, requiring pharmacological intervention with Sertraline (Seroxat) and Alprazolam (Xanax). **Discussions** : The management of this case highlights the complexity of treating comminuted fractures in a polytrauma context. Specific care was taken to prevent pressure sores and thromboembolism by administering 0.4ml Clexane daily by subcutaneous injection. Limited weight bearing was allowed on the left side for 8 to 10 weeks and the right side for 12 weeks: as the intention was to allow each side to consolidate in stages. Pantoprazol was used for gastroprotection to minimize the risk of polypharmacy and long-term adverse effects. **Conclusions**: Ultimately, this case underlines the important role of the cooperation of multidisciplinary teams in trauma cases. The final result depended not only on the surgical reconstruction but also on the postoperative prophylaxis and special psychiatric treatment. Although he was hemodynamically stable and made neurological improvement by the time of discharge, he was monitored by orthopedists and a psychologist for some time to achieve complete functional recovery.

Keywords: polytrauma, orthopedic osteosynthesis, road traffic accident, post-traumatic stress disorder

MULTIDISCIPLINARY THERAPEUTIC STRATEGY FOR A NEONATE WITH BILATERAL CHOANAL ATRESIA AND EXTREME TETRALOGY OF FALLOT: A CASE REPORT

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Introduction: The clinical management of newborns presenting with concurrent life threatening airway obstructions and ductal-dependent cardiac lesions represents one of the most demanding scenarios in neonatal intensive care. Such cases necessitate immediate stabilization and a highly integrated, multispecialty approach to navigate the conflicting requirements of respiratory and hemodynamic support. **Case Report:** The patient, a male infant born via cesarean section at 39 weeks (2700g), was prenatally identified as having complex congenital heart disease. At birth, he exhibited severe respiratory distress and generalized cyanosis, requiring immediate endotracheal intubation. Clinical investigations, including rigid nasal endoscopy and Angio-CT, confirmed bilateral posterior choanal atresia alongside an extreme form of Tetralogy of Fallot characterized by pulmonary valve atresia, severe pulmonary trunk hypoplasia, and a right-sided aortic arch. Dismorphic features such as microretrognathia and low-set ears further prompted an ongoing genetic evaluation. **Discussions** : The therapeutic management was defined by the delicate balance of maintaining a patent airway while ensuring adequate pulmonary blood flow. The patient remained dependent on mechanical ventilation due to the complete nasal obstruction. To maintain the ductus arteriosus, Alprostadil (PGE1) therapy was initiated at 0.01µg/kg/min. A clinical attempt to discontinue the infusion resulted in a rapid decline in oxygen saturation to 77%, confirming the ductal-dependent nature of his circulation. An interdisciplinary team-comprising neonatologists, pediatric cardiologists, ENT surgeons, and radiologists-held regular consultations to determine the optimal surgical path. Because the "reverse angle" of the ductus and the right aortic arch precluded a percutaneous stent, the team recommended a systemic-to-pulmonary shunt (SPS). Due to the restriction of the ductus during the fifth week, the PGE1 dosage was increased to 0.02µg/kg/min to stabilize the patient for transfer. **Conclusions:** The survival of a neonate with these combined malformations depends on the seamless coordination between cardiac and airway specialists. This case underscores that when anatomical constraints limit interventional cardiology, a dedicated multidisciplinary framework is essential to bridge the patient to definitive surgical correction.

Keywords: Choanal atresia, Interdisciplinary management, Tetralogy of Fallot, Alprostadil

MULTIFOCAL METHICILLIN-SUSCEPTIBLE STAPHYLOCOCCUS AUREUS SKIN AND SOFT TISSUE INFECTION IN A 12-YEAR-OLD GIRL

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Introduction: Skin and soft tissue infections are prevalent in children; however, multifocal disease impacting multiple anatomical regions is less common and may necessitate both antimicrobial and surgical intervention. This case is interesting because the lesions got worse even though the patient was treated as an outpatient at first, and microbiological testing was necessary for targeted treatment. **Case Report:** A 12-year-old girl exhibited subfebrile

symptoms and numerous painful purulent lesions affecting the lower lip, forearms, and right axillary area. The lip was very swollen, red, and oozing pus, which made it hard to eat, talk, and sleep. At first, she was treated as an outpatient with cefuroxime axetil, paracetamol, FlucoVim, and topical fusidic acid, but the lesions got worse. Laboratory tests showed leukocytosis ($15.16 \times 10^3/\mu\text{L}$), neutrophilia ($10.83 \times 10^3/\mu\text{L}$), mild anaemia (haemoglobin 11.3 g/dL), thrombocytosis ($451 \times 10^3/\mu\text{L}$), and positive C-reactive protein. However, liver and kidney function tests were normal. A bacteriological test found methicillin-susceptible *Staphylococcus aureus* (MSSA). The antibiogram showed that the bacteria were resistant to benzylpenicillin but sensitive to clindamycin, erythromycin, and oxacillin. The patient was given oxacillin and gentamicin through an IV for 10 days, and the lesion in the armpit needed surgery to fix it. **Discussions** : This case stands out because of the multifocal distribution, the severity of the symptoms, and the fact that the first outpatient treatment didn't work. The lip involvement caused a lot of problems with function, and the axillary lesion needed surgery. Culture and antibiogram were very important for confirming an MSSA infection and choosing the right treatment. **Conclusions**: When a child has painful, pus-filled sores on multiple parts of their body, they may have a multifocal MSSA skin and soft tissue infection. For good results, it is important to recognise the disease early, confirm it with microbiology, and start targeted treatment right away.

Keywords: Paediatric skin infection, *Staphylococcus aureus*, MSSA, soft tissue infection

MULTIMODAL DIAGNOSTIC APPROACH IN SOLID PSEUDOPAPILLARY NEOPLASM OF THE PANCREAS: A CASE REPORT

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Introduction: Solid pseudopapillary neoplasm (SPN) is a rare exocrine tumor of the pancreas, accounting for nearly 1-2% of all pancreatic neoplasms. Predominantly occurring in young women, it is characterized by its low-grade malignant potential and vague clinical presentation, being often incidentally detected. Surgical resection is usually the curative treatment choice and is associated with favorable clinical outcome. This case emphasizes the key role of a multimodal diagnostic approach in guiding the management of such rare entity. **Case Report:** We present the case of a 21-year-old female patient with no prior medical history, who was referred after an incidental discovery of a pancreatic mass during an ultrasound. Initial laboratory tests were all within normal limits, including the CEA and CA 19-9 markers. Further evaluation began with an endoscopic ultrasound (EUS) which revealed a 28 mm well-defined heterogeneous mass with internal calcifications, described as being located at the cephalo-isthmus region of the pancreas. Contrast-enhanced EUS (CEUS) showed the mass remaining hypoenhancing in all vascular phases, with additional hypovascular areas. EUS-guided Fine-Needle-Aspiration (EUS-FNA) was conducted, and the cytopathology was highly suggestive of SPN, later confirmed by the post-op histopathological examination. Afterwards, contrast-enhanced CT was performed, describing a 28x25 mm lesion at the body-isthmus junction, and identifying anterior contact with the porto-spleno-mesenteric confluence. Based on these investigations, the patient underwent distal pancreatectomy in July 2023, and a follow-up from 2025 showed no recurrence of SPN. **Discussions** : Due to its non-specific clinical presentation and variable imaging characteristics, the diagnosis of SPN can be challenging. This case underscores the importance of combining endoscopic and cross-sectional imaging techniques for an accurate preoperative diagnosis. Latest literature highlights the EUS-FNA as a significant tool in the diagnostic work-up, owing to its high sensitivity and a low complication rate. In addition, it plays a crucial role in the differential diagnosis with neuroendocrine neoplasms. Additionally, in this case, the less typical localization near the isthmus accentuates the value of contrast-enhanced CT for guiding operative planning and providing a complete overview of the anatomy **Conclusions:** SPN should always be taken into consideration in the differential diagnosis of pancreatic tumors in young female patients. The diagnostic difficulties can be overcome by associating EUS-FNA with cross-sectional imaging, resulting in optimal surgical management and excellent long-term prognosis.

Keywords: Solid pseudopapillary neoplasm, Endoscopic Ultrasound Fine-Needle-Aspiration, Pancreas

MULTIMODAL MANAGEMENT OF LOCALLY ADVANCED DISTAL ESOPHAGEAL ADENOCARCINOMA: A CASE REPORT

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Introduction: Esophageal adenocarcinoma, particularly in its locally advanced stages, remains a formidable surgical challenge, frequently necessitating a multimodal approach that integrates neoadjuvant chemoradiotherapy with radical surgical resection. This case report describes the multidisciplinary management and surgical treatment of a patient with locally advanced distal esophageal adenocarcinoma who underwent subtotal Ivor-Lewis esophagectomy following neoadjuvant therapy. **Case Report:** A 62-year-old male presented with severe progressive dysphagia secondary to a stenosing distal esophageal adenocarcinoma. The patient had completed neoadjuvant radio-chemotherapy (50.4 Gy) in early 2024. Preoperative contrast-enhanced CT imaging demonstrated a circumferential tumor with 18 mm wall thickness and infiltration of the hiatal fat planes. Relevant comorbidities included a history of left nephrectomy for renal cell carcinoma and grade I obesity. The surgical procedure consisted of a subtotal Ivor-Lewis esophagectomy. The operation was initiated laparoscopically but required early conversion to a median laparotomy due to intimate adherence of the large tumor to the diaphragmatic pillars, precluding safe laparoscopic mobilization. Reconstruction was performed with gastric pull-up and creation of a mechanical intrathoracic esophagogastric anastomosis using circular and linear staplers. The intervention also included standard two-field lymphadenectomy, cholecystectomy, and placement of a feeding jejunostomy. Bilateral pleural drains and a transhiatal drain were inserted. Postoperative course in the Intensive Care Unit was initially complicated by hemodynamic instability requiring brief vasopressor support, as well as bilateral pleural effusions. Microbiological screening of respiratory secretions revealed *Stenotrophomonas maltophilia* and *Klebsiella pneumoniae*, which were treated with targeted antibiotic therapy. After successful weaning from non-invasive ventilatory support (CPAP/AIRVO) and confirmation of an intact anastomosis on control CT imaging, the patient progressed to oral intake and was discharged from hospital in stable condition on postoperative day 18. **Discussions :** This case illustrates several key aspects of contemporary management of locally advanced esophageal adenocarcinoma. Neoadjuvant chemoradiotherapy effectively downstaged the tumor to allow resection, yet the persistent large tumor volume and local adhesions necessitated conversion from minimally invasive to open surgery-a common scenario reported in up to 20-40% of laparoscopic attempts in advanced cases. The use of mechanical stapled anastomosis in the thorax facilitated a safe and efficient reconstruction, while the addition of feeding jejunostomy ensured early postoperative nutritional support. Postoperative respiratory complications and polymicrobial colonization are well-recognized risks following transthoracic esophagectomy, particularly in patients with prior comorbidities and prolonged operative time. **Conclusions:** Multimodal treatment incorporating neoadjuvant therapy and subtotal Ivor-Lewis esophagectomy with gastric reconstruction remains an effective strategy for locally advanced distal esophageal adenocarcinoma.

Keywords: Esophageal adenocarcinoma, Ivor-Lewis esophagectomy, Gastric pull-up

MULTIMODAL MANAGEMENT OF LOCALLY ADVANCED RECTAL ADENOCARCINOMA (CT4BN2M0)

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Introduction: Rectal adenocarcinoma is the most common rectal cancer (95% of cases). Tumoral grading (G1-G4) measures how "abnormal" cells look. Lower grades (G1) grow slowly with a better prognosis, while higher grades (G3/G4) are highly aggressive and spread quickly. Neoadjuvant Therapy: Standard practice involves chemotherapy and radiation before surgery to shrink the tumor. TRG Score (Tumor Regression Grade): Used after surgery to measure how well the tumor responded to treatment: TRG 0: Complete success (no living cancer cells found). TRG 1: Near-complete success (only tiny traces remain). TRG 2: Partial success (significant tumor mass remains). TRG 3: No response (the tumor stayed the same or grew). **Case Report:** A 79-year-old male patient presented with a left inguinal hernia. His medical history includes a previous stroke (CVA), for which he is treated

with Trombex 75 mg once daily. Upon physical examination, the patient reported pain in the left inguinal region and hematochezia (rectal bleeding). A digital rectal examination (DRE) revealed a low rectal mass palpated approximately 4-5 cm from the anal verge. The MRI and CT investigations identified an infiltrative pelvic tumor involving the rectum, seminal vesicles, and prostate, staged as cT4bN2M0 (Stage T4b). Initially, surgery was performed to repair the inguinal hernia and create a diverting loop colostomy to prevent bowel obstruction. Subsequently, the patient underwent a neoadjuvant chemoradiotherapy protocol (VMAT 55 Gy + Capecitabine). The final surgical step consisted of an Abdominoperineal Resection (Miles procedure), performed with radical (curative) intent, with the subsequent histopathological diagnosis indicating a pathologic stage of ypT2; low/moderately differentiated adenocarcinoma (G2), with focal invasion into the muscularis propria. Postoperatively, the patient is showing favorable progress, continuing oncological treatment as recommended by the oncologist with Capecitabine 75mg oral tablets. **Discussions** : Advanced age and cardiovascular risk necessitated close perioperative monitoring. The success of the VMAT (Volumetric Modulated Arc Therapy) technique was crucial, enabling the delivery of a curative dose with minimal toxicity to the organs at risk (urinary bladder, small bowel). The transformation of the 75mm infiltrative tumor into a residual lesion (an ulceration of approximately 20mm) demonstrates the radiosensitivity of rectal adenocarcinoma. **Conclusions**: Multimodal therapy is mandatory across all stages of rectal neoplasms to provide a comprehensive treatment from both an oncological and surgical perspective, minimizing the risk of recurrence and converting inoperable cases into candidates for R0 resection. Even in the presence of multi-organ invasion, long-term success depends on Total Mesorectal Excision (TME) and the control of resection margins.

Keywords: Adenocarcinoma, Neoadjuvant, Radiotherapy, Miles

MULTIMODAL REPERFUSION IN A BASILAR ARTERY OCCLUSION LEADING TO A RARE BILATERAL THALAMIC-MESENCEPHALIC INFARCT

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Introduction: Posterior circulation strokes account for approximately one quarter of all ischemic strokes and are frequently caused by large or small vessel disease. Bilateral thalamic infarction is a rare stroke pattern most commonly associated with artery of Percheron (AOP) occlusion, accounting for approximately 0.1-2% of all ischemic strokes. Although these strokes are associated with high morbidity and mortality, intravenous thrombolysis and mechanical thrombectomy have been shown to improve clinical outcomes significantly. **Case Report:** A 66-year-old male with hypertension, chronic ischemic heart disease, a history of smoking, and no chronic home medications presented with sudden-onset speech disturbances, dizziness, deteriorating quickly towards rapidly progressing flaccid tetraplegia, and loss of consciousness, later requiring orotracheal intubation and mechanical ventilation. The initial CT scan showed no acute abnormalities. AngioCT of cerebral arteries revealed a basilar artery occlusion affecting both posterior cerebral arteries (PCA). At 4 hours after symptom onset, IV thrombolysis was administered, but the patient's neurological status remained unchanged. Given the large vessel occlusion, he was transferred to Emergency Clinical County Hospital Tîrgu Mureș for endovascular treatment. The procedure, initiated at 8 hours after symptom onset, demonstrated spontaneous recanalization of the basilar tip with a persistent thrombus in the P2 segment of the right PCA. Complete recanalization was achieved with mechanical thrombectomy and stenting of a severe left vertebral artery stenosis. Postprocedurally, the patient's status remained stationary, with partial recovery observed the following day, including improved consciousness, partial remission of motor weakness, Parinaud syndrome (vertical gaze palsy), and left oculomotor paresis, along with successful extubation. Later imaging revealed infarction in mesencephalic and bilateral thalamic region in the territory of thalamo-perforant arteries from PCA. **Discussions** : The case describes a basilar artery occlusion leading to PCA involvement and thalamoperforator ischemia. This succession of events resulted in bilateral thalamic-mesencephalic infarction manifesting as Parinaud syndrome, left oculomotor nerve palsy and flaccid tetraplegia. Differential diagnosis is essential due to its similarity to an AOP infarction, thrombosis of a small distal vessel, which is generally not eligible for endovascular intervention. Recognizing this pattern is vital for timely diagnosis and appropriate intervention. **Conclusions:** Early reperfusion is crucial for patient survival and neurological recovery. In patients with extensive ischemic lesions caused by large vessel occlusions, particularly when neurological deterioration is persistent, a multimodal revascularization strategy may improve outcomes. In selected cases, achieving successful revascularization can also include stenting of severe stenosis combined with thrombectomy during endovascular treatment.

Keywords: Basilar artery occlusion, Bilateral thalamic-mesencephalic infarction, Parinaud syndrome, Multimodal

reperfusion

MULTIPLE ETIOLOGIES OF ISCHEMIC STROKE: WHEN CONVENTIONAL RISK FACTORS MEET RARE CAUSES

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Introduction: Ischemic stroke is a critical emergency in which the lack of immediate diagnosis and treatment culminates in permanent neurological damage and death. The risk factors involved in its development differ depending on patient age, ranging from underlying cardiovascular disease to rare causes such as hypercoagulable or metabolic disorders. This case highlights the importance of thorough etiological workup to tailor treatment and improve clinical outcomes. **Case Report:** A 50-year-old overweight female patient with a complex medical background, including chronic alcohol use, hypertension, aortic stenosis, and two late-stage miscarriages, presented with a sudden onset of left-sided motor deficits, paresthesia, gait disturbance, facial asymmetry, and dysarthria. Cerebral CT angiography in the emergency department confirmed an acute ischemic stroke affecting the right middle cerebral artery territory. As the patient was relatively young, additional etiological investigations were performed, revealing homozygous PAI-1, heterozygous MTHFR A1298C, and heterozygous factor XIII V34L mutations. This, together with the presence of cutaneous angiokeratomas on examination and hypertrophic cardiomyopathy on echocardiogram, suggested a presumptive diagnosis of Fabry disease. The patient was then referred to a rehabilitation hospital for neurological recovery and further metabolic assessment, which identified previously undiagnosed type II diabetes. Treatment included antiplatelet, anticoagulant, hypolipidemic, antihypertensive, and antidiabetic therapies, followed by physical rehabilitation. Clinical evolution was favorable, and the patient was discharged while awaiting genetic test results for Fabry disease. **Discussions :** Despite the common consensus that ischemic stroke mainly affects older adults with traditional cardiovascular risk factors, its rising incidence in younger individuals pleads for investigating uncommon etiologies. Inherited thrombophilias may contribute to the development of arterial ischemic stroke in association with primary vascular conditions. Endothelial involvement in Fabry disease can also lead to ischemic events. In this case, the patient's relatively young age, her history of multiple miscarriages, and underlying cardiovascular disease justified thrombophilia screening. Moreover, the identification of cutaneous angiokeratomas and cardiac structural abnormalities raised clinical suspicion of Fabry disease, requiring genetic testing for confirmation. On this account, the presence of cardiovascular risk factors together with suspected Fabry disease suggests a likely multifactorial etiology of the stroke. **Conclusions:** Clinical management of ischemic stroke demands extensive etiological investigation, assessing both common and rare risk factors, especially in relatively young patients. To achieve accurate diagnoses and improve patient outcomes, complex cases such as the present must be approached in an interdisciplinary manner.

Keywords: ischemic stroke, inherited thrombophilia, Fabry disease, young adults

MULTIPLE TISSUE EXPANDER RECONSTRUCTION FOR POST-BURN KELOID SCAR PLAQUE IN A SIX-YEAR OLD PATIENT

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Introduction: Keloid scars are a common complication of burns in pediatric patients and are characterized as a raised scar extending beyond the original wound margins. They may impair movement if located near joints and are frequently associated with pain and pruritus. This case report describes the principles of the surgical treatment of a keloid scar plaque in a pediatric patient using multiple tissue expanders and the advantages of this technique in reconstructive treatment. **Case Report:** A 6-year-old male patient presented with an extensive keloid scar plaque involving the anterior thorax and extending to the left deltoid region one year after sustaining a third-degree scald burn affecting approximately 5% TBSA. The lesion was associated with severe pruritus, pain, hypersensitivity, and limited shoulder mobility. A staged reconstructive approach using tissue expansion was

planned. During the first surgical stage, performed under general anesthesia, three perilesional tissue expanders (125 cc, 125 cc, and 300 cc) were implanted beneath healthy skin in the right pectoral, left supraclavicular, and left epigastric regions, together with subcutaneous valves for progressive inflation. After a two-month healing period, gradual expansion was initiated through transcutaneous saline injections of 2-10 mL/day for approximately one month. After adequate expansion, a second procedure was performed. The expanders were removed and approximately 95% of the keloid plaque was excised. Grid-pattern relaxing incisions were made to release the periprosthetic capsule and improve tissue mobility. The resulting defect (160-200 cm²) was reconstructed using the expanded skin flaps. Z-plasty and cross-flap techniques were performed to redistribute tension and optimize functional and aesthetic outcomes. The postoperative course was favorable. The patient was discharged the following day and sutures were removed after 14 days. Follow-up evaluation demonstrated improved shoulder mobility, resolution of pain and pruritus, and satisfactory aesthetic integration with good color and texture match.

Discussions : Management of extensive pediatric keloid scars is challenging due to high recurrence rates and limited surrounding healthy tissue. Conservative treatments such as intralesional corticosteroids or silicone therapy may be effective for smaller lesions but are often insufficient for large scar plaques. Tissue expansion generates additional well-vascularized local skin with similar characteristics to adjacent tissues, allowing coverage of large defects while minimizing donor-site morbidity. In this case, the use of multiple expanders enabled adequate reconstruction and contributed to favorable functional and aesthetic outcomes. **Conclusions:** Tissue expansion represents an effective reconstructive strategy for extensive pediatric keloid scars, providing reliable defect coverage and satisfactory functional and aesthetic results.

Keywords: Keloid Scar, Tissue Expander, Burn, Reconstruction

MULTITERRITORY ATHEROSCLEROTIC DISEASE IN A 56-YEAR-OLD WOMAN WITH INTERMITTENT CLAUDICATION

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Introduction: Peripheral arterial disease frequently occurs due to systemic atherosclerosis and is closely linked to diabetes mellitus and tobacco use. This case is instructive as it illustrates the coexistence of lower-limb symptoms with atherosclerotic alterations in other vascular regions, while subsequent imaging following previous intervention can inform further management. **Case Report:** A 56-year-old woman with type 2 diabetes mellitus necessitating insulin therapy and a history of chronic tobacco use was admitted for reassessment and management of diagnosed peripheral arterial disease. She said she had pain in her lower limbs, calf paresthesias, muscle cramps, and claudication that came and went. She had already had a balloon angioplasty on the right popliteal artery. When she was admitted, her haemodynamics were stable, and there were no major acute findings on her general examination. The lab tests were normal, however there was mild hyperglycemia and thrombocytopenia, which later turned out to be pseudothrombocytopenia. The abdominal ultrasound showed normal results. Carotid Doppler ultrasonography revealed bilateral hyperechoic and mixed plaques at the internal carotid arteries, without haemodynamically significant stenosis. Lower-limb arterial Doppler ultrasonography revealed diffuse atherosclerotic lesions in both lower extremities, approximately 30% restenosis at the right popliteal artery following prior angioplasty, and serial stenoses in the posterior tibial artery, without significant haemodynamic compromise. Along with atorvastatin, aspirin, anticoagulant therapy, and glucose-lowering treatment, the patient got vasodilator/hemorheologic therapy with alprostadil. Her clinical course was positive, with an increase in her ability to walk, and she was released in stable condition. **Discussions :** This case aligns with existing literature indicating that peripheral arterial disease frequently manifests as a component of generalized atherosclerosis rather than as a distinct limb disorder. The presence of carotid atherosclerotic plaques, even in the absence of significant stenosis, underscores the necessity for comprehensive vascular evaluation in symptomatic individuals. It also shows how important it is to keep an eye on patients after endovascular procedures, since restenosis can happen even if there isn't a lot of flow restriction. The thrombocytopenia was characterized as pseudo-thrombocytopenia due to EDTA-induced platelet aggregation, which is a crucial distinction since thrombocytopenia, especially when induced by heparin, may require alterations in anticoagulant regimens, whereas pseudothrombocytopenia doesn't. Controlling risk factors, quitting smoking, exercise therapy, and regular vascular follow-up are still very important. **Conclusions:** This case underscores that intermittent claudication may indicate multiterritory atherosclerotic disease. Doppler evaluation, meticulous post-angioplasty monitoring, and proactive management of cardiovascular risk factors are essential for diagnosis and sustained care.

Keywords: Peripheral Arterial Disease, Intermittent Claudication, Diabetes Mellitus, Carotid Atherosclerosis

MYELOYDYSPLASTIC SYNDROMES WITH TRANSFUSION-DEPENDENT ANEMIA AND INFECTIOUS COMPLICATIONS: A CASE STUDY

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Introduction: Myelodysplastic syndromes (MDS), which are clonal disorders of the bone marrow, are characterized by peripheral cytopenias and ineffective hematopoiesis. Patients are more susceptible to infections and may experience severe anemia that necessitates frequent transfusions, particularly when immunosuppressive medication is administered. **Case Report:** We describe the case of a 66-year-old man who was admitted for worsening asthenia and mucosal bleeding. He had a history of psoriasis and had previously been treated with methotrexate, which was stopped in 2022. Laboratory tests showed low platelet and reticulocyte counts, along with severe normocytic normochromic anemia, with the lowest hemoglobin level being 3.9 g/dL. The peripheral blood smear showed anisopoikilocytosis and large platelets. A bone marrow examination revealed intermediate-risk myelodysplastic syndrome. **Discussions :** Due to transfusion-dependent anemia, the patient needed more than ten units of packed red blood cells over the course of several hospital stays. Nephrotoxicity complicated the start of corticosteroid and cyclosporine treatment. The clinical situation worsened due to several serious infections, including methicillin-sensitive *Staphylococcus aureus* sepsis, cavitary pneumonia, multidrug-resistant *Serratia marcescens* and *Acinetobacter baumannii* infections, and *Clostridium difficile* colitis. Progressive thrombocytopenia required platelet transfusions. Despite receiving the proper antibiotic treatment, cytopenias continued. The patient was released in stable condition after the infections were effectively treated. He is presently receiving luspatercept medication at home. **Conclusions:** In summary, this case highlights the difficulties in treating transfusion-dependent MDS, especially when treatment-related toxicity and repeated multidrug-resistant infections are involved. Close monitoring and a multidisciplinary approach are crucial for these complex patients.

Keywords: myelodysplastic syndrome, anemia, infection

MYOTONIC DYSTROPHY TYPE 1: A CASE OF SLOW PROGRESSION AND MULTISYSTEMIC INVOLVEMENT

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Introduction: Myotonic Dystrophy Type 1 (DM1), or Curschmann-Steinert disease, is the most common form of adult-onset muscular dystrophy, with a global prevalence of approximately 1 in 8,000 individuals. The etiology is hereditary, as an autosomal dominant disorder of the DMPK gene. The main symptoms include progressive muscle wasting and myotonia. Due to its chronic, debilitating nature and multisystemic complications, the quo ad laborem prognosis is generally reserved, often impacting the patient's long-term professional capacity. **Case Report:** We present the case of a 47-year-old male, employed as a security guard, who presented in the Neurology I Clinic of SCJU Târgu Mureş with hand myotonia from childhood and progressive bilateral ptosis (left > right). Clinical examination revealed a classic "myopathic facies", frontal alopecia, and bilateral hand myotonia. Neurological findings included difficulty walking on heels and bilateral Marinescu-Radovici signs, suggesting associated pyramidal tract involvement. Laboratory investigations showed elevated fasting glucose (128 mg/dL) and HbA1c (8.44%) consistent with the patient's history of diabetes mellitus, and significant mixed dyslipidemia (triglycerides 538.1 mg/dL). Electromyography (EMG) confirmed the diagnosis, revealing "myotonic runs" in all muscle groups and a chronic myogenic pattern with low-amplitude, polyphasic motor unit potentials. **Discussions :** This case highlights the necessity of a multidisciplinary approach in DM1 patients. Beyond the neuromuscular syndrome, the patient required cardiological evaluation (revealing minor mitral and tricuspid regurgitation), ophthalmological consultation (confirming ptosis but excluding cataracts), psychological testing (indicating mild cognitive impairment with an IQ of 73%) and kineotherapy. Interdisciplinary consultations are vital to monitor life-threatening cardiac arrhythmias and respiratory failure. The particularity of this case lies in the remarkably slow clinical progression and the patient's successful social and professional integration despite the usual manifestations of the disease. **Conclusions:** DM1 is a complex disorder where the "myotonic phenomenon" is

often just the tip of the iceberg. This case emphasizes that early multidisciplinary screening for endocrine, cardiac, and cognitive complications is essential for improving quality of life. Despite a reserved functional prognosis, personalized management including kinetotherapy and physiotherapy can support prolonged social integration.

Keywords: Myotonic Dystrophy Type 1, Curschmann-Steinert, Myotonia, Myopathic Facies

NEPHROCALCINOSIS AS AN ULTRASONOGRAPHIC CLUE TO UNDERLYING PRIMARY HYPERPARATHYROIDISM: A CASE REPORT

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Introduction: Nephrocalcinosis is a rare acquired condition characterized by the deposition of calcium salts within the renal parenchyma. Often asymptomatic, it is incidentally identified on ultrasound examination, which reveals characteristic imaging features. In the adult population, the condition is relatively uncommon, with a prevalence of approximately 2.4%. Typically, nephrocalcinosis results from chronic hypercalcemia, most commonly associated with primary hyperparathyroidism (PHPT), renal tubular acidosis, and certain musculoskeletal disorders. **Case Report:** : A 45-year-old male patient, with a known history of recurrent urinary tract infections, presented with passage of multiple kidney stones, profound hyperparathyroidism (PTH 1300 pg/mL) and hypercalcemia (serum Ca 11.6 mg/dL) alongside hypercalciuria. Laboratory findings further revealed azotemia, with urea at 78 mg/dL and creatinine at 2.4 mg/dL, Phosphorus 3.4 mg/dL, and moderately severe renal impairment classified as chronic kidney disease stage G3bA1. Renal ultrasonography was performed to assess parenchymal structure and detect potential abnormalities. Revealing punctate hyperechoic foci within the renal parenchyma, indicating calcium deposits that are gradually organizing into microcalculi. These formations are noted within the renal tubules and, occasionally, the collecting system, suggesting nephrocalcinosis. Given the ultrasound findings and documented hypercalcemia, further investigations were directed toward confirming PHPT. The diagnosis was established through a classic biochemical profile characterized by persistent hypercalcemia in the presence of inappropriately elevated intact parathyroid hormone levels. This hormonal imbalance, accompanied by serum hypophosphatemia, effectively confirmed autonomous parathyroid overactivity. Subsequent multimodal imaging localized the adenoma, enabling a targeted surgical approach integrated with bisphosphonates and cinacalcet therapy. **Discussions :** Although hypercalciuria is the most frequent cause of nephrocalcinosis, serum calcium levels may be either elevated or normal. PHPT is associated with hypercalcemia, whereas distal renal tubular acidosis typically presents with hypercalciuria in the absence of hypercalcemia—a pattern also characteristic of medullary sponge kidney (MSK). Regarding ultrasound differentiation, MSK typically exhibits asymmetric, clustered calcifications within dilated cystic ducts, whereas kidneys in PHPT display symmetric, diffuse echogenicity across all pyramids due to generalized interstitial calcinosis. **Conclusions:** Nephrocalcinosis can be readily diagnosed by ultrasound examination. Its imaging characteristics, combined with appropriate biochemical evaluation, enable differentiation among the main etiologies: primary hyperparathyroidism, medullary sponge kidney, and renal tubular acidosis.

Keywords: Nephrocalcinosis, Hypercalciuria, Ultrasound assessment

NEUROBORRELIOSIS: THE GREAT IMITATOR — A CHALLENGING DIAGNOSIS

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Introduction: Borrelia burgdorferi, the causative bacterium of Lyme disease and known as the "great imitator," can cross the blood-brain barrier to infect the central nervous system. Once there, it can trigger symptoms that closely mimic classic psychiatric conditions, which are frequently refractory to standard pharmacological treatment. Although testing is not routinely performed, the incidence can reach up to 4 per 100,000 inhabitants in Romania. The actual prevalence is likely much higher, as not all tick bites are noticed and many cases remain undiagnosed. **Case Report:** A 52-year-old male patient with a medical history of type 2 diabetes mellitus, ischemic heart disease, and hypertension under treatment was brought to the emergency department transported by a medical team. He presented with a psychopathological profile dominated by non-systematized delusions, dissociative phenomena, and signs and symptoms of a depressive-anxiety syndrome, prompting his admission to the psychiatric ward. Subsequently, the patient repeatedly returned to the emergency department on his own initiative, complaining of persistent psychiatric symptoms even with standard-of-care treatment. He also presented

frequently for hypertensive crises, despite optimal management. Routine laboratory parameters revealed no pathological abnormalities. His symptomatology persisted over the course of 3 years, marked by episodes of severe relapse and the later development of facial asymmetry characterized by left-sided loss of facial expression lines and mild dysarthria. He was admitted to the infectious diseases department, where a lumbar puncture was performed to collect cerebrospinal fluid (CSF). Biochemical analysis of the CSF revealed an inflammatory syndrome and positive serology for *Borrelia burgdorferi*. Additionally, CSF cultures for other microorganisms yielded negative results, and both the Nonne-Apelt and Pandy reactions were negative. Treatment was initiated with antibiotic therapy (ceftriaxone) and dexamethasone. **Discussions** : Although there was a favorable clinical evolution regarding the Bell's palsy manifestations and the patient was discharged with an improved clinical status, he experienced a persistence of symptoms with severe relapses for approximately 7 additional months. Complete resolution of the symptomatology was achieved over the following years. Despite no documented link between borreliosis and hypertension, the patient became normotensive with ongoing treatment. **Conclusions**: Regardless the persistence of symptoms initially raised clinical questions, the diagnosis was unequivocal: neuroborreliosis. While it serves as an excellent imitator of classic psychiatric disorders, subtle clinical signs can guide clinicians toward a definitive diagnosis.

Keywords: neuroborreliosis, Bell's palsy, great imitator, psychiatric disorders

NEUROFIBROMATOSIS TYPE 1 PRESENTING WITH SECONDARY HYPERTENSION IN A PEDIATRIC PATIENT: A CASE REPORT

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Introduction: Neurofibromatosis type 1 (NF1) is an autosomal dominant disorder characterized by café-au-lait spots, neurofibromas, and Lisch nodules, and may be associated with vascular and endocrine manifestations, including renovascular hypertension and pheochromocytoma. **Case Report:** We report the case of a 12-year-old female patient who presented to the endocrinology department for the evaluation of grade 2 arterial hypertension with a non-dipper profile, initially identified during a pediatric cardiology assessment. Clinical examination revealed multiple café-au-lait spots, prompting further evaluation of both parents. The father was identified as the index case, presenting features highly suggestive of NF1, including multiple café-au-lait spots (>6), numerous neurofibromas, and axillary freckling. Further clinical assessment identified 21 café-au-lait spots distributed across the body surface (largest measuring 6 cm), bilateral axillary freckling, and two small nodular lesions suggestive of neurofibromas in the anterior thoracic region. Ophthalmological examination confirmed multiple Lisch nodules bilaterally. Given the strong clinical suspicion, genetic testing for NF1 was performed in the patient, with a negative result; however, this does not exclude the diagnosis, which was established based on clinical criteria. The patient's endocrinological evaluation revealed no hormonal abnormalities to account for the hypertension. However, given its severity, non-dipper profile, and the presence of left ventricular hypertrophy, a secondary cause was strongly suspected. Abdominal CT angiography was therefore performed, revealing bilateral renal artery stenosis with a filamentous appearance at their origin, along with mild hepatosplenomegaly. **Discussions** : The identification of arterial hypertension in a pediatric patient should prompt thorough evaluation for secondary causes, as these are more common in children than in adults. Neurofibromatosis type 1 is associated with vascular abnormalities, particularly renovascular involvement, which represents a recognized cause of secondary hypertension in this population. In contrast, endocrine causes such as pheochromocytoma are more frequently reported in adult patients. The presence of characteristic clinical features should raise suspicion for an underlying genetic condition. **Conclusions:** Neurofibromatosis type 1 should be considered in pediatric patients presenting with secondary hypertension, particularly when associated clinical features are present. Early recognition of vascular complications is essential, as it has important implications for management and requires a multidisciplinary approach.

Keywords: neurofibromatosis type 1, secondary hypertension, renal artery stenosis, pediatric patient

NIEMANN–PICK DISEASE: FROM DIAGNOSTIC CHALLENGES TO BREAKTHROUGHS – THE ROLE OF GENETIC BACKGROUND IN DIFFERENTIAL DIAGNOSIS

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Introduction: Rare diseases represent a diagnostic challenge due to their low incidence and often nonspecific clinical presentations. Nonspecific manifestations may lead to delayed diagnosis, negatively impacting prognosis and quality of life. Niemann-Pick disease is an example of a genetic lysosomal storage disorder characterized by multisystem lipid accumulation secondary to acid sphingomyelinase deficiency. **Case Report:** We present the case of a 16-year-old male patient admitted for loss of appetite, abdominal pain, and chronic constipation. His medical history revealed moderate neuropsychomotor delay and eating disorders, while family history was notable for intellectual disability in two siblings, suggesting a possible genetic background. Clinical examination showed relatively good general condition, stunted growth and underweight, pale skin, abdominal distension, hepatomegaly, and significant splenomegaly. Laboratory tests revealed mild thrombocytopenia, and serology indicated previous CMV infection. Due to suspicion of a lysosomal storage disorder, acid sphingomyelinase activity was measured from dried blood spot and found to be decreased. Genetic testing using next-generation sequencing identified two mutations specific for Niemann-Pick disease type A/B in homozygous state. Imaging studies confirmed hepatosplenomegaly and interstitial lung changes. **Discussions :** Niemann-Pick disease is a rare genetic lysosomal storage disorder with autosomal recessive inheritance, including types A, B, A/B, and C. Types A and B known as acid sphingomyelinase deficiency (ASMD) result from mutations in the SMPD1 gene, leading to acid sphingomyelinase deficiency and lysosomal lipid accumulation, whereas type C involves mutations in the NPC1 or NPC2 genes, affecting intracellular cholesterol metabolism. Type A is characterized by severe neurovisceral involvement, infantile onset, and early mortality, while type B presents predominantly with visceral involvement and minimal neurological symptoms. Diagnosis is established by measuring enzymatic activity in leukocytes and genetic confirmation, with dried blood spot testing facilitating early detection. Type C is investigated using plasma biomarkers and genetic sequencing. Differential diagnosis of lysosomal storage disorders is based on correlating clinical features with the specific enzyme defect and accumulated substrate. Bone involvement suggests Gaucher disease, while predominant neurological symptoms indicate Tay-Sachs disease or metachromatic leukodystrophy. Early diagnosis is crucial for optimal management and genetic counseling. **Conclusions:** The differential diagnosis of Niemann-Pick disease is crucial in the presence of a nonspecific clinical picture in order to avoid diagnostic delays and errors. This case highlights the essential role of enzymatic and genetic testing. The particularity of this case is the familial aggregation of mutations, suggesting a common genetic background and possible consanguinity, emphasizing the importance of family screening and genetic counseling.

Keywords: Niemann-Pick disease type A/B, lysosomal storage disorder, dried blood spot, acid sphingomyelinase

NINTH TIME'S THE CHARM, I SWEAR: A HYDATID CYST TO LIVER TRANSPLANT CLINICAL CASE

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Introduction: Some of the complications of a hydatid cyst include the rupture and drainage into the biliary ducts-treated through ERCP with extraction of debris and catheterization or surgical removal of the cyst- and extrinsic stenosis of the bile ducts evolving to acute cholangitis with similar treatment. **Case Report:** In 2023 a 49-year-old patient is diagnosed with a left intrabiliary duct rupture of a stage 3b hydatid cyst located in the 2nd, 3rd and 4th segments of the liver, proximal to the hepatic hilum, common hepatic duct and main bile duct such that it cannot be excised. As follows, the patient undergoes multiple decompressing ERCP procedures consisting of repeated placements of plastic biliary stents in the right duct throughout 2023. Due to the occluding effect of multiple acute cholangitis episodes of the common biliary duct and left hepatic duct that were not remedied post pneumatic dilation and catheterization in January, March and May 2024 a cholecystectomy and a (L-L) Roux-en-Y hepaticojejunostomy were performed in June 2024. Advancing secondary sclerosing cholangitis with bilateral retrograde duct dilations was found at a postintervention checkup that gradually led to stenting of the left hepatic duct in November 2025 and again in January 2026 with the impossibility of right duct catheter placement. **Discussions :** Each stenting is a double-edged sword as it allows for immediate clinical and biological resolution. Yet, due to the abrasive nature of the process on repeated accounts in time it leads to significant secondary sclerosing cholangitis culminating in the impossibility of further stent placement, cholestasis and ultimately cirrhosis. Furthermore, in this case, the patient has a slow and unsatisfactory postprocedural improvement prompting the search for another solution. Given the patient's status his case was presented to the IRGH Liver Transplant Board and now awaits transplant. **Conclusions:** Considering the imminent obturating postprocedural and post inflammatory fibrosis and the insufficient improvement in clinical-biological status, as a last resort a

lifesaving liver transplant is necessary.

Keywords: liver transplant, hydatid cyst, multiple stenting, secondary sclerosing cholangitis

NODULAR HIDRADENOMA OF THE UPPER LIP – A CASE REPORT WITH DIAGNOSTIC CHALLENGES

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Introduction: Hidradenoma is a rare benign adnexal tumor that develops from the sweat glands, having eccrine or apocrine differentiation. Clinically, it may mimic malignant cutaneous lesions, especially when identified in atypical sites, complicating accurate diagnosis. **Case Report:** We present the case of a 64-year-old female patient with a nodular lesion located on the upper lip, measuring approximately 4×4×3 mm, whitish-brown and high consistency. The lesion was surgically removed and sent to the Clinical Pathology Department of Mures Clinical County Hospital for histopathological diagnosis. Microscopically, a dermal and superficial hypodermal tumor was observed, with nodular and partially cystic architecture. The tumoral proliferation was composed of clear cells with eosinophilic cytoplasm and small nuclei, arranged in solid nests separated by a hyalinized stroma. There were observed rare mitoses and no cytological atypia. Immunohistochemically, tumoral cells were positive for cytokeratin 5/6, EMA, and p63, with a low Ki67 of 1-2%. The lesion was excised within the surgical safety limits.

Discussions : Taking into consideration the microscopically and the immunohistochemically profile, the histopathological diagnosis was hidradenoma. Although benign, hidradenoma can pose significant diagnostic difficulties due to its overlap with malignant entities such as basal cell carcinoma or other adnexal tumors. The unusual localization on the upper lip further increased the suspicion of malignancy in this case. Histopathological and immunohistochemical evaluation remain essential for establishing the correct diagnosis and guiding management. **Conclusions:** Hidradenoma should be considered in the differential diagnosis of nodular lesions of the lip. Accurate diagnosis relies on histopathological and immunohistochemical features, preventing overtreatment of a benign condition.

Keywords: Hidradenoma, Adnexal tumor, Upper lip, Immunohistochemistry

OBSTETRIC CHALLENGES IN PREGNANCY WITH UTERUS DIDELPHYS: A CASE REPORT

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Introduction: Uterus didelphys is a rare congenital Müllerian duct anomaly resulting from complete failure of fusion during embryogenesis, a process that normally occurs between the 6th and 22nd weeks of intrauterine life. It is characterized by duplication of the uterine cavities, cervix, and frequently the vagina. Although approximately 60% of affected women can achieve term pregnancies, the condition is associated with increased obstetric risks, including breech presentation (~43%), preterm birth (17-33%), miscarriage (~25%), ectopic pregnancy (~3%), and a high cesarean section rate (up to 80%). Objective is to present a rare clinical case of pregnancy in a patient with uterus didelphys and to highlight the associated obstetric risks and management challenges. **Case Report:** Clinical case of a 32-year-old patient (G6P1) at 28 weeks of gestation, in whom a uterine malformation was incidentally diagnosed during routine ultrasonographic evaluation. The patient's obstetric history included one prior cesarean delivery at 37 weeks in 2019 for transverse fetal lie and four first-trimester miscarriages (5-6 weeks). The current pregnancy was complicated by fetal growth restriction, diagnosed at 28 weeks, with biometric parameters lagging approximately three weeks behind gestational age. At 36+5 weeks of gestation, Doppler ultrasound findings indicated fetal hypoxia, necessitating emergency cesarean section for fetal distress. A male neonate in cephalic presentation was delivered, weighing 2100 g, with Apgar scores of 7 and 8 at 1 and 5 minutes, respectively. **Discussions :** Intraoperative findings revealed a uterus didelphys with a longitudinal septum, two separate uterine cavities each with its own anexa, and a single cervix. The current pregnancy was located in the right uterine cavity, corresponding to the site of the previous cesarean scar. The postoperative course was uneventful for both mother and neonate. **Conclusions:** Uterus didelphys remains a rare Müllerian anomaly associated with variable reproductive outcomes and increased obstetric risk. This case highlights the association

with fetal growth restriction, preterm delivery, and fetal distress requiring emergency cesarean section. Patients with this condition, particularly when diagnosed late and with a history of adverse reproductive outcomes, require close monitoring and individualized prenatal care to optimize maternal and fetal outcomes.

Keywords: uterus didelphys, congenital anomaly, preterm delivery, fetal growth restriction

OBSTETRIC MANAGEMENT OF PREGNANCY IN AN ADOLESCENT WITH PREVIOUS SOLID PSEUDOPAPILLARY PANCREATIC NEOPLASM AND HEPATIC RECURRENCE

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Introduction: Solid pseudopapillary neoplasm (SPN) of the pancreas is a rare epithelial tumor, accounting for 1-3% of exocrine pancreatic neoplasms. It predominantly affects adolescent girls and young women and is generally associated with a favorable prognosis after complete surgical resection. Despite its low-grade malignant potential, local recurrence and distant metastases have been reported. Due to the rarity of the disease and its predilection for women of reproductive age, data regarding pregnancy after SPN treatment remains limited, making management particularly challenging. **Case Report:** We present a case of a 17-year-old pregnant patient, gravida III para III, with a history of SPN of the pancreatic tail treated by distal pancreatectomy in 2018. In 2019, she developed hepatic and peritoneal recurrence, managed with surgical intervention and for cycles of Cisplatin and Gemcitabine, but the chemotherapy was discontinued prematurely at the request of the patient and her family. Subsequent follow-up demonstrated disease in remission without radiologic evidence of progression. After distal pancreatectomy, the patient developed impaired glucose metabolism, with episodes of hyperglycemia consistent with pancreatogenic diabetes, managed conservatively and monitored during pregnancy. In 2025, at the age of 17 with 31-32 weeks of gestation, was admitted for preterm labor during her third pregnancy. Her obstetric history included two previous lower-segment transverse cesarean sections, last one at 15 years old. Clinical and imaging evaluation performed during pregnancy showed no signs of active tumor recurrence. Given the presence of two uterine scars, prematurity, and a history of extensive abdominal surgery, a third cesarean section was performed with bilateral tubal ligation, after appropriate counseling and informed consent. A live female neonate weighing 1820 g was delivered, with Apgar scores of 7 at 1 minute and 9 at 5 minutes. The postoperative maternal course was uneventful, with normal bowel function recovery and proper wound healing. **Discussions :** SPN predominantly affects young women of reproductive age. Although cases of SPN diagnosed during pregnancy have been reported, data regarding pregnancy after surgical resection are limited. Available reports suggest generally favorable obstetric outcomes, with metabolic complications-particularly diabetes mellitus-being the most frequent issue. To our knowledge, pregnancies following pancreaticoduodenectomy remain exceedingly rare, with only a few cases described in the literature. **Conclusions:** Pregnancy after treatment for solid pseudopapillary pancreatic neoplasm, even after prior recurrence, can have a favorable outcome when managed through individualized and multidisciplinary care. Continuous oncologic surveillance and careful obstetric planning are crucial to ensure maternal safety and neonatal well-being.

Keywords: solid pseudopapillary neoplasm, multidisciplinary management, hepatic recurrence, cesarean section

OBSTRUCTIVE UROSEPSIS IN A PATIENT WITH A SOLITARY KIDNEY AFTER NEPHRECTOMY FOR CLEAR CELL RENAL CELL CARCINOMA: A CASE REPORT

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Introduction: High-grade fever associated with systemic inflammatory syndrome may occasionally represent the initial manifestation of an underlying malignancy. Renal tumors can present with atypical clinical features, sometimes mimicking infectious or inflammatory conditions, which may delay diagnosis. Imaging investigations play a crucial role in identifying renal masses and guiding further management. In this context, the detection of a tumor mass in the upper pole of the right kidney with radiological suspicion of malignancy requires prompt multidisciplinary evaluation to establish the appropriate therapeutic strategy, with surgical intervention often representing the treatment of choice. **Case Report:** We present the case of a 62-year-old female patient, initially admitted for high-grade fever and systemic inflammatory syndrome. Imaging studies identified a tumor mass at the

upper pole of the right kidney, suspicious for malignancy (T1bN0M0), leading to the indication for right nephrectomy, which was performed on 25 July 2025. The initial postoperative course was favorable; however, it was complicated by an interhepatic-phrenic abscess and reactive pleural effusion, managed with postoperative drainage and prolonged antibiotic therapy. The patient was discharged in improved condition on 07 August 2025. Three months postoperatively, the patient presented in critical condition with suspected urosepsis. Contrast-enhanced abdominal CT revealed a stone of approximately 1 cm in the distal left ureter, near the ureteral orifice, associated with grade I ureterohydronephrosis. A smaller stone had previously been reported in the left renal pelvis, suggesting migration. In an emergency setting, the 1.1 cm stone was surgically removed, and a JJ stent (8 Ch/26 cm) was placed. Histopathological examination confirmed clear cell renal carcinoma, WHO/ISUP grade 2, stage pT1b, associated with chronic interstitial nephritis in the adjacent renal parenchyma. **Discussions** : The present case highlights the increased vulnerability of patients with a solitary kidney associated with cardiovascular and metabolic comorbidities (arterial hypertension, type 2 diabetes mellitus, obesity) to severe obstructive-infectious complications. Ureteral lithiasis can cause acute urinary tract obstruction, promoting the rapid development of urological sepsis, particularly in the presence of a single functioning kidney. In such situations, early diagnosis and urgent decompression of the urinary tract are essential to prevent deterioration of renal function and progression to multiple organ failure. **Conclusions**: Patients with a surgically solitary kidney require close monitoring and education regarding urological warning signs. In this context, urinary obstruction associated with infection represents a life-threatening emergency, and prompt urological intervention is essential for survival and preservation of renal function.

Keywords: Clear cell renal carcinoma, Solitary kidney, Urological sepsis, Ureteral lithiasis

OCCIPITO-CERVICAL JUNCTION METASTASIS WITH HEPATOCELLULAR-LIKE FEATURES: AN OCCULT PRIMARY SITE

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Introduction: Tumors of the occipito-cervical junction with intracranial extension and no identifiable primary are rare. When these lesions show hepatocellular characteristics but imaging does not demonstrate hepatocellular carcinoma, determining the true origin becomes even more difficult and complicates both diagnosis and surgical planning. **Case Report:** A 69 year old man with hypertension and type 2 diabetes mellitus presented with progressive left sided cervical swelling and cervicgia over three months. Neurological examination revealed a Glasgow Coma Scale score of 15. Cranio cervical MRI demonstrated a heterogeneously enhancing left cervico occipital mass measuring 5.8 × 4.4 × 6.6 cm (84 cm³), displacing cervical musculature, invading the spinal canal, infiltrating the dura and extending intracranially with subdural and cerebellar involvement. Due to worsening mass effect and intractable pain, surgery was performed through a left postero lateral cervical approach with partial occipital bone resection. Subtotal resection was achieved due to tumor adherence to the vertebral artery. Histopathology revealed a poorly differentiated carcinoma with marked pleomorphism, numerous atypical mitoses, and extensive necrosis, while subsequent histopathology suggested a poorly differentiated pulmonary carcinoma. Immunohistochemistry demonstrated AE1/AE3+, CK8/18+, HepPar 1+, cytoplasmic TTF 1+ and a Ki 67 index of 50-60%, consistent with metastatic HCC. However, abdominal CT revealed no hepatic lesions, suggesting an occult or extrahepatic origin. Six weeks later, rapid regrowth prompted reoperation. A second-stage maximal safe resection was performed through posterior cervical approach with C1-C2 laminectomy, extended craniectomy, dural resection and duraplasty. Postoperatively, the patient developed a pulmonary embolism and a wound infection, with favorable neurological recovery. Adjuvant radiotherapy was planned after wound healing. **Discussions** : In this case, HepPar-1 and CK8/18 positivity with a high proliferative index indicated hepatocellular-type differentiation. However, the absence of hepatic lesions and cytoplasmic TTF-1 expression suggested the possibility of pulmonary hepatoid adenocarcinoma or another extrahepatic hepatoid tumor rather than metastatic hepatocellular carcinoma. Vertebral artery adherence limited the initial resection and rapid regrowth subsequently prompted a second-stage maximal safe decompression. This case emphasizes the difficulty of diagnosing such rare tumors when histological and immunohistochemical findings are inconclusive. In these situations, pursuing the greatest safe resection possible can be particularly valuable in patients at high risk of neurological deterioration. **Conclusions:** Maximal safe resection of rare occipito-cervical junction tumors with hepatocellular-like features can relieve cervicgia and help prevent neurological deterioration, even when the primary site remains occult.

Keywords: Occipito-cervical tumors, Hepatocellular-like features, Cervicgia, Maximal safe resection

OCCULT HPV-INDEPENDENT CERVICAL SQUAMOUS CELL CARCINOMA IN A NONAGENARIAN UNDERGOING SURGERY FOR INFECTED STAGE IV GENITAL PROLAPSE

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Introduction: Pelvic organ prolapse (POP) is a common condition in elderly women, while invasive cervical cancer is rarely diagnosed when it comes to nonagenarians. In cases of severe POP, chronic exposure, inflammation, and ulceration may hide malignant lesions, making the diagnosis challenging. The coexistence of an infected stage IV POP and an occult HPV-independent invasive cervical squamous carcinoma is extremely rare. **Case Report:** A 93-year-old woman with stage IV infected genital prolapse and significant cardiovascular comorbidities (severe aortic stenosis and heart failure) was admitted to the Department of Obstetrics and Gynecology. Laboratory findings revealed inflammatory syndrome with acute leucocytosis (up to $12.7 \times 10^3/\mu\text{L}$) and extremely elevated CRP (up to 200 mg/L) and mildly anaemic (lowest values for hemoglobin 7.5-8.2 g/dL) but with stable renal function (creatinine 0.75-0.97 mg/dL) and normal coagulation parameters (INR 1.03). Vaginal secretion culture revealed enteric flora (containing many types of bacteria). The patient received antibiotics (cefazolin and metronidazole) alongside warfarin, analgesics and supportive treatment. After preoperative assessment, a total vaginal hysterectomy was done. During surgery, a rectal laceration (~2×1 cm, above the external anal sphincter) was identified and repaired in two layers. The vaginal wall and perineum were also reconstructed, and the patient had uneventful recovery and was discharged in a improved clinical condition. Histopathological examination revealed an invasive cervical squamous cell carcinoma, HPV-independent, p53 wild-type with an HPV-independent intraepithelial squamous lesion, staged as IB1 (FIGO 2018). HPV-genotyping did not identify any viral DNA. **Discussions :** Cervical cancer associated with complete uterovaginal prolapse is an unusual and often overlooked entity, especially when infections and ulcers are predominant features in a patient with a diagnosis of pelvic organ prolapse. The ulcerated and suprainfected cervix secondary to complete genital prolapse may associate underlying cervical cancer, as highlighted in this case and supported by recent literature on treatment challenges in such scenarios. This underscores the importance of maintaining a high index of suspicion and performing targeted biopsies in cases of severe and infected prolapse. Additionally, the technical challenges of vaginal surgery must be considered. Prompt identification of complications are essential to prevent morbidity. **Conclusions:** The ulcerated and suprainfected cervix secondary to complete genital prolapse may obscure underlying cervical malignancy, including rare HPV-independent invasive squamous cell carcinoma. In elderly patients with chronic or ulcerated prolapse, systematic evaluation and directed biopsy are crucial before definitive surgical intervention. Early recognition of HPV-independent cervical cancer can improve diagnostic precision, guide appropriate surgical management and optimize postoperative care.

Keywords: Pelvic organ prolapse, Cervical squamous cell carcinoma, HPV-independent, Vaginal hysterectomy

OLIGODENDROGLIOMA - THE TRUE PROTAGONIST, TO THE DETRIMENT OF GLIOBLASTOMA, THROUGH THE UNVEILING OF ITS DISTINCT MOLECULAR MECHANISMS

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Introduction: Anaplastic oligodendrogliomas are rare, diffuse gliomas³ often associated with an IDH (isocitrate dehydrogenase) mutation and a 1p/19q codeletion, which is likely indicative of genes related to better survival outcomes⁴. Although it resembles a glioblastoma, it is distinguished by the mutational status of isocitrate dehydrogenase (IDH)^{1/2}, the key glioma driver gene that encodes IDH. IDH mutations are the earliest detectable genetic alterations in precursor low-grade diffuse astrocytomas and oligodendrogliomas⁸, but the diagnosis of the latter requires the presence of both an IDH mutation and a 1p/19q codeletion, according to the 2021 World Health Organization (WHO) classification. **Case Report:** A 50-year-old man presented with a sudden-onset headache that began approximately one month prior to admission. Neurological examination revealed a conscious and cooperative patient with a Glasgow Coma Scale score of 15. No signs of meningeal irritation, intracranial hypertension, or cranial nerve involvement were observed. The patient exhibited no motor deficits or objective

sensory disturbances. However, mixed aphasia was present. Brain MRI with contrast demonstrated a left temporal intra-axial tumor mass. The patient was admitted for neurosurgical intervention, and a gross total resection of the tumor was performed. The surgical specimen was submitted for histopathological evaluation and molecular analysis, including assessment of IDH mutation status and 1p/19q codeletion. Additionally, in the 9p21.2 region, encompassing the CDKN2A and CDKN2B genes, reduced gene dosage, consistent with a heterozygous deletion, was detected. The C228T mutation in the TERT promoter was identified, whereas the C250T mutation was absent. The MGMT promoter demonstrated increased methylation. Based on histopathological and molecular findings, the patient was diagnosed with anaplastic oligodendroglioma (WHO grade 3). Three months after neurosurgical intervention, the patient returned for follow-up, at which time tumor recurrence was observed. **Discussions** : The particularity of this case is highlighted by the histological similarities between glioblastoma and oligodendroglioma. Although the presence of an IDH mutation and 1p/19q codeletion is generally associated with a favorable prognosis, the patient's early recurrence is noteworthy. **Conclusions**: The case emphasizes the importance of integrating imaging, histopathological, and molecular data, as oligodendroglioma can mimic glioblastoma and exhibit an aggressive clinical course in the presence of additional genetic alterations.

Keywords: anaplastic oligodendroglioma, IDH (isocitrate dehydrogenase) mutations, 1p/19q codeletion, CDKN2A and CDKN2B genes

ONCOLOGICAL AND FUNCTIONAL OUTCOMES OF ZERO ISCHEMIA ROBOTIC PARTIAL NEPHRECTOMY IN RENAL CELL CARCINOMA: A CASE REPORT

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Introduction: Renal cell Carcinoma (RCC) is a frequent malignant pathology, mainly affecting the male patients. It is often diagnosed incidentally through imaging techniques. Robotic surgery represents the gold standard for minimally invasive surgery, innovating the field of urology. Our objective is to highlight the importance of oncological and functional outcomes of zero ischemia robotic partial nephrectomy (RPN). **Case Report:** We report the case of a 71 year-old male patient that underwent a CT scan for other pathology, that revealed a renal tumor mass cT1bN0M0 on the left kidney. Zero ischemia RPN was performed. **Discussions** : We performed a transperitoneal approach through 4 incisions, the longest one being 20 mm long, facilitating the extraction of the renal tumor mass. The patient presented a favourable postop evolution, with removal of the drainage tube on day 3, resuming bowel movement 4 days after the surgery, discharged in day 4. Histopathological examination revealed clear cell renal carcinoma pT1bNxMxV0L0R0. **Conclusions:** Zero ischemia RPN is a safe and applicable method with acceptable oncological and functional outcomes in small renal tumors and even in selected larger renal tumors.

Keywords: zero ischemia, robotic partial nephrectomy, renal cell carcinoma

ONE-STAGE OPEN NATIVE-TISSUE REPAIR OF POST-HYSTERECTOMY VAGINAL VAULT PROLAPSE AND UMBILICAL HERNIA IN A PATIENT WITH DIVERTICULOSIS AND EXTENSIVE ADHESIONS

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Introduction: Umbilical hernia is a common complication following abdominal surgery, as well as a weakening of the anterior abdominal wall. Post-hysterectomy vaginal vault prolapse is a rare but clinically important pelvic floor disorder that may cause a significant reduction in quality of life. The choice of surgical procedure, mesh or native tissue repair, is a controversial issue in patients with abdominal wall defects and advanced pelvic organ prolapse. We report a case of an open surgical repair of an umbilical hernia and post-hysterectomy vaginal vault prolapse in a woman with a complex combination of these defects. **Case Report:** A 74-year-old female patient with total hysterectomy and bilateral adnexectomy was scheduled for repair of a symptomatic umbilical hernia, postoperative suprapubic incisional eventration, and vault prolapse with cysto-recto-enterocele. The procedure was done under general anaesthesia with orotracheal intubation. An exploratory laparotomy was done through an elliptical midline

incision extending to the previous scar, which was excised together with the umbilical defect. Because of severe adhesive syndrome, entering the peritoneal cavity was very difficult and required significant adhesiolysis. A large cysto-recto-enterocele was present in the pelvis, bulging through the floor of the pelvis. Multiple diverticula were found at the level of the rectosigmoid. The surgical approach for the pelvic prolapse was an anterior cystorectopexy with bladder plication using continuous suture and lateral and anterior retropubic cystopexy. The use of synthetic mesh was not possible due to rectosigmoid diverticulosis, so native tissue repair was decided. The procedure was completed by draining the sacral excavation and closing the abdominal wall in layers. The postoperative period was uneventful, and the patient was discharged with a satisfactory functional result.

Discussions : Repair of abdominal wall defects and pelvic organ prolapse is not common. Nowadays, most surgeons prefer to repair it using a mesh. However, the presence of known diverticular disease and suspected extensive adhesions would pose a challenge for mesh repair due to the risk of infection or sepsis. A native tissue pexy is a good alternative in such scenarios. It is essential to thoroughly assess the patient preoperatively and intraoperatively to perform the intended surgery. **Conclusions:** The individual approach to the management of complex pelvic organ prolapse, specifically in a situation where the use of prosthetics in potentially contaminated fields is avoided, is discussed to reduce the risk of postoperative infection and a speedy recovery for the patient.

Keywords: Vaginal Vault Prolapse, Umbilical Hernia, Post-hysterectomy Prolapse, Mesh-free pexy procedures

OPTIC NERVE GLIOMA DIAGNOSED IN CHILDHOOD: LONG-TERM EVOLUTION – A CASE REPORT

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Introduction: Optic nerve glioma is a rare, slow-growing, benign brain tumor that affects the nerve transmitting information from the eye to the brain. They are characterized by enlargement of the optic nerve, visible on either CT or MRI. These tumors typically occur in children and account for approximately 10-15% of supratentorial tumors in this age group. Regarding gender distribution, we conclude that males and females are equally affected. Optic nerve gliomas may be confined to the optic nerve or may extend to involve the optic chiasm or optic radiation. Clinical presentation varies depending on the extent and location of the tumor. The main symptoms of this disease include progressive vision loss, involuntary eye movement (nystagmus), proptosis, strabismus, and headaches. The primary diagnostic tool is magnetic resonance imaging (MRI), which shows enlargement of the optic nerve or optic pathway. This case highlights the clinical relevance of careful observation in selected patients.

Case Report: We present the case of an 18-year-old male who presented with painless decreased vision, headache, and proptosis of the left eye for two months. He was diagnosed with optic glioma at the age of seven. There was no association with neurofibromatosis type 1. He was admitted for an MRI examination, which revealed enlargement, kinking, and buckling of the left optic nerve. On T2-weighted images, the optic tumor appeared hyperintense. Management options include surgery, radiotherapy, and chemotherapy; however, in this case, none of these treatment options were pursued. **Discussions :** This report illustrates the slow-growing nature of optic glioma in childhood. The main symptom in this patient was vision loss, and MRI examination demonstrated progression of tumor enlargement. Treatment for optic gliomas is generally initiated only after clinical progression, such as reduction in visual acuity or tumor growth on neuroimaging. This case emphasizes that careful monitoring can be a safe and effective strategy, allowing many patients to maintain stable vision without immediate intervention. **Conclusions:** This case indicates that optic pathway tumors without progression of symptoms should initially be managed with observation. Follow-up examinations and appropriate radiologic studies, preferably MRI, should be performed at regular intervals and are essential to guide management decisions. Many patients maintain good vision and never require surgical intervention.

Keywords: optic nerve, tumor, glioma, vision loss

OPTIMIZING AESTHETIC OUTCOMES AFTER BREAST RECONSTRUCTION: COMBINED SCAR REVISION AND NAC RECONSTRUCTION

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Introduction: The nipple-areola complex (NAC) represents the aesthetic core of the breast. NAC reconstruction is known as the final stage in breast reconstruction after mastectomy for breast cancer. Although it doesn't restore function, it plays a crucial role in women's perception of health, well-being and psychosocial recovery. **Case Report:** We present the case of a 53-year-old patient known with arterial hypertension, grade I obesity, with a history of bilateral mastectomy performed for ductal carcinoma in situ (NID grade 3), followed by immediate bilateral breast reconstruction with tissue expanders. The patient was referred for elective evaluation due to the presence of bilateral lateral thoracic retractile scars, secondary to previous reconstructive procedures. These scars were associated with aesthetic discomfort and local tissue distortion. The surgical management consisted of bilateral incisions that were made with complete excision of the retractile scar tissue. Nipple reconstruction was performed using a local rotational dermo-cutaneous flap, according to the star flap technique. Three triangular flaps were designed radially along the intended nipple site. This technique was the preferred one due to its simplicity, allowing for adequate initial projection and intra-operative adaptability, especially in previously expanded or scarred tissues. Areolar reconstruction was performed by using a total skin graft, harvested from the previously excised thoracic skin, ensuring an optimal color and texture match. Postoperative evolution was favorable, with clean surgical wounds and no signs of inflammation or infection. **Discussions:** This case highlights the importance of an integrated surgical approach, combining both scar correction and nipple-areola reconstruction. The surgical technique allowed for the restoration of breast symmetry and contour. But most importantly, the reconstructive process contributed to increased self-confidence, restoring body image, highlighting that this procedure is not strictly based on aesthetics, but also on reinforcing the woman's sense of femininity. **Conclusions:** The reconstruction of the nipple-areola complex has been highlighted through many studies, addressing both physical and emotional aspects of post-mastectomy recovery.

Keywords: Nipple-areola complex reconstruction, Breast reconstruction, Mastectomy, Psychosocial recovery

OPTIMIZING TURNER SYNDROME MANAGEMENT: GROWTH PERSPECTIVES AND IMPACT ON QUALITY OF LIFE

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Introduction: Turner syndrome is the only viable monosomy in humans, resulting from complete or partial loss of the X chromosome, affecting individuals with a female phenotype. It is a sporadic genetic event, most commonly resulting from nondisjunction or structural abnormalities of the X chromosome. Growth failure is the main clinical manifestation; in the absence of treatment, final adult height averages around 140-145 cm, whereas growth hormone therapy can increase adult height to approximately 150-151 cm. **Case Report:** We present the case of a 9-year-old patient diagnosed prenatally with Turner syndrome (45, X), known to have short stature currently undergoing treatment with rhGH, who presented to the endocrinology department in the context of growth curve stagnation. Her medical history is notable for obesity (BMI +2.13 SD WHO), aortic coarctation surgically corrected at one month of age, currently with residual aortic arch hypoplasia, bicuspid aortic valve with mild insufficiency, regressing (grade 1) left renal hydronephrosis, chronic autoimmune thyroiditis with preserved thyroid function, and thoracic scoliosis. The patient presented with growth retardation, which is one of the main clinical manifestations, with loss of standard deviation scores over time (-2.08 SD Ro; +1.11 SD Turner) and a subnormal growth velocity (3.09 cm/year). Consequently, rhGH therapy (Somatropinum 0.8 mg/day s.c) was initiated. IGF-1 levels monitored dynamically after the start of rhGH were 429.8, 457, 458 ng/ml, and currently 312 ng/ml (reference range 71-394 ng/ml). This monitoring illustrates the efficacy of the treatment with auxological parameters improvement. Under treatment, the patient showed a significant increase in growth velocity, up to 8.8 cm/year (+4.23 SD) and a favorable repositioning on specific Turner syndrome specific growth charts (+1.74). **Discussions:** This case highlights the importance of the integrated approach in Turner syndrome, highlighting the need for rigorous monitoring of statural, endocrine and cardiovascular development. Treatment with rhGH, IGF-1 monitoring and dose adjustments allow for improvement of the growth curve, contributing to optimizing the quality of life and preventing associated complications. **Conclusions:** Careful auxological monitoring, early recognition of statural deficiencies and optimization of treatment strategies are mandatory in order to improve long term outcomes and quality of life in patients with Turner Syndrome.

Keywords: Turner Syndrome, Growth hormone therapy, Short stature, IGF-1 monitoring

ORAL MUCOSAL METASTASIS IN NEUROBLASTOMA: A RARE CASE REPORT

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Introduction: Neuroblastoma is the most common extracranial solid tumor of childhood. The 5-year overall survival rate reaches up to 98% in the low-risk group, but decreases to 63% in the high-risk group. The most common metastatic sites include bone, bone marrow, liver and lymph nodes. To date, metastasis to the oral mucosa has not been reported in the literature. In this report, we discuss unusual dissemination pathways of neuroblastoma. **Case Report:** A 20-month-old male patient was referred to our hospital after detection of a suprarenal mass at another center, where he had presented with a six-week history of vomiting. Further evaluation revealed elevated levels of VMA, NSE, and LDH, supporting the diagnosis of neuroblastoma. Shortly thereafter, the patient was diagnosed with INRG stage L1 and was admitted for surgery. The mass was completely resected, and histopathological examination revealed poorly differentiated neuroblastoma. The patient was classified as low-risk due to localized INRG stage L1 disease, age >12 months, complete surgical resection, and absence of N-myc amplification; therefore, no further treatment was administered. The first relapse was detected three months later. The patient was reclassified as high-risk and chemotherapy was initiated, without achieving complete response. Fourteen months after diagnosis, routine follow-up revealed elevated NSE and VMA levels. Physical examination showed swelling in the left maxilla. Maxillofacial MRI demonstrated a 57×44 mm mass in the left maxilla, involving the infratemporal region, buccal masticator space, and submandibular area, extending to the retromolar trigone. Biopsy of the oral mucosal lesion was consistent with metastatic neuroblastoma. The family declined further treatment, and the patient died shortly thereafter. **Discussions :** Neuroblastoma is a neural crest-derived pediatric tumor, and metastases are present at diagnosis in more than half of patients. The closest previously reported metastatic site to the oral mucosa is the mandible, although even this location is extremely rare. In our patient, the lesion was considered a true oral mucosal metastasis, as it was radiologically centered in the mucosa and histopathological examination showed no involvement of bone or periosteum. The most likely mechanism is hematogenous spread. Due to its rich vascularity and neuroectodermal cellular components, the oral mucosa may theoretically be susceptible to metastasis. **Conclusions:** Any lesion observed in the oral mucosa should be considered in the differential diagnosis of metastasis before being attributed to treatment-related complications. Careful physical examination is crucial in the suspicion of relapse.

Keywords: Neuroblastoma, Oral mucosal metastasis, Rare metastasis, Pediatric oncology

ORGANOPHOSPHATE POISONING PRESENTING AS REVERSIBLE COMPLETE ATRIOVENTRICULAR BLOCK IN A STRUCTURALLY NORMAL HEART

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Introduction: Recognizing toxicological etiologies of complete heart block is crucial, particularly in patients without structural heart disease, to ensure timely antidotal therapy and avoid unnecessary invasive procedures. **Case Report:** A 55-year-old previously healthy male, with no cardiovascular history or regular medication, presented to the E.R. one hour after sudden onset of dizziness, presyncope and epigastric discomfort while working in the fields. On arrival, he was pale, diaphoretic and hypotensive (78/45 mmHg) with marked bradycardia (32 bpm). The initial ECG demonstrated complete AV block with a large-QRS escape rhythm at 30-35 bpm and no acute ischemic changes. High-sensitivity troponin I was mildly elevated at 32 ng/L (reference <14 ng/L), rising to 58 ng/L at 3 hours without dynamic ST-T changes. Transthoracic echocardiography showed normal left ventricular function and no regional wall motion abnormalities. Laboratory tests were unremarkable. Intravenous atropine (boluses up to 3 mg) produced only transient improvement, and a temporary transvenous pacemaker was inserted for persistent symptomatic AV block. After stabilization, further history from family members revealed recent intense inhalational exposure to organophosphate-based pesticides earlier that day. Given the organophosphate poisoning suspicion, intravenous atropine infusion was initiated, together with hemodialysis. Over the next 48 hours, AV conduction progressively recovered, and the ECG reverted to normal AV conduction with a PR interval of 180 ms; the

temporary pacemaker was removed on day 3. The patient was discharged on day 7 in stable condition, with no residual conduction abnormality at 1-month follow-up. **Discussions** : This case illustrates an uncommon manifestation of organophosphate toxicity, likely mediated by excessive vagal stimulation and direct involvement of the cardiac conduction system. The absence of regional wall motion abnormalities, modest troponin elevation, and prompt response to atropine supported a toxic rather than ischemic etiology. Similar reports describe transient high-grade AV block in organophosphate and carbamate poisoning, with resolution after appropriate antidotal treatment, underscoring the need to consider toxic exposures in adults presenting with new-onset total AV block, especially in agricultural settings. **Conclusions**: Organophosphate poisoning should be included in the differential diagnosis of unexplained complete AV block in patients without structural heart disease when epidemiological context suggests pesticide exposure. Early recognition and prompt administration of atropine plus pralidoxime, if available, may reverse conduction disturbances and avoid unnecessary permanent pacing.

Keywords: organophosphate poisoning, atrioventricular block, cholinesterase inhibition, cardiac conduction

OUTCOME IN PROTEIN C DEFICIENCY THROMBOPHILIA WITH COMPLEX ETIOLOGY

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Introduction: Protein C is a natural anticoagulant that inactivates factors Va and VIIIa. Deficiency of this protein leads to an imbalance between procoagulant and anticoagulant factors, promoting thrombosis, especially at the level of venous circulation, where slower blood flow allows prolonged contact between coagulation factors and vessel wall. **Case Report:** An 18-year-old female patient, presenting with dyspnea, is admitted to the ICU of the Mures County Hospital. A thoraco-abdomino-pelvic CT-angiography is performed, which reveals filling defects at the proximal segment of the left main pulmonary artery and the inferior lobar branch of the right pulmonary artery, accompanied by bilateral basal ground-glass opacities, findings suggestive for the diagnosis of pulmonary embolism complicated by pulmonary infraction. Also, a filling defect at the left common iliac vein is detected. The patient is initially treated with low molecular weight heparin (LMWH), but the left lower limb thrombosis progresses and therefore the medication is switched to unfractionated heparin (UFH). However, the patient's condition worsens: she develops compartment syndrome of the left calf, and consequently a fasciotomy is performed at this level. She also presents signs of gangrene in the distal third of the left calf and left foot, which leads to her transfer to the Vascular Surgery Department, where an amputation of the affected portion of the limb is performed. Later, UFH is replaced with Apixaban. The patient presents the following laboratory test results: protein C activity 28.6 %, platelets 89.000/uL, lupus anticoagulant-screening test 81.3 seconds, and confirmation test 54.7 seconds and procalcitonin 2-10 ng/ml, which raises suspicion of protein C deficiency associated thrombophilia, in association with disseminated intravascular coagulation, sepsis, and antiphospholipid syndrome. **Discussions** : In the presence of multiple risk factors for developing protein C deficiency, the thrombophilic state is exacerbated due to excessive activation of the coagulation cascade, leading to further decrease of protein C levels. **Conclusions:** Even if protein C deficiency thrombophilia with mixed etiology is associated with an unfavorable outcome, identifying the multiple underlying causes, as well as the laboratory tests that suggest them and their appropriate treatment, may improve the life expectancy of the patients diagnosed with this condition.

Keywords: thrombophilia, protein C deficiency, mixed etiology, pulmonary embolism

OUTCOMES OF INTRAUTERINE FETAL OVARIAN TORSION DIAGNOSED IN THE THIRD TRIMESTER OF PREGNANCY - CASE PRESENTATION AND REVIEW OF THE LITERATURE

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Introduction: Prenatally diagnosed fetal ovarian torsion is a rare finding and usually arises as a complication of a pre-existing ovarian cyst. It is commonly detected incidentally during routine ultrasound examinations in the third trimester of pregnancy, where sonographic findings are presented by complex morphology with internal septations, echogenic components and fluid-debris levels suggesting hemorrhage. Ovarian cysts are mostly benign and resolve spontaneously but complications such as ovarian torsion may compromise ovarian function and fertility irreversibly. However, there is no standardized guideline available for prenatal diagnosis and management.

Case Report:

We present a case of a primigravid, nulliparous patient diagnosed with intra-uterine fetal ovarian torsion at 35 weeks of gestation. Additionally, the patient presents with some pregnancy related conditions including gestational diabetes, gestational hypertension and hypothyroidism. Sonographic images revealed a well circumscribed intra-abdominal cystic lesion, anechoic, with thin, regular walls, appearing as a fluid-filled structure without solid components. Fetal MRI demonstrated a large multiloculated cystic mass, containing several internal septations and multiple fluid-fluid levels with hemorrhagic content. We monitored the pregnancy by serial ultrasound examinations. Following current guidelines, we performed a cesarian section at 38 weeks of gestation, taking into consideration a fetus too large for gestational age and maternal comorbidities. Post-partum sonographic evaluation confirmed prenatal findings. Neonatal follow-up revealed a favorable outcome with resorption of the affected ovary. **Discussions** : Treatment options are controversial. Conservative treatment by watch and wait may result in spontaneous resolution or in ovarian autoamputation. Invasive treatment like prenatal aspiration of the ovarian cyst may contribute to ovarian preservation. Potential complications, like preterm rupture of membranes, amniotic fluid infections, and hemorrhages must be considered. Perinatal care essentially requires an interdisciplinary approach in which the gynecologist must decide the optimal time of delivery, the neonatologist provides appropriate neonatal monitoring and follow-up and the pediatric surgeons performing reevaluation of the ovarian lesion to determine potential need for further management. **Conclusions**: Fetal ovarian torsion is a rare complication of ovarian cysts. Management decisions must balance potential risk factors and the aim of ovarian preservation, made by multidisciplinary approach including the obstetric, neonatologists, pediatric surgeons and the parents.

Keywords: fetal ovarian torsion, prenatal diagnosis, fetal ovarian cyst, third trimester

OVERCOMING THE BURDEN OF X-LINKED HYPOPHOSPHATEMIA: A CASE REPORT ON THE THERAPEUTIC SHIFT TO BUROSUMAB IN ADULTS

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Introduction: X-linked hypophosphatemia (XLH) is a renal phosphate-wasting disorder that is the most common heritable form of rickets. It affects approximately 1 in 20.000 people. XLH is caused by mutations in the phosphate-regulating endopeptidase homolog X-linked (PHEX) gene. PHEX inactivation leads to increased production of fibroblast growth factor 23 (FGF23). It is primarily expressed in osteoblasts and osteocytes. FGF23 excess results in rickets, osteomalacia, severe bone pain, lower limb deformities, muscle weakness, short stature, dental abscesses, and insufficiency fractures. **Case Report:** A 34-year-old patient with known XLH- genetically confirmed by the identification of c2077T>A mutation in the PHEX gene- presents for clinical and biological evaluation and therapeutic management, complaining of lumbar pain, right lower limb pain, paraesthesia, and lower right limb muscular contraction. The patient's medical history includes multiple corrective surgeries for lower limb deformities starting at the age of 7, as well as multiple fractures. Clinical examination reveals a patient of short stature and normal weight, notable for bilateral genu varum and a kyphoscoliotic thorax. Assessments of phosphocalcemic metabolism reveal values within limits for total calcium (9.46 mg/dl), ionised calcium (4.25 mg/dl), and alkaline phosphatase (64U/l), but with low phosphorus levels (1.81 mg/dl). All parameters are within limits on the thyroid ultrasound. Bilateral lower limb X-rays were performed, revealing osteoporosis in all sections of both lower limbs. The patient is discharged with the following recommendations: treatment initiation with Burosumab 40mg, administered as one subcutaneous injection every 28 days. Additionally, she is to take magnesium supplements twice a day. Following the initiation of treatment, the patient's evolution has been favourable, and phosphorus levels have remained within limits. **Discussions** : Conventional treatment for XLH consists of oral phosphate and active vitamin D. While Burosumab, a monoclonal antibody, is a first-line treatment in children is typically reserved as a second-line treatment for adults. Strict criteria apply for Burosumab: a patient must have genetic confirmation of the PHEX gene and clear radiological evidence of active bone disease. Particularly, adults must not respond to conventional treatment or have severe complications to receive Burosumab. This treatment is revolutionary for patients, as conventional therapy is often limited by gastrointestinal side effects, and compliance is also easier to achieve. **Conclusions:** This case reaffirms that biological therapy is a superior alternative for patients who have suffered long-term complications of XLH. Not only is phosphorus regulation better controlled, but quality of life is also significantly improved.

Keywords: x-linked hypophosphatemia, Burosumab, adult, rickets

PANCREAS DIVISUM WITH AMPULLARY MALIGNANCY: A RARE CASE

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Introduction: Pancreas divisum represents the most common congenital anomaly of the pancreatic ductal system, with a reported prevalence of 4-14%. It results from failure of fusion between the dorsal and ventral pancreatic ducts during embryogenesis, leading to predominant drainage through the dorsal duct and minor papilla. In cases of minor papilla stenosis, impaired pancreatic outflow may predispose to recurrent or chronic pancreatitis. Although often asymptomatic, pancreas divisum may complicate the clinical course in patients with concomitant pancreatic or periampullary pathology, occasionally necessitating surgical intervention. **Case Report:** We present the case of a 63-year-old female admitted with persistent abdominal pain, recurrent vomiting, anorexia, and significant weight loss (20 kg over five months). Clinical and paraclinical evaluation revealed a stenosing duodenal tumor associated with chronic cephalic pancreatitis. Imaging studies identified an antral mass and additional abdominopelvic tumor formations. Given the severity of the presentation and suspicion of malignancy, the patient underwent an extensive surgical procedure consisting of cephalic pancreaticoduodenectomy (Whipple procedure) with gastrojejunostomy, hepaticojejunal and pancreatojejunal anastomoses, jejunostomy, and concomitant total hysterectomy with bilateral adnexectomy. Histopathological analysis confirmed a well-differentiated intestinal-type ampullary adenocarcinoma (G1), with metastases to the left ovary and peripancreatic lymph nodes (pT3bN1M1). The postoperative course was favorable, with early recovery of intestinal transit and satisfactory clinical evolution. **Discussions :** In pancreas divisum, the majority of pancreatic exocrine secretions are drained through the dorsal duct into the minor papilla, which may represent a functional bottleneck. Increased intraductal pressure secondary to impaired drainage is considered a key mechanism underlying the development of chronic pancreatitis. In the presence of coexisting malignancy, such as ampullary or periampullary tumors, altered ductal anatomy may further complicate both diagnosis and management. While endoscopic approaches remain first-line for symptomatic pancreas divisum, surgical intervention is indicated in complex cases, particularly when associated with obstructive lesions or neoplasia. Pancreaticoduodenectomy remains the standard of care for resectable periampullary malignancies and can address both oncologic and anatomical pathology. **Conclusions:** Pancreas divisum is a clinically relevant anatomical variant that may influence the presentation and progression of pancreatic disease. In the context of associated malignancy, it may contribute to diagnostic and therapeutic complexity. Surgical management, including pancreaticoduodenectomy, plays a crucial role in selected cases, offering both definitive oncologic treatment and resolution of obstructive pathology.

Keywords: pancreas divisum, pancreaticoduodenectomy, ampullary adenocarcinoma

PAPILLARY THYROID CARCINOMA ASSOCIATED WITH GRAVES DISEASE

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Introduction: Graves disease is a frequent cause of autoimmune hyperthyroidism, predominant in females and young to middle-aged individuals. Its coexistence with papillary thyroid carcinoma (PTC) represents a particular clinical entity. Although PTC is the most common type of thyroid cancer, its association with Graves' disease remains relatively rare, with a frequency below 2%. **Case Report:** We present the case of a 39-year-old female patient diagnosed with Graves disease 10 years ago, on treatment with Thiamazole 40 mg/day due to biochemical hyperthyroidism. Thyroid ultrasound revealed a diffuse goiter with globally hypoechoic, inhomogeneous echostructure, with fine diffuse hyperechoic strands. Thoracic CT examination showed a markedly enlarged, inhomogeneous thyroid gland, with predominant development of the left lobe plunging into the mediastinum and compressing the esophagus and trachea. Total thyroidectomy was performed due to difficult-to-control hyperthyroidism and the large volume of the thyroid gland causing compression of adjacent organs. The definitive histopathological result revealed a conventional variant papillary thyroid carcinoma of the left lobe associated with Graves disease. Postoperative evolution was favorable, under substitutive therapy and standard oncological surveillance. **Discussions :** In typical forms of Graves disease, the thyroid gland is diffusely enlarged and intensely vascularized, with an apparently homogeneous ultrasound appearance, which may falsely suggest an

exclusively benign pathology and diminish oncological vigilance. Even in the absence of clinically or imaging-evident nodules, studies on thyroidectomy specimens for toxic diffuse goiter have described the presence of intraparenchymal papillary microcarcinomas, difficult to anticipate preoperatively. Recent literature indicates that patients with Graves disease and thyroid nodules have a significantly higher risk of PTC compared to those without nodularity, with many cases diagnosed incidentally after thyroidectomy. **Conclusions:** Papillary thyroid carcinoma associated with Graves disease represents a clinical situation where oncological risk should not be underestimated in the face of an apparently "typical" hyperthyroidism picture. The particularity of the case lies in the incidental discovery of a papillary thyroid carcinoma in the context of a voluminous Graves goiter, without preoperative imaging suspicion.

Keywords: Graves, Thyroid, Carcinoma, Papillary

PARANEOPLASTIC DISSEMINATED INTRAVASCULAR COAGULATION: A DIAGNOSTIC AND THERAPEUTIC CHALLENGE

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Introduction: Disseminated intravascular coagulation (DIC) represents a life-threatening clinical syndrome, characterized by its profound heterogeneity, a direct consequence of its diverse underlying etiologies. The pathophysiology of this condition is based on the systemic, uncontrolled activation of the coagulation cascade, which results in widespread fibrin deposition within the vasculature, thereby precipitating microvascular occlusive events, ultimately leading to multisystem organ failure. **Case Report:** We report the case of a 64-year-old female patient diagnosed with stage IV bronchopulmonary neoplasm (pulmonary, hepatic, and diffuse bone metastases). The patient initially presented to the emergency department with pain and functional impairment of the right lower limb. Following admission to the Orthopedics and Traumatology Department, she underwent surgical intervention for a right femoral fracture on pathological bone. The postoperative course was unfavorable, characterized by the rapid onset of cyanosis in the right upper limb and both lower limbs. The angio-CT (angio-computed tomography) examination revealed a multisystemic thrombosis pattern including pulmonary thromboembolism, massive deep and superficial venous thromboses (in the upper and lower limbs), and splenic and renal ischemic infarctions. The biological assessment confirmed a severe consumptive form of DIC syndrome: severe thrombocytopenia, critically low fibrinogen 32.39 mg/dL, prolonged coagulation times (prothrombin time 39.5 s), D-dimers > 320,000 ng/mL, and hepatic cytolysis. Despite optimal medical management, in accordance with the international guidelines, the patient's critical condition and multiple comorbidities led to a fatal outcome. **Discussions :** The diagnosis of DIC was established using the ISTH (International Society on Thrombosis and Haemostasis) score, considered the gold standard. It quantifies biological parameters (platelets, D-dimers, prothrombin time, and fibrinogen), a score greater than or equal to 5 is correlated with overt DIC. The presented case highlights the aggressiveness, the difficulty of management, and the unfavorable prognosis in overt DIC (ISTH score 8) occurring on a fragile neoplastic background. **Conclusions:** Rapid recognition of DIC syndrome is crucial, although in fulminant paraneoplastic forms, the outcome most often remains fatal.

Keywords: Disseminated Intravascular Coagulation (DIC), multisystemic thrombosis, consumptive coagulopathy, pathological fracture

PARKINSON'S DISEASE WITH TREMOR PREDOMINANCE VERSUS ESSENTIAL TREMOR: DIAGNOSTIC CHALLENGE

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Introduction: Essential tremor (ET) and Parkinson's disease (PD) with tremor predominance are two different diagnoses, but extremely easy to confuse, especially at the onset, when tremor is more evident and Parkinsonian signs (bradykinesia, rigidity) are more discreet. **Case Report:** We present the case of a patient with resting and postural tremor of the upper limbs, with asymmetric onset, associated with bradykinesia and muscle rigidity, initially diagnosed with essential tremor. Approximately five years after this diagnosis, in the context of the progression of the existing symptomatology, as well as the appearance of new motor and non-motor symptoms, the diagnosis

argues in favor of the diagnosis of Parkinson's disease with tremor predominance. The patient has difficulty accepting the new diagnosis, so additional investigations were performed, including a PET/CT with 18F-FDOPA, which is positive (confirming the PD diagnosis). **Discussions** : Although there is currently an effective symptomatic treatment for advanced stages of Parkinson's disease, early diagnosis of tremor-predominant Parkinson's disease remains difficult. The semiology of involuntary movement, asymmetric onset and progression, association with typical Parkinsonian phenomena, as well as normal imaging and biological investigations at onset, should raise suspicion of tremor-predominant Parkinson's disease. According to the literature, some patients initially labeled as ET later develop tremor-predominant PD. However, it remains difficult to separate an erroneous diagnosis of ET from a diagnosis of PD or an ET-PD association. Establishing the diagnosis of tremor-predominant Parkinson's disease as early as possible can help patients accept their disease and increase compliance with treatment. **Conclusions**: For the patient in the present case, Parkinson's disease with tremor predominance remains as the most probable diagnosis based on both a significant improvement of his symptomatology upon initiation of antiparkinsonian treatment, progressive evolution of bradykinesia and rigidity dynamics and some non-motor symptoms that help significantly to classify this patient's condition, together with imaging confirmation. Since the patient did not show improvement in symptomatology with the initial propranolol treatment and, over the course of the disease, the involuntary movements remained limited to the limbs (without affecting the head or voice), the coexistence of ET and PD in this case is unlikely. We deem it necessary to consider, from the outset, the possibility of PD with tremor predominance or the ET-PD association in patients with obvious upper-limb tremor, asymmetric onset, and discrete elements of bradykinesia and rigidity.

Keywords: Parkinson's disease, Essential tremor, L-Dopa, PET/CT

PARTIAL ANOMALOUS PULMONARY VENOUS CONNECTION OF THE LEFT SUPERIOR PULMONARY VEIN TO THE LEFT BRACHIOCEPHALIC VEIN WITH CO-EXISTING PULMONARY VENOUS VARIATIONS

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Introduction: Partial anomalous pulmonary venous connection (PAPVC) is a congenital cardiovascular anomaly characterized by an abnormal drainage of one or more pulmonary veins into the systemic circulation rather than the left atrium. The anomalous connection of the left superior pulmonary vein (LSPV) to the left brachiocephalic vein (LBCV) represents a particularly rare variant, with only a handful of cases documented in the literature. The anomaly results from the incomplete regression of the left anterior cardinal vein, which persists as a vertical vein that connects the pulmonary venous plexus to the systemic circulation. Knowledge of this anatomical variant is clinically relevant for thoracic surgery, catheter ablation for atrial fibrillation and accurate interpretation of mediastinal imaging. **Case Report:** A 64-year-old male underwent contrast-enhanced multidetector computed tomography (CT) with multiplanar reconstruction and three-dimensional volume rendering. Systematic assessment of the pulmonary venous anatomy demonstrated anomalous drainage of the LSPV into the LBCV at 2.34 cm from its origin at the confluence of the left internal jugular and subclavian veins. The LSPV ascended anterior to the left pulmonary artery, coursed laterally along the aortic arch and emptied into the LBCV. Additionally, the lingular vein drained separately into the left inferior pulmonary vein and an accessory right middle lobe vein was identified on the contralateral side. **Discussions** : PAPVC of the LSPV to the LBCV must be distinguished from a persistent left superior vena cava on CT imaging. The key differentiating feature is the identification of intraparenchymal pulmonary venous tributaries draining into the vertical vein. PAPVC produces a left-to-right shunt. When a single vein is affected, the shunt is usually hemodynamically insignificant, though larger anomalous drainage can lead to right-sided volume overload and pulmonary hypertension. The co-existence of an accessory right middle lobe vein with contralateral LSPV anomaly highlights that multiple pulmonary venous variations may occur simultaneously in the same patient. **Conclusions:** This case illustrates the diagnostic value of comprehensive CT assessment of pulmonary venous anatomy. Identifying these rare variants and acknowledging their potential co-existence is critical for ensuring safe pre-procedural planning in thoracic surgery and catheter-based electrophysiological procedures.

Keywords: partial anomalous pulmonary venous connection, left superior pulmonary vein, brachiocephalic vein, vertical vein

PATENT DUCTUS ARTERIOSUS IN FULL-TERM NEWBORNS: CASE SERIES AND LITERATURE REVIEW

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Introduction: The Fetal Ductus Arteriosus connects the pulmonary artery to the descending aorta, allowing blood to bypass the lungs during fetal circulation. After birth, increased oxygen levels and decreased pulmonary vascular resistance normally lead to functional closure of the ductus arteriosus within the first 24 hours, followed by anatomical closure within the following weeks. Patent Ductus Arteriosus (PDA) is observed when this physiological closure fails. While PDA is more frequently seen in premature infants, it can also present in full-term infants. The clinical presentation of PDA is related to the degree of ductal shunting and its impact on cardiovascular function.

Case Report: This case series describes five fullterm newborns who were diagnosed with PDA after the first 72 hours of life. The index case was a full term female neonate with a birth weight of 2900 grams. A systolic heart murmur was found during a routine examination. An echocardiogram showed a large left-to-right shunt at the PDA level, and mild pulmonary hypertension. Pharmacological treatment with paracetamol was initiated. Due to persistent ductal patency and increased pulmonary blood flow, supportive therapy with captopril, propranolol, and spironolactone was added. Serial echocardiographic evaluations showed progressive reduction in pulmonary arterial pressure and narrowing of the PDA. Although PDA pharmacological closure was unsuccessful, she was discharged on day 20 of life with a recommendation for close followup in the Pediatric Cardiology Department. The other four cases presented with varied clinical features. Two neonates were found to have incidental heart murmurs and a moderate PDA, yet without any hemodynamic instability. Another instance linked ductal patency to early neonatal sepsis. Furthermore, an infant experiencing respiratory distress and moderate pulmonary hypertension required supplemental oxygen and close monitoring. All cases were discharged from the neonatal unit in stable condition and were subsequently referred to the Pediatric Cardiology Department for close followup.

Discussions : This case series highlights the varied clinical presentations of PDA in full-term neonates. Although some infants exhibit incidental murmurs and few symptoms, others may experience hemodynamically significant ductal shunting and pulmonary hypertension. Echocardiography is crucial for assessing the hemodynamic impact of PDA and directing treatment. Current evidence supports personalized treatment approaches, contingent upon clinical and echocardiographic observations. **Conclusions:** PDA can be easily overlooked among term newborns. Accurate diagnosis, requiring careful clinical examination and echocardiography studies, is essential for tailored management in order to prevent evolving hemodynamic instability.

Keywords: Patent Ductus Arteriosus;, Echocardiography studies;, Hemodynamic echocardiography;, Term newborns

PEDIATRIC RENAL COLIC CAUSED BY OBSTRUCTIVE UROLITHIASIS WITH SECONDARY HYDRONEPHROSIS: A CASE REPORT

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Introduction: Urolithiasis is uncommon in pediatric populations, yet its prevalence is increasing. Delayed diagnosis is not a common cause of sudden abdominal pain, but it can lead to serious problems like hydronephrosis and renal obstruction. Pediatric nephrolithiasis often has symptoms that aren't very specific, which makes it hard to find early on. To avoid permanent kidney damage and recurrence, it's important to diagnose and treat the problem as soon as possible. This case shows how obstructive urolithiasis can make an 11-year-old patient have hydronephrosis. It also shows how important it is to get an image and get treatment right away.

Case Report: An 11-year-old boy had pain in his right side of his abdomen and flank for three to four days. The pain was intermittent and somewhat relieved by analgesics, but persisted, requiring hospitalisation. He had no serious health problems before. The examination showed that the vital signs were stable, the person was mildly dehydrated, and there was tenderness in the right flank. Tests in the lab showed leukocytosis (7,760/ μ L), haematuria (up to 300/ μ L), and leukocyturia, which means that something is blocking the urinary tract. An ultrasound showed an 8-9 mm stone at the pyeloureteral junction, a shadow on the back, grade III right hydronephrosis, and proximal ureter dilation. The left kidney and bladder were fine. He received fluids through an

IV, along with painkillers, Drotaverine, Tamsulosin, and Cystone. He felt better, and he was sent home with follow-up care and the option of ESWL if he needed it. **Discussions** : Pediatric urolithiasis is uncommon but increasingly diagnosed. Family history, poor diet, metabolic disorders, and low fluid intake are risk factors. Diagnosis is difficult because children often present with non-specific abdominal pain instead of typical renal colic. Ultrasound is the preferred imaging method because it avoids radiation and detects stones and hydronephrosis, as in this case. Other diagnostic methods include non-contrast CT, which is most accurate but limited by radiation, X-ray, which may miss small stones, and MRU, which evaluates obstruction. Urinalysis findings such as haematuria support diagnosis. According to literature, stones under 10 mm, like the 8-9 mm stone here, are usually treated conservatively. Grade III hydronephrosis indicates obstruction and possible renal damage. **Conclusions**: This case highlights obstructive urolithiasis as an important cause of abdominal pain in children. Ultrasound plays a key role in early detection. Small stones may respond to conservative treatment, and prompt diagnosis is essential to prevent hydronephrosis and long-term renal damage.

Keywords: Pediatric urolithiasis, renal colic, hydronephrosis, ureteral obstruction

PERINATAL AND SURGICAL CARE OF LAPAROSCHISIS IN A PREMATURE NEWBORN - A CASE REPORT

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Introduction: Laparoschisis, commonly known as gastroschisis, is a congenital defect of the abdominal wall. This defect usually occurs to the right of the umbilical cord, causing the intestines and sometimes other organs to protrude without a protective membrane. As a result, these organs are directly exposed to the amniotic fluid. The immediate risks of laparoschisis include sepsis, hypothermia, intestinal complications, malnutrition, and hypotension. **Case Report:** We report the case of a premature newborn at 36 weeks of gestation, delivered via cesarean section in cranial presentation, weighing 1700 grams, with an APGAR score of 8 at 1 minute and 9 at 5 minutes. The laparoschisis was diagnosed and monitored antenatally, prompting the cesarean delivery. Other associated defects included a patent foramen ovale, a patent ductus arteriosus (PDA), mildly enlarged left cardiac chambers, and mild right pyelectasis. At birth, the newborn received resuscitation and tactile stimulation and was transferred to the neonatal intensive care unit (NICU). The management of the preterm newborn involved covering the intestines with a sterile, moist compress, inserting a peripheral venous line for hemodynamic stability, correcting electrolyte imbalances, and providing parenteral nutrition and antibiotics. A nasogastric tube was used to decompress the stomach and prevent aspiration, and the newborn was placed in an incubator to address hypothermia. **Discussions** : After immediate postnatal stabilization and assessment by a multidisciplinary team, the infant was transferred to the pediatric surgery unit. After evaluating the risk of abdominal compartment syndrome and hemodynamic instability, a staged silo reduction was selected. Staged silo reduction is a safe and common surgical method for treating neonates with gastroschisis, a condition where the eviscerated organs are gradually relocated back into the abdomen over several days using a fitted, spring-loaded, or adhesive pouch. The infant was then returned to the NICU for postoperative management and nutritional support, where he was again stabilized and then gradually started on enteral feeding. The definitive repair of the abdominal defect and the reintroduction of the herniated organs into the abdomen were performed at the age of 13 days, with a favorable outcome. **Conclusions:** Cases like this should be managed by a multidisciplinary team, where collaboration among neonatologists, surgeons, and other specialists ensures timely intervention, adequate nutritional support, the prevention of complications, and improved clinical outcomes.

Keywords: Laparoschisis, staged silo reduction, multidisciplinary care, premature newborn

PERIOPERATIVE CHALLENGES OF EMERGENCY SURGERY FOR ABDOMINAL ABSCESS IN A PATIENT WITH MULTIPLE SCLEROSIS: PROLONGED MECHANICAL VENTILATION AND DIFFICULT WEANING

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Introduction: Multiple sclerosis is associated with specific perioperative challenges, including muscle weakness, impaired respiratory mechanics, and heightened sensitivity to stress. Emergency interventions further increase

complexity. This report describes the challenges of mechanical ventilation and weaning in a patient with MS who required urgent surgical management for an intra-abdominal abscess. **Case Report:** A middle-aged woman with advanced multiple sclerosis and baseline spastic paraparesis presented with sepsis caused by a large intra-abdominal abscess. She underwent emergency surgical drainage under general anesthesia. Preoperatively, she showed reduced cough efficiency and limited respiratory reserve. Postoperatively, she was admitted to the ICU with respiratory insufficiency, requiring ventilatory support. She was hemodynamically unstable, with shock requiring norepinephrine infusion, and had severe metabolic acidosis. Correction of acid-base imbalance was pursued through targeted fluid therapy, leading to improved hemodynamic parameters, with MAP increasing from 54 to 88 mmHg and pulse pressure adjusting from 61 to 41 mmHg. Under multimodal analgesia, assisted mechanical ventilation was initiated early. Several spontaneous breathing trials were attempted, initially unsuccessful due to respiratory muscle fatigue. Diaphragm ultrasound performed at 24 and 48 hours showed reduced excursion, with subsequent improvement following structured kinetotherapy. The third spontaneous breathing trial was successful, allowing extubation and transition to high-flow nasal oxygen. No respiratory deterioration or abnormalities in blood gas analysis or monitoring were observed thereafter. Inflammatory and severity indices improved over 48 hours, with NLR decreasing from 9 to 4, PLR from 19.21 to 6.1, SII from 1575.5 to 448.9, and APACHE II score from 21 to 14. The patient's clinical condition steadily improved, enabling transfer to the surgical ward for continued care. **Discussions :** MS-related respiratory dysfunction is often underrecognized but may significantly impact perioperative outcomes. General anesthesia, infection, and surgical stress can exacerbate neuromuscular weakness, prolonging ventilatory dependence. Difficult weaning was linked to impaired diaphragmatic function and ineffective airway clearance, highlighting the value of repeated assessment, including diaphragm ultrasound, and early physiotherapy to support respiratory recovery. **Conclusions:** In multiple sclerosis, emergency surgical settings increase the likelihood of difficult weaning and extended mechanical ventilation. Proactive respiratory management and early supportive measures are key to recovery and may limit intensive care burden.

Keywords: Multiple sclerosis, SBT, weaning, postoperative care

PITFALLS IN CIRRHOSIS ETIOLOGY AND MANAGEMENT IN YOUNG ADULTS: CASE PRESENTATION

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Introduction: Determining the etiology of liver cirrhosis in young adults is a diagnostic challenge, often leading to "anchoring bias" where alcohol consumption is prematurely blamed. Accurate etiological diagnosis is vital, as it fundamentally alters the therapeutic management and long-term prognosis, especially in treatable conditions like autoimmune hepatitis (AIH). **Case Report:** A 38-year-old male, initially diagnosed in a secondary center with alcoholic cirrhosis complicated by ascites and esophageal varices. Upon admission to the Gastroenterology Clinic in Tîrgu Mureş, the patient presented with persistent ascites and abdominal bloating. Physical examination revealed Grade I obesity and hepatomegaly. The clinical picture included significant cardiovascular comorbidities: high-risk arterial hypertension, hypertensive cardiopathy, and mild mitral insufficiency. Laboratory workup showed a preserved liver secretory function Child-Pugh A, but with atypical features for an alcoholic etiology: a normal De Ritis ratio (AST/ALT) and significant hyperproteinemia. Viral markers were negative. Ultrasonography confirmed a thickened, stratified gallbladder wall, suggesting intense parenchymal inflammation. Based on these biochemical "red flags", an extended autoimmune profile was performed, testing positive for anti-F-actin antibodies, confirming AIH as the primary etiology. Other relevant laboratory findings included leukocytosis with neutrophilia and an elevated ESR with normal levels of CRP, alongside macrocytosis despite normal hemoglobin levels. Management involved hepatoprotective therapy, short-term corticosteroids, immunosuppressants, and ursodeoxycholic acid, alongside diuretics and beta-blockers for portal hypertension and ascites control. **Discussions :** The primary diagnostic pitfalls in this case were the initial attribution of cirrhosis to alcohol and the presence of macrocytosis with normal hemoglobin. While often associated with chronic ethanol consumption, macrocytosis acted as a confounding factor masking the underlying AIH. Furthermore, the transiently elevated ESR, leukocytosis and normal CRP were initially attributed to dehydration, which strengthens the initial blame on alcohol consumption. However, the lack of a significantly elevated De Ritis ratio (>2) and marked hyperproteinemia suggested an immune-mediated process. While the patient has established cirrhosis, the Child-Pugh A status indicates that the liver still possesses significant functional capacity, offering a vital window for intervention. The multidisciplinary challenge now lies in balancing immunosuppressive therapy with the patient's complex cardiovascular risk profile. **Conclusions:**

This case emphasizes that identifying AIH in the Child-Pugh A stage represents a critical "window of opportunity". While the structural fibrosis is irreversible, timely immunosuppression can arrest the autoimmune attack, prevent further decompensation, and significantly improve the quality of life. Accurate etiological clarification transforms the prognosis from a progressive decline to a manageable chronic condition.

Keywords: autoimmune hepatitis, Child-Pugh A liver cirrhosis, anti-F-actin antibodies, diagnostic pitfalls

PITUITARY MICROADENOMA, PSEUDO-CUSHING'S SYNDROME, REACTIVE HYPOGLYCEMIA IN THE CONTEXT OF ANXIETY-DEPRESSION DISORDERS

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Introduction: Pituitary microadenomas are benign tumors less than 10 mm in diameter. They are often discovered incidentally. Some of them may be capable of secreting pituitary hormones. Pseudo-Cushing's syndrome is a syndrome associated with cortisol hypersecretion in non-neoplastic diseases. **Case Report:** A 25-year-old male patient presents at the Endocrinology Clinic, complaining of high blood pressure over the last 3 years, fatigue, night sweats, and episodes of hypoglycemia. Clinical evaluation and laboratory investigations were performed. Initial hormonal tests revealed abnormalities suggestive of Cushing's syndrome, therefore screening tests were conducted: morning cortisol at 8:00 a.m. 29.8 µg/dL, ACTH 83.12 pg/mL (reference range 7.2-63.3), urinary free cortisol 111.09 µg/24 h (3.5-45), urinary cortisone 251.1 µg/24 h (17-129), late-night salivary cortisol at 11:30 p.m. 0.418 µg/dL (<0.410), and cortisol after the 1-mg dexamethasone suppression test 2.65 µg/dL (<1.8). Hypothalamic-pituitary MRI identified a 1.6 × 1.8 mm lesion in the right paramedian region of the adenohypophysis, suggestive of a pituitary microadenoma. Because of elevated testosterone levels, tumor markers were also evaluated: LDH 145 U/L, alpha-fetoprotein 1.5 IU/mL (<6.7), and HCG <0.1 IU/mL (<2.6), which excluded testicular malignancy. During hypoglycemic episodes, insulin and C-peptide levels were measured and were within normal limits. Furthermore, no hypoglycemia occurred during the 72-hour fasting test, supporting the diagnosis of reactive hypoglycemia. Subsequently, suspicion arose of endogenous ACTH-dependent hypercorticism associated with pituitary microadenoma (acromegaly, hyperparathyroidism, and thyroid dysfunction were ruled out), currently refuted by the 2x2 DXM test, which supports the diagnosis of pseudo-Cushing's syndrome (anxiety-depressive disorder) **Discussions :** This case is very interesting due to the evolution of the clinical picture, the overlap of endocrine pathologies, the difficult interpretation of the case in view of the changes in laboratory test parameters, and the inconsistency with the classic clinical picture. Basically, we started with GH hypersecretion, a possible ACTH-dependent Cushing's syndrome, including suspicion of MEN syndrome, which fortunately was ruled out by repeated lab tests. **Conclusions:** The symptomatology can most likely be explained in the context of chronic stress accompanied by anxiety-depressive disorders, which disrupted the entire endocrine system, causing the described hormonal imbalances, which were remedied after stress relief and treatment for anxiety-depressive disorders.

Keywords: Pituitary microadenoma, Cushing, ACTH, Hypoglycemia

PLACENTAL MORPHOLOGY IN A 17-WEEK GESTATION WITH TRISOMY 21: HISTOPATHOLOGICAL CORRELATIONS

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Introduction: Trisomy 21, the most common viable chromosomal aneuploidy, is associated with a broad spectrum of fetal developmental abnormalities. While the phenotypic features of the fetus are well established, the histomorphological changes in the placenta in early second-trimester pregnancies are less clearly defined. Detailed morphopathological assessment may reveal subtle villous alterations reflecting underlying chromosomal imbalance. **Case Report:** A 37-year-old patient, IVG0P, at 17 weeks of gestation, underwent a therapeutic termination following prenatal diagnosis of trisomy 21. Instrumental uterine control was performed for retained placental tissue, and the placenta with fetal adnexa was submitted for histopathological evaluation. Macroscopically, the placenta measured 120 × 90 × 15 mm and weighed 80 g. The umbilical cord showed marginal insertion, normal configuration, and three vessels (two arteries, one vein). The fetal membranes were translucent, with no gross pathological deposits. Microscopically, the placental parenchyma showed predominantly

immature and intermediate chorionic villi appropriate for gestational age. The villi exhibited mild morphological variability, with slightly irregular contours and discretely edematous stroma. A well-developed capillary network was present. Foci of unipolar trophoblastic proliferation without cytological atypia were identified, consistent with mild villous dysmaturity. Focal perivillous fibrin deposition and isolated areas of fibrinoid necrosis were observed. There were no organized infarctions, extensive intervillous hemorrhages, inflammatory lesions, or features suggestive of chronic villitis. Overall, the morphological findings were consistent with a placenta appropriate for 17 weeks of gestation, showing mild villous dysmorphism that was most likely related to fetal aneuploidy. **Discussions :** Placental findings in trisomy 21 are often subtle and may include delayed or abnormal villous maturation, stromal edema, and trophoblastic proliferative changes. In the early stages of gestation, these features may overlap with physiological immaturity, which makes interpretation challenging. In this case, however, irregular villous contours and focal unipolar trophoblastic proliferation without atypia support a diagnosis of mild dysmaturation rather than a trophoblastic neoplastic or molar process. The absence of inflammatory or ischemic lesions further suggests that the observed alterations are primarily related to chromosomal imbalance. Recognition of these patterns is important in morphopathological practice to avoid overinterpretation and to provide an accurate clinicopathological correlation. **Conclusions:** This case illustrates the presence of subtle yet identifiable placental morphologic changes in a 17-week pregnancy involving trisomy 21. Although largely consistent with gestational age, the placenta exhibited mild villous dysmorphism and focal trophoblastic proliferation, likely reflecting the underlying aneuploidy. Careful histopathological evaluation is essential to ensure appropriate interpretation and diagnostic precision in cases of prenatal chromosomal abnormalities.

Keywords: Placental histopathology, Villous dysmaturity, Trisomy 21

POEMS SYNDROME- CLINICAL PRESENTATION, EVOLUTION AND MANAGEMENT

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Introduction: POEMS syndrome is a rare paraneoplastic hematologic disorder defined by monoclonal plasma cell proliferation and peripheal polyneuropathy, with minor criteria including endocrine, dermatologic diseases, organomegaly, and peripheral edema or edema of internal organs. The case is relevant for the classic form of the syndrome, exceptionally meet as such. **Case Report:** The patient, C.I.D. age 58, has history of hyperthension, chronic ischemic cardiomiopathy, dyslipidemia, hepatomegaly, lumbar disc herniation, hydroarthrosis of the left joint and prior meniscal surgery . Family hystory includes hereditary neoplasmas. The symptoms began with the onset of paresthesias in the fingers of the right hand, with extension to all the limbs, correlated with burning-type dysesthesias and progressive motor deficit with abolition of osteotendonous reflexes. Investigation revealed monoclonal gammopathy: IgG lambda immunoglobulin (1731.00 mg/dl serum), elevated VEGF (740 pg/ml), tumor markers CA 15-3 (27.90 IU/ml) increased and AFP (7.3 IU/ML). Lumbar MRI confirmed degenerative disc changes; electromyography validated sensory-motor polyradiculoneuropathy and the marrow aspirate showed 2-10% plasma cells. The evolutionary trajector recorded attenuation of the motor and sensory deficit by immunoglobulins administration. Subsequently, the patient complained of persistence of neuropathy, for which, was initiated lenalidomide and dexamethasone. Supportive therapy incorporated: gabapentin for neuropathic pain, antihypertensive therapy, lipid-lowering therapy, metabolic supplements, physical therapy, low-sodium diet, avoidance of exposure to toxicants and periodic monitoring of HTA and neurological status. **Discussions :** The case report exemplifies the conventional form of POEMS and corresponds to the picture described by Dispenzieri et al., in which peripheral neuropathy represents the earliest and most constant symptom. Serum markers such as VEGF, and monoclonal IgG lambda gammopathy reflect the biological activity of the disease. In the past, local radiotherapy was considered sufficient in limited forms, the updated guidelines recommend lenalidomide and dexamethasone-based regimens, and the introduction of monoclonal antibodies such as daratumumab. Autologous stem cell transplantation remains the favorable option in eligible patients, as emphasized by EBMT guidelines. **Conclusions:** Therefore, therapeutic management requires early identification of subtle signs and targeted supervision of the plasma cell clone to prevent complications. Overall, the present study contributes significantly to the understanding of the mechanisms and evolution of POEMS syndrome, offers valuable insights for optimizing diagnostic and treatments, and reiterates the importance of identifying sensitive markers.

Keywords: POEMS, plasmacytoma, polyneuropathy, VEGF

POLYMICROBIAL SEPSIS COMPLICATING A VASCULAR GRAFT IN A PATIENT WITH AN AORTOENTERIC FISTULA

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Introduction: Sepsis related to vascular graft infection (VGI) is a rare but life-threatening condition, often associated with enteric sources, requiring prompt surgical management combined with targeted antibiotic therapy.

Case Report: We report the case of a 43-year-old male with a history of infrarenal abdominal aortic aneurysm (AAA), presenting to the gastroenterology department with upper gastrointestinal hemorrhage. Diagnostic workup, including upper gastrointestinal endoscopy and aortic CT angiography, identified an aortoenteric fistula (AEF) and a fusiform infrarenal AAA (maximum diameter 58 mm). The patient underwent endovascular aortic repair (EVAR) in August 2024, with perioperative cefazolin and rifaximin prophylaxis, followed by a 10-day amoxicillin-clavulanate course at discharge. The postoperative course was complicated by recurrent septic episodes: methicillin-resistant coagulase-negative staphylococci (MR-CoNS) bacteremia in October 2024, and *Streptococcus anginosus* bacteremia in January 2025, each managed with EUCAST-guided targeted antimicrobial therapy. In November 2025, the patient was diagnosed with *Eikenella corrodens* (EC) bacteremia, and repeat blood cultures confirmed polymicrobial sepsis (PS) due to EC and *Prevotella veroralis* (PV). **Discussions :** The management of this PS episode was complicated by the failure of EUCAST-recommended first-line antimicrobial regimens, necessitating escalation to broad-spectrum coverage with meropenem and vancomycin. This pattern of resistance is clinically significant: empirical escalation to last-resort agents, while justified by clinical severity, carries an inherent risk of selecting for multidrug-resistant (MDR), extensively drug-resistant (XDR), and pandrug-resistant (PDR) organisms, a consequence further undermining the long-term viability of antibiotic-based strategies. Regression of inflammatory markers under broad-spectrum therapy suggested microbiological containment. Definitive management necessitates surgical AEF closure and vascular graft exchange to eliminate the infectious focus and reduce recurrent septic episodes. A multidisciplinary surgical approach is required based on the patient's status. Prior to intervention, the patient must be hemodynamically, microbiologically, and immunologically stable, alongside aggressive optimization of their nutritional and coagulation profiles. **Conclusions:** Recurrent bacteremia following EVAR should prompt systematic evaluation for VGI, despite apparent microbiological diversity across septic episodes. Antibiotics alone are insufficient for definitive management due to the persistent anatomical infectious source and pathogens' antimicrobial resistance. Escalating antibiotic regimens risks emerging MDR and XDR organisms, necessitating timely surgical source control through graft explantation, biological reconstruction, and enteric fistula repair.

Keywords: Aortoenteric fistula, Vascular graft infection, *Eikenella corrodens*, *Prevotella veroralis*

POST-ANGIOGRAPHY ACUTE PULMONARY EDEMA CAUSED BY TRANSIENT MYOCARDIAL STUNNING: A REVERSIBLE FORM OF ACUTE HEART FAILURE

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Introduction: Acute heart failure with pulmonary edema is a potentially life-threatening complication following invasive coronary procedures. Although coronary angiography is generally considered safe, procedure-related acute heart failure may occur due to transient myocardial ischemia, abrupt hemodynamic changes, contrast-induced volume overload, or microvascular dysfunction. Transient left ventricular systolic dysfunction due to myocardial stunning remains underrecognized in this setting, particularly in patients with advanced cardiovascular and metabolic comorbidities. **Case Report:** We report the case of a 66-year-old female with a history of long-standing arterial hypertension, ischemic and hypertensive cardiomyopathy, chronic heart failure (NYHA class III), type 2 diabetes mellitus, dyslipidemia, and morbid obesity. She was admitted for acute dyspnea at rest with orthopnea, peripheral edema, and markedly elevated blood pressure values. The patient had recently undergone diagnostic coronary angiography for ischemic heart disease assessment. Shortly after the procedure, she developed acute respiratory distress consistent with pulmonary edema. On admission, blood pressure was 190/100 mmHg. Physical examination revealed bilateral basal pulmonary crackles and lower limb edema. Electrocardiography showed sinus rhythm with left axis deviation, incomplete right bundle branch block, and left

anterior fascicular block. Initial transthoracic echocardiography demonstrated normal left ventricular dimensions, discrete anteroseptal hypokinesia, mildly reduced global systolic function with a left ventricular ejection fraction of 50-55%, grade I diastolic dysfunction, and mild mitral regurgitation. Follow-up echocardiography revealed a transient deterioration of systolic function, with ejection fraction reduced to approximately 40% and septal and apical hypokinesia. Chest radiography excluded pulmonary infection or pleural effusion. Acute heart failure with pulmonary edema secondary to post-interventional myocardial stunning was diagnosed. Therapeutic management included intravenous loop diuretics, vasodilators, optimization of antihypertensive therapy, beta-blockers, mineralocorticoid receptor antagonists, and initiation of sodium-glucose cotransporter-2 inhibitors. Bronchodilator therapy was added for bronchospastic episodes. Progressive clinical improvement was observed, with resolution of pulmonary congestion and recovery of left ventricular systolic function on repeat echocardiographic assessment.

Discussions : Post-angiography myocardial stunning represents a transient, reversible form of ventricular dysfunction triggered by ischemia-reperfusion injury, contrast-induced microvascular impairment, and acute afterload increase. This case illustrates the dynamic nature of left ventricular systolic function in the post-interventional setting and emphasizes the importance of early echocardiographic reassessment to distinguish reversible myocardial dysfunction from irreversible injury. **Conclusions:** Acute pulmonary edema with transient left ventricular systolic dysfunction may complicate coronary angiography in high-risk patients. Recognition of post-interventional myocardial stunning allows prompt targeted therapy and may lead to complete functional recovery, highlighting the clinical relevance of this underrecognized entity

Keywords: acute heart failure, pulmonary edema, coronary angiography, myocardial stunning

POST-CARDIAC ARREST MULTI-ORGAN FAILURE FOLLOWING MASSIVE PULMONARY EMBOLISM IN A PATIENT WITH REDUCED EJECTION FRACTION AND REFRACTORY INFECTIONS

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Introduction: Massive Pulmonary Thromboembolism (PTE) represents a life-threatening cause of obstructive shock and cardiac arrest, particularly in patients with a history of myocardial infarction and significantly impaired left ventricular function. Survival following resuscitated cardiopulmonary arrest (CPA) is frequently complicated by post-resuscitation syndrome and multi-organ dysfunction, as observed in this patient. Additionally, the concomitant presence of sepsis caused by multidrug-resistant (MDR) pathogens poses significant challenges in therapeutic management and infection control within intensive care units. **Case Report:** We report the case of a 67-year-old male with ischemic cardiomyopathy (EF 25%) and a history of prior myocardial infarction who experienced a six-minute resuscitated cardiopulmonary arrest secondary to a massive, sub-occlusive pulmonary thromboembolism. Thoracic CT angiography confirmed bilateral embolic burden with right ventricular strain, evidenced by pulmonary artery dilation of 29 mm, and revealed a pre-existing pulmonary abscess in the left lower lobe along with right bronchopneumonia. The post-resuscitation course was characterized by refractory shock requiring dual vasoactive support with Norepinephrine and Dobutamine, mechanical ventilation via synchronized intermittent mandatory ventilation (SIMV), and the development of Multi-Organ Dysfunction Syndrome (MODS), characterized by hypoxic "shock liver" with AST at 715 U/L and ALT at 599 U/L, severe hypoalbuminemia at 2.2 g/dL, hemodynamic instability, and coagulopathy managed with high dose of heparin. The clinical course was further complicated by the identification of multidrug-resistant pathogens, leading to sepsis, including carbapenem-resistant *Acinetobacter baumannii*, Vancomycin-resistant *Enterococcus*, and *Pseudomonas aeruginosa*, necessitating targeted triple antimicrobial therapy. **Discussions :** Massive Pulmonary Thromboembolism can cause obstructive shock and cardiac arrest, especially in patients with reduced cardiac reserve. The patient's ischemic cardiomyopathy (EF 25%) likely limited compensatory mechanisms, leading to rapid hemodynamic collapse and post-resuscitation shock. The development of the Multi-Organ Dysfunction Syndrome reflects global hypoperfusion, systemic inflammation, and septic complications. Elevated transaminases and hypoalbuminemia indicated hypoxic hepatitis, while coagulopathy during anticoagulation showed the complex balance between thrombosis and bleeding risk. These findings represent a severe post-cardiac arrest syndrome in which impaired cardiac reserve, obstructive shock, and systemic inflammation interact and lead to an unfavorable prognosis. **Conclusions:** This report underscores that in patients suffering from severe cardiomyopathy, massive Pulmonary Thromboembolism may trigger a cascade of refractory shock, organ failure, and infectious complications. Early identification, aggressive multidisciplinary management, and strict infection-control measures are essential, although the prognosis remains highly guarded in the presence of severe cardiac dysfunction and resistant pathogens.

Keywords: resuscitated cardiopulmonary arrest, Multi-Organ Dysfunction Syndro, Massive Pulmonary Thromboembolism, sepsis

POST-RESUSCITATION CHALLENGES AFTER PROLONGED CARDIAC ARREST IN ACUTE MYOCARDIAL INFARCTION-CASE REPORT

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Introduction: Cardiac arrest is most frequently associated with acute myocardial infarction and is often followed by post-resuscitation syndrome, a complex condition with high mortality. Prolonged resuscitation and cardiogenic shock are major predictors of poor outcome. This case highlights the challenges of post-resuscitation management in a critically ill patient. **Case Report:** We report the case of a 70-year-old patient with type 2 diabetes mellitus who presented with out-of-hospital cardiac arrest due to ventricular fibrillation, progressing to asystole, requiring approximately 40 minutes of advanced life support before return of spontaneous circulation. On admission, electrocardiography revealed inferior ST-segment elevation myocardial infarction complicated by cardiogenic shock (Killip class IV). The clinical course was further complicated by a transient second-degree atrioventricular block, Mobitz type II. The patient developed post-resuscitation syndrome with critical general condition, requiring intubation, mechanical ventilation, and intensive hemodynamic support. Neurological examination showed fixed, dilated pupils. Additional findings included rib fractures secondary to cardiopulmonary resuscitation and biological signs of hepatocytolysis. **Discussions :** Post-resuscitation syndrome is a well-described entity characterized by brain injury, myocardial dysfunction, and systemic ischemia-reperfusion response, with mortality remaining high despite advances in critical care. Studies show that prolonged resuscitation duration and cardiogenic shock are strong predictors of poor outcome. In acute myocardial infarction, especially inferior ST-segment elevation myocardial infarction, conduction disturbances such as high-grade atrioventricular block may occur and further compromise hemodynamic stability. Current guidelines emphasize early intensive care management and cautious, multimodal neurological prognostication, particularly in patients with severe post-anoxic injury. **Conclusions:** This case highlights the severity and complexity of post-resuscitation syndrome following prolonged cardiac arrest in acute myocardial infarction. Early aggressive management and careful neurological assessment are essential to guide prognosis in critically ill patients.

Keywords: cardiac arrest, post-resuscitation syndrome, ST-elevation myocardial infarction, cardiogenic shock

POSTERIOR TIBIAL ARTERY PERFORATOR-BASED PROPELLER FLAP FOR RECONSTRUCTION OF MEDIAL MALLEOLAR DEFECTS - A CASE REPORT

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Introduction: Soft tissue defects of the medial malleolus represent a reconstructive challenge due to limited local tissue availability and poor vascular supply. These defects frequently occur in post-traumatic settings or following orthopedic procedures, such as external fixation for ankle fractures. Perforator-based fasciocutaneous flaps have become a reliable option for reconstruction of distal lower limb defects, providing adequate coverage with minimal donor site morbidity. We present the case of a patient with a medial malleolar soft tissue defect treated using a propeller flap based on a perforator from the posterior tibial artery. **Case Report:** A 61-year-old female patient presented with a chronic ulcerative lesion at the level of the left medial malleolus, following trauma treated in another surgical unit with external fixation for a bimalleolar fracture. Clinical examination revealed a small ulceration covered with fibrinoid secretions and significant perilesional erythema, associated with local functional impairment. Following clinical and paraclinical evaluation, a staged surgical approach was planned. Preoperative planning included identification and marking of perforators using Doppler ultrasound and a handheld Doppler device. Under spinal anesthesia, excisional debridement of devitalized soft tissue and bone was performed down to bleeding bone. After debridement, a soft tissue defect measuring approximately 5 × 5 cm (≈25 cm²) resulted. The defect was subsequently covered using a posterior tibial artery perforator-based propeller flap (PTAP flap). The procedure involved subfascial dissection of the flap, identification and skeletonization of the vascular perforator, rotation of the flap into the defect, and suturing, with primary closure of the donor site. The postoperative course was favorable under antibiotic, anti-inflammatory and anticoagulant treatment, without local complications. The

patient was discharged in improved general condition, with recommendations for follow-up. **Discussions :** Reconstruction of distal lower limb soft tissue defects remains challenging in reconstructive surgery. Posterior tibial artery perforator-based flaps represent an effective alternative to random-pattern local flaps, allowing coverage with well-vascularized local tissues. Compared to skin grafts, this technique provides superior vascular supply and durability, particularly in weight-bearing areas. The propeller flap design enables rotation of the tissue around its vascular pedicle, allowing adaptation to defects of varying sizes and locations. **Conclusions:** The posterior tibial artery perforator-based propeller flap is a reliable and effective method for the reconstruction of small soft tissue defects in the distal third of the leg. This technique provides adequate coverage with favorable functional and aesthetic outcomes and low donor-site morbidity, representing a valuable option in selected cases.

Keywords: posterior tibial artery perforator flap, propeller flap, medial malleolus defect, lower limb reconstruction

POSTERIOR TRANSLATION OF AN ANTERIORLY DISPLACED SOFT PALATE: SURGICAL MANAGEMENT

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Introduction: Anteriorly displaced soft palate is a rare anomaly associated with open rhinolalia, which causes speech disorders by altering the resonance of the pharyngeal and oral cavity. **Case Report:** A 9-year-old patient presented with speech difficulties and impaired articulation of certain consonants and words. This disorder has been present since the onset of speech. A buccopharyngoscopy was performed, revealing anterior displacement of the soft palate and a widened velopharyngeal space, as well as uvular duplication. Surgical intervention was proposed to posteriorly reposition the soft palate using various surgical techniques. To identify proper surgical spaces, a tonsillectomy was recommended to better highlight the anterior and posterior pillars, after which a palatoplasty was performed, that consisted of frontal plane dissection of the palate, between the two pillars. This detachment was reaposed along the midline, resulting in two palatal segments - a smaller anterior one and a posterior one detached from the deep structures of the soft palate to allow posterior translation without traction from anterior adherent tissue. The two palates were sutured together at different levels. The inferior margin of the posterior pillars was reduced by deep radiofrequency ablation to trigger scar tissue formation over the coming months, resulting in the retraction of the posteroinferior pharyngeal arch. Postoperatively, the patient's condition is consistent with the post-tonsillectomy state, characterized by pharyngeal pain, reflex otalgia, halitosis, but from the first evening the patient was able to pronounce consonants, words that were previously pronounced incorrectly. Postoperative evolution is long-term, as fibrous scarring of the pharyngeal arch occurs over 2, 3 months, resulting in voice changes on a weekly and monthly basis. Possible postoperative complications - hemorrhage, infections, and soft palate dehiscence. **Discussions :** Anterior displacement of the soft palate is associated with altered voice quality, causing unintelligible speech, hypernasality and unclear articulation of sounds. Surgical techniques for this anomaly aim to reposition the soft palate posteriorly and reduce the velopharyngeal space. **Conclusions:** This rare anomaly requires a complex surgical approach to achieve posterior repositioning of the soft palate while maintaining its integrity.

Keywords: dissection, soft palate, anomaly, radiofrequency

POSTMENOPAUSAL BLEEDING UNMASKS UTERINE LEIOMYOSARCOMA

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Introduction: Uterine leiomyosarcoma (uLMS) is a rare but highly aggressive malignant mesenchymal tumor of the uterus. Preoperative differentiation from benign leiomyomas is challenging, as clinical and imaging findings frequently overlap. In postmenopausal women, abnormal uterine bleeding associated with a rapidly enlarging uterine mass should raise suspicion for malignancy. Accurate pathological assessment, including tumor size, mitotic activity, tumor cell necrosis, histologic grade, and immunohistochemical profile, is essential for correct staging and prognostic evaluation. **Case Report:** A 63-year-old woman presented with postmenopausal metrorrhagia and a large uterine mass. She underwent total hysterectomy with bilateral salpingo-oophorectomy. Gross examination revealed an 85 × 70 × 40 mm nodular, relatively well-circumscribed tumor occupying the

myometrium and extending toward the uterine cavity. Histopathological evaluation demonstrated a malignant spindle-cell neoplasm characterized by marked nuclear pleomorphism, a mitotic index of 11 mitoses per 10 high-power fields, including atypical forms, and approximately 20% coagulative tumor necrosis with abrupt transition. No lymphovascular or perineural invasion was identified. Immunohistochemical analysis showed diffuse strong p16 positivity, a Ki-67 proliferation index of approximately 25%, and a wild-type p53 expression pattern. According to the FNCLCC grading system, the tumor was classified as grade 2 (score 5). The tumor was confined to the uterus and measured more than 5 cm, corresponding to FIGO stage IB (pT1b). Additional findings included chronic cervicitis and bilateral chronic salpingitis. The final diagnosis was uterine leiomyosarcoma, spindle-cell type, grade 2, FIGO stage IB. **Discussions** : Uterine leiomyosarcoma represents a small proportion of uterine malignancies but carries a poor prognosis due to its aggressive biological behavior and high recurrence risk. Clinical manifestations are often nonspecific, with abnormal uterine bleeding being one of the most frequent presenting symptoms. Because imaging studies cannot reliably distinguish leiomyosarcoma from benign leiomyomas, the definitive diagnosis is usually established only after surgical removal and histopathological examination. Key diagnostic features include high mitotic activity, significant cytologic atypia, and tumor cell necrosis. Immunohistochemical markers such as p16, Ki-67, and p53 contribute supportive information for diagnosis and assessment of proliferative activity. **Conclusions**: Postmenopausal bleeding associated with a large leiomyoma-like uterine mass should prompt consideration of uterine leiomyosarcoma. Surgical treatment enables definitive diagnosis and staging. Comprehensive pathological evaluation, including mitotic index, tumor necrosis, FNCLCC grade, and immunohistochemical profile, plays a crucial role in prognostic assessment and follow-up planning. Structured reporting improves clarity and facilitates comparison with contemporary clinical literature.

Keywords: Uterine leiomyosarcoma, Postmenopausal bleeding, FNCLCC grade, Immunohistochemistry

POTTER SYNDROME: CLINICAL AND PATHOLOGICAL FINDINGS IN A RARE NEONATAL CASE

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Introduction: Potter syndrome is a rare congenital condition, often fatal within the first days of life. It is characterized by a spectrum of anomalies, including bilateral renal agenesis, polycystic kidney disease, obstructive uropathy, and other severe renal malformations, all leading to fetal oligohydramnios. This, in turn, results in pulmonary hypoplasia and limb deformities due to intrauterine compression. Although the exact etiology remains unclear, a genetic basis has been suggested, involving genes such as RET, GDNF, PAX2, and PKHD1. **Case Report:** A preterm neonate at 35 weeks of gestation was delivered by cesarean section to a 16-year-old mother (G2) with an insufficiently monitored pregnancy complicated by severe oligohydramnios. At birth, the Apgar score was 7 at 1 minute, but the neonate developed immediate severe respiratory insufficiency requiring CPAP support. Despite intensive care management, including inotropic support and high ventilatory settings, the clinical condition progressively deteriorated with severe hypoxemia. Given the history of prolonged oligohydramnios, pulmonary hypoplasia consistent with Potter sequence was suspected. During evolution, the patient developed pneumothorax, further worsening respiratory function. Subsequently, cardiorespiratory arrest occurred, unresponsive to advanced life support maneuvers. A medico-legal autopsy revealed the absence of identifiable kidneys. The lungs appeared markedly abnormal, being condensed with a dense parenchymatous structure. Histopathological examination demonstrated features of hyaline membrane disease (neonatal respiratory distress syndrome). These findings, in association with pneumothorax, led to severe respiratory failure and death.

Discussions : Potter syndrome represents a severe sequence of developmental anomalies, most commonly associated with bilateral renal agenesis and pulmonary hypoplasia. It may also include characteristic facial features and skeletal deformities due to prolonged intrauterine compression. Pulmonary hypoplasia remains the main life-limiting factor. The pathophysiology highlights the essential role of fetal kidneys in maintaining amniotic fluid balance. In this case, autopsy findings confirmed the diagnosis, demonstrating renal agenesis and severe pulmonary pathology, including hyaline membrane disease complicated by pneumothorax. Recognition of this condition is important for both prenatal diagnosis and postmortem evaluation, while case reporting contributes to improved awareness among clinicians. **Conclusions:** Potter syndrome carries a poor prognosis, with most cases resulting in early neonatal death due to pulmonary hypoplasia and severe respiratory complications. Oligohydramnios triggers a cascade of developmental abnormalities culminating in fatal respiratory failure.

Keywords: Potter syndrome, renal agenesis, oligohydramnios, pulmonary hypoplasia

PRIMARY CARDIAC TUMORS: A COMPARATIVE CLINICAL, MORPHOPATHOLOGICAL, AND PATHOPHYSIOLOGICAL CASE REPORT

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Introduction: Primary cardiac tumors are rare entities with a low incidence in the general population. Both benign and malignant cardiac tumors may disrupt cardiac hemodynamics and lead to life-threatening complications, including sudden death. The clinical presentation and outcome depend largely on tumor location, growth pattern, and pathophysiological impact. **Case Report:** We report two autopsy-confirmed cases of primary cardiac tumors. The first case involved a 10-year-old male with no prior medical history who developed sudden nocturnal dyspnea followed by cardiorespiratory arrest. Autopsy revealed a 5 cm intramural mass located in the lateral wall of the left ventricle. Histopathological examination was consistent with cardiac fibroma diagnosis. The second case concerned a 51-year-old male with several months of progressive fatigability who died suddenly at home. Autopsy identified a large infiltrative tumor involving the right ventricular wall with extension into the interventricular septum and the right atrioventricular valve. Histology revealed a malignant mesenchymal proliferation with marked cellular atypia consistent with cardiac sarcoma diagnosis. **Discussions :** The two cases illustrate the contrasting clinical and pathological features of benign and malignant primary cardiac tumors. Cardiac fibroma, typically encountered in pediatric patients, most often develops within the ventricular myocardium and may lead to sudden death through arrhythmogenic mechanisms or impairment of myocardial contractility. In the present case, the intramural location within the left ventricular wall likely contributed to segmental contractile dysfunction and partial obstruction of the mitral inflow. In contrast, cardiac sarcomas are aggressive malignant tumors usually occurring in adults and characterized by rapid growth and high mitotic activity. Their clinical manifestations and fatal outcomes are commonly related to extensive myocardial infiltration or severe intracardiac obstruction. In our second case, the large infiltrative mass produced near-complete obstruction of the right ventricular cavity, resulting in critical impairment of diastolic filling and systolic ejection. These differences emphasize the importance of tumor location, growth pattern, and pathophysiological mechanism in determining the clinical course and mechanism of death in primary cardiac tumors. **Conclusions:** Clinicopathological and pathophysiological correlation, supported by forensic examination, remains essential for understanding the mechanisms leading to sudden death in primary cardiac tumors. Even benign tumors may cause sudden death through mechanical or functional cardiac impairment, while malignant tumors often produce severe hemodynamic compromise due to aggressive infiltrative growth. Primary cardiac tumors remain insufficiently studied, not only due to their low incidence but also because of low intravital diagnostic rates and limited opportunities for life-saving therapeutic intervention.

Keywords: autopsy, cardiac fibroma, cardiac sarcoma, sudden death

PROTON PUMP INHIBITOR RESISTANCE - A KEY TO MEN1 SYNDROME DIAGNOSIS

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Introduction: Multiple Endocrine Neoplasia type 1 (MEN1) is a rare genetic condition characterized by autosomal dominant inheritance and the presence of hyperparathyroidism along with hormone-secreting tumors involving the pituitary gland and pancreas. Individuals diagnosed with Zollinger-Ellison syndrome should undergo screening for MEN1, given its high prevalence in these cases. **Case Report:** A 41-year-old male presented to the gastroenterology department complaining of recurrence of acid reflux symptoms after ceasing a long-standing PPI (proton pump inhibitor) treatment. Given the lack of response to treatment and the onset of prolonged diarrhea, a scintigraphy and SPECT-CT were performed, identifying an 18/14 mm mass at the tail of the pancreas. Computed tomography showed multiple millimetric nodules throughout the pancreatic parenchyma as well as a 4 mm duodenal tumor, highly suggestive of gastrinoma. Laboratory findings indicated elevated levels of gastrin (445.5 ng/mL), chromogranin A (445 pg/mL) and serotonin (218.92 mcg/L). In addition, a biopsy from a pancreatic nodule was taken during endoscopic ultrasound. The histopathological examination revealed a well differentiated (G1) tumor positive for immunohistochemical markers chromogranin A and synaptophysin, thus confirming the neuroendocrine nature of the tumor. A pituitary MRI was also performed, identifying a 3.43 mm prolactin secreting microadenoma. Further investigations showed phosphocalcic metabolism imbalances, with high serum levels of

PTH, ionized calcium and hypercalciuria, indicative of primary hyperparathyroidism. In light of the laboratory and imaging results, the patient underwent genetic testing for the MEN1 mutation, which turned out to be positive.

Discussions : Hyperparathyroidism due to glandular hyperplasia led to severe osteoporosis and elevated calcium in the urine. The patient initially refused parathyroidectomy, therefore management was attempted by administering loop diuretics. Since calcium levels could not be regulated through medication, surgical removal of the parathyroids remains the only viable option in halting the progression of these complications. Treatment also involves the control of prolactin levels, serologic tests showing normalized values under dopamine agonist medication (Cabergoline). Somatostatin analogues (Lanreotide) are likewise used in order to decelerate the growth of neuroendocrine tumors. In this case, the response in terms of pancreatic tumor evolution was favorable, their dimensions remaining stable on routine MRI examinations. **Conclusions:** The case underlines the importance of additional examinations when dealing with PPI-refractory peptic lesions. Discovering gastrin secreting tumors should alert in regards to a possibly larger context, screening for MEN1 being mandatory in these situations.

Keywords: MEN1, peptic lesions, prolactinoma, hyperparathyroidism

PSEUDOMYXOMA PERITONEI SECONDARY TO APPENDICEAL MUCINOUS NEOPLASM MIMICKING AN UMBILICAL HERNIA

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Introduction: Appendiceal mucinous neoplasms represent a rare group of tumors characterized by excessive mucin production. Appendiceal perforation may result in the dissemination of mucin and neoplastic cells within the peritoneal cavity, leading to pseudomyxoma peritonei, a condition associated with significant diagnostic and therapeutic challenges. **Case Report:** We report the case of a 63-year-old female patient with a long-standing history of umbilical hernia, admitted for diffuse abdominal pain predominantly localized in the periumbilical region. Clinical examination revealed a painful but reducible umbilical mass, with preserved intestinal transit. An abdominopelvic ultrasound performed one day prior to admission demonstrated an umbilical hernia containing omentum and fluid, associated with peritoneal effusion, more pronounced in the periuterine area. Based on these findings, the patient was admitted with the presumptive diagnosis of an incarcerated umbilical hernia. Intraoperatively, gelatinous material suggestive of pseudomyxoma peritonei was identified, prompting conversion to an exploratory laparotomy with omphalectomy. A perforated tumor at the level of the appendiceal tip was discovered, and a standard appendectomy was performed. Large amounts of gelatinous ascites were noted throughout the peritoneal cavity, particularly in the pelvic compartment, requiring extensive peritoneal lavage and drainage. Surgical specimens, including the umbilicus with omentum, appendix, and peritoneal fluid, were submitted for histopathological examination. The final diagnosis was low-grade appendiceal mucinous neoplasm (G1) with serosal perforation and peritoneal dissemination of acellular mucin, associated with low-grade pseudomyxoma peritonei (G1), involving the omentum, peritoneum, and umbilical subcutaneous tissue (pT4aM1b). **Discussions :** Appendiceal mucinous neoplasms associated with pseudomyxoma peritonei are rare pathological entities that represent a considerable diagnostic challenge. Their clinical presentation is frequently nonspecific, while imaging findings may overlap with those of more prevalent abdominal conditions, often leading to diagnostic uncertainty and unclear initial therapeutic strategies. As illustrated in the present case, such overlap may result in misinterpretation as a common surgical condition, such as an incarcerated umbilical hernia. **Conclusions:** This case highlights the necessity of maintaining a high index of suspicion for rare underlying neoplastic conditions when evaluating apparently uncomplicated abdominal wall hernias. A comprehensive differential diagnosis is essential, as such pathologies may only become evident during surgical exploration.

Keywords: pseudomyxoma peritonei, appendiceal mucinous neoplasm, incarcerated umbilical hernia

PSYCHOTIC DISORDER AND MYXEDEMA: CLINICAL AND THERAPEUTIC CHALLENGES

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Introduction: Most clinical presentations of severe hypothyroidism are described as a spectrum of metabolic

slowing, yet in their most extreme manifestations, they can progress into a profound organic neuropsychiatric syndrome, often mimicking primary psychotic disorders leading to diagnostic overshadowing. The patients are often admitted to a psychiatric unit before screening reveals a highly elevated TSH level, predisposing to a delay in diagnosis and hormone therapy. **Case Report:** We present the case of a patient in the second half of her fifth decade of life, admitted non-voluntarily on an emergency basis following an acute psychotic episode characterized by psychomotor agitation, polymorphic delusions, auditory and visual hallucinations and temporal-spatial disorientation. Physical examination revealed hallmark signs of severe thyroid deficiency, including dysphonia, xeroderma, batrachian abdomen (BMI 41.4 kg/m²) and non-pitting edema. Paraclinical investigations confirmed a critical biological status of hypothyroidism: TSH 103 μ UI/mL, FT4 0,32 ng/dL and high titer antithyroid peroxidase antibodies Ac-TPO > 1000. Comorbidities included Type II respiratory failure secondary to stage III GOLD COPD and grade III obesity. Therefore, the therapeutic strategy required a delicate balance between psychiatric stabilisation and hormonal replacement, including: Risperidone and Haloperidol for psychotic symptom control, supplemented with Valproate for mood stabilization, gradual titration of Levothyroxine initiated at 25 μ g/day up to 100 μ g/day to mitigate the risk of precipitating acute coronary events in a somatically compromised state, respiratory support (bronchodilators, oxygen therapy). **Discussions :** This case presents a critical intersection of endocrinology and psychiatry, providing insight into the thyroid-brain axis. The association between psychological disturbance and hypothyroidism was observed as early as 1888, when it was noted that delusions and hallucinations occurred in nearly half of advanced cases. Nowadays, overt psychosis is present in approximately 5-15% of patients with advanced myxedema. The rarity of the presentation, alongside a constellation of respiratory and metabolic comorbidities called for an integrated multidisciplinary approach. The patient showed gradual clinical improvement correlated with partial normalization of thyroid values. While the acute agitation and hallucinations subsided, the patient exhibited residual delusions. **Conclusions:** The management of severe myxedema and its neuropsychiatric complications is a testament of the necessity of looking beyond the primary psychiatric diagnosis. This case highlights the importance of endocrine screening in patients presenting with acute psychiatric symptoms as well as the brain's position as the ultimate integrator of systemic health.

Keywords: Myxedema, Psychotic disorder, Interdisciplinarity

PULMONARY THROMBOEMBOLISM OR SEPSIS? AN ATYPICAL CLINICAL PRESENTATION OF SEVERE ABDOMINAL INFECTION- AN INTENSIVE CARE APPROACH

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Introduction: This thesis is grounded in a fundamental principle used in clinical medicine: the need to distinguish between two life-threatening entities, sepsis and pulmonary embolism, that share similar signs and symptoms despite having different underlying pathophysiological mechanisms. **Case Report:** We report the case of a 55-year-old female with a history of systemic lupus erythematosus (SLE), hypertension, and chronic tobacco use, admitted with sepsis of presumed abdominal origin. Emergency exploratory laparotomy revealed generalized peritonitis secondary to perforated sigmoid diverticulitis, with massive pyoperitoneum, confirming a severe intra-abdominal infection already established preoperatively. The early postoperative course was marked by clinical deterioration requiring ICU admission. The patient developed significant organ dysfunction (SOFA score: 8), severe hypoxemia (PaO₂/FiO₂ ratio: 104 despite FiO₂ 80%), and hemodynamic instability requiring vasoactive and inotropic support. Paroxysmal supraventricular tachycardia (195 bpm) was also noted. Given the acute deterioration in the context of recent surgery, systemic inflammation, and immobilization, pulmonary embolism was suspected. Diagnostic work-up included D-dimer testing and computed tomography pulmonary angiography (CTPA), all of which excluded thromboembolic disease. In contrast, contrast-enhanced CT of the thorax, abdomen, and pelvis demonstrated findings consistent with severe intra-abdominal sepsis, including residual collections and inflammatory changes. Microbiological investigations remained negative, likely due to prior antibiotic therapy. Sepsis was diagnosed based on clinical presentation and Sepsis-3 criteria. Intraoperative findings confirmed that the septic process was already established preoperatively, with postoperative deterioration reflecting progression of systemic inflammation and organ dysfunction rather than a new acute event. Management included continuous ICU monitoring (arterial blood gases, oxygenation indices, urine output, inflammatory markers, and coagulation profile including APTT), invasive mechanical ventilation, vasoactive and inotropic support, and broad-spectrum antibiotic therapy. **Discussions :** This case illustrates the concept of "sepsis mimics," where pulmonary embolism may clinically resemble sepsis. Overlapping features require a structured diagnostic approach to ensure accurate differentiation. **Conclusions:** Careful integration of clinical, imaging, and laboratory data allowed exclusion of

pulmonary embolism and confirmed that deterioration was driven by progression of pre-existing sepsis. Continuous reassessment is essential for accurate diagnosis and timely management in critically ill patients.

Keywords: Pulmonary Thromboembolism, Sepsis, SOFA, Sepsis-mimics

RADIAL NERVE PALSY ASSOCIATED WITH HUMERAL SHAFT FRACTURES

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Introduction: Humeral shaft fractures account for 1-5% of all adult fractures, occurring in a bimodal age distribution involving high-energy trauma in young adults and low-energy fall in the elderly. Due to unique anatomical particularities of the radial nerve, specifically its course through the spiral groove of the humeral shaft where it is in direct contact with the bone, radial nerve palsy is the most common neurological complication associated with these fractures, occurring in 8-17% of the cases. The classification of these injuries, based on the Seddon and Sunderland scales, ranges from neuropraxia (conduction block) to neurotmesis (complete nerve transection), with current literature reporting spontaneous recovery rates of 70% to 90% **Case Report:** This retrospective observational study analyzed a cohort of five patients aged between 30 and 80 years, who presented with closed fractures localized in the middle third of the humeral shaft, associated with primary radial nerve palsy. Clinical evaluation revealed localized pain, functional impotence and sensory disturbances, all characteristic of humeral shaft fractures associated with radial nerve palsy. The diagnosis was confirmed by serial imaging. All patients underwent early surgical intervention involving open reduction and internal fixation, with stabilization being achieved using either plates with screws or locked intramedullary nails. Intraoperative exploration was performed simultaneously and revealed neuropraxia-type lesions in all instances. The nerve was found to be contused, compressed by bone fragments or trapped within scar tissue. **Discussions :** The dilemma in managing RNP is the timing of nerve exploration, the two options being the conservative „wait-and-see" approach or early surgical exploration. In our cohort we have found early surgical exploration to be beneficial for all our patients. Providing mechanical stability with rigid internal fixation and having the advantage of visualizing the nerve early, our surgeons could perform neurolysis and free the entrapped radial nerve, contributing to a faster recovery time **Conclusions:** The study correlates current scientific evidence with practical experience, demonstrating that a proactive surgical approach leads to predictable and optimal recovery.

Keywords: humeral shaft, radial nerve, palsy

RADIATION-INDUCED PANHYPOPITUITARISM ASSOCIATED WITH PARTIAL EMPTY SELLA SYNDROME IN A PATIENT TREATED FOR NASOPHARYNGEAL CARCINOMA: A CASE REPORT

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Introduction: Radiation therapy is the standard treatment for nasopharyngeal carcinoma. Due to the anatomical positioning of the pituitary gland, radiation-induced panhypopituitarism (PHP) is a common complication. PHP is an insidious and progressive disease that can manifest years after oncological treatment through multi-axis endocrine failure. This case highlights the evolution of PHP and its radiological manifestation: secondary empty sella syndrome (SESS), as well as the importance of lifelong endocrine screening for survivors. The presence of a cardiovascular malformation, namely myocardial bridging of the left descending artery (LAD), adds to the case's uniqueness. **Case Report:** We present the case of a 59-year-old male with a history of nasopharyngeal carcinoma, treated with chemo-radiotherapy in 2019. He was referred for an endocrine consultation due to suspicions of multi-hormonal deficiency. Biochemical evaluation confirmed a diagnosis of PHP with the following findings: a morning cortisol of 5.2 ug/dL, free T4 (fT4) of 0.66 ng/dL (ref: 0.7-1.48), an IGF-1 level of 30.85 ng/mL (ref: 58-204), a LH level of 1.00 mUI/mL (ref: 0.57-12.7) and a FSH level of 3.13 mUI/mL (ref: 0.95-11.95). Paired with a low testosterone level 64.22 ng/dL (ref: 142.3-923.14), the borderline low levels of FSH and LH further support the diagnosis. The thyroid profile initially showed a paradoxical pattern of elevated TSH 7.51 uUI/mL (ref: 0.35-4.94) paired with low fT4 levels but over time the normalization of TSH levels in the presence of persistently low fT4 excludes primary hypothyroidism. Although the basal ACTH 20.9 pg/mL (ref: 7.2-63.3) was misleadingly within the normal range an Insulin Tolerance Test was performed, confirming secondary adrenal

insufficiency and growth hormone deficiency. Pituitary MRI revealed partial SESS, characterized by marked atrophy of the glandular parenchyma. Furthermore, cardiovascular evaluation identified a myocardial bridge in the middle segment of the LAD. Following the initiation of this multidisciplinary therapy with hydrocortisone, levothyroxine, testosterone undecanoate, ramipril, amlodipine and atorvastatin, the patient has shown a favorable evolution. **Discussions** : Compared to existing literature, this case is distinctive because of its paradoxical thyroid profile. While central hypothyroidism presents with low or normal TSH, radiation-induced cases may exhibit high TSH levels due to the secretion of biologically inactive TSH isoforms. More so, the patient faces an elevated cardiovascular risk due to the association between the pro-atherogenic state and the myocardial bridge. **Conclusions**: This case highlights the importance of a nuanced approach that balances the intersection between endocrinology and cardiology, ensuring that hormone replacement therapy is optimized without exceeding the hemodynamic limits. This concept is a cornerstone for ensuring long-term quality of life in cancer survivors.

Keywords: Radiation-induced Panhypopituitarism, Secondary Empty Sella, Myocardial Bridge, Nasopharyngeal Carcinoma

RAPIDLY PROGRESSIVE ACRAL MELANOMA: A CASE HIGHLIGHTING THE AGGRESSIVE POTENTIAL OF ACRAL SUBTYPES

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Introduction: Melanoma is a malignant neoplasm that originates from melanocytes and accounts for most skin cancer related deaths. Acral nodular melanoma is a UV-independent subtype that occurs on the skin of the palms, soles, and nail beds, representing approximately 2-3% of melanomas in the Caucasian population. The prognosis remains poor, given the high mitotic rate and its correlation with early metastatic spread.

Case Report: We present the case of a 71-year-old female patient with an ulcerated tumor located on the left heel. Following excisional biopsy and histopathological examination, she was diagnosed with acral nodular melanoma. The primary lesion revealed a Breslow thickness of 8 mm and Clark level V. The mitotic index was 74 mitoses per 10/HPF. The tumor exhibited both vertical and horizontal growth phases, focal pagetoid spread, and an associated in situ component. Tumor-infiltrating lymphocytes (TILs) were present (non-brisk type). The tumor was located less than 1 mm from the surgical lateral resection margin. Pathological staging was pT4bNxMx. Immunohistochemistry showed diffuse strong positivity for SOX-10 and S100, focal positivity for Melan A/MART -1 (A103), negative HMB45 (Melanosome), and a Ki-67 (30-9) proliferation index of approximately 50%. A month later, inguinal sentinel lymph node excision revealed metastases. Another four months later, the patient presented multiple nodular cutaneous lesions all over her leg, from the tibial area towards the inguinal region. She underwent excision of the largest tumors, located in the popliteal fossa. Histological examination demonstrated dermal and hypodermal nodular tumor proliferation consistent with melanoma. Immunohistochemistry showed diffuse SOX-10 positivity and a Ki67 index of approximately 90%. **Discussions** : Acral nodular melanoma is characterized by accelerated vertical growth, which is associated with a poor prognosis. However, the patient started specialized treatment, and the cutaneous lesions started to decrease in size. Currently, she does not present disease progression and is under continuous oncological surveillance and treatment. **Conclusions:** This case highlights the particularities of acral melanoma and the risk of rapid progression, emphasizing the risk of regional and distant dissemination.

Keywords: Acral nodular melanoma, Mitotic index, Immunohistochemistry, Early metastasis

RAPIDLY PROGRESSIVE HIP OSTEOARTHRITIS

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Introduction: Rapidly progressive secondary hip osteoarthritis represents a rare and aggressive form of hip joint degeneration, characterized by accelerated destruction of the articular cartilage and subchondral bone within a short period of time. Unlike the primary form, this entity progresses through rapid joint space loss, frequently exceeding 2 mm per year, associated with marked structural deterioration. The pathogenic mechanisms are not fully elucidated, with mechanical, ischemic, and metabolic factors being implicated. Recent studies suggest the

involvement of local inflammatory processes, with increased matrix metalloproteinases (MMPs), particularly MMP-8, which contributes to collagen degradation and cartilage destruction. The differential diagnosis must exclude septic arthritis, avascular necrosis of the femoral head, rheumatoid arthritis, and neuropathic arthropathy. **Case Report:** We present the case of a 78-year-old female patient with a history of type 2 diabetes mellitus, who presented with progressive right hip pain, significantly worsening over the last four months. A pelvic radiograph performed one year earlier showed no pathological findings. Current imaging revealed severe joint space narrowing, osteophyte formation, and medial protrusion of the femoral head. Computed tomography confirmed accelerated joint destruction. Laboratory investigations showed mildly elevated inflammatory markers (ESR and C-reactive protein), without leukocytosis. Assessment of matrix metalloproteinases, including MMP-8, suggested increased degradative activity at the cartilage level. Bacterial cultures were negative, and histopathological examination demonstrated chronic degenerative changes without evidence of infection or malignancy. Given the advanced joint destruction and severe symptoms, total hip arthroplasty was performed. The postoperative course was favorable, with pain relief and restoration of mobility. **Discussions :** Rapidly progressive secondary hip osteoarthritis leads to severe joint destruction within a short time frame, requiring early diagnosis and exclusion of infectious or inflammatory etiologies. The involvement of matrix metalloproteinases, particularly MMP-8, supports the role of enzymatic processes in accelerated cartilage degradation. Conservative treatment has limited effectiveness in these aggressive forms. In advanced stages, total hip arthroplasty remains the optimal therapeutic solution, restoring function and relieving pain, although the procedure may be technically challenging in the presence of bone defects. **Conclusions:** Rapidly progressive secondary hip osteoarthritis is a severe condition characterized by accelerated evolution and significant destructive potential. A thorough differential diagnosis, correlated with imaging findings and biological markers, is essential for appropriate therapeutic decision-making. Timely surgical intervention allows for favorable functional outcomes.

Keywords: Secondary hip osteoarthritis, Rapid progression, Total hip arthroplasty, Matrix metalloproteinases (MMP-8)

RECONSTRUCTION OF A FULL-THICKNESS NASAL ALA DEFECT AFTER HIGH-RISK BASAL CELL CARCINOMA EXCISION USING A COMPOSITE GRAFT-SUPPORTED NASOLABIAL FLAP

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Introduction: High-risk basal cell carcinomas (BCC) of the nasal ala present significant surgical challenges due to their infiltrative growth patterns that reshape local anatomy and poorly defined margins, which increase the risk of incomplete excision and recurrence. Achieving complete excision often results in full-thickness defects that require proper reconstruction to ensure satisfactory functional and aesthetic outcomes. This case report describes the outcome of a composite cartilage graft-supported nasolabial rotation flap technique used to reconstruct a full-thickness alar rim defect. **Case Report:** The patient is an 87-year-old male with a history of multiple cardiovascular comorbidities and type 2 insulin-dependent diabetes mellitus who presented to the Plastic Surgery Department with a poorly demarcated, ulcerated tumor of the left nasal ala, infiltrating deep structures, resulting in the destruction of the lower margin of the left alar cartilage and adjacent fibroadipose tissue. Additionally, a second tumor measuring approximately 5 mm in diameter with poorly demarcated margins was identified at the level of the nasal pyramid. Surgical intervention was performed with excision of both tumors within oncological margins. The resulting alar rim defect has been reconstructed using a composite skin-cartilage graft harvested from the left auricle (dorsal surface), followed by coverage with a rotated nasolabial flap. The nasal pyramid defect was closed by primary suturing. Post-operative histopathological examination revealed high-risk mixed (nodular and infiltrative) BCC of the left nasal ala and high-risk mixed (nodular and micronodular) BCC of the nasal pyramid with no lymphovascular or perineural invasion. The patient had a favorable post-operative evolution, with no flap- or graft-related complications and preservation of nasal function and aesthetic integrity. **Discussions :** Restoring nasal function and aesthetics requires reconstruction of a three-layer defect: internal nasal mucosa, cartilaginous framework and external skin. The skin component of the composite graft served as an internal lining substitute, providing a suitable surrogate for nasal mucosa, while the auricular cartilage, with mechanical properties close to alar cartilage, contributed to maintaining adequate nasal patency and contour. The rotated nasolabial flap provided well-vascularized adjacent tissue for external coverage, adding up to a complete full-thickness alar defect reconstruction within a single-stage procedure. **Conclusions:** This combined approach may achieve improved

outcomes compared to reconstruction using a rotated nasolabial flap alone, although it requires more surgical experience and increased operative time. This technique ensures reliable airway function and natural nasal aesthetics.

Keywords: Basal Cell Carcinoma, Nasolabial Flap, Alar Reconstruction, Composite Graft

RECONSTRUCTION OF PELVIC FLOOR DEFECT WITH RECTUS ABDOMINIS MUSCLE FLAP AFTER PELVIC EXENTERATION

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Introduction: Tissue damage affecting multiple organs and subsequent pelvic inflammation may develop months or even years after radiotherapy applied to the pelvis, posing a significant therapeutic challenge. Multiorgan resection (exenteration), aimed at improving quality of life, requires close cooperation among multiple specialties (surgery, urology, gynecology) before, during, and after surgery. Pelvic irradiation can effectively destroy tumor tissues; however, it often damages healthy tissues as well. In some cases, only soft tissue defects remain, while in others, skin replacement is also necessary. The best-known and most commonly used method is the creation of a VRAM flap (vertical rectus abdominis myocutaneous flap). If skin replacement is not required, the muscle alone can be used without an additional skin island. **Case Report:** A 29-year-old female patient with stage IV cervical adenocarcinoma received definitive radiotherapy based on an oncoteam decision. Approximately 6 months later, radiation-induced damage led to the development of a recto-vaginal-vesical fistula. As a solution, a transversostomy was created, and due to ileal obstruction, an ileo-ascendostomy was also performed. Due to urinary leakage, the internal bypass became insufficient, necessitating the placement of an ileostomy as well as bilateral uretero-cutaneostomy. Despite these interventions, pelvic inflammation did not improve, became chronic, and was accompanied by significant perineal discharge. Therefore, 3 years later, pelvic exenteration was performed. The left colon segment and the rectum were removed while preserving the transversostomy; the rectal stump and ileostomy were closed. The resulting pelvic defect was reconstructed using a rotated left rectus abdominis muscle. **Discussions :** For reconstruction of pelvic soft tissue defects, the omentum is primarily a good option if still available. If this is not feasible, the rectus abdominis muscle-with its reliable blood supply (preservation of the inferior epigastric artery is important)-can serve as a viable alternative, particularly as a bulky tissue source distant from previously irradiated areas. We applied this method in three additional patients: in two cases after gynecologic oncologic radiotherapy, and in one case due to a bladder tumor infiltrating the rectum requiring extended resection. No flap-related complications occurred in any of the cases. Our presented patient is tumor-free and lives a near full life with significantly improved quality of life. **Conclusions:** The rectus abdominis muscle flap represents a safe and effective alternative for reconstruction of pelvic defects. This case highlights the good functional outcomes, low complication rates and improved quality of life of patients undergoing VRAM flap.

Keywords: Cervical adenocarcinoma, VRAM flap, Pelvic exenteration

RECONSTRUCTIVE MANAGEMENT OF COMPLEX TRANSCARPAL HAND TRAUMA: A CASE REPORT

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Introduction: Severe hand trauma involving extensive soft tissue damage represents a major challenge in plastic and reconstructive surgery, given the need to restore both coverage and function. High-energy injuries caused by angle grinders frequently result in complex traumatic defects requiring reconstructive approaches and precise surgical execution. This case highlights the complexity of limb salvage in the context of combined vascular, neural, and tendinous injuries. **Case Report:** A 75-year-old patient was admitted in emergency conditions following an angle grinder injury, presenting with a complex traumatic injury of the left hand. Clinical evaluation revealed a severe transcarpal injury with extensive soft tissue damage, associated with significant haemorrhage and functional impairment. Exploration revealed a severe transcarpal trauma with extensive soft tissue loss, distal ischemia, radial artery injury, median and ulnar nerve lesions, and multiple tendon disruptions (digits II-V). After thorough debridement with excision of devitalized wound edges, vascular reconstruction was achieved by termino-

terminal anastomosis of the radial and ulnar arteries under magnification. Median and ulnar nerves were repaired by neurorrhaphy, flexor tendons were reconstructed, and osteosynthesis was performed using three Kirschner wires. Postoperatively, the progress was favourable, with stable hemodynamic and respiratory status, no fever, and minimal inflammation at the wound site. The patient received anticoagulation therapy, antibiotic prophylaxis, and analgesic and anti-inflammatory treatment. The early post-surgical evolution showed satisfactory perfusion of the hand, with no immediate vascular complications. Functional recovery remains under evaluation, with ongoing rehabilitation. Patient-related factors, such as diabetes and smoking, may influence tissue healing and nerve regeneration. **Discussions** : The complexity of combined vascular, neural, and tendinous injuries requires a prioritised and structured surgical approach to maximise functional preservation. This case highlights the importance of timely intervention in preventing complications such as infection, necrosis, and loss of function. Considering the patient's advanced age and associated comorbidities, rapid and accurate surgical management was essential in limiting infectious complications, promoting tissue healing, and improving the potential for functional recovery. **Conclusions**: Severe hand trauma caused by power tools remains a surgical emergency, focused on tissue reconstruction and functional restoration. Early intervention, meticulous debridement, and appropriate reconstructive strategies are essential for optimal outcomes and limb preservation.

Keywords: complex hand trauma, reconstructive surgery, neurovascular and tendon repair, transcarpal injury

RECONSTRUCTIVE STRATEGY IN DEVASTATING FIRECRACKER BLAST INJURY OF THE HAND: A STAGED PLASTIC SURGICAL APPROACH

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Introduction: Blast injuries of the hand caused by firecrackers represent a particularly severe category of trauma. These high-energy mechanisms typically produce complex patterns of injury, including extensive soft tissue destruction, bone loss, vascular compromise, and heavy contamination. The management of such cases is surgically demanding and often requires staged procedures aimed at infection control, removal of devitalized tissues, and preservation of maximal functional capacity. We present a case of severe left-hand blast trauma characterized by multiple traumatic amputations and quasi-amputations requiring urgent and repeated surgical interventions. **Case Report:** A patient presented with blast trauma to the left hand following a firecracker explosion. Examination revealed traumatic amputation of the distal third of metacarpals II-IV, quasi-amputation of the thumb and fifth digit with preservation of a minimal soft tissue pedicle, and intensely contaminated wounds. Emergency surgery included chemical antiseptic cleansing, extensive debridement of devitalized tissues, curettage, abundant lavage, and hemostasis. Due to severe crush injury and non-viable tissues, revascularization was impossible; therefore, completion amputation of the thumb and fifth digit was performed. Additional procedures included shortening of flexor and extensor tendons (digits II-IV), median nerve shortening, partial excision of thenar musculature, and metacarpal shortening (II-IV), followed by sterile dressing. Staged reinterventions consisted of repeated antiseptic cleansing, lavage, further debridement, stump remodeling, preparation and repositioning of skin flaps, and definitive skin suturing. Postoperative evolution was slowly favorable, without pathological secretions or major necrosis. Minimal cutaneous necrosis was observed in the final stage. The patient was discharged with antibiotics, anti-inflammatory and analgesic therapy, gastric protection, and strict follow-up recommendations. **Discussions** : Management of high-energy blast hand injuries depends on tissue viability, vascular integrity, and contamination degree. While primary revascularization is preferred when possible, extensive crush injury often necessitates completion amputation. Aggressive staged debridement is essential to reduce infection risk and prevent further necrosis. Proper tendon and nerve shortening, bone remodeling, and careful stump preparation are crucial for functional rehabilitation and potential prosthetic fitting. **Conclusions:** Severe hand blast injuries demand prompt, staged surgical management centered on radical debridement, infection control, and functional stump preparation. Even with extensive tissue loss, repeated interventions can achieve favorable local outcomes. Multidisciplinary rehabilitation is essential to optimize long-term functional recovery.

Keywords: Traumatic amputation, Blast hand injury, Surgical debridement, Firecracker trauma

RECURRENT ACUTE PSYCHOTIC EPISODE IN YOUNG ADULT WITH HISTRIONIC PERSONALITY TRAITS

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Introduction: Recent literature has explored the influence of premorbid personality structures on the onset and course of transient psychotic episodes. While Cluster A types are most commonly associated with acute psychosis, emerging evidence highlights the relevance of Cluster B traits as vulnerability factors in young adults.

Case Report: A 21-year-old female with histrionic personality traits presented to the psychiatry clinic following an intense interpersonal conflict with her mother, exhibiting disorganised thinking, persecutory and grandiose delusions, and superficial associations. She had a prior diagnosis of acute psychotic disorder two years earlier, treated at home but discontinued after three months. Despite treatment non-adherence, she remained in remission until the current episode.

Discussions : Histrionic traits may increase vulnerability through suggestibility, affective lability, interpersonal sensitivity and impulsivity, promoting maladaptive coping mechanisms under stress. Early experiences, including parental divorce and a critical, harsh maternal relationship, likely facilitated the consolidation of these traits. The patient's limited primary social support and prior weak therapeutic alliance further heightened the risk for decompensation and relapse. Early adulthood, a critical period for personality development, is characterised by incomplete maturation, which may increase susceptibility to emotional dysregulation, unstable relationships and maladaptive coping, facilitating transient psychotic episodes. **Conclusions:** Assessment of personality structure and psychosocial context is essential in managing recurrent psychotic episodes in young patients. The ongoing development of personality may be an advantage if psychotherapy is implemented concomitantly with psychiatric treatment after psychotic symptoms remission, potentially promoting adaptive coping and resilience.

Keywords: histrionic personality, psychosis, young adult, psychotherapy

RECURRENT CARDIAC ARREST AND CARDIOGENIC SHOCK IN STEMI: A CASE REPORT EMPHASIZING MULTIDISCIPLINARY CRITICAL CARE

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Introduction: Acute ST-elevation myocardial infarction (STEMI) complicated by cardiogenic shock and recurrent cardiorespiratory arrest represents one of the most critical situations in cardiovascular intensive care. Mortality rates are higher in cases involving ventricular arrhythmias, complete atrioventricular block, or multi-organ dysfunction. Early revascularization via primary percutaneous coronary intervention (PCI) remains the main treatment, even for patients with severe hemodynamic instability. This report discusses the clinical progression, and intensive care management challenges in a patient with postero-inferior-lateral STEMI complicated by recurrent cardiorespiratory arrest, cardiogenic shock (Killip IV), and multi-organ failure. **Case Report:** A 57-year-old male with a history of arterial hypertension presented with acute, crushing precordial chest pain and diaphoresis. During prehospital care and transportation, he experienced five episodes of cardiorespiratory arrest. The initial episodes involved ventricular fibrillation and were successfully defibrillated. Later arrests, caused by pulseless electrical activity, were also resuscitated. At the Emergency Department, he was in profound cardiogenic shock (BP 60/30 mmHg) and required immediate intubation as well as dual inotropic and vasopressor therapy with dobutamine and noradrenaline. Coronary angiography showed an acute occlusion of the circumflex artery. Primary percutaneous coronary intervention (PCI with a drug-eluting stent (DES) was performed. The patient was admitted to ICU in critical condition with Killip class IV STEMI, third-degree AV block, mixed metabolic acidosis, and stage III acute kidney injury. Monitoring included central venous catheterization via the internal jugular vein, arterial line in the left radial artery, and urinary catheterization. During ICU stay, the patient remained hemodynamically unstable, needing high-dose vasopressors. Tachycardia persisted. Mechanical ventilation was used. Despite successful coronary reperfusion, the patient developed multi-organ dysfunction, including thrombocytopenia, hypoalbuminemia, and persistent shock. **Discussions :** Early coronary reperfusion via primary PCI is the only proven intervention to enhance survival in STEMI-related cardiogenic shock. While revascularizing the circumflex artery likely prevented immediate death, ongoing myocardial stunning and systemic hypoperfusion led to persistent

shock and subsequent organ damage. Repeated cardiac arrests heighten the risk of hypoxic-ischemic brain injury, and sedation limits early neurological evaluation, making long-term prognosis dependent on both heart recovery and brain health. **Conclusions:** Early coronary reperfusion via primary PCI is the only proven intervention to enhance survival in STEMI-related cardiogenic shock. While revascularizing the circumflex artery likely prevented immediate death, ongoing myocardial stunning and systemic hypoperfusion led to persistent shock. Repeated cardiac arrests heighten the risk of hypoxic-ischemic brain injury, and sedation limits early neurological evaluation, making long-term prognosis dependent on both heart recovery and brain health.

Keywords: of ST-elevation myocardial infarction (STEMI), cardiogenic shock, occlusion of the circumflex artery

RECURRENT DIABETIC KETOACIDOSIS DUE TO POOR ADHERENCE – CLINICAL AND PSYCHOSOCIAL INSIGHTS

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Introduction: Diabetic ketoacidosis (DKA) remains a major acute complication of type 1 diabetes mellitus (T1DM) and is frequently associated with poor treatment adherence. Psychiatric comorbidities and adverse social conditions are recognized, but often underappreciated, contributors to recurrent DKA episodes. **Case Report:** We report the case of a 56-year-old male patient with T1DM diagnosed in 1995, treated with a basal-bolus insulin regimen, and presenting with multiple microvascular and macrovascular complications. In 2025, the patient had 14 presentations to the Emergency Department and was subsequently admitted to the Diabetology Department or other medical units, primarily for DKA. The patient had a history of depressive disorder associated with mild intellectual disability and cognitive-behavioral impairment. Additionally, he had a poor social background, characterized by the absence of family or social support, living alone, poor hygiene, and inadequate nutrition. These factors contributed to poor treatment adherence and multiple episodes of DKA, some of which were life-threatening. A prompt multidisciplinary intervention was implemented, involving diabetologic re-evaluation, psychiatric assessment, psychological support, and social work services. **Discussions :** In this case, the patient's repeated admissions for DKA were not primarily driven by acute medical triggers but rather by chronic poor adherence to insulin therapy. Psychiatric comorbidity, particularly depressive disorder, is well known to negatively impact self-care behaviors in patients with diabetes. Depression has been associated with reduced treatment adherence, impaired glycemic control, and an increased risk of acute complications. Furthermore, mild intellectual disability with cognitive-behavioral impairment may compromise the patient's ability to understand, organize, and consistently follow treatment recommendations. Social vulnerability represented an additional critical factor. Living alone, lacking family or community support, and experiencing poor hygiene and inadequate nutrition significantly limited the patient's ability to maintain appropriate diabetes self-management. Social isolation has been identified as an independent predictor of poor metabolic control and recurrent hospitalizations in chronic diseases, including diabetes. **Conclusions:** This case highlights the importance of a multidisciplinary approach in high-risk patients with T1DM. Beyond optimizing insulin therapy and glycemic control, effective management should integrate psychiatric evaluation, social work involvement, and structured support systems.

Keywords: Diabetic Ketoacidosis, Type 1 Diabetes Mellitus, Depression

RECURRENT HYPOGLYCEMIA MANAGED BY SURGICAL TREATMENT OF INSULINOMA: A CASE REPORT

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Introduction: Insulinoma is the most common cause of hypoglycemia due to endogenous hyperinsulinism with an incidence of 1-4 cases per million individuals. Clinical manifestations are various and include confusion, behavioral and personality changes, visual disturbances, seizures and coma. Early and accurate diagnosis is important for preventing severe complications. **Case Report:** This report presents a 67-year-old female patient known with hypertension, left suprarenal adenoma and mild vascular dementia, who presented with recurrent severe hypoglycemia, manifesting as loss of consciousness, transient amnesia and clonic episodes accompanied by urinary incontinence. Initial investigations focused on epilepsy, which was subsequently ruled out following

paraclinical tests that revealed elevated levels of insulin, proinsulin and C-peptide. Contrast-enhanced abdominal CT demonstrated a small hypervascular lesion in the pancreatic body, which was confirmed by endoscopic ultrasound as a hypoechoic mass exhibiting positive Doppler vascularity, consistent with a neuroendocrine tumor. Insulinoma diagnosis was confirmed and the patient underwent surgical treatment. The laparoscopic intervention included adhesiolysis, splenopancreatectomy and placement of drains in the splenic fossa and retropancreatic area. The tumor in the pancreatic body was localised using intraoperative laparoscopic ultrasound. Resection involved dissection of the inferior margin of the pancreas, retropancreatic tunneling and identification and ligation of the splenic vein and artery. **Discussions** : Histopathological examination revealed malignant tumoral proliferation with neuroendocrine features. Immunohistochemical staining was positive for chromogranin, synaptophysin and insulin, consistent with a low-grade insulinoma. The postoperative course was uneventful with no complications encountered. The favorable outcome was achieved under comprehensive intravenous therapy including antibiotics, analgesics and anticoagulants. **Conclusions:** Insulinomas symptoms can be different in each patient with diverse manifestations. Even subtle or atypical symptoms may indicate a serious underlying disease. The most effective treatment remains surgical resection of the tumor and early intervention is crucial for symptoms remission, optimal outcomes and prevention of complications.

Keywords: Insulinoma, laparoscopic intervention, splenopancreatectomy, hypoglycemia

RECURRENT INTESTINAL OBSTRUCTION AFTER FOREIGN BODY INGESTION IN A 2-YEAR-OLD GIRL

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Introduction: Foreign body ingestion is common in young children, especially under 3 years old, mainly due to exploratory behaviour. In most cases, the foreign body passes through the gastrointestinal tract without complications. However, in some cases, the foreign body may be retained and lead to complications such as obstruction, perforation, or stricture formation. Delayed complications are uncommon and can make diagnosis more difficult. The case presents a recurrent intestinal obstruction in a toddler due to a retained plastic foreign body, which ultimately led to colonic stricture necessitating surgical intervention. **Case Report:** A 2-year-old female presented with persistent constipation and vomiting. She had a recent history of foreign body ingestion and had been admitted approximately four weeks earlier with similar symptoms. During the first admission imaging studies such as CT scan, abdominal X-ray, and ultrasound were performed. The patient was managed conservatively with enemas, after which she passed stool containing plastic fragments, seed coatings, and hair. Her symptoms improved and she was discharged. At the current presentation, the patient had recurrent vomiting, absence of stool passage, and progressive abdominal distension. Imaging showed bowel dilation, mainly in the small intestine and proximal colon to the splenic flexure, without pneumoperitoneum. X-rays suggested obstruction, therefore emergency laparotomy was performed. A transverse colonic stricture near the splenic flexure with marked proximal dilation was found. A right colectomy and ileostomy were done due to size mismatch. During an ileostomy washout, plastic toy wristband pieces were found, confirming a foreign body cause. **Discussions** : Most ingested foreign bodies in children pass spontaneously without the need for intervention. However, a retained foreign body causes chronic inflammation, blockage, or strictures. This case highlights that complications can happen later, even after foreign material seems to have passed. Persistent or recurring gastrointestinal symptoms after consumption foreign material, should be carefully evaluated, closely monitored and followed-up. It is important to note that the imagistic approach may fail to detect radiolucent material such as plastic which may delay the diagnosis. **Conclusions:** Ingesting a foreign body can cause serious and delayed gastrointestinal complications in children. This case illustrated that retained foreign bodies can cause chronic inflammation and the formation of strictures, which can lead to intestinal obstruction. To avoid complications, it is important to recognise early, follow up thoroughly, and early surgical interventions are essential to prevent severe outcomes.

Keywords: Foreign body ingestion, pediatric intestinal obstruction, colonic stricture

RECURRENT ISCHEMIC EVENTS IN A YOUNG WOMAN: MENINGOVASCULAR NEUROSYPHILIS MIMICKING THROMBOTIC AND DEMYELINATING DISEASE

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Introduction: Neurosyphilis is a rare but serious complication of *Treponema pallidum* infection. The diagnosis of neurosyphilis is made difficult by the highly variable clinical manifestations and the inconsistent progression of the disease, with periods of activity and latency, sometimes mimicking thrombotic and demyelinating disease. **Case Report:** A 43-year-old female patient with a history of deep vein thrombosis presented with left hemianopsia and mild left hemiparesis. The patient also complained of loss of vision in her right eye for 2 days, 3 weeks prior. Magnetic resonance imaging showed several small white matter lesions. Suspicions were raised for demyelinating disease, but cerebrospinal fluid tests showed mild pleocytosis without oligoclonal bands, and screening for infectious diseases came out negative. The patient underwent corticosteroid pulse therapy with remission of symptoms. The patient later returned with right body paraesthesia. Cardiological investigations ruled out a cardioembolic source, and the screening for vasculitis was negative. Genetic testing revealed a homozygous MTHFR A1298C mutation signifying thrombophilia, and the patient's anticoagulation treatment was optimised. Despite adequate anticoagulation, the patient was admitted two months later for somnolence, left hemiplegia and forced ocular deviation to the right, with sudden onset during sleep, which were preceded for several days by headache and behavioural changes. Imaging confirmed the diagnosis of ischemic stroke of the right middle cerebral artery. Further investigations found an elevated serum and cerebrospinal fluid Venereal Disease Research Laboratory (VDRL), which, together with the clinical findings, confirmed the diagnosis of meningovascular neurosyphilis. The patient was treated for the stroke and started on intravenous benzylpenicillin, with clinical improvement, but a persistent motor deficit. **Discussions :** The non-specific symptoms without systemic involvement, the false negative infectious screening result, the initial radiologic findings, and the clinical improvement following corticosteroids steered the diagnosis away from neurosyphilis and toward demyelinating disease. While thrombophilia contributed to the development of ischemic events, it could not single-handedly account for all the manifestations. **Conclusions:** This case demonstrates the difficulty of diagnosing recurrent stroke in a young patient, where infectious, inflammatory and thrombotic mechanisms overlap. Stroke or unexplained parenchymal lesions in a young patient warrant consideration of neurosyphilis, and re-evaluation with time can establish a diagnosis that might otherwise be missed. Early serologic testing can help prevent disease progression and severe complications.

Keywords: Neurosyphilis, Ischemic stroke, Demyelinating disease, Thrombophilia

RECURRENT URINARY TRACT INFECTION FOLLOWING SURGICAL AND ENDOSCOPIC MANAGEMENT OF VESICoureTERAL REFLUX: A CASE REPORT

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Introduction: Vesicoureteral reflux (VUR) is a common cause of progressive nephropathy in children with recurrent urinary tract infections and renal function impairment. The affected kidney can become scleroatrophic, resulting in a progressive decline in renal function and, in more severe forms, a non-functioning kidney. The contralateral kidney becomes subject to compensatory hypertrophy, as well as some anatomical and functional changes. **Case Report:** We describe the case of a 22 year-old male patient who underwent left ureteral reimplantation at age 7 using the Cohen cross-trigonal procedure. The patient persisted with annual episodes of acute pyelonephritis, despite surgical correction (presence of persistent vesicoureteral reflux). Renal scintigraphy was obtained in 2025 with a scleroatrophic left kidney that showed a functional capacity of 14%. The right kidney showed compensatory hypertrophy. It also exhibited little calyceal dilation, grade II-III vesicoureteral reflux, and pyeloureteral hypotonia. Due to the presence of reflux in a solitary functioning kidney, a proactive therapeutic approach was considered appropriate. In December 2025, the patient underwent endoscopic submucosal Deflux injection, aimed at reducing reflux and protecting the functional kidney from further insult. Postoperative course was favorable with no immediate complications as well as satisfactory clinical evolution. **Discussions :** The right

kidney remains the only functional renal unit and is therefore particularly vulnerable to further infectious episodes. Other potential causes of urinary tract infection, including cystitis, prostatitis, and urinary obstruction, were excluded based on clinical evaluation, laboratory findings, and urinary tract imaging, as well as digital rectal examination. In this context, the presence of moderate-grade reflux (II-III) becomes clinically significant, as it may contribute to ongoing renal risk. While such cases are often managed conservatively or with minimally invasive techniques, a more proactive approach is justified in patients with a solitary functioning kidney. Endoscopic treatment with Deflux therefore represents a reasonable therapeutic option in this clinical setting. **Conclusions:** This case highlights the importance of long-term follow-up, infection prevention, and appropriate behavioral measures, such as regular voiding, in patients with vesicoureteral reflux, particularly in the presence of a solitary functioning kidney. The severe impairment and scleroatrophy of the left kidney are most likely secondary to congenital abnormal ureteral insertion.

Keywords: Vesicoureteral reflux, Solitary functioning kidney, Cohen reimplantation, Deflux injection

RELAPSING IDIOPATHIC THROMBOCYTOPENIC PURPURA ASSOCIATED WITH UNEXPLAINED EOSINOPHILIA: A DIAGNOSTIC DILEMMA

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Introduction: Idiopathic thrombocytopenic purpura (ITP) is an autoimmune disease which is defined by sustained platelet count below 100.000 / mm³ and the manifestation of a hemorrhagic syndrome. This case report details the presentation and evolution of a 54-year-old patient diagnosed with ITP associated with unexplained eosinophilia.

Case Report: A 54-year-old female patient, known for arterial hypertension, hepatic steatosis and chronic cigarette smoking, presented to the emergency department with bilateral petechiae on the lower limbs, torso and hard palate, epistaxis and other flu-like symptoms (fatigue, asthenia, myalgia, arthralgia, nasal congestion). Complete Blood Count revealed severe thrombocytopenia (2000 / μ L), after that the patient was admitted in the Medical Clinic 1 for further investigation (thoracoabdominal contrast CT) and specialized treatment with Solumedrol and platelet concentrate transfusion. The CT scan showed a solid mass located in the right superior pulmonary lobe, multiple pulmonary micronodules in the right pulmonary field, a heterogeneous liver lesion which were later biopsied and a possible malignancy was excluded. During the admission, the diagnosis of severe immune thrombocytopenia was confirmed by bone marrow aspiration and immunological analysis, which appeared not to have a sustained response to corticotherapy, so the administration of high dose Ig iv. was recommended. In the next months, the patient had two more relapses of hemorrhagic symptoms (whole body disseminated petechiae, gingival bleeding) which were well controlled with corticotherapy and Nplate. In the next months, the hemorrhagic symptoms were absent, the signs of a chronic illness being intermittent. In a routine laboratory test, severe eosinophilia: 3940 was highlighted, questioning the mechanism of the underlying condition. **Discussions :** This case is significant for the coexistence of ITP and unexplained eosinophilia, typically the former being considered a sole entity. The overlap may suggest a rare, yet unknown, shared pathophysiological mechanism or just be a diagnostic coincidence. Based on literature, possible differential diagnoses of ITP include pseudothrombocytopenia, secondary thrombocytopenia in systemic lupus erythematosus and hypersplenism, which were excluded based on the morphological analysis and the absence of a simultaneous autoimmune or infectious process. Hypereosinophilic syndrome was considered to be idiopathic by ruling out the secondary causes of eosinophilia (e.g. parasitic infections, allergies and drugs), hematologic neoplasms and clonal disorders. **Conclusions:** The case report features a rare association between severe immune thrombocytopenic purpura and unexplained eosinophilia with a positive outcome undergoing the right individualized therapy. Early recognition of atypical presentations of ITP may improve the clinical decision-making and prevent any possible complications.

Keywords: hypereosinophilic syndrome, petechiae, thrombocytopenia

RELIGIOUS BELIEFS AND THE POLARIZATION OF MYSTICAL DELUSION: A CASE REPORT FOLLOWING BEREAVEMENT

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Introduction: Religious and spiritual beliefs can play a protective role in coping with trauma and loss. However,

where there is a premorbid personality, they may contribute to the structuring and reinforcement of psychotic content. The boundary between culturally sanctioned beliefs and pathological delusion remains a diagnostic and ethical challenge in psychiatric practice. **Case Report:** We report the case of a 47-year-old woman with no prior psychiatric history who developed a severe psychotic episode following the sudden death of her twin sister. The patient exhibited progressive social withdrawal, insomnia, and intense preoccupation with religious themes. She became firmly convinced that God would resurrect her sister and, acting under this belief, kept the deceased's body in her home for approximately one year. Family members described an increasing rigidity of thought, hyperreligiosity, fasting behaviors, and scriptural reinterpretations centered on divine testing and resurrection. There was no history of substance use, neurological illness, or prior affective or psychotic symptoms. On psychiatric evaluation, the patient demonstrated a systematized mystical delusion with strong affective investment, preserved orientation, and partial insight limited to social consequences but not to the delusional belief itself.

Discussions : This case illustrates how pre-existing religious frameworks can shape the thematic organization and "polarization" of delusional content. The twin bond, traumatic grief, and existential vulnerability likely contributed to the crystallization of a resurrection-centered delusional system. Rather than generating novel symbolic material, the psychosis amplified culturally available religious narratives, conferring coherence and resistance to counterargument. The case highlights the complex interplay between grief, identity fusion in twin relationships, and religious cognition in the emergence of psychosis. **Conclusions:** Religious belief systems may provide both resilience and risk in the aftermath of traumatic loss. Clinicians must approach spiritually themed psychosis with cultural sensitivity while recognizing when belief-driven behaviors cross into severe psychopathology with significant legal, ethical, and public health implications.

Keywords: religion, psychosis, loss

RENAL CELL CARCINOMA PRESENTING AS CHRONIC COUGH

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Introduction: Chronic cough is a frequent clinical complaint and is generally linked to upper airway syndrome diseases, it can also be a sign of systemic low grade inflammation and call for broader investigation, especially when respiratory and gastrointestinal investigations are normal. **Case Report:** A 59-year-old non-smoking male was evaluated for chronic dry cough lasting 18-24 months. The cough was persistent, day and night, sometimes in paroxysms and worse by speaking. Oxygen saturation was 98-99% on room air. ENT examination, chest radiography, pulmonary function tests including bronchial provocation (FEV1 107%), cardiologic evaluation, and gastroscopy were normal. Asthma and reflux-related etiology were excluded, and empirical proton pump inhibitor therapy was ineffective. Laboratory tests revealed a marked inflammatory syndrome. C-reactive protein reached 186-187 mg/L without fever or clinical signs of infection. Analysis of previous laboratory results demonstrated progressive CRP elevation over several years. Fibrinogen and lactate dehydrogenase (350 U/L) were also elevated. No leukocytosis was observed. Renal function remained preserved (creatinine 1.0-1.1 mg/dL and eGFR >60 mL/min). Whole-body 18F-FDG PET-CT revealed a heterogeneous and intensely hypermetabolic mass in the lower pole of the left kidney measuring approximately 11 × 8 cm (SUV max 21.24) with hypermetabolic retroperitoneal para-aortic lymphadenopathy (SUV max up to 16.88), without distant metastases. The patient underwent radical left nephrectomy with lymph node dissection. Histopathology showed clear cell renal cell carcinoma with rhabdoid differentiation (75%), measuring 12 cm, ISUP grade 4, with 40% necrosis. Tumor infiltration of renal parenchyma, hilum, and perirenal fat was present, with lymphatic permeation and vascular emboli in branches of the renal vein. Resection margins were negative (R0). One lateroaortic lymph node was positive. Final stage was pT3a pN1 L1 V1 R0. Given the high risk of recurrence, adjuvant pembrolizumab was proposed. **Discussions :** This case highlights the unusual presentation of RCC through a paraneoplastic inflammatory syndrome. The absence of lung and gastrointestinal pathology, together with persistently elevated inflammatory markers, pointed toward a systemic cause. RCC may induce cytokine-associated inflammatory syndromes through interleukin-6, providing a plausible explanation for the patient's CRP elevation. Although FDG-PET/CT is not routinely recommended for RCC staging because of limited sensitivity and specificity, in this case it was obtained during the work-up of chronic cough and systemic inflammation and revealed the renal tumor. **Conclusions:** Chronic cough with unexplained inflammatory marker elevation should suggest evaluation for occult

malignancy. Renal Cell Carcinoma may present without urological symptoms, and early recognition is essential to prevent late diagnosis.

Keywords: Renal Cell Carcinoma, Chronic cough, Paraneoplastic syndrome, C-reactive protein

RESPIRATORY INFECTION REVEALING ADVANCED LUNG MALIGNANCY

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Introduction: Severe bacterial pneumonia in patients with chronic lung disease may obscure or delay the diagnosis of major underlying pathologies. The overlap between fibrosing interstitial lung disease, chronic obstructive pulmonary disease (COPD), and acute respiratory infection represents a significant diagnostic challenge, particularly when complicated by acute respiratory failure and pleural effusion. Identifying secondary etiologies is essential for appropriate management and prognostic assessment. **Case Report:** We report the case of a 50-year-old female, active smoker (25 pack-years), with a history of autoimmune thyroiditis and osteoporosis, admitted for progressive dyspnea at rest and dry cough with onset approximately one month prior to presentation. On admission, the patient exhibited acute respiratory failure with hypoxemia (oxygen saturation 91% on room air), bilateral basal crackles, and impaired general condition. Pulmonary function testing demonstrated mixed ventilatory dysfunction, predominantly obstructive with an associated restrictive component, and a severe reduction in diffusing capacity (DLCO 41%). Chest computed tomography revealed diffuse bilateral interstitial fibrosis, more pronounced in the basal regions, peripheral partially confluent pulmonary consolidations, and bilateral pleural effusions. Microbiological analysis of bronchial aspirate identified *Klebsiella pneumoniae*, establishing the diagnosis of severe bacterial pneumonia superimposed on chronic lung disease. Targeted antibiotic therapy was initiated, resulting in clinical and respiratory improvement. Pleural fluid analysis revealed an exudative effusion. Extended imaging evaluation uncovered multiple secondary lesions involving the lungs, liver, adrenal glands, and peritoneum, along with mediastinal and retroperitoneal lymphadenopathy, raising suspicion of advanced metastatic malignancy of unknown primary origin. The patient was referred for multidisciplinary oncological evaluation for staging and further therapeutic planning. **Discussions :** This case highlights the diagnostic complexity arising from the coexistence of chronic pulmonary pathology, acute respiratory infection, and advanced malignancy. Bacterial pneumonia acted as a trigger for respiratory decompensation, facilitating the detection of extensive underlying neoplastic disease. In such contexts, acute infectious events may represent the initial presentation of systemic pathology rather than an isolated condition. **Conclusions:** Acute respiratory infections in patients with chronic lung disease may serve as a diagnostic gateway to severe underlying systemic disorders, including advanced malignancy. An integrated clinical, functional, and imaging-based approach is crucial for identifying complex etiologies and ensuring timely initiation of appropriate management.

Keywords: Pulmonary fibrosis, Chronic obstructive pulmonary disease (COPD), Acute respiratory failure, Metastatic malignancy

RESPIRATORY INSUFFICIENCY SECONDARY TO LONGITUDINALLY EXTENSIVE TRANSVERSE MYELITIS IN A NEUROMYELITIS OPTICA SPECTRUM DISEASE PATIENT

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Introduction: Neuromyelitis Optica Spectrum Disorder (NMOSD) is a severe inflammatory, demyelinating disease of the central nervous system, typically involving the optic nerves and the spinal cord. The clinical picture combines bilateral optic neuritis and longitudinally extensive transverse myelitis (LETM), characterized by extensive demyelination (more than three vertebral segments) of the spinal cord. Most cases are driven by pathogenic IgG antibodies against the aquaporin-4 (AQP4) water channel. However, seronegative phenotypes remain a diagnostic challenge. According to the IPND 2025 criteria, these cases require at least two core clinical characteristics, a positive AQP4-IgG test (ideally using Cell-Based Assay - CBA) and exclusion of an alternate diagnosis. **Case Report:** We report the case of a 54-year-old female who presented the onset of the disease in March with bilateral loss of visual acuity and mild left-sided ataxic hemiparesis. The brain and spinal cord MRI revealed an extensive cervical demyelinating lesion extending from C3 to C6. We performed extensive autoimmune and infectious

screening - negative serology (ELISA) for AQP4-IgG antibodies, positive for hepatitis C. The patient was advised to start urgent interferon-free antiviral therapy according to the gastroenterology consult, and perform AQP4-IgG retesting (CBA). In July she was admitted with worsening neurological symptoms, and the cervical MRI showed lesion extension between C2 and C6. Her neurological examination revealed bilateral decreased visual acuity, left-sided ataxic hemiparesis grade 4, brisk deep tendon reflexes. She received symptomatic treatment (vitamins, kinetotherapy) with a mild regression and was discharged with instructions to follow gastroenterological recommendations. Due to the high hepatitis C viral load, immunosuppressive treatment remained contraindicated. In August she suddenly presented with flaccid quadriplegia and acute respiratory failure and was brought to the emergency department where she was intubated and mechanically ventilated. The repeated cervical spine MRI revealed progression of the spinal lesion toward the bulbo-spinal junction. **Discussions** : This case illustrates a clinical impasse. The unavailability of an initial CBA AQP4-IgG test maintained uncertainty regarding the immunopathology. Furthermore, the high hepatitis C viral load was an absolute contraindication to immunosuppression, such as corticosteroids or azathioprine, due to the high risk of fulminant hepatitis.

Conclusions: The diagnosis is particularly challenging because testing options are limited for this very rare yet devastating neurological disorder. Potent immunosuppression cannot be safely initiated in patients who are already immunocompromised or who have active infections.

Keywords: Neuromyelitis optica spectrum disorder, NMOSD, Longitudinally extensive transverse myelitis, Aquaporin-4

RETROGRADE AORTO-CELIAC BYPASS FOR CHRONIC MESENTERIC ISCHEMIA AFTER FAILED ENDOVASCULAR REVASCULARIZATION

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Introduction: Celiac artery occlusive disease is an uncommon vascular condition characterized by significant stenosis or occlusion of the celiac trunk, most frequently caused by atherosclerosis, although extrinsic compression by the median arcuate ligament and less commonly inflammatory or thrombotic etiologies may also occur. Symptomatic disease typically arises in the setting of multivessel mesenteric arterial involvement and may manifest as chronic mesenteric ischemia, classically presenting with postprandial abdominal pain, weight loss, and food aversion. According to current vascular surgery guidelines, therapeutic intervention is primarily indicated in symptomatic patients with hemodynamically significant stenosis, with endovascular revascularization generally considered the first-line treatment strategy. This case is of particular clinical significance due to the rare association of simultaneous occlusion of the celiac trunk, superior mesenteric artery, and inferior mesenteric artery. Furthermore, the case raises important considerations regarding the optimal therapeutic strategy in terms of choosing an endovascular recanalization or a surgical approach. **Case Report:** A 55-year-old male with a medical history of hypertension, coronary artery disease with prior myocardial infarction and coronary stenting, aortic and tricuspid valvopathies, and former smoking, presented in a cachectic state with postprandial epigastric pain, anorexia, and significant weight loss. Computed tomography revealed occlusion of the celiac trunk, superior mesenteric artery, and inferior mesenteric artery. Endovascular revascularization was attempted several times but proved unsuccessful. Following the failed endovascular attempt, a surgical aorto-celiac bypass was undertaken. Given the anatomical situation and lesion appearance, a retrograde aorto-celiac bypass was performed via a retropancreatic retroperitoneal approach using a 6 mm Dacron synthetic graft. At two months postoperatively, the patient demonstrated a favorable recovery, including a 3-kilogram weight gain. **Discussions** : The wide range of therapeutic strategies available for the management of aortoiliac occlusive disease has generated ongoing debate regarding the optimal approach. According to the literature, outcomes after endovascular treatment for chronic mesenteric ischemia (including celiac lesions) typically demonstrate good primary and secondary patency rates and symptomatic relief over intermediate follow-up (~1-3 years). Endovascular success is heavily influenced by anatomy, presence of embolic vs thrombotic occlusion, and lesion characteristics. Failures or incomplete recanalization frequently necessitate conversion to open surgery. **Conclusions:** Rather than favoring a single technique universally, it is important to recognize that each modality has a specific role within the comprehensive management of aortoiliac occlusive disease, provided that it is selected according to the clinical context and patient characteristics.

Keywords: Celiac artery occlusive disease, Multivessel mesenteric arterial involvement, Multivessel mesenteric arterial involvement, Retrograde aorto-celiac bypass

RETROPERITONEAL HYDATID CYST WITH VASCULAR ADHERENCE - A SURGICAL CHALLENGE

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Introduction: Hydatid disease, caused by *Echinococcus granulosus*, most frequently involves the liver and lungs. Primary retroperitoneal localization is rare and may remain asymptomatic for long periods, leading to delayed diagnosis. Due to its deep location and proximity to major vascular structures, surgical management may be technically demanding. We report a case of a large retroperitoneal hydatid cyst with significant vascular adherence, highlighting its diagnostic and therapeutic challenges. **Case Report:** A 49-year-old male patient, animal breeder presented with chronic mesogastric pain radiating to the back, progressively worsening over the past year. Abdominal computed tomography revealed a well-defined cystic mass measuring approximately 10 x 8 cm, located in the left hypochondrium, anterior to the spleen and closely adherent to the left kidney. The lesion showed calcified walls and multiple peripheral daughter cysts, highly suggestive of hydatid disease. Surgical treatment was initially attempted laparoscopically. Intraoperative exploration identified a large (10 x 8 cm), completely calcified cyst located in the retroperitoneum, extending through the transverse mesocolon and firmly adherent to the inferior mesenteric vein and left kidney. Due to the complex anatomical relationships and vascular involvement, conversion to open surgery via laparotomy was performed. During dissection, accidental cyst rupture occurred. Immediate measures were taken to prevent peritoneal dissemination, including evacuation of cyst contents, scolical lavage with hypertonic saline and an antiseptic agent, partial pericystectomy, omentoplasty and drainage. The postoperative course was uneventful and the patient was discharged on postoperative day six. **Discussions :** Primary retroperitoneal hydatid cysts represent an uncommon presentation and are often diagnosed at an advanced stage because of nonspecific symptoms. Their proximity to major vascular structures increases operative complexity and the risk of intraoperative complications. While minimally invasive surgery is an effective option in selected cases, large size, calcification, and vascular adherence may limit its feasibility. Early intraoperative recognition of these features is essential to ensure timely conversion and safe surgical management. **Conclusions:** Retroperitoneal hydatid cysts are rare entities that may pose significant surgical challenges when associated with major vascular adherence. Careful preoperative assessment, awareness of atypical localization and timely adaptation of the surgical approach are key factors for a favorable outcome. This case highlights the importance of individualized surgical strategy in uncommon presentations of hydatid disease.

Keywords: retroperitoneal hydatid cyst, *Echinococcus granulosus*, vascular adherence, rare localization

RHABDOMYOSARCOMA MIMICKING A HEMATOMA: THE CRITICAL ROLE OF MRI IN ACCURATE DIAGNOSIS – CASE REPORT

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Introduction: Rhabdomyosarcoma represents an aggressive malignant pathology, affecting the soft tissue, that can present with nonspecific imaging findings, often being mistaken for benign lesions such as hematomas. Although this tumor predominantly occurs in pediatric patients, rare cases have been documented in adults over the age of 45. Adult-onset rhabdomyosarcoma tends to have a more aggressive clinical course and worse prognosis compared to pediatric cases. The early and accurate diagnosis is crucial for appropriate treatment and prognosis. **Case Report:** We report the case of a 52-year-old female who presented with a painful, palpable soft tissue mass and swelling in the left thigh after exercise. Her past medical history was not relevant in this context, without evidence of prior cancer. Initially it was suspected to be a hematoma based on ultrasound examination, even though the patient denied any history of trauma. The lesion appeared hypoechoic and mildly heterogeneous, without significant internal vascularity, leading to a conservative initial approach. Due to persistent symptoms and atypical progression, MRI was performed, revealing a solid, oval mass measuring 86mm in its long axis, showing heterogeneous intense contrast enhancement and containing areas of necrosis, within the rectus femoris muscle, being suggestive for malignancy. Although it was in close proximity to the fascia, no fascial invasion has been

observed and the soft tissue plane between the mass and the bone was also preserved. Ultimately, the patient was referred for tissue biopsy and oncologic management. **Discussions** : This case emphasizes the diagnostic challenges associated with soft tissue masses, particularly when clinical and sonographic findings are misleading. MRI played a pivotal role in revealing the true nature of the lesion, offering superior characterization and distinction between a benign hematoma and a malignant tumor. **Conclusions**: In conclusion, the early and accurate diagnosis of rhabdomyosarcoma represents the first crucial step into increasing the survival rates of these patients, leading to the proper management approaches.

Keywords: Rhabdomyosarcoma, Hematoma, MRI, Malignancy

RIGHT RENAL TUMOR WITH VASCULAR VARIANTS: DIAGNOSTIC AND SURGICAL CHALLENGES

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Introduction: Tumors are increasingly detected incidentally because of widespread use of cross-sectional imaging. Although most kidneys present a predictable vascular pedicle, anatomical variants such as multiple renal arteries or veins may significantly increase surgical complexity and perioperative risk. Preoperative imaging and accurate intraoperative vascular control are essential, especially when nephron-sparing or minimally invasive techniques are planned. We present this case with a right renal tumor associated with a complex vascular anatomy, pinpointing diagnostic and surgical challenges. **Case Report:** 76-year-old male patient with a body mass index (BMI) of 29.5 kg/m² was admitted following the incidental discovery of a right renal mass on contrast-enhanced computed tomography (CT) performed for chronic abdominal discomfort. The patient did not report urinary symptoms or hematuria. Laboratory investigations, like renal function tests; within normal limits. Contrast-enhanced CT showed a well-defined right renal mass consistent with clinical stage cT1bN0M0. (Evaluation of the vascular anatomy demonstrated two right renal arteries with multiple branches, along with a single renal vein). Based on the tumor size, anatomical location, probable proximity to the renal sinus and collecting system, and predominantly endophytic characteristics, the lesion was associated with a high anatomical complexity. According to image-based evaluation, the tumor would likely correspond with a high complexity category (PADUA score 10). Minimally invasive surgical management was advocated, and the patient underwent laparoscopic right partial nephrectomy. During surgery, careful dissection confirmed the presence of two right renal arteries and one renal vein, requiring careful vascular pedicle identification and temporary arterial control prior to tumor removal. The tumor was removed, while maximizing renal parenchymal preservation. Hemostasis and renography were achieved, with no intraoperative complications either. Postoperative course was favorable, and the patient was discharged on postoperative day three. Histopathological diagnosis: Clear cell renal cell carcinoma, WHO/ISUP grade 1, stage pT1b, R0, of the right kidney. **Discussions** : The coexistence of renal tumors and vascular variants significantly increases surgical difficulty. Failure to identify accessory renal vessels may result in hemorrhage, prolonged operative time, or segmental renal ischemia. Preoperative imaging plays a pivotal role in surgical planning, particularly in high-complexity lesions undergoing nephron-sparing surgery. **Conclusions:** Meticulous imaging and tailored surgical planning are vital for managing complex renal tumors, ensuring oncological safety while preserving renal function.

Keywords: Renal tumor, Accessory renal arteries, Nephron-sparing surgery, Nephrectomy

RISKS AND BENEFITS: INTERFERON TREATMENT IN STAGE F4 LIVER CIRRHOSIS IN THE PRE-BULEVIRTIDE ERA

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Introduction: Compared to other chronic viral hepatitis, co-infection with hepatitis B and D viruses is associated with a rapidly progressive clinical course. Peginterferon alfa-2a was the only therapeutic standard before the clinical integration of antivirals that inhibit HBV and HDV entry into hepatocytes, such as Bulevirtide. In advanced stages of fibrosis (F4), the administration of Peginterferon alfa-2a requires careful risk stratification due to the increased incidence of bone marrow suppression and the risk of precipitating hepatic decompensation. The aim of this study is to evaluate the virological response and the limitations due to bone marrow toxicity in a patient with

HBV/HDV liver cirrhosis (F4) treated with Peginterferon alfa-2a. **Case Report:** We present the case of a 48-year-old patient diagnosed with HBV/HDV cirrhosis and grade 1 esophageal varices. At treatment initiation, the disease was compensated (Child-Pugh class A), with severe fibrosis (F4) and a FibroMax score of 0.83. Treatment consisted of a single course of Peginterferon alfa-2a administered at a dose of 180 µg per week for a cumulative duration of approximately 48 weeks. Monitoring focused on viral load assessment, quantification of cytopenia secondary to bone marrow toxicity, and periodic reassessment of liver functional reserve. **Discussions :** Treatment led to a significant reduction in viremia, with HDV RNA decreasing from 14,100,000 to 138,000 copies/mL. However, despite the favorable virological response, leukocytes reached a minimum of $1.61 \times 10^3/\mu\text{L}$, and platelets decreased from 57,000/ μL to a critical level of 45,000/ μL . Due to major associated risks, treatment was interrupted on 09.02.2019 and again on 16.08.2019. After completion of the cumulative 48 weeks of therapy, a therapeutic break followed. During this period, previous toxic effects and the natural progression of the disease led to decompensation. The patient progressed to Child-Pugh class C, with a MELD score of 25. Ultimately, the patient underwent liver transplantation. **Conclusions:** In patients with advanced HDV cirrhosis, interferon represented a high-risk bridge to transplantation. Although it improved virological parameters, severe toxicity led to treatment interruptions, and the disease ultimately decompensated. This case highlights the need for modern therapies such as Bulevirtide, which provide effective viral suppression without the risk of bone marrow toxicity.

Keywords: Hepatitis D, Liver cirrhosis, Peginterferon alfa-2a, Hematological toxicity

RUBELLA-ASSOCIATED MYOPERICARDITIS IN AN 18-YEAR-OLD MALE: A CASE REPORT

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Introduction: Myopericarditis is an inflammation of the heart muscle and the surrounding pericardium. The name 'myopericarditis' indicates predominant pericarditis with myocardial involvement. It is idiopathic in most cases, however it can occur due to infectious (Coxsackievirus, Epstein-Barr) or non-infectious causes (drugs, radiation therapy, systemic inflammatory diseases). **Case Report:** An 18-year-old male presented with anterior chest pain, described as pressure. Upon further examination, vital signs were within normal limits. A complete blood count (CBC) showed decreased MCH, and elevated monocytes and neutrophil count. Biochemistry analysis demonstrated elevated AST and urea. A chest X-Ray showed accentuated intrahilar lung markings in the right, but was otherwise normal. The cardiac biomarker Troponin I was highly elevated with a value of 2,340 ng/L, where the normal value is <14 ng/L. Serial ECGs demonstrated a normal sinus rhythm, however with ST elevation and PR depression consistent with pericarditis. Upon further testing, the patient showed positive IgG and IgM antibodies against rubella, suggesting this as a possible viral cause of myopericarditis in this patient. This patient was admitted to the cardiology department for further evaluation. **Discussions :** Most patients affected by myopericarditis are adult males. Symptoms include retrosternal chest pain, palpitations, and dyspnea. On clinical examination, findings include pericardial friction rub and heart failure signs. Essential investigations for the diagnosis of myopericarditis are CBC, erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), cardiac biomarkers, and ECG. Additional examinations are cardiac magnetic resonance imaging (CMR) and endomyocardial biopsy (EMB) in select cases. In the present case, the patient's clinical presentation and findings were consistent with these symptoms, particularly the elevated levels of Troponin. The prognosis is favourable without long-term consequences, despite the combined involvement of the pericardium and myocardium. Treatment is indicated for the symptoms (NSAIDs in a well-functioning heart), heart failure (beta blockers, ACE inhibitors, diuretics), and pericardial effusion if present (pericardiocentesis). The use of colchicine is safe in patients with myopericarditis, preventing recurrences. Patients are recommended to avoid physical activity for 3 months. Follow-up is required with clinical assessment, biomarkers, and repeat imaging within 6 months. **Conclusions:** Myopericarditis is an uncommon condition with mostly an idiopathic cause, suspected in young male patients without any cardiac history. However, it has a favourable prognosis when managed with appropriate treatment. Several investigations are essential for differential diagnoses, as well as early diagnosis and treatment. Follow-up is required within 6 months to assess recovery, with complete remission seen in 3-6 months.

Keywords: myopericarditis, rubella, troponin

S(P)ARTANS, WHAT IS YOUR PROFESSION? OLMESARTAN INDUCED ENTEROPATHY

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Introduction: Olmesartan-linked enteropathy is a fairly new and underdiagnosed condition, with an incidence of less than 1 per 1,000 patients. In many cases, the timespan between exposure to Olmesartan and the onset of clinical symptoms varies from a few months to several years. Patients usually present with diarrhea, nausea, abdominal discomfort and weight loss. **Case Report:** A 74-year-old woman with a history of hypertension and colonic diverticulosis presented with a 3-week history of watery diarrhea (>20 episodes per day), nausea, abdominal discomfort and bloating, without significant weight loss. The physical examination revealed slight abdominal tenderness. Stool culture including *Clostridium difficile* returned negative. The initial blood workup indicated hepatocellular injury with elevated liver enzymes, hypoproteinemia, and azotemia. Upper gastrointestinal endoscopy showed a 4 cm sliding hiatal hernia and small, diffuse whitish plaques on the mucosal lining of the duodenum. ARB-induced enteropathy was suspected, thus the antihypertensive treatment with Olmesartan was discontinued. The patient showed marked clinical improvement within just 2 days after stopping the treatment; consequently, the number of diarrheal episodes dropped to 4 per day and further declined to 2 formed stools per day after an additional 3 days. **Discussions :** Current clinical guidelines suggest a dual combination of an ARB and a calcium channel blocker, such as amlodipine, for the treatment of uncomplicated hypertension. Hence, the diagnosis is often challenging given the massive usage of these drugs, often leading to underdiagnosis or misdiagnosis. Mucosal changes associated with this kind of enteropathy vary from duodenal villous atrophy to mucosal inflammation and lymphocytosis. Another significant aspect is that the mean duration between exposure to this drug and the onset of symptoms can range from 6 months up to 10 years. In our case, the patient presented with symptoms after several years of using Olmesartan. Furthermore, this case demonstrates that this enteropathy can affect any part of the gastrointestinal tract, as indicated by the presence of chronic inflammation and hepatocellular injury. **Conclusions:** This case highlights the importance of considering a drug-induced enteropathy in patients with unexplained chronic diarrhea. Lastly, given the widespread use of this drug and the challenging differential diagnosis, early recognition and drug discontinuation are crucial for clinical improvement.

Keywords: Olmesartan, Drug-induced, Enteropathy, Diagnostic challenge

SACCULAR CEREBRAL ANEURYSM RUPTURE: WHAT COULD GO WRONG? A CASE PRESENTATION FOLLOWING A RARE CASCADE OF COMMON COMPLICATIONS

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Introduction: A cerebral aneurysm is an abnormal dilation of a blood vessel in an area of weakened arterial wall, which may rupture and result in subarachnoid hemorrhage (SAH). About 5% of the population has at least one cerebral aneurysm (1/3 presenting more than one), with the saccular type being the most common. Over time, the survival rate for ruptured aneurysms has significantly improved to about 60%-70%, of which 25% have cognitive or neurologic deficits. **Case Report:** A 64-year-old female was found unconscious with hypertension and neurological deficits by the emergency response team, which required pre-hospital intubation. The CT Angiography of the cerebral arteries performed in the emergency department identified a 10/4 mm ruptured saccular aneurysm on the anterior communicating artery (ACA), with no other vascular anomalies associated. Following a neurosurgery consult, the patient underwent clipping of the ACA aneurysm and a right frontal decompressive craniectomy with placement of an epicranial drain. In addition to the paraventricular hemorrhage, the patient developed, despite the reduced size of the aneurysm and depletive medication initiated promptly in the Emergency Department, a cascade of complications, which led to clinical deterioration and a poorer prognosis: worsening cerebral edema with sulcal effacement, tonsillar herniation and absence of opacification of both the intracranial arterial and venous systems on CT Angiography, extensive bilateral parasagittal ischaemic lesions, diffuse SAH with decreasing intensity. Another sign of poor prognosis is represented by the radiographic aspect of the lungs a few hours after the diagnosis: diffuse bilateral prominence of pulmonary markings which may suggest neurogenic pulmonary edema. **Discussions :** The particularity of this case stands both in the challenge that a critical patient with altered

mental status and abrupt loss of consciousness, in the field, with impossible anamnesis, represents in determining the cause and in the cascade of complications leading to a worsening prognosis. Furthermore, the hypertensive spike which may be the root cause for the rupture posed a significant challenge for the emergency physician, as blood pressure cannot be lowered excessively in a patient with cerebral edema, given the need to maintain cerebral perfusion while this approach carries an increased risk of hemorrhage, as well as cardiac and pulmonary decompensation or even multiorgan system failure. **Conclusions:** This case underscores the paramount importance of balancing early recognition of a cascade of complications leading to rapid deterioration, highlighting the need for timely, coordinated management in ruptured aneurysm emergencies and informing clinical practice.

Keywords: Cerebral Edema, Tonsillar Herniation, Ruptured Aneurysm, Saccular Aneurysm

SACRAL CHORDOMA TREATED WITH DEBULKING SURGERY AND CARBON ION RADIOTHERAPY: A CASE REPORT

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Introduction: Sacral chordomas are rare, locally aggressive tumors arising from notochordal remnants, accounting for 29-50% of all chordomas. While en bloc resection remains the gold standard, achieving complete resection without significant morbidity is often not feasible. Carbon ion radiotherapy (CIRT) has emerged as an effective treatment for incompletely resected sacral chordomas, offering superior biological effectiveness compared to conventional photon therapy. **Case Report:** A 34-year-old male presented with right-sided lumbosacral pain, radiating to the right lower extremity and inguinal region. MRI revealed a multilobulated, heterogeneous sacral tumor with moderate T2-weighted hyperintensity centered at S2. The patient underwent laminectomy with tumor debulking and nerve root decompression. Histological analysis and immunohistochemical assessment positively diagnosed a chordoma tumor. Postoperative MRI showed residual tumor involving the S2 vertebral body and right sacral ala. He received CIRT using intensity-modulated particle therapy (IMPT) delivering 73.6 Gy (RBE) in 16 fractions. To this day there are no signs of recurrence, though the patient developed sacral insufficiency fractures involving the sacral alae and S1 vertebral body and complained of positional pain.

Discussions : This case illustrates key aspects of contemporary sacral chordoma management. The immunohistochemical profile with brachyury positivity and preserved INI1 confirmed conventional chordoma, carrying a more favorable prognosis than poorly differentiated chordoma. CIRT following debulking surgery represents an evidence-based approach for tumors not amenable to wide resection. The Heidelberg Ion Beam Therapy Center reported 5-year progression-free survival and overall survival rates of 53% and 74%, respectively, in 68 patients with sacral chordoma. A European phase II randomized trial (ISAC) demonstrated 4-year overall survival of 81% and local progression-free survival of 70%. Sacral insufficiency fractures represent a well-recognized late complication, occurring in approximately 49% of patients, albeit most maintain functional capacity.

Conclusions: This case demonstrates that CIRT following debulking surgery is an effective treatment strategy for sacral chordoma in young patients when radical resection is not feasible. While sacral insufficiency fractures represent a significant late toxicity, most patients maintain functional capacity. Long-term surveillance is essential given the propensity for late local recurrences.

Keywords: chordoma, carbon ion radiotherapy, sacral tumor, sacral insufficiency fracture

SACRIFICING STRUCTURE FOR ONCOLOGIC SAFETY: EN-BLOC RESECTION OF A MASSIVE CAMPANACCI GRADE III H3F3A G34W-POSITIVE DISTAL ULNA GCTB FOR FAVORABLE LONG-TERM OUTCOMES

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Introduction: Giant cell tumor of bone (GCTB) represents a rare, locally aggressive benign neoplasm, comprising approximately 5% of primary bone tumors. It predominantly arises in the epiphyseal regions of long bones, typically manifesting in young adults during their third and fourth decades of life. An atypical case of a neglected, massive Campanacci Grade III GCTB involving the distal ulna in an older patient underscores the surgical complexity of achieving complete oncological clearance while preserving limb function. **Case Report:** A 52-year-old male presented with a two-year history of a progressively enlarging, 16×12 cm ulcerated forearm mass,

complicated by local inflammation, pathological exudate, and significantly restricted regional mobility. Advanced imaging delineated a 10 cm expansile osteolytic lesion involving the distal ulna, exhibiting profound cortical obliteration and extensive extraosseous soft-tissue invasion. With the primary imperative of ensuring oncological safety, a wide en-bloc resection achieving negative surgical margins was executed, excising the distal 10 centimeters of the ulna. Due to direct tumor infiltration, the extensor proprii tendons of digits II-V were sacrificed. Functional reconstruction was achieved through tenodesis to the common extensor tendon, combined with intramedullary Kirschner wire fixation and local adjuvant chemical curettage to mitigate recurrence risk. Definitive histopathological analysis confirmed the diagnosis of GCTB, notably harboring the highly specific H3F3A G34W mutation. Postoperatively, the patient opted against further complex skeletal reconstructive procedures.

Discussions : Giant cell tumors of the distal ulna represent an exceedingly rare clinical entity, particularly in older patients. While standard management of Campanacci Grade III lesions typically dictates wide resection followed by complex osteoarticular reconstruction, such as autologous fibular grafting or 3D-printed endoprostheses, this case demonstrates that stringent oncological clearance, coupled with strategic soft-tissue management, yields favorable outcomes. Prioritizing soft-tissue repair over simultaneous skeletal reconstruction minimizes surgical morbidity while upholding the paramount objective of total tumor eradication. **Conclusions:** Radical en-bloc resection of locally advanced giant cell tumors involving the distal ulna combined with tailored tendon transfer, provides effective oncological control and satisfactory functional preservation. At three-year follow-up, the patient remained recurrence-free and demonstrated a sustained, pain-free functional range of motion. This substantiates that aggressive tumor ablation with strategic soft-tissue repair constitutes a viable treatment strategy in selected advanced cases.

Keywords: Giant cell tumor of bone, Distal ulna, En-bloc resection, H3F3A G34W mutation

SCLERODERMATOMYOSITIS WITH NORMAL MUSCLE ENZYMES: AN ATYPICAL CASE REPORT

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Introduction: Sclerodermatomyositis is a rare autoimmune overlap syndrome combining features of dermatomyositis (chronic inflammatory disease involving the skin and muscle) and systemic sclerosis. The presence of anti-transcription intermediary factor 1-gamma (anti-TIF1-γ) antibodies in his laboratory investigation is associated with an increased risk of malignancy, making early recognition and thorough evaluation essential. Amyopathic presentations further complicate diagnosis due to the absence of muscle enzyme elevation.

Case Report: We report the case of a male patient presenting with characteristic cutaneous and muscular findings. Serological testing revealed positivity for anti-TIF1-γ and anti-Ro52 antibodies. The patient underwent several screenings, including computed tomography, colonoscopy, gastroscopy, and nasofibroscope, which showed no evidence of neoplasia. Magnetic resonance imaging (MRI) could not be performed due to prior orthopedic surgery with metallic fixation, representing a diagnostic limitation. Muscle biopsy demonstrated perivascular inflammatory infiltrates consistent with dermatomyositis. Notably, muscle enzyme levels, including creatine kinase, aldolase, and myoglobin, were within normal limits, supporting an amyopathic form. Clinically, the patient exhibited Gottron's papules over the metacarpophalangeal joints, mechanic's hands, and holster sign, along with facial and cervical erythema. Proximal muscle weakness affecting the shoulder and pelvic girdles was observed, without significant joint involvement. Laboratory findings included monocytosis and altered protein fractions consistent with chronic inflammation. Nailfold capillaroscopy revealed an active scleroderma pattern, supporting the diagnosis of an overlap syndrome. The patient was treated with corticosteroids and methotrexate with folic acid, and appropriate supplementation (vitamin D). **Discussions :** This case illustrates an atypical presentation of sclerodermatomyositis with normal muscle enzyme levels, which may delay diagnosis. The presence of anti-TIF1-γ antibodies necessitates vigilant malignancy screening despite initially negative findings. Magnetic resonance imaging (MRI) can demonstrate characteristic patterns of muscle edema distribution, which may help differentiate dermatomyositis from polymyositis and could represent a useful alternative diagnostic tool in similar cases. **Conclusions:** Amyopathic sclerodermatomyositis represents a diagnostic challenge. Early recognition is essential to initiate appropriate immunosuppressive therapy and ensure long-term malignancy surveillance. This case contributes to the growing awareness of atypical presentations in autoimmune overlap syndromes.

Keywords: Sclerodermatomyositis, dermatomyositis, anti-TIF1-γ, autoimmune overlap syndrome

SCREENING FOR LIMB-GIRDLE MUSCLE DYSTROPHY: THE IMPORTANCE OF GENETIC COUNSELING FOR FUTURE GENERATIONS

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Introduction: Limb-girdle muscle dystrophies (LGMD) comprise a diverse group of disorders that typically manifest in the proximal muscles of the shoulder and pelvic girdles, causing weakness and atrophy of the affected muscles. LGMD type 2 is an autosomal recessive disorder caused by multiple pathogenic variants in genes encoding various myofibrillar proteins. For some families, genetic investigations can detect more than one variant associated with disease, which can shift clinical management and genetic counselling. **Case Report:** Our case focuses on the genetic counselling of a family from central Romania and family planning. Two of the daughters manifested the clinical phenotype of LGMD, born to clinically healthy parents. The proband, another asymptomatic daughter, sought premarital genetic counselling to assess the recurrence risk for her potential future children. Through extensive Next-Generation Sequencing (NGS), the proband and her clinically asymptomatic parents were identified as heterozygous (carriers) of a pathogenic variant of the *CAPN3* gene, c.550del, responsible for LGMD. Thus, both of the proband's affected sisters were homozygous for the mutation, consistent with autosomal recessive inheritance. Considering the complexity of NGS testing, this case revealed an overlapping genetic profile: the autosomal recessive *CAPN3* variant explains the proband's family's clinical phenotypes specific for LGMD, alongside an incidental finding, a pathogenic variant in the *LMNA* gene, which accounts for a significant predisposition to develop cardiomyopathy with an autosomal dominant inheritance pattern. This incidental finding overturns the course of the genetic counselling. The pathogenic *CAPN3* variant only involved a recurrence risk for future children, depending on her partner's carrier status, a rare occurrence in the general population. The pathogenic *LMNA* variant introduces a high personal risk for the patient, requiring strict monitoring of the cardiac status. Also, given the autosomal dominant inheritance pattern of the *LMNA* variant, all of her future children have a 50% chance of inheriting the pathogenic variant, regardless of the partner's genotype. **Discussions :** NGS testing has completely altered the scope of genetic counselling. In this case, the incidental finding of a pathogenic *LMNA* variant alongside the expected *CAPN3* variant has shifted the clinical focus from a neuromuscular diagnosis to a multi-systemic risk, necessitating strict, lifelong cardiovascular surveillance for all family members carrying the pathogenic *LMNA* variant. **Conclusions:** This case highlights the impact genetic counselling has and how it navigates unexpected genomic findings that alter not only the management of the patient's personal health but also their future reproductive choices, requiring careful family planning.

Keywords: Limb-girdle muscle dystrophy 2, CAPN3 gene, LMNA gene, genetic counselling

SEA-ANEMONE-LIKE PAPILLARY FIBROELASTOMA OF THE LEFT ATRIUM: AN INCIDENTAL CARDIAC MASS

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Introduction: Primary cardiac tumors are rare, and papillary fibroelastoma represents one of the most common benign entities, with a predilection for valvular structures. Non-valvular localization within the left atrium is uncommon and may pose diagnostic challenges in differentiating it from other intracardiac masses. We report a case of left atrial fibroelastoma associated with moderate mitral regurgitation, managed with surgical intervention. **Case Report:** A 69-year-old female patient with a history of heart failure with preserved ejection fraction (NYHA class II) was admitted for exertional dyspnea and fatigue. Clinical examination revealed regular heart sounds without audible pathological murmurs and mild bilateral lower limb edema. Electrocardiography demonstrated sinus rhythm at 67 BPM, without ischemic changes. Transthoracic echocardiography showed a non-dilated left ventricle with preserved systolic function (ejection fraction 60%) and a mobile hyperechoic mass measuring approximately 15 mm, located on the lateral wall of the left atrium, associated with moderate mitral regurgitation characterized by multiple jets. Right-sided cardiac chambers were normal in size and function. Coronary angiography excluded significant coronary stenosis. Transesophageal echocardiography confirmed the left atrial mass, with a narrow implantation base adjacent to the left inferior pulmonary vein. Complete surgical excision of

the mass and mitral commissuroplasty were performed via a minimally invasive endoscopic approach under femoral cardiopulmonary bypass. The postoperative course was favorable, without complications, and mitral regurgitation was reduced to grade I on follow-up echocardiography. **Discussions** : Intracardiac masses identified at the atrial level require careful differential evaluation, particularly with regard to myxoma and organized thrombus. Echocardiographic characterization, including assessment of size, mobility, and mode of attachment, is essential for guiding the preoperative diagnosis. A narrow implantation base and increased mobility are features associated with embolic risk and support the indication for surgical management. Transesophageal echocardiography confirmed the left atrial mass, revealing a highly mobile, pedunculated, hyperechoic lesion with an anemone-like appearance and a narrow implantation base adjacent to the left inferior pulmonary vein. **Conclusions**: Left atrial lateral wall implantation of the fibroelastoma, associated with moderate mitral regurgitation, supports the indication for complete surgical resection, resulting in favorable valvular functional outcome and an uncomplicated postoperative course.

Keywords: Papillary fibroelastoma, Left atrial mass, Minimally invasive cardiac surgery, Transesophageal echocardiography

SECONDARY PULMONARY HYPERTENSION IN A YOUNG ADULT: EARLY PULMONARY VASCULAR REMODELING IN A CONTEXT OF HYPOXEMIA AND OCCUPATIONAL EXPOSURE

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Introduction: Pulmonary hypertension is uncommon in young adults and usually reflects more than one underlying mechanism. The contributing factors such as chronic hypoxemia, congenital cardiopulmonary abnormalities, and occupational exposure may all play a part in early pulmonary vascular remodeling. This case is relevant because it shows secondary pulmonary hypertension developed at a young age in the presence of several coexisting risk factors. **Case Report:** We report the case of a 22-year-old woman with prior exposure to respiratory irritants in an agricultural greenhouse who presented with progressive exertional dyspnea and fatigue. Pulmonary function testing showed moderate airflow limitation with marked small-airway involvement. An FEV₁ of 57% predicted, an FEV₁/FVC ratio of 68%, and reduced diffusion capacity raised suspicion for chronic obstructive airway disease with impaired alveolar-capillary gas transfer. The overnight pulse oximetry study revealed the presence of severe nocturnal hypoxia, with a mean SpO₂ of 87% and oxygen saturation levels below 90% for the predominant period of the study. Transthoracic echocardiography showed a prior surgical closure site of a patent ductus arteriosus, with a possible small residual post-surgical shunt, pulmonary hypertension, right ventricular dilation, cardiac hypertrophy, and a reduced longitudinal systolic function. Valvular assessment showed moderate tricuspid regurgitation and mild to moderate mitral regurgitation, with a left ventricle that was non-dilated and had preserved systolic function. Other findings included the presence of pulmonary collateral vessels and a probable small patent foramen ovale. In addition, polycythemia confirmed the presence of chronic hypoxemic stress. Inhaled bronchodilator therapy and nocturnal oxygen therapy were started, and a multidisciplinary follow-up program was organized. **Discussions** : This case illustrates early secondary pulmonary hypertension in a young patient with multiple contributing factors, including nocturnal hypoxia, obstructive ventilatory dysfunction, occupational exposure, and congenital cardiopulmonary disease. Despite the young age of the patient, there was significant pulmonary vascular remodeling. This case also illustrates the value of recognizing modifiable contributing factors, especially nocturnal desaturation and environmental exposure. **Conclusions:** Secondary pulmonary hypertension may develop early in young patients through the cumulative effect of hypoxemia, ventilatory impairment, environmental exposure, and cardiopulmonary abnormalities. Early recognition of nocturnal hypoxemia and other potentially modifiable contributors may improve multidisciplinary management by allowing for timely interventions and tailored treatment plans.

Keywords: Nocturnal hypoxemia, Occupational exposure, Pulmonary hypertension, Young adult

SEEING THE NARROW PATH: RADIOLOGICAL DIAGNOSIS AND EVALUATION OF AORTIC COARCTATION

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Introduction: Coarctation of the aorta (CoA) is a congenital narrowing of the aortic lumen, most commonly affecting the aortic isthmus distal to the left subclavian artery. It accounts for 5-8% of congenital heart disease and can undetected cause hypertension, reduced perfusion of distal organs, and progressive cardiac dysfunction. Accurate imaging is essential to confirm the diagnosis, determine severity, and evaluate collateral circulation. CT angiography has become increasingly valuable in pediatric patients due to its ability to provide detailed anatomical assessment and guide management. **Case Report:** We report the case of a 3-year-old male child, weighing 15 kg and 97 cm tall, referred to radiology department with clinical suspicion of CoA. Thoracic and cardiac Angio-CT was performed under general anesthesia with spontaneous breathing, using a GE Revolution Frontier 128-slice scanner, with contrast administered through a 24G right arm venous line. The exam showed situs solitus, levocardia, normal systemic and pulmonary venous return, and intact atrial and ventricular septa. The aortic arch and supraaortic branches appeared normal, but there was a distinct narrowing at the aortic isthmus, with a remaining lumen of approximately 3 mm. The descending aorta measured within normal limits. A welldeveloped collateral network was identified, including enlarged internal thoracic arteries measuring 3-4 mm, indicating chronic obstruction. Heart chambers, pulmonary arteries, lung parenchyma, and abdominal structures showed no pathological changes. **Discussions :** This case highlights the value of CT angiography as a comprehensive diagnostic tool for suspected aortic coarctation. Although clinical examination may detect differential pulses or blood pressure discrepancies, children often compensate through collateral circulation, reducing symptoms and delaying diagnosis. CT provides precise visualization of the stenosis, vascular morphology, and collateral pathways, enabling accurate severity grading. In this patient, the extremely narrow isthmus and marked collateralization reflect a chronic condition requiring timely intervention. Additionally, CT assists in pre-procedural planning by offering exact measurements useful for surgical decision-making or endovascular options such as balloon angioplasty or stent placement. The low radiation exposure 31,72 mGy·cm and high-quality imaging achieved in this examination further support CT as chosen modality in pediatric cardiology. **Conclusions:** Early identification of CoA is crucial to prevent long-term cardiovascular complications. CT angiography offers rapid, detailed, and reliable assessment of the affected aortic segment and compensatory circulation. In this case, the detection of a significantly narrowed 3 mm lumen and extensive collateral supply provided essential information for therapeutic planning. Improved access to advanced imaging supports better outcomes for children with congenital aortic narrowing.

Keywords: Coarctation of the aorta, CT angiography, collateral circulation

SEPTIC SHOCK IN A VERY ELDERLY PATIENT WITH ASPIRATION-RELATED RESPIRATORY FAILURE: THE CLINICAL RISK OF DELAYED DIAGNOSIS

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Introduction: Septic shock in older adults is a time-critical emergency, frequently complicated by atypical presentation, delayed recognition, and inappropriate therapy. Current evidence emphasizes that, in elderly patients, the major clinical risks are delayed infection-source identification, excessive fluid administration, and overly aggressive blood pressure targets. Contemporary studies support individualized fluid resuscitation, early norepinephrine, and a mean arterial pressure target around 65 mmHg rather than higher vasopressor-driven targets. **Case Report:** We present the case of a 93-year-old female transferred from a residential care facility with altered mental status and suspected aspiration. Prehospital assessment found coma, food residues in the oropharynx and airways, requiring endotracheal intubation and mechanical ventilation. The triage level upon admission to the ED was code red. Initial hemodynamic support included intravenous fluids and vasopressors. In the emergency department, the patient remained critically ill: Glasgow Coma Scale 6, blood pressure 59/38 mmHg, heart rate 125 bpm, oxygen saturation 94% under mechanical ventilation, and prolonged capillary refill

time. Bilateral wheezing and prolonged expiration suggested aspiration-related respiratory compromise. Laboratory findings showed leukocytosis with neutrophil predominance, coagulation abnormalities, and urinalysis suggestive of urinary tract infection. Cranial CT revealed chronic cerebral changes, while chest radiography showed bilateral infra-hilar abnormalities with left-sided basal opacity. The final diagnosis was septic shock associated with aspiration-related acute respiratory failure, probable aspiration pneumonia, urinary tract infection, severe metabolic acidosis, and electrolyte imbalance. **Discussions** : This case illustrates a major emergency medicine safety issue: in very old patients, septic shock may initially present through altered mental status and respiratory failure, while the infectious source is mixed or unclear. Current literature supports iv volume replenishment according to survive sepsis campaign, rapid source-oriented evaluation, early broad-spectrum antibiotics and avoidance of excessive vasopressor escalation to high MAP targets in older adults. Delayed antimicrobials increase mortality, whereas non-individualized bundle-driven care may expose frail patients to overtreatment and fluid overload. **Conclusions**: In elderly patients with septic shock, the key clinical risk is not only infection severity, but also failure to individualize early resuscitation. This case highlights the importance of prompt recognition, early airway protection, rapid infection-source assessment, timely antimicrobial therapy, cautious fluid resuscitation, and standard rather than high MAP targets.

Keywords: septic shock, elderly patient, aspiration pneumonia, hemodynamic resuscitation

SEQUENTIAL HYPERINFLAMMATORY SYNDROMES IN ADVANCED HIV: FROM POST-ABORTUM SIRS TO INTEGRASE INHIBITOR-INDUCED IRIS

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Introduction: Advanced HIV infection diagnosed during early pregnancy presents significant management and prognostic challenges. Immune Reconstitution Inflammatory Syndrome (IRIS) is a paradoxical inflammatory response occurring in 30-50% of patients with CD4 counts <50 cells/mm³ upon initiating Antiretroviral Therapy (ART). We present a complex case of severe systemic inflammation and early unmasking IRIS in a pregnant patient newly diagnosed with advanced AIDS, highlighting the intricate balance between infection control and immunomodulation. **Case Report:** A 24-year-old female, presenting at 10 weeks of gestation, was recently diagnosed with HIV. Initial investigations revealed an HIV RNA viral load of 123,731 copies/ml and a CD4 count of 9 cells/mm³, confirming an advanced immunological terminal stage (CDC category A3). Following a therapeutic abortion via uterine curettage, she developed a severe systemic inflammatory syndrome (SIRS) characterized by temperatures up to 40°C. Laboratory tests showed extreme hyperinflammation: IL-6 at 294 pg/ml, C-reactive protein (CRP) at 183 mg/L, procalcitonin at 4.21 ng/ml, and D-dimers at 2651 ng/ml. Extensive imaging (head, chest, abdomen, and pelvis CT) and blood cultures were completely negative for focal opportunistic or bacterial infections. She received broad-spectrum antibiotics (Meropenem, Vancomycin) and intravenous Dexamethasone, which rapidly normalized the cytokine storm. Subsequently, ART with Biktarvy (bictegravir/emtricitabine/tenofovir alafenamide) was initiated, alongside mandatory prophylaxis for opportunistic infections using Cotrimoxazole and Azithromycin. Approximately five days post-ART, she experienced a sudden fever spike of 40.4°C and reactivated inflammatory markers, without any focal infectious signs. Respiratory viral panels, including SARS-CoV-2 and influenza, were negative. Suspecting early IRIS, Dexamethasone was promptly reintroduced, leading to complete clinical and biological remission after the first dose. **Discussions** : This case highlights the complexity of managing profound immunosuppression (CD4 <10 cells/mm³), where the risk of severe IRIS and opportunistic infections is maximal. Distinguishing between post-abortion bacterial sepsis and an immune-mediated cytokine storm is a critical diagnostic challenge. The rapid onset of IRIS-just five days after starting a potent integrase inhibitor-based regimen-aligns with literature noting faster immune reconstitution with these agents but demands prompt recognition. Furthermore, targeted corticosteroids proved crucial in controlling both the initial post-operative SIRS and the subsequent IRIS. **Conclusions:** Advanced HIV discovered during pregnancy requires aggressive, multidisciplinary management. Early IRIS should be highly suspected in severely immunosuppressed patients presenting with sudden fever shortly after starting integrase inhibitors, especially after ruling out classical sepsis. Corticosteroids are highly effective and essential in managing severe, non-infectious hyperinflammatory states in these vulnerable patients.

Keywords: Advanced HIV, Immune Reconstitution Inflammatory S, Systemic Inflammatory Response Syndrome (SIRS), Integrase Inhibitors, Dexamethasone

SEVERE ANEMIA REVEALING SUSPECTED WALDENSTRÖM'S MACROGLOBULINEMIA IN AN ELDERLY PATIENT: A DIAGNOSTIC CHALLENGE

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Introduction: Waldenström's macroglobulinemia (WM) is a rare lymphoplasmacytic malignancy characterized by bone marrow infiltration and monoclonal IgM overproduction, leading to systemic manifestations, most notably hyperviscosity syndrome. Due to its heterogeneous presentation, diagnosis may be challenging, particularly in elderly patients with multiple comorbidities. **Case Report:** An 87-year-old patient with a history of chronic lymphoproliferative disorder, severe untreated microcytic anemia, recurrent gross hematuria, and prior ischemic stroke with residual left spastic hemiparesis presented to the emergency department with deteriorated general condition, lower limb edema, headache, and diffuse abdominal pain. Initial laboratory investigations revealed severe anemia (Hb 2.4 g/dL), thrombocytopenia (144,000/ μ L), INR 1.4, elevated NT-proBNP (12,730 pg/mL), and increased inflammatory markers (CRP 14.4 mg/L). The patient received transfusional support with O Rh-negative packed red blood cells, with corticosteroid premedication due to a history suggestive of transfusion incompatibility, and was admitted for further evaluation. During hospitalization, repeated transfusions (packed red blood cells and platelet concentrates) resulted in partial hematologic improvement (Hb 7 g/dL, platelets 179,000/ μ L). Peripheral blood smear demonstrated rouleaux formation, platelet morphological variability, and rare circulating erythroblasts. Given the severity of anemia, upper and lower gastrointestinal endoscopy were proposed but declined by the patient. Immunological workup revealed decreased IgG levels (348 mg/dL) and markedly elevated IgM (5764 mg/dL), with mildly increased free light chains, raising strong suspicion for WM. Bone marrow examination showed hypercellularity with features suggestive of erythroid iron deficiency and megakaryocytic alterations. Additional investigations, including serum protein electrophoresis and beta-2 microglobulin, were performed, with results pending. **Discussions :** WM accounts for approximately 1-2% of non-Hodgkin lymphomas and is associated with IgM-mediated hyperviscosity, which may lead to neurological, visual, and cardiovascular complications. Early recognition is essential, as severe cases may require urgent plasmapheresis alongside targeted therapy. **Conclusions:** This case underscores the diagnostic complexity of WM in elderly patients with overlapping pathologies. Given the high clinical suspicion and potential for rapid deterioration, treatment with Ibrutinib was initiated prior to definitive confirmation, highlighting the importance of timely therapeutic intervention.

Keywords: Macroglobulinemia, Waldenstrom, Medulogram, Kappa

SEVERE ANEMIA – BETWEEN CHRONIC DISEASE AND SUSPICION OF MALIGNANCY

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Introduction: Severe anemia is a common finding in internal medicine and may have multiple contributing factors, especially in patients with multiple comorbidities and chronic alcohol consumption. Determining the underlying etiology can be challenging, requiring thorough clinical, laboratory, and imaging evaluations. Cases in which anemia is associated with suspected malignancy present an additional diagnostic challenge. **Case Report:** We present the case of a 71-year-old male, chronic alcohol consumer, with a history of insulin-dependent type 2 diabetes mellitus, grade 3 hypertension, ischemic heart disease, and toxic liver cirrhosis (Child-Pugh A), admitted for marked asthenia, fatigue, and pallor. Clinical examination revealed signs of left-sided heart failure, aortic stenosis murmur, hepatomegaly, and grade I esophageal varices. Laboratory tests showed severe hypochromic microcytic anemia, poorly controlled diabetes, and mild liver function abnormalities. Imaging raised suspicion of a pancreatic tail mass, without evidence of other lesions. Upper endoscopy revealed erythematous antral gastritis. **Discussions :** This case illustrates the complexity of establishing the cause of severe anemia in a patient with multiple comorbidities. Contributing factors included chronic disease, nutritional deficiencies, gastrointestinal blood loss, and the effects of chronic alcohol consumption. The suspicion of pancreatic neoplasm adds an additional layer of diagnostic difficulty, necessitating a multidisciplinary approach involving internal medicine, gastroenterology, hematology, and oncology. Integrated evaluation and careful patient monitoring are essential to guide therapeutic decisions and optimize prognosis. **Conclusions:** Severe anemia in patients with multiple comorbidities and chronic alcohol use may conceal complex etiologies, including suspected malignancy. This case

highlights the importance of a systematic, multidisciplinary clinical approach for accurate diagnosis and effective management, taking into account both chronic disease and potential neoplastic causes.

Keywords: severe anemia; suspected malignancy; chronic disease; alcohol consumption;

SEVERE ANTI-NXP2-POSITIVE DERMATOMYOSITIS: A DIAGNOSTIC AND THERAPEUTIC CHALLENGE

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Introduction: Dermatomyositis (DM) is a rare inflammatory myopathy characterized by proximal muscle weakness and pathognomonic cutaneous manifestations, with potential systemic involvement affecting the lungs, heart, and gastrointestinal tract. It also carries a well-recognized malignancy risk, occurring in up to 15-30% of adult patients, most commonly within the first three years of diagnosis. Early diagnosis and aggressive immunosuppression are essential to improve outcomes. **Case Report:** A 29-year-old woman presented with a 12-month history of progressive proximal muscle weakness (unable to lift her head from the pillow, walk, or perform daily activities), dysphagia, weight loss, and severe skin rash. Physical examination revealed symmetrical proximal muscle weakness (2-3/5 on muscle testing), heliotrope rash with periorbital edema, anterior chest ("V-sign"), upper back and shoulders ("shawl sign"), and extensor thigh rash ("holster sign"). Laboratory findings included elevated CRP, ESR, and creatine kinase (CK) at 3.000 U/L. ANA were positive with a speckled pattern and myositis profile showed intense anti-NXP2 positivity. EMG confirmed a myopathic pattern. Comprehensive cancer screening, including CT chest/abdomen/pelvis, breast ultrasound, endoscopy, and tumor markers, was negative. Treatment was initiated with high-dose corticosteroids and mycophenolate mofetil, followed by intravenous immunoglobulin (IVIG). Relapse during corticosteroid tapering prompted the addition of cyclophosphamide and methotrexate, with a favorable response. **Discussions :** DM is primarily a clinical diagnosis based on progressive proximal muscle weakness and characteristic skin manifestations, supported by elevated CK, inflammatory markers, and myopathic EMG. Myositis-specific autoantibodies provide additional diagnostic value and help predict disease severity, organ involvement, and malignancy risk. Among these, anti-NXP2 antibodies define a severe disease subset characterized by muscle weakness, high CK levels, dysphagia, calcinosis, and subcutaneous edema. In this case, significant functional impairment and weight loss were the main disease consequences. Anti-NXP2 positivity in adults is also associated with increased malignancy risk (risk increased about 3-4 fold), justifying the extensive cancer screening performed. These patients often respond poorly to monotherapy, and the relapse observed during corticosteroid tapering underlines the need for early escalation to combination immunosuppression. **Conclusions:** This case illustrates the clinical and therapeutic challenges of anti-NXP2-positive DM, highlighting the importance of early diagnosis. In refractory cases, timely escalation to combination immunosuppressive therapy, including IVIG and cyclophosphamide, should be considered to prevent irreversible damage. Given the associated malignancy risk, cancer surveillance should be maintained for at least three years following diagnosis.

Keywords: dermatomyositis, anti-NXP2 antibodies, intravenous immunoglobulin, cyclophosphamide

SEVERE CACHEXIA LEADING TO DEATH IN AN END STAGE SCHIZOPHRENIA PATIENT: ONCOLOGIC CONCERN OVERSHADOWING THE REAL CAUSE

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Introduction: Schizophrenia is a serious mental disorder characterised by progressive thought dysfunction, hallucinations, delusions and negative symptoms. One of the most significant of those symptoms is the deepening of abulia (avolition) which can lead to the lack of self-care, up to the point of starvation. Indeed, active daily life impairment is present in 46.3% of schizophrenia patients. Starvation is a reported symptom in schizophrenia, by mechanisms such as food refusal. Cachexia as a result of oncological processes is also a very commonly talked about symptom of neoplasia. A current case of a schizophrenia patient for whom a differential of cachexia based on oncology and cachexia as aftereffect of schizophrenia induced starvation and malabsorption was necessary.

Case Report: The patient was 54 years old at the time of his death. His disease and treatment timeline is as follows. Schizophrenia diagnosis in 2016. Unsuccessful suicide attempt in 2019. Due to the continuous

progression of his schizophrenia he was hospitalised twice in 2022, for two and 6 months respectively. In the latter he displayed slow and amorphous thinking and sleep disturbances. Appetite was preserved, although he did not eat sufficiently over the week prior due to lack of external care. In his hospitalisation he complained about his digestion "not working". He ate regularly and with calorie additives. His weight was 60kg on admission, 44kg in the middle of hospitalisation, and 39kg at the date of his death. Due to his weakness and weightloss, an oncological process was presumed. Oncological consult was performed. No signs of oncology on colonoscopy, ultrasound, cancer markers. His condition starkly deteriorated the last week of May, culminating with cardiovascular collapse. On autopsy: cachexia of unknown etiology, cardiovascular insufficiency, myocardial dystrophy (primary cause of death) were noted, with an absence of tumoral processes. **Discussions** : This case showed the unfortunate end for a patient due to heightened focus on oncological causes of his condition. A primary cause for his outcome was not found. Postmorbid hypotheses included malabsorption after prolonged starvation before the hospitalisation. Pancreatitis was mentioned as an alternative during a general hospital stay, but was not confirmed at autopsy. **Conclusions:** Treatment teams should not always presume oncological processes at the sight of a rapid loss of weight. Routine gastroenterologist consultations should be considered after any long periods of starvation. This is especially true for psychiatric patients, where getting clear clinical and anamnestic information is difficult.

Keywords: Schizophrenia, Psychiatry, Cachexia

SEVERE COAGULOPATHY IN A PATIENT WITH CANCER: A CASE OF DISSEMINATED INTRAVASCULAR COAGULATION

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Introduction: Disseminated intravascular coagulation (DIC) is a syndrome characterized by a hypercoagulable state consisting in systemic activation of coagulation within the microcirculation and macrocirculation, with the capacity of leading to multiple organ dysfunction. In malignancies, particularly lung cancer, it can manifest as a severe paraneoplastic syndrome triggered by the release of procoagulant substances from the tumor into the bloodstream, resulting in excessive consumption of coagulation factors and platelets. This case describes the diagnostic and therapeutic challenges in managing decompensation in cancer patients. **Case Report:** A 77-years-old patient, with a medical history of chemo treated multiple lung cancers, presented to the hospital for shortness of breath with light activity, asthenia, and fatigability. Imaging studies of the lungs identified a left upper suprahilar pulmonary consolidation, post-lobectomy, along with irregular pulmonary consolidation in the left lower lobe, and paravertebral linear pulmonary consolidation, in the right lower lobe, extending to the upper pole at the level of the pulmonary hilum. Laboratory investigations showed severe thrombocytopenia, elevated INR, prolonged prothrombin time, and hypofibrinogenemia, consistent with DIC. The patient was managed with supportive measures, and systemic corticotherapy. Despite supportive care, the patient's condition rapidly deteriorated. Thrombocytopenia improved rapidly after the initiation of chemotherapy, as did hypofibrinogenemia, D-dimer levels, and INR. **Discussions** : Managing acute paraneoplastic DIC poses an extreme therapeutic dilemma characterized by the inaccessibility of standard oncological treatments. While supportive measures are necessary for active bleeding, they eventually fail if the underlying malignancy remains untreated. Unless the tumor carries mutations suitable for non-myelosuppressive targeted therapies, patients face a lack of viable options, leading to a clinical decline. In such therapeutically scenarios, severe coagulation abnormalities serve as critical prognostic markers to swiftly guide clinical decision-making away from aggressive interventions and toward palliative care. **Conclusions:** Managing acute paraneoplastic DIC in advanced malignancies represents an extreme therapeutic challenge. Conventional chemotherapy is frequently contraindicated due to its myelosuppressive effects, leaving systemic curative treatments largely unavailable in the presence of severe thrombocytopenia. This case underscores that early recognition of severe coagulation abnormalities is crucial for guiding clinical decision-making.

Keywords: disseminated intravascular coagulation, paraneoplastic syndrome, thrombocytopenia

SEVERE COPD WITH FUNCTIONAL IMPAIRMENT: CAN OPTIMIZED MANAGEMENT MODIFY PROGNOSIS?

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Introduction: Chronic obstructive pulmonary disease (COPD) represents a major public health issue, characterized by a progressive course and episodes of exacerbation that significantly impact the patient's functional status. In advanced stages, severe symptoms and frequent exacerbations predominate, directly affecting the patient's quality of life. **Case Report:** We present the case of a 73-year-old patient, former smoker (25 pack-years), with exertional dyspnea and a history of exacerbations. Clinical examination revealed diffuse bilateral rhonchi and wheezing. Spirometry showed severe mixed ventilatory dysfunction (FEV₁ 40.6%, FVC 44.1%, FEV₁/FVC ratio 70.79%), while arterial blood gas analysis indicated respiratory failure with hypoxemia (SaO₂ 78% on room air) and hypercapnia due to respiratory acidosis. The 6-minute walk test demonstrated reduced exercise capacity (247 m). Symptom assessment revealed an mMRC score of 1 and a CAT score of 9, suggesting that the patient underestimates his condition compared to both clinical symptoms and objective spirometric findings. Chest CT scan described minimal bilateral bronchiectasis and distal interstitial changes. Additionally, based on evaluation and medical history, poor treatment adherence was identified. **Discussions :** Following the addition of inhaled anticholinergic therapy, long-acting bronchodilators, corticosteroids, antibiotic therapy, and oxygen therapy, along with non-pharmacological interventions, the patient's clinical course was favorable. Symptoms progressively improved, and exercise tolerance increased. At follow-up, the patient reported reduced dyspnea and absence of new exacerbations, associated with an improvement in quality of life. **Conclusions:** This case highlights that in severe COPD, even in the presence of significant functional impairment, appropriate therapeutic intervention can lead to favorable clinical outcomes and improved quality of life. Treatment adherence, early recognition of exacerbations, and both pharmacological and non-pharmacological management remain essential in the complex care of these patients.

Keywords: exacerbated COPD, respiratory failure, pharmacological treatment, non-pharmacological treatment

SEVERE EOSINOPHILIC ASTHMA WITH PRESERVED SPIROMETRY: A CASE WITHIN THE AERD SPECTRUM

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Introduction: Severe eosinophilic asthma is a type 2 inflammatory disorder with symptoms persisting over time, frequent exacerbations, and often the need for systemic corticosteroids. Aspirin-exacerbated respiratory disease (AERD) is characterized by the combination of Samter's triad, consisting of asthma, chronic rhinosinusitis with nasal polyposis, and hypersensitivity to nonsteroidal anti-inflammatory drugs (NSAIDs). In severe asthma, airflow limitation is often present; however, in some cases, spirometry may be relatively preserved despite poor disease control and ongoing airway inflammation. **Case Report:** A 37-year-old female patient with a history of allergic asthma, with onset in childhood, and chronic nasal polyposis was evaluated for exertional dyspnea and frequent exacerbations. The patient was not adequately controlled despite high-dose inhaled corticosteroid/long-acting beta2-agonist and required multiple courses of systemic corticosteroids. She had a history of hypersensitivity to NSAIDs and sensitization to dust mites and cat dander, with no smoking history or relevant environmental exposure. Among biomarkers, blood eosinophilia was present, with an eosinophil count of 7.7% and 650 cells/L. The Asthma Control Test score was 15, indicating suboptimal control of asthma. The chest radiograph was normal. The spirometry values showed mild impairment in FEV1 at 82% of the predicted value, whereas FVC was within normal limits at 106% of the predicted value, but with an obstructive value of FEV1/FVC with positive bronchodilator response. The patient's evaluation showed a T2-high inflammatory profile. Together with the diagnosis of severe asthma (characterized by repeated exacerbations requiring corticosteroids) and recurrent nasal polyposis, this supports the indication for biological therapy with Dupilumab. This case is notable for the presence of aspirin-exacerbated respiratory disease (AERD) in a patient with severe asthma but relatively preserved lung function, where ENT symptoms are the dominant clinical feature. **Discussions :** This case highlights a clinic-functional dissociation in a patient with uncontrolled asthma, where the symptom burden and

inflammatory activity are significant despite being almost within normal spirometry results. In patients within the AERD spectrum, relatively preserved or near-normal lung function may coexist with a high level of type 2 inflammation and persistent symptoms. Therefore, severe asthma should not be excluded based solely on normal or near-normal spirometry, particularly in patients who remain clinically uncontrolled. **Conclusions:** This case emphasizes that relatively preserved spirometry may underestimate disease severity in eosinophilic asthma within the AERD spectrum. The phenotyping and endotyping of these cases is essential for proper therapeutic conduct.

Keywords: Aspirin-exacerbated respiratory disease, Dupilumab, Eosinophilic asthma, Nasal polyposis

SEVERE GASTROINTESTINAL INVOLVEMENT IN SYSTEMIC LUPUS ERYTHEMATOSUS - A COMPLEX DIAGNOSTIC APPROACH

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Introduction: Systemic lupus erythematosus is a chronic autoimmune disease characterized by multi systemic involvement with diverse clinical manifestations. Gastrointestinal involvement in SLE is rare and can delay diagnosis due to nonspecific clinical presentation, requiring exclusion of infectious and other inflammatory conditions. **Case Report:** A 36-year-old female diagnosed with SLE in 2023, with articular and immunological involvement (positive ANA and anti-dsDNA antibodies, hypocomplementemia) under treatment with mycophenolate mofetil and hydroxychloroquine, experienced multiple hospital admissions for persistent gastrointestinal symptoms between January and March 2026. Symptoms included watery diarrhea with mucus, nausea, epigastric pain and abdominal distension. Repeated microbiological and parasitological investigations were negative. Abdominal CT imaging revealed diffuse inflammatory change of the small intestine, including bowel wall thickening and vascular engorgement, suggestive of intestinal vasculitis and possible malabsorption syndrome. Endoscopic evaluation demonstrated hyperemic gastritis and duodenitis. Histopathological examination identified diffuse chronic inflammatory infiltrates throughout the gastrointestinal tract: terminal ileum, colonic mucosa with preserved architecture and diffuse chronic inflammation with rare submucosal inflammatory nodules, rectal mucosa, duodenal mucosa with ulceration, marked polymorph inflammatory infiltrate, intraepithelial neutrophils, mild villous shortening and crypt hyperplasia, gastric mucosa with chronic gastritis and focal ulceration. The clinical course was further complicated by severe hematologic involvement, including thrombocytopenia and autoimmune haemolytic anemia. The patient received high-dose corticosteroid therapy, intravenous immunoglobulins and subsequent biologic therapy with belimumab, with favourable clinical and biological evolution. **Discussions:** Gastrointestinal involvement in SLE remains a diagnostic challenge due to overlapping features with infectious and inflammatory conditions. In this case, the association of active immunological markers, haematological abnormalities, imaging findings and histopathological evidence supported the diagnosis of lupus enteritis. The favorable response to immunosuppressive and biologic therapy further confirmed the autoimmune etiology. A multidisciplinary approach was essential for optimal management. **Conclusions:** Lupus enteritis is a rare, but potentially severe manifestation of SLE. Early recognition, integration of clinical, imaging and histopathological data and prompt initiation of aggressive immunosuppressive therapy, including biological agents, are critical for improving patient outcomes.

Keywords: lupus enteritis, systemic lupus erythematosus, intestinal vasculitis, gastrointestinal involvement

SEVERE ONSET OF TYPE 1 DIABETES IN A CHILD TRIGGERED BY INFLUENZA A INFECTION: DIAGNOSTIC AND THERAPEUTIC CHALLENGES

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Introduction: Type 1 diabetes mellitus (T1DM) in children may present abruptly and can rapidly progress to severe diabetic ketoacidosis (DKA), particularly when triggered by acute infections. Viral agents, including influenza, are recognized as potential triggers through immune-mediated mechanisms. This report aims to highlight a pediatric case of severe inaugural T1DM triggered by influenza A infection, emphasizing the diagnostic and therapeutic challenges associated with this presentation. **Case Report:** A 6-year-and-9-month-old female was admitted for marked weight loss (10 kg over six months), asthenia, dysphagia, nausea, and vomiting. On presentation, she exhibited severe hyperglycemia (473 mg/dL), metabolic acidosis, and ketonuria. Laboratory

investigations confirmed newly diagnosed T1DM (HbA1c 14.5%, glutamic acid decarboxylase antibodies [GADA] 196 IU/mL, low C-peptide 1.02 ng/mL), complicated by severe DKA. Concomitant infection with influenza A virus was identified. The patient received intensive care management, including fluid resuscitation, electrolyte correction, and continuous intravenous insulin infusion, followed by transition to a basal-bolus insulin regimen using rapid- and long-acting analogs. Clinical evolution was favorable, with resolution of ketoacidosis and stabilization of glycemic control. **Discussions** : This case illustrates a severe presentation of inaugural T1DM likely precipitated by acute viral infection. Compared with typical presentations, the degree of metabolic decompensation was notable. Influenza A may act as a trigger through immune-mediated mechanisms leading to β -cell destruction. Additionally, management was complicated by challenges in insulin dose adjustment and diabetes education in the context of limited family health literacy, underscoring the importance of individualized educational strategies. Early recognition and aggressive management are critical to reduce morbidity and mortality. **Conclusions**: Type 1 diabetes mellitus in children is a chronic condition that can be triggered by various environmental factors, including viral infections. This case illustrates influenza A as a potential trigger of severe inaugural T1DM presenting with DKA. Early recognition, prompt metabolic stabilization, and tailored family education are essential for improving outcomes.

Keywords: Type 1 diabetes mellitus, Diabetic ketoacidosis, Influenza A infection, Insulin therapy

SEVERE POSTPARTUM ENDOMYOMETRITIS AND SEPTIC SHOCK IN A 30-YEAR-OLD PATIENT: A CASE REPORT

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Introduction: Postpartum (PP) sepsis is one of the most severe forms of maternal morbidity. PP endomyometritis, especially in the setting of intrauterine fetal demise, can rapidly progress to septic shock and multi-organ failure. Early surgical and pharmacological intervention is critical. We report an unusual case of uterine hypertonus with life-threatening abdominal sepsis managed by a multidisciplinary team. **Case Report:** A 30-year-old woman was admitted for an emergency cesarean section due to a uterine hypertonus and antepartum intrauterine fetal demise. During the cesarean section, the uterus appeared putrid and fetid, and the amniotic fluid was brown and malodorous. The patient was admitted to the ICU directly and developed septic shock with hypotension (Blood pressure 70/50 mmHg) and anuria, requiring vasopressors support. On the day of admission, laboratory findings showed markedly elevated CRP (300 mg/L), thrombocytopenia (96,000/ μ L) and acute kidney injury (Creatinine 1.7 mg/dL). Despite broad-spectrum antibiotic treatment and hemodynamic stabilization, a follow-up CT scan on postoperative day 6 revealed severe persistent endomyometritis with pyometra, hepatomegaly, ascites, and bilateral pleuropneumonia. Total hysterectomy with left adnexectomy was performed. Cultures obtained from the surgical wound grew the bacteria *Acinetobacter baumannii* (CR/XDR), which was treated with Colistin. Psychiatric and psychological consults were required to manage a situational depressive episode during recovery. **Discussions** : This case is an important example of timely conversion to radical surgery in the setting of failed source control during conservative management. Our patient survived because of early source control. A strain of multi-drug resistant *Acinetobacter baumannii* has been identified, highlighting the need for careful microbiological screening in the ICU to guide appropriate antibiotic therapy. **Conclusions:** Multidisciplinary management involving obstetricians, critical care specialists, and infectious disease specialists, together with radical surgery (hysterectomy), remains the standard of care in refractory postpartum sepsis in high-risk population. The patient was discharged in stable condition and was advised to maintain physical rest and continue psychological and psychiatric follow-up.

Keywords: postpartum sepsis, hysterectomy, septic shock

SEVERE PROGRESSIVE POLYNEUROPATHY IN A PATIENT WITH LONG-STANDING TYPE 1 DIABETES MELLITUS: A DIAGNOSTIC CHALLENGE

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Introduction: Diabetic polyneuropathy (DPN) is the most common chronic microvascular complication of diabetes

mellitus. Although long disease duration and suboptimal glycemic control are established risk factors, atypical or rapidly progressive presentations require further evaluation to exclude alternative etiologies. **Case Report:** We present the case of a 46-year-old man with a 27-year history of type 1 diabetes mellitus, treated with a basal-bolus insulin regimen and monitored with a Dexcom One Plus continuous glucose monitoring system. He had long-standing suboptimal glycemic control and multiple chronic complications. The patient was admitted for marked glycemic variability and rapidly progressive lower-limb symptoms, including pain, muscle cramps, numbness, and significant functional impairment. Electromyography confirmed severe, predominantly axonal sensorimotor polyneuropathy. The patient received alpha-lipoic acid and neurotrophic therapy, with only mild clinical improvement, further supporting the chronic and advanced nature of the neuropathy. Continuous glucose monitoring over the most recent 30 days showed sustained hyperglycemia, with mean glucose 208 mg/dL, time in range 34%, and time above range 66%. By contrast, HbA1c over the preceding three months was 6.9%, suggesting apparently acceptable recent glycemic control. Together, these findings indicate that HbA1c alone did not fully capture the patient's glycemic profile. During hospitalization, repeated glucose profiles documented recurrent hypoglycemic episodes and postprandial hyperglycemia, prompting insulin dose adjustments, with partial short-term improvement in glycemic control. Clinical examination also revealed trophic skin changes and diminished lower-limb pulses. Previous ankle-brachial index assessment showed bilateral medial arterial calcification, while the clinical findings remained suggestive of associated vascular disease. Given the patient's relatively young age and unusually rapid clinical deterioration, an extensive diagnostic workup was performed to exclude alternative etiologies. Metabolic causes, including vitamin B12 and folate deficiency, autoimmune disease, monoclonal gammopathy, infectious causes such as Lyme disease, HIV, and hepatitis B and C were excluded. Rare etiologies, including Fabry disease and neurosarcoidosis, were likewise negative. **Discussions :** No alternative etiology was identified. The overall picture is most consistent with advanced diabetic neuropathy due to long-standing suboptimal glycemic control, leading to cumulative and likely irreversible nerve injury. Clinical findings were also suggestive of peripheral arterial disease, which likely contributed to the accelerated progression of neuropathy. The limited response to etiopathogenic therapy further supports the advanced stage of the disease at presentation. **Conclusions:** This case underscores the importance of a differential diagnostic approach in patients with atypical forms of neuropathy, to avoid overlooking potentially treatable causes and to ensure accurate diagnosis.

Keywords: diabetic polyneuropathy, type 1 diabetes mellitus, sensorimotor polyneuropathy., differential diagnosis

SEVERE ULCERATIVE COLITIS WITH NORMAL FECAL CALPROTECTIN: A DIAGNOSTIC PITFALL

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Introduction: Ulcerative colitis is a chronic inflammatory bowel disease, characterized by persistent, relapsing colonic inflammation and symptoms such as abdominal pain, rectal bleeding and prolonged diarrhea. It is associated with reduced quality of life and an increased risk of colorectal cancer. Fecal calprotectin is a widely used, non-invasive biomarker that reflects intestinal inflammation and disease activity. However, discrepancies between its levels and disease severity may occur, representing a potential and clinically relevant diagnostic pitfall. **Case Report:** A 47-year-old male patient presented to our hospital with mild, intermittent abdominal pain, altered bowel habits and low-volume diarrheal stools, predominantly in the morning, associated with urgency. He also reported a history of alternating loose and normal stools, without prior comprehensive medical evaluation. Initial laboratory investigations revealed a fecal calprotectin within normal limits (42 µg/g). On admission, the patient was in good general condition, hemodynamically stable, with a soft abdomen, normal bowel sounds and a mild tenderness in the left flank on superficial palpation. Laboratory results showed a normal fecal calprotectin level (2.83 µg/g) and a slightly elevated C-reactive protein (0.66 mg/dL). Microbiological stool examinations were negative. Despite these findings, endoscopic evaluation revealed severe disease. Colonoscopy illustrated severe inflammatory modifications of the sigmoid colon, including mucosal edema, ulcerations, fibrin deposits, inflammatory pseudopolyps, all suggestive of ulcerative colitis (Mayo score 3). Histopathological examination confirmed this diagnosis, showing features consistent with active ulcerative colitis (Nancy grade IV). The patient was initiated on treatment with oral and topical mesalazine and corticosteroid therapy, in accordance with current recommendations for induction of remission in moderate-to-severe ulcerative colitis. **Discussions :** Fecal calprotectin is commonly used as a reliable, non-invasive biomarker, demonstrating good correlation with endoscopic and histological disease activity in ulcerative colitis. It is also accurate in monitoring and prediction of

relapse. In this case, despite persistently normal fecal calprotectin, further investigations revealed advanced disease. This discordance highlights a potential misdiagnosis and underscores the importance of not relying solely on biomarkers, but integrating clinical and endoscopic findings in everyday clinical practice. Moreover, from a clinical perspective, the patient presented with non-specific symptoms, which could easily be misinterpreted as functional bowel disease, potentially delaying appropriate management. **Conclusions:** This case highlights potential discrepancy between fecal calprotectin levels and severity in ulcerative colitis, emphasizing that normal values do not exclude active or even advanced disease. It contributes to existing evidence regarding limitations of non-invasive biomarkers and reinforces the need for a comprehensive, integrated diagnostic approach in clinical practice.

Keywords: Ulcerative colitis, Fecal calprotectin, Biomarkers, Diagnostic pitfall

SHATTERED SOCKET: MOTORCYCLE TRAUMA AND ACETABULAR RECONSTRUCTION

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Introduction: Acetabular fractures (AF) are complex intra-articular injuries occurring most often in young male patients involved in high-energy trauma. Posterior wall fractures represent the most common pattern of acetabular fractures. They require anatomical surgical reduction to obtain satisfactory results and avoid complications. This case was treated with open reduction and internal fixation (ORIF) that represents the standard treatment for displaced acetabular fractures. **Case Report:** A 32-year-old male patient was rushed to the emergency room following trauma from a motorcyclist accident. Upon arrival at the hospital, the patient was conscious, hemodynamically, and respiratorily stable. Radiographic evaluation, including X-ray and computed tomography, confirmed a comminuted fracture of the posterior wall of the right acetabulum, classified as AO 62-A1. After preoperative preparation, surgery was performed with open reduction, Kocher-Langenbeck approach, and osteosynthesis with a plate and reconstruction screws. At admission, analgesic treatment, fluid-electrolyte balance, and thromboprophylaxis were administered. Postoperatively and until discharge, the patient's general condition was stable: afebrile, hemodynamically and respiratorily stable, normal urinary output and intestinal peristalsis were present. The surgical wound was regularly cleaned with sterile dressings, and the healing process was observed. The patient was discharged in improved general condition, following the specialist's recommendations.

Discussions : The quality of reduction of an acetabular fracture is a critical factor in achieving satisfactory surgical outcomes in order to avoid post-traumatic osteoarthritis, avascular necrosis, and the potential need for total hip arthroplasty, while preserving long-term hip function. An accurate diagnosis is essential for defining fracture morphology and guiding surgical planning. In this case, an open reduction and internal fixation through the Kocher-Langenbeck approach allowed a proper visualization of the posterior wall and restoration of articular congruity. However, a comminuted fracture represents a surgical challenge due to the difficulty of restoring articular congruity. **Conclusions:** The main clinical takeaway is that early identification of the fracture pattern and prompt reduction of the dislocated hip are important to minimize complications and preserve joint function. Surgical treatment through ORIF is crucial in displaced or comminuted fractures, as it restores the anatomical congruity and stability of the hip joint, which is necessary for optimal functional recovery. Clinicians should maintain a high level of suspicion for associated acetabular injuries in patients involved in high-energy trauma and ensure timely imaging, surgical evaluation, and structured postoperative rehabilitation to achieve favorable outcomes.

Keywords: open reduction internal fixation, posterior acetabular wall fracture, Kocher-Langenbeck approach

SILENT PROGRESSION TO OBSTRUCTIVE RENAL FAILURE: THE COST OF DELAYED MANAGEMENT IN GIANT UTERINE LEIOMYOMATOSIS

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Introduction: With a cumulative incidence of up to 80% by the fifth decade of life, uterine leiomyoma represents the most frequent benign gynecological tumor. These monoclonal proliferations, derived from smooth muscle cells of the myometrium, have a growth pattern that is strongly influenced by circulating estrogen levels. Although often considered a benign and frequently asymptomatic condition, large tumor volumes may produce a significant pelvic "mass effect." One uncommon but clinically relevant complication is extrinsic compression of the ureters, which

can lead to hydronephrosis and, in advanced cases, obstructive renal failure. The present case illustrates the progression toward renal impairment in the context of delayed surgical treatment, highlighting the importance of timely intervention in extensive fibromatosis. **Case Report:** A 53-year-old patient presented with progressive abdominal distension and persistent pelvic pain. Her medical history was significant for uterine leiomyomatosis and grade III arterial hypertension. Paraclinical evaluation revealed impaired left renal function secondary to extrinsic ureteral compression caused by the tumor mass. In order to decompress the upper urinary tract and stabilize renal function, a left ureteral stent was inserted. During surgery, a markedly enlarged polyfibromatous uterus along with extensive parieto-epiploic adhesions were identified. Adhesiolysis followed by total hysterectomy with bilateral salpingo-oophorectomy was performed. Postoperative care included Cefazolin prophylaxis, volemic support, and analgesic therapy. The postoperative evolution was favorable, with restoration of spontaneous diuresis and normal wound healing. **Discussions :** The particularity of this case consists in the silent evolution of a common benign condition toward a severe visceral complication. Although renal involvement in uterine leiomyoma is uncommon, the literature indicates that large tumor masses may exert significant compressive effects on the pelvic ureters. Preoperative ureteral stenting played an essential role in decompressing the pyelocaliceal system and stabilizing renal function; however, definitive treatment required surgical removal of the compressive mass. The delay in surgical management contributed to increased intraoperative difficulty due to the presence of extensive adhesions, underlining the importance of an early and proactive therapeutic approach in cases of giant polyfibromatosis in order to prevent irreversible renal damage. **Conclusions:** This case underscores the importance of proactive management in giant leiomyomatosis, where early intervention is essential to prevent severe compressive complications. Delaying surgical treatment can generate complex and potentially irreversible secondary pathologies, transforming routine gynecological management into a multidisciplinary emergency. Monitoring renal function is imperative in the presence of voluminous uterine masses to ensure prompt therapeutic resolution.

Keywords: uterine leiomyoma, obstructive renal failure, ureteral stenting, multidisciplinary emergency

SINGLE-STAGE RECONSTRUCTION OF A GIANT SCALP SQUAMOUS CELL CARCINOMA IN A PATIENT WITH POLYCYTHEMIA VERA: A MULTIDISCIPLINARY APPROACH

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Introduction: Giant cutaneous squamous cell carcinomas (cSCC) of the scalp present major extirpative and reconstructive challenges due to the inelastic nature of cranial tissue and the frequent exposure of calvarial bone. These surgical challenges are exponentially exacerbated in patients with Polycythemia Vera (PV), a chronic myeloproliferative neoplasm associated with profound thrombohemorrhagic risks and an iatrogenic susceptibility to aggressive non-melanoma skin cancers secondary to long-term cytoreductive therapies. To evaluate the efficacy, hemodynamic safety, and oncological outcomes of a single-stage reconstructive algorithm utilizing two local rotation flaps combined with a split-thickness skin graft (STSG) following the wide local excision of a giant cSCC in a high-risk geriatric patient with PV and extensive cardiovascular comorbidities. **Case Report:** A 74-year-old male presenting with PV, ischemic heart disease, hypertension, and diabetes required surgical intervention for a giant, ulcerated, incompletely excised right temporo-parietal cSCC. Wide local excision was performed under general anesthesia. Immediate intraoperative oncological clearance was verified using rapid intraoperative histopathological examination - frozen section examination from seven distinct vectors, including the temporal, frontal, occipital, and deep parietal margins. The resulting massive full-thickness cranial defect was reconstructed using two large rotation flaps mobilized from the left temporo-parietal and right occipital regions. The secondary donor defect was covered with an STSG harvested from the anterior thigh. Crucially, a proximal "dog-ear" deformity was intentionally preserved at the temporo-parietal flap's pivot point to prevent mechanical torsion and ensure uninterrupted pedicle vascularity, with revision planned for a secondary stage. **Discussions :** Intraoperative frozen sections successfully confirmed tumor-free margins across all sampled areas. Meticulous perioperative optimization prevented any thromboembolic or hemorrhagic complications, despite the severe hyperviscosity risks inherent to PV. Postoperatively, the rotation flaps remained completely viable, exhibiting a robust three-second capillary refill time with no clinical signs of venous congestion or arterial insufficiency. The STSG demonstrated complete (100%) final integration over the secondary defect. The patient was safely discharged with a structured outpatient protocol for wound management. **Conclusions:** The synergistic application of wide local excision guided by rigorous rapid intraoperative histopathological examination - frozen section examination and immediate single-stage reconstruction via two rotation flaps with an STSG represents a highly reliable, definitive surgical paradigm for giant scalp defects. The intentional preservation of a dog-ear deformity

acts as a critical hemodynamic safeguard for flap viability. Furthermore, meticulous multidisciplinary perioperative optimization is indispensable for mitigating the profound thrombohemorrhagic risks inherent to Polycythemia Vera.

Keywords: Scalp reconstruction, Squamous cell carcinoma, Rotation flaps, Rapid intraoperative histopathological examination

SMARTWATCH – SMART CHOICE: EARLY DETECTION OF ASYMPTOMATIC ATRIAL FIBRILLATION USING WEARABLE DEVICES.

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Introduction: Atrial fibrillation (AF) is the most common sustained cardiac arrhythmia and represents a major risk factor for thromboembolic events, particularly stroke. Although often symptomatic, AF may also occur in the absence of overt clinical manifestations, leading to delayed diagnosis and an increased risk of severe complications. The development of smartwatches equipped with electrocardiogram (ECG) functionality offers new opportunities for the early detection of silent arrhythmias. **Case Report:** We report the case of a 47-year-old male, a former military professional with a physically active lifestyle, who had participated in multiple military operational theaters, and who denied typical arrhythmic symptoms such as palpitations, syncope, or chest pain, reporting only mild dyspnea during moderate exertion. Following the use of a smartwatch with integrated ECG capability, the patient received notifications of an irregular rhythm suggestive of AF. Upon hospital admission, a standard 12-lead ECG confirmed atrial fibrillation with rapid ventricular response. Transthoracic echocardiography revealed global left ventricular dilation with severely reduced ejection fraction (25%), atrial enlargement, and mild mitral and tricuspid regurgitation. Coronary angiography excluded an ischemic etiology, showing no significant lesions in the epicardial coronary arteries. Transesophageal echocardiography demonstrated a thrombus-free left atrial appendage, allowing safe performance of cardioversion. An initial attempt at electrical cardioversion failed to restore sinus rhythm. The patient is currently undergoing amiodarone loading as part of a rhythm control strategy, with a plan for repeat electrical cardioversion. **Discussions :** The concept of "smartwatch - smart choice" illustrates how modern technology helps in the early detection of arrhythmias and guides patients toward specialized medical evaluation. This case underscores the clinical utility of smartwatch-based ECG monitoring in identifying previously unrecognized atrial fibrillation. In minimally symptomatic or asymptomatic individuals, such devices may serve as early warning systems, prompting timely medical intervention. Recent technological progress has led to the development of smartwatches equipped with ECG capabilities that have been clinically validated and authorized for medical use. Notably, devices such as Apple Watch and Samsung Galaxy Watch have obtained regulatory approval for ECG recording and the detection of atrial fibrillation. **Conclusions:** Smartwatches with ECG capabilities represent a valuable tool for the early detection of asymptomatic atrial fibrillation and the prevention of severe complications such as thromboembolism. In the present case, their use contributed not only to the diagnosis of arrhythmia but also to the identification of severe ventricular dysfunction, highlighting their potential role in preventing heart failure progression.

Keywords: Smartwatch, Atrial Fibrillation, Early detection

SOMATIC COMORBIDITIES OF THE CHRONIC PSYCHIATRIC PATIENT

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Introduction: Recent clinical studies highlight that psychiatric diagnoses and behavioral disorders represent approximately 45% of the total comorbidity picture among the studied population, patients with schizophrenia frequently facing pathologies that precede or succeed the primary diagnosis, such as hypothyroidism, obesity or chronic respiratory conditions. Schizophrenia is a severe neuropsychiatric disorder, defined by persistent symptoms and cognitive deficits. According to the diathesis-stress neurobiological model, symptomatology is triggered by the association between a preexisting genetic vulnerability and psychosocial stress. Associated symptoms can be positive, reflecting the presence of exaggerated perceptions, such as hallucinations and delusions, while negative symptoms include affective flattening, social withdrawal, anhedonia and apathy. **Case Report:** We present the case of a 54-year-old patient, with a family history marked by neoplasms and

neurodegenerative conditions. The sudden death of the father, occurring when the patient was 18 years old, functioned as a triggering factor for the first psychotic episode, the evolution being subsequently exacerbated at 24 years old by a severe postnatal depression. Following multiple hospitalizations, the patient presented complex visual hallucinations, chronic delusional ideas, affective detachment and psychomotor restlessness. Due to the chronicity of the disease, medico-social institutionalization was required, for. Although the mental state improved, multiple somatic conditions were added: type II diabetes mellitus, hypothyroidism, grade II obesity, asthmiform bronchitis, arterial hypertension and bilateral gonarthrosis. Dominated by positive symptoms, the patient manifests a constant need for attention-seeking, affective lability and a compulsive eating behavior against a background of psychomotor agitation. **Discussions:** This case emphasizes the profound interdependence between mental and somatic pathology, highlighting the difficulty of clinical management in the context of deficient coping mechanisms, such as chronic smoking which worsens the physical state. The patient is trapped in a biopsychosocial vicious circle: psychomotor agitation determines compulsive eating, which worsens diabetes and obesity, leading to decreased mobility through gonarthrosis and, finally, to social isolation. However, the prognosis is favorably influenced by the multidisciplinary approach. Mental symptomatology is improved through occupational therapy, music therapy and drawing, methods that favor regaining autonomy, while somatic diseases are controlled through kinesitherapy and chronic psychiatric treatment with antipsychotics. **Conclusions:** The management of chronic schizophrenia requires a multidisciplinary approach, integrating occupational therapy and the rigorous control of somatic comorbidities to break the biopsychosocial vicious circle and to improve the quality of life and autonomy of the patient.

Keywords: Schizophrenia, Somatic, Coping, Institutionalization

SOMATIC PROFILING TO GERMLINE DISCOVERY REVEALING LI-FRAUMENI SYNDROME IN METASTATIC COLORECTAL CANCER

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Introduction: Li-Fraumeni Syndrome is a rare, autosomal dominant cancer predisposition syndrome caused by germline mutations in the TP53 tumor suppressor gene. While the phenotypic expression is diverse, five primary cancer sites account for the majority of Li-Fraumeni-related tumors: breast cancer, osteosarcomas, soft-tissue sarcomas, brain tumors, and adrenocortical carcinomas. Despite its well-defined clinical criteria, this syndrome often remains underdiagnosed without genetic testing. **Case Report:** We report the case of a 54-year-old woman diagnosed with poorly differentiated anal canal adenocarcinoma with a neuroendocrine component. Despite prior chemotherapy and stereotactic body radiotherapy, the disease showed increasing metastatic lesions in the liver, lungs, and urinary bladder. In February 2025, a comprehensive somatic molecular testing (PrimeDx) was performed on the tumor. The analysis identified a full RAS/BRAF wild-type status providing therapeutic indications for targeted treatments such as Cetuximab or Panitumumab. It also revealed significant HER2 amplification, Trastuzumab treatment being initiated. The most critical discovery was the detection of the TP53 c.173delC mutation with a high variant allele frequency (VAF) of 59.6%. Because the mutation was present in more than half of the tumor cells, germline testing was performed using the patient's saliva, which confirmed the constitutional defect and established the definitive diagnosis of Li-Fraumeni Syndrome. **Discussions:** The patient's family history, involving her mother deceased at age 34 from ovarian cancer and her brother at age 19 from mantle cell lymphoma, illustrates the tragic nature of this hereditary syndrome. This definitive diagnosis now enables genetic counseling, screening, and oncological surveillance for the remaining members of her family. Studies show that approximately 50% of individuals with Li-Fraumeni Syndrome develop cancer before the age of 40. This case is unique due to the primary tumor diagnosis at age 53, falling outside the classic expectation of early-onset cancer diagnosis. **Conclusions:** This case is significant as it illustrates the incidental discovery of Li-Fraumeni Syndrome during routine somatic profiling for metastatic colorectal cancer, highlighting the role of comprehensive genetic testing in identifying hereditary risks.

Keywords: VAF, Li-Fraumeni Syndrome, TP53 Mutation, HER2 Amplification

SPURIOUS LIFE-THREATENING ANEMIA DUE TO BLOOD SAMPLE DILUTION: A CASE REPORT

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Introduction: Complete Blood Counts (CBCs) are among the most cost-effective laboratory tests used to monitor patients, irregardless of the initial pathology. Ensuring proper blood sample collection is therefore essential for obtaining accurate and clinically relevant results. **Case Report:** A 72-year-old female patient was transferred to the Obstetrics and Gynecology Department from Gastroenterology, having been diagnosed with stenosing antropyloroduodenal tumor invading the liver and gallbladder. Furthermore, she presented with a left ovarian tumor, peritoneal carcinomatosis and ascites. An initial CBC was performed on the day of transfer, showing a red blood cell count (RBC) of $3.62 \times 10^{12}/L$, hemoglobin (Hb) level of 8.8 g/dL and a hematocrit (Hct) of 27.2%. Three days later, the ascitic liquid was removed surgically using needle aspiration and sent for cytological analysis. No immediate post-operative complications arose and the patient was sent to ICU Obstetrics and Gynecology. A second CBC is performed, this time showing an RBC of $0.46 \times 10^{12}/L$, Hb level of 1.1 g/dL and a Hct of 3.5%. This would indicate a severely low anemia that is life-incompatible, despite the patient being hemodynamically stable. The blood sample was thus deemed unreliable and another blood sample was collected a day later showing an RBC of $4.12 \times 10^{12}/L$, Hb level of 10.8 g/dL and a Hct of 32.6%. Two days later, the patient developed cardiac arrest and, despite resuscitation efforts, was pronounced deceased. **Discussions :** A hallmark sign of preanalytical error is a dramatic change in laboratory parameters within hours or days that is inconsistent with the patient's clinical status. In cases of uniformly decreased hematological values, sample dilution should be suspected. This most commonly consists of collecting venous blood from a line that is concurrently used for intravenous fluid administration. Retrospective analysis in this case confirmed that the erroneous sample had been contaminated with IV fluids. **Conclusions:** Given the far-reaching consequences of improper blood sample collection, such as a delay in diagnosing, treating, or causing an unnecessary cascade of subsequent tests, strict adherence to standardized blood collection protocols is essential to ensure accurate laboratory results and optimal patient care.

Keywords: complete blood cell count, blood collection, preanalytical error, sample dilution

STABILIZING THE UNSTABLE: MULTIMODAL MANAGEMENT OF RELAPSED MANTEL CELL LYMPHOMA

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Introduction: Mantle cell lymphoma is an aggressive subtype of B-cell lymphoma, characterized by cyclin D1 over-expression. Patients with this condition tend to have a high relapse rate, therefore management often requires multimodal therapeutic strategies, particularly when complicated by severe systemic events. **Case Report:** We describe a 54-year-old female patient who was diagnosed with mantle cell lymphoma (MCL) in 2013. Several years later, in 2019, disease relapse occurred with development of bulky mediastinal lymphadenopathy measuring up to 15 cm, associated with progressive dyspnea, dysphagia and significant weight loss. Lactate dehydrogenase levels were elevated. Immunochemical analysis confirmed CD20+, cyclin D1+ B-cell lymphoma. Initial treatment with CHOP followed by R-CHOP achieved partial remission. In 2023, symptoms reoccured, therefore targeted therapy with Ibrutinib was initiated but discontinued due to suspected worsening of cardiac function and hemodynamic instability. Venetoclax was also later attempted, with limited clinical benefit and poor tolerance. The clinical course was complicated by inferior vena cava thrombosis, anemia and multiple severe infections. The patient developed septic shock requiring intensive care admission and vasopressor support. Given the disease progression and treatment intolerance, R-CHOP was reintroduced. Following two cycles, the patient presented with clinical stabilization, improved general condition and laboratory parameters. The patient completed eight cycles and entered a follow-up phase with no significant residual adenopathy. **Discussions :** Despite initial responsiveness to therapy, most patients experience disease progression requiring multiple lines of therapeutic approaches. In this case, the patient developed life-threatening systemic complications, highlighting the immunosuppressive state associated with relapsed mantle cell lymphoma and its treatment. BTK inhibitors and

BCL-2 inhibitors, like Ibrutinib and Venetoclax, have significantly improved outcomes in relapsed disease. Yet the discontinuation of Ibrutinib due to suspected cardiac instability and the poor tolerance of Venetoclax, illustrate the complexity of managing fragile patients with advanced hematologic malignancies. The reintroduction of R-CHOP resulted in meaningful clinical and radiological improvement, demonstrating that conventional chemotherapy may still retain efficacy even after targeted therapy failure. **Conclusions:** This case highlights the aggressive and relapsing nature of mantle cell lymphoma and the challenges associated with managing advanced disease complicated by systemic events. Despite treatment intolerance and critical illness, individualized therapeutic adaptation can result in meaningful disease control.

Keywords: Mantle cell lymphoma, Relapsed lymphoma, R-CHOP, Treatment intolerance

STENOTIC HEMORRHAGIC BULBAR ULCER MIMICKING GASTRIC VOLVULUS: A COMPLEX CASE MANAGED CONSERVATIVELY

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Introduction: Duodenal ulcer is a chronic mucosal lesion associated with inflammation and risk of severe complications, including upper gastrointestinal bleeding, perforation and pyloro-duodenal stenosis. Rarely, duodenal stenosis can cause significant gastric distension and rotation, mimicking gastric volvulus. Aerobilia may be present without dilation of the main bile ducts. This case is remarkable due to the association of these unusual features, highlighting the importance of integrated clinical and imaging evaluation in conservative management.

Case Report: A 69-year-old female with a history of a perforated duodenal ulcer operated on in 2022 presented with nausea, recurrent vomiting for four days and anorexia. Laboratory tests showed leukocytosis (18,860/ μ L) with 81% neutrophils, haemoglobin 18 g/dL, creatinine 1.43 mg/dL, urea 98-102 mg/dL and hypokalemia (3.17 mmol/L). Abdominopelvic CT revealed severe gastric distension, long-axis rotation of the mesentery and aerobilia, suggestive of gastric volvulus and possible bilio-digestive fistula, without pneumoperitoneum. Nasogastric decompression yielded 3000 mL of stagnant and bilious content. Upper gastrointestinal endoscopy (UGE) showed a hemorrhagic stenotic bulbar ulcer (Forrest IIB), impassable endoscopically, oesophageal ulcers Forrest III and Los Angeles grade D reflux esophagitis. She received intravenous pantoprazole, fasting, antiemetic and antispasmodic therapy, with correction of dehydration. Endoscopic reevaluation after several days showed a persistent stenotic bulbar ulcer (Forrest III) covered with fibrin and a large gastric foreign body (stone pit), which was removed endoscopically. Contrast-enhanced CT confirmed near-complete D1-D2 stenosis with filiform passage of contrast. The patient resumed a liquid-to-semi-solid diet without symptom recurrence and was discharged stable, with recommendations for endoscopic follow-up. **Discussions :** This case is noteworthy due to the rare combination of stenotic hemorrhagic bulbar ulcer, severe gastric distension mimicking volvulus without bile duct dilation. The presence of a large stone pit worsened gastric stasis and symptoms. These features complicate diagnosis and emphasise the importance of integrated clinical, endoscopic and imaging assessment. **Conclusions:** A stenotic duodenal ulcer can cause severe gastric emptying disorders and mimic acute complications such as gastric volvulus. Careful conservative management, guided by endoscopic and imaging evaluation, can be safe and effective in the absence of ischemia, perforation or hemodynamic instability. This case contributes valuable insights into the conservative management of rare duodenal ulcer complications.

Keywords: duodenal ulcer, foreign body, aerobilia, bulbar stenosis

STEROID-REFRACTORY ULCERATIVE COLITIS DUE TO CYTOMEGALOVIRUS SUPERINFECTION

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Introduction: Ulcerative colitis is a chronic inflammatory bowel disease characterized by periods of remission interspersed with inflammatory flares of the colonic mucosa. Managing moderate-to-severe cases becomes a significant clinical challenge when symptoms become refractory to standard corticosteroid therapy, necessitating a rigorous investigation of superimposed exacerbating factors, such as opportunistic infectious agents. **Case Report:**

We report the case of a 43-year-old male with a two-year history of ulcerative colitis, previously maintained on Mesalamine 3g/day, who presented with a severe flare-up characterized by 6-7 bloody stools per day. Laboratory findings revealed secondary anemia (Hgb 10.5 g/dL), systemic inflammation (CRP 20 mg/dL, Fibrinogen 567 mg/dL), and a highly elevated fecal calprotectin level of 2400 µg/g. Despite the initiation of intensive corticosteroid therapy (intravenous Hydrocortisone followed by oral Prednisone 40 mg/day) after excluding *Clostridium difficile* and other common pathogens, the patient's condition failed to improve. Subsequent colonoscopy showed continuous mucosal inflammation extending to the hepatic flexure, while histopathological analysis confirmed the presence of Cytomegalovirus (CMV) inclusions. Following the cessation of corticosteroids and the initiation of antiviral therapy with Valganciclovir, the patient achieved complete symptomatic resolution. **Discussions** : The uniqueness of this case lies in identifying CMV infection as the primary driver of steroid resistance, transforming a routine flare into a complex clinical scenario. The rapid therapeutic success following antiviral intervention highlights the necessity of early screening for opportunistic etiologies in refractory IBD cases, thereby preventing the risks associated with prolonged, ineffective immunosuppression. **Conclusions**: In these type of cases where corticosteroid therapy proves ineffective, the next immediate step should be endoscopic reassessment with histopathological evaluation. To improve patient outcomes, this type of infection should be monitored regularly so that antiviral treatment can be initiated as early as possible.

Keywords: Ulcerative colitis, Cytomegalovirus, anemia, calprotectin

STROKE-ASSOCIATING ACUTE LIMB ISCHEMIA DUE TO THE RUPTURE OF A HYDATID CYST

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Introduction: Echinococcus is a zoonotic infection resulting from cestode parasites of the genus echinococcus (taeniidae family), the disease in humans being caused by the development of the larval stage which leads to the formation of the hydatid cyst. From an epidemiological point of view, echinococcus is a public health problem in endemic areas. Clinical features can vary and depend on affected organ, size and location of the cyst, but also on possible complications such as cyst rupture and the dissemination of protoscoleces. **Case Report:** We report the case of a 25 year old who presented at the emergency room accusing sudden pain in the right upper limb associated with signs of acute ischemia. The onset of the symptoms was 24 hours before admission and was associated with severe occipital headache. On clinical examination signs like facial edema, rash, and dyspnea were observed which were suggestive of an allergic reaction. Neurological evaluation demonstrated right homonymous hemianopsia. The patient's personal history revealed a brachio-brachial bypass performed previously following a vascular trauma. The laboratory tests showed elevated inflammatory markers as well as eosinophilia. Brain imaging investigations confirmed the presence of an ischemic stroke in the left occipital lobe. On the thoracic CT scan, multiple mediastinal and pericardial cysts were identified which raised suspicion of hydatid disease. To treat the acute ischemia, surgical embolectomy was carried out. Histopathological examination revealed membrane fragments characteristic of hydatid cyst, confirming the embolic origin. Postoperative evolution was favorable, with restoration of arterial flow and improvement of neurological symptoms. **Discussions** : Rupture of the hydatid cyst is a rare complication, but significant because its material can disseminate into the systemic circulation. Membrane fragments can determine acute ischemia in a variety of organs, embolism usually reported in the lower limbs. The coexistence of a cerebral embolism and an arterial occlusion in the upper limb is unusual. Allergic manifestation associated with acute vascular symptoms can indicate cyst rupture and rapid identification of the etiology is essential for the appropriate treatment, including surgical management and antiparasitic therapy. **Conclusions:** In the differential diagnosis, considering rare etiologies of acute ischemic events is important and this case highlights this aspect. Correlation between systemic signs, imaging and histopathological investigations allows early diagnosis and appropriate treatment, improving patient outcomes.

Keywords: Hydatid Disease, Acute Limb Ischemia, Ischemic Stroke, Echinococcosis

STRUCTURAL MICROFAILURE AND DELAMINATION OF AN ARTERIOVENOUS GRAFT FOLLOWING REPEATED CANNULATION FOR HEMODIALYSIS: A CASE REPORT

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Introduction: When autologous arteriovenous fistula (AVF) creation is not feasible, the European Society for Vascular Surgery (ESVS) guidelines recommend arteriovenous graft (AVG) as the second option for vascular access in hemodialysis. However, this approach carries a higher risk of iatrogenic complications and an increased incidence of thrombosis. **Case Report:** We report the case of a 57-year-old female with end-stage kidney disease who presented to the Vascular Surgery Department with prolonged bleeding at the puncture site and a recently developed hematoma in the brachial region along the course of a left brachiocephalic AVG. Three years prior, a left brachiocephalic arteriovenous fistula was created in another center. During the first year, the fistula developed mild aneurysmal dilatation, which progressed during the second year, requiring surgical revision with exclusion of the aneurysmal segment and interposition of a 6-mm Venafllo II graft. Following initiation of graft cannulation, prolonged bleeding after puncture and the formation of significant hematomas were noted. Duplex ultrasound examination demonstrated discontinuity of the graft wall associated with a localized pseudoaneurysm. Computed tomography angiography revealed multiple micro-failure points along the entire length of the graft. Surgical intervention was undertaken, consisting of defect repair and rerouting of the outflow from the cephalic arch to the axillary vein, due to the presence of severe stenosis at the level of the cephalic arch. The postoperative course was favorable, with successful resumption of hemodialysis through the arteriovenous graft two weeks after surgery. **Discussions :** Repeated cannulation may potentially trigger graft delamination and structural microfailure. When adhesion between the intermediate and outer layers of the graft is insufficient, needle puncture can create a focal tear, allowing blood to dissect between the layers of the graft wall. Currently, no standardized treatment strategy exists for graft delamination and intramural dissection. **Conclusions:** Repeated cannulation may cause structural damage and delamination of arteriovenous grafts. Early recognition and individualized surgical management are crucial for preserving vascular access function.

Keywords: hemodialysis, vascular access, vascular access, AVG

SUCCESSFUL OCCIPITOCERVICAL RESCUE FUSION IN A CASE OF C1-C2 FRACTURE WITH ANKYLOSING SPONDYLITIS AFTER MULTIPLE IMPLANT FAILURE

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Introduction: The neurosurgical management of combined C1-C2 fractures in the setting of an Ankylosing Spondylitis (AS), rigid spine presents a significant challenge. Traditional short segment osteosynthesis techniques are associated with an elevated risk of failure, including screw loosening, pull-out, and pseudoarthrosis. We present a case with recurrent implant dysfunction needing multiple surgical interventions. **Case Report:** A 59 years old patient known with Ankylosing Spondylitis when he suffered a trauma to the cervical spine, developing intense pain but no other sign or symptoms. Computed Tomography (CT) was performed, showing a C1 Jefferson type 3 and C2 type 3 fracture. In August 2023, the patient underwent neurosurgical intervention, a posterior cervical fusion (Harms) was performed with 4 transpedicular polyaxial screws and 2 longitudinal connection bars plus epidural drain. 5 days after the procedure, the patient is discharged, considering the favourable evolution. In December 2023, the patient was checked again, underwent a CT scan, and revealed displacement of the left C2 screw. The patient went to surgery again, this time the C2 screw was repositioned and the osteosynthesis was done with another screw in the left C3 mass and bilateral screw in C4, plus 2 longitudinal bars from C1 to C4. Due to favourable prognosis, the patient was discharged 3 days after the surgery. The patient remains clinically stable until May 2025, when another CT scan demonstrated a fracture with pseudoarthrosis at the base of the odontoid process together with implant dysfunction. To achieve definitive stabilization, a third more extensive surgery was performed, fixing the vertebrae with 2 parallel occipital bars (Medtronic occipital plate), reposition of C2 screws and C1- C3 with 4 connection bars. The patient recovered well from this final intervention. At his most recent follow-up in February 2026, he demonstrated a favourable clinical evolution. **Discussions :** The management of upper

cervical fractures in patients with Ankylosing Spondylitis is surgical challenge. The definitive solution in this case was made by extending the fusion to the occipital bone, sacrificing head rotation but providing immobilization necessary for fracture healing. Although ultimately successful, occipital fixation was not the initial treatment choice in order to preserve cervical mobility and avoid permanent loss of head rotation. **Conclusions:** This case showed us that neurosurgeons must be aware of implant failure especially when treating AS patients with vertebrae trauma. Although less invasive procedures are preferred, ankylosed spine often needs a more aggressive approach, to achieve definitive stabilization.

Keywords: Cervical Fracture, Ankylosis Spondylitis, Implant failure

SUCCESSFUL TREATMENT OF RESISTANT GRANULOMA ANNULARE: A CASE-BASED REPORT ON THE USEFULNESS OF OCCLUSIVE TOPICALS

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Introduction: Granuloma annulare (GA), also known as necrobiotic papulosis, is a cutaneous inflammatory granulomatous disorder of unknown etiology. Although typically asymptomatic, its clinical appearance may cause considerable psychological distress. There is no universally efficient treatment for GA. **Case Report:** We report the case of a 63-year-old female patient that presented to the Dermatology Department with multiple cutaneous lesions located on both upper limbs, refractory to previous treatments. Lesions presented as well defined dark-red erythematous plaques, with an elevated border and annular shape, with a slightly atrophic center. The suspicion of GA was made, and a 6 mm punch biopsy was performed. The histopathological examination identified histocytes around a focus of necrobiosis, multinucleated giant cells are present, a mild perivascular interstitial lymphocytic infiltrate in the surrounding dermis with scattered neutrophils and eosinophils, thus confirming the diagnosis. The patient was started on occlusive high-potency topical steroids and betamethasone injections, with further significant lesion clearance after three months. **Discussions :** Expert guidelines suggest that this approach can be considered a first-line option, as occlusion may improve penetration into the dermis and increase the outcome of lesion resolution compared with non-occluded applications. Evidence from case reports suggests that occluded topical therapy in patients with GA frequently results in notable lesion improvement, although high-quality controlled studies are lacking, and current recommendations are primarily based on clinical experience. **Conclusions:** This case supports the role of occlusive topical corticosteroid therapy as an effective first-line approach in localized granuloma annulare and reinforces the importance of individualized therapeutic strategies when standard topical treatment fails. While current recommendations are largely based on clinical experience and limited evidence, this therapeutic approach demonstrated favorable outcomes in our patient.

Keywords: Granuloma annulare, occlusive topical corticosteroid therapy, cutaneous lesions

SUDDEN FLACCID TETRA PARESIS TRIGGERED BY A MEDULLARY INFARCTION IN A PATIENT WITH AUTOSOMAL DOMINANT POLYCYSTIC KIDNEY DISEASE AND SUSPECTED MULTIPLE MYELOMA

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Introduction: Intradialytic hypotension (IDH) is a frequent complication during hemodialysis, but it rarely triggers a catastrophic neurological event such as a brainstem or spinal cord infarction. This case is significant due to the complex interplay of Autosomal Dominant Polycystic Kidney Disease (ADPKD), suspected multiple myeloma and severe pancytopenia which creates a state of vascular and metabolic vulnerability. **Case Report:** I present the case of a 58-year-old female patient with ADPKD, Stage G5 Chronic Kidney Disease (CKD) on maintenance hemodialysis and grade III Hypertension. During dialysis the patient experienced a sudden episode of hypotension with a blood pressure of 79/35 mmHg, which was followed by sudden onset of bilateral lower limb pain and a rapid progression to flaccid tetra-paresis grade 1/5 for the lower limbs and 4/5 for the upper limbs. After diagnostic workup severe pancytopenia, a markedly elevated C-reactive protein of 396.2 mg/L and an increased Procalcitonin (35.56 ng/mL) were identified, suggesting a systemic inflammation. Neurologically the patient presented with a GCS of 15, flaccid tetra-paresis and bilaterally positive Babinski sign. The clinical presentation indicated the need for an MRI investigation which was performed, which confirmed a medullary infarction, probably caused by the

sudden intradialytic hypotensive episode. **Discussions** : The discussion focuses on the "perfect storm" of risk factors: ADPKD-related vasculopathy, potential hyperviscosity from the multiple myeloma and severe leukopenia. While the initial suspected diagnosis was a cervical marrow infarction, the symmetrical tetra paresis and intradialytic onset pointed more towards a brainstem transition zone ischemia, which was confirmed on the MRI. This highlights how even brief episodes of IDH can be critical for neural tissue in patients with compromised microcirculation. **Conclusions**: This case illustrates the critical need for hemodynamic stability during renal replacement therapy in multi-morbid patients. It contributes to medical literature by documenting a rare presentation of acute flaccid tetra paresis as a complication of intradialytic hypotension in the setting of hematological malignancy and ADPKD.

Keywords: ADPKD, Brainstem Infarction, Intradialytic Hypotension, Tetraparesis

SUICIDE ATTEMPT IN AN 8 YEARS OLD INTELLECTUALLY DISABLED PATIENT: A STATISTICAL ABNORMALITY

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Introduction: In Europe, both girls and boys have a high likelihood of experiencing child sexual abuse throughout their childhood. The consequences of sexual abuse include posttraumatic stress disorder, anxiety, depression, self-harm, suicidal ideation and suicide attempts. Pediatric suicide is considered one of the major factors of child mortality, with a median incidence being 1.52 per 100000 in boys and 0.94 per 100000 in girls in the 10-14 years old range. Suicide rates in adolescent usually increase towards the later years of adolescence. It's usually considered that the suicidal risk is lower in intellectually disabled population. It is known, that intellectual disability reduces rates of suicide attempts by two-thirds, albeit with rather outdated data and in the adult population. The current case will show a 8 year old intellectually disabled male with sexual abuse and unsuccessful suicidal attempt, following the sexual abuse situation in his history. **Case Report:** An 8 year old intellectually disabled male was admitted three times into the pediatric psychiatry ward Tg. Mures, between July 2024 and December 2025. The patient has a confirmed history of sexual abuse by an older boy in his foster home, around 3 weeks prior to his initial hospitalization. This lead to an attempt at suicide through strangulation 3 days before the first interview. At presentation he showed: anxiety, hypermnnesia of traumatic events, timid and distant disposition and societal withdrawal. He was treated with alprazolam during the acute post-traumatic period, with the treatment later updated to sertraline and levopromazine. His second and third hospitalisation were performed for reevaluation and clinical check-up. Treatment bore a moderate success; however at the last presentation the patient still was aggressive, reaction to peer provocations, fear of other children and lack of academic success. Reported nightmares did not persist. No further autolytic attempts were made. **Discussions** : Even though the treatment outcome was favourable, the presented case displays a lasting aftereffects of the sexual abuse situation. The initial suicidal attempt in the highly untypical patient, the lasting socialization difficulties and stigmatisation from other children and the lingering psychological trauma puts an emphasis on importance of sexual abuse prevention. **Conclusions:** This case highlighted a patient profile that is quite uncommon; suicide attempts below the age of 10, over the background of intellectual disability. This leaves open questions about other cofounding factors that should be researched in future science.

Keywords: Child and adolescent psychiatry, suicide attempt, intellectual disability, strangulation

SURGICAL AND PSYCHIATRIC CHALLENGES: GENERALIZED PERITONITIS AND ORGANIC DELIRIUM IN A PATIENT WITH A PERFORATED ANASTOMOTIC ULCER

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Introduction: Gastrojejunal anastomotic ulcer represents a potential late consequence of gastric surgery. Its progression to perforation reflects a severe clinical presentation associated with the development of generalized peritonitis, a condition with a poor prognosis in the absence of prompt intervention. The presence of risk factors such as alcohol use disorder and tobacco use may negatively influence the clinical course and postoperative outcome. **Case Report:** A 51-year-old male presented to the emergency department with severe epigastric pain, nausea, asthenia, and diffuse abdominal guarding, indicative of peritoneal irritation. His medical history was

significant for a hemorrhagic duodenal ulcer complicated by a hemorrhagic fistula, treated surgically in 2020 by proximal gastrectomy with Billroth II gastrojejunal reconstruction (Omega loop). Emergency CT and upper endoscopy were performed. Endoscopy confirmed a gastrojejunal anastomotic ulcer, while CT revealed an 18 mm retro-gastric fluid collection and a 5 mm parietal air bubble. The patient was admitted with a diagnosis of acute surgical abdomen and subsequently underwent emergency exploratory laparotomy. During the procedure, the perforation was closed with omentoplasty, followed by adhesiolysis, peritoneal lavage, and drainage of the subhepatic space and Douglas pouch. On postoperative day 5, the patient developed acute psychiatric symptoms, including temporal disorientation, auditory and visual hallucinations, severe psychomotor agitation with hostile behavior. He was diagnosed with organic delirium in the context of chronic ethanol dependence, with recent alcohol cessation, and was managed with diazepam, haloperidol, and zolpidem. Despite remaining surgically and hemodynamically stable, he required specialized psychiatric care for persistent psychomotor agitation and uncooperative behavior. **Discussions** : Surgical literature describes the perforation of a gastrojejunal anastomotic ulcer as a rare cause of acute abdomen requiring urgent intervention. In this context, chronic alcohol use and smoking are established risk factors that impair mucosal defense by decreasing nitric oxide production and disrupting cellular turnover. These mechanisms lead to reduced mucosal blood flow and a compromised regenerative capacity of the tissue, ultimately favoring the development and perforation of the anastomotic ulcer. Furthermore, these dependencies are identified risk factors for postoperative delirium, which negatively impacts clinical outcomes if not promptly recognized and managed. **Conclusions**: This case illustrates the challenges of acute surgical management in patients with alcohol use disorder, where peritonitis was complicated by severe postoperative delirium. Surgical success depends on operative technique and a multidisciplinary approach. Collaboration between general surgery, gastroenterology, anesthesiology, and psychiatry is essential for the effective management of the case in unstable patients with addictions.

Keywords: generalized peritonitis, perforated ulcer, gastrectomy, organic delirium

SURGICAL CORRECTION OF ADVANCED SECONDARY FLATFOOT IN A PATIENT WITH MYELOMENINGOCELE AND CONGENITAL CLUBFOOT: A CASE REPORT

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Introduction: Myelomeningocele is the most severe form of spina bifida, which can often lead to musculoskeletal abnormalities due to an underlying neurological deficit. Congenital clubfoot is frequently associated with lower spinal malformations, and it can easily progress into more complex, decompensated foot deformities in adulthood. This case highlights the surgical management of a secondary flexible flatfoot in a 39-year-old patient with a history of congenital clubfoot and presacral myelomeningocele. **Case Report:** A 39-year-old female with a known history of congenital clubfoot and myelomeningocele presented to the orthopedics office with painful, functionally decompensated and advanced secondary right flatfoot and sensory anesthesia in both medial and lateral submalleolar regions. Upon clinical examination severe mobility impairment, antalgic gait and bilateral congenital clubfoot were revealed with the right side showing greater severity. The surgery consisted of Medializing Calcaneal Osteotomy (MCO) with two 40mm cannulated titanium screws, Reconstruction of the Right Tibiocalcaneonavicular Ligament using a semitendinosus autograft and Augmentation with Arthrex FiberTape system and anchoring via Zimmer ToggleLoc with ZipLoop and a CompositCP screw. Postoperative treatment consisted of anticoagulants, followed by antiaggregant agents and analgesics (PRN). Overall recovery was favorable. The patient was discharged in a plaster splint with instructions for 3 weeks of immobilization followed by 8 weeks of non-weight-bearing physiotherapy. **Discussions** : Adult flatfoot secondary to neuromuscular conditions like myelomeningocele can be challenging for patients due to underlying muscle imbalance. These cases often require a combination of osseous realignment (MCO) and soft tissue reconstruction. The synthetic augmentation alongside autografts ensures enhanced stability, which is crucial for patients with neuromuscular and/or skeletal gait pathologies. **Conclusions:** This case highlights how myelomeningocele can lead to progressive foot deformities that will require complex surgical intervention. Taking everything into consideration, combining MCO with ligament reconstruction using autografts and synthetic augmentation is a viable and effective approach for restoring healthy foot architecture.

Keywords: Myelomeningocele, Medializing Calcaneal Osteotomy, Ligament Reconstruction, Spina Bifida

SURGICAL CORRECTION OF TETRALOGY OF FALLOT IN AN INFANT WITH MESOCARDIA AND COMPLEX LIMB MALFORMATIONS

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Introduction: Tetralogy of Fallot (ToF) is a common cyanotic congenital heart defect, but its association with rare anatomical variations and extracardiac malformations can significantly increase clinical and surgical complexity. This case report describes the successful primary total correction of ToF in a 6-month-old patient presenting with mesocardia, a right-sided aortic arch, and severe musculoskeletal anomalies. **Case Report:** We present the case of a 6-month-old infant managed at our center since three weeks of age. The patient was diagnosed with ToF, featuring a pulmonary trunk and branches at the lower limit of normal, alongside severe right midventricular stenosis with a dynamic gradient of 80 mmHg. While undergoing medical management with propranolol, the infant required emergency surgical correction due to a prolonged hypoxic spell triggered by a traffic accident. The patient's medical history included a pathological pregnancy, mesocardia, a right-sided aortic arch, left ulnar hemimelia, syndactyly, and a scapulohumeral joint malformation. The surgical intervention involved the closure of the ventricular septal defect (VSD) using a heterologous pericardial patch, resection of the right ventricular infundibular muscle, and a pulmonary valve commissurotomy. The right ventricular outflow tract (RVOT) was enlarged with a heterologous pericardial patch while successfully preserving the pulmonary annulus. The postoperative course was uneventful, and the patient was discharged 10 days after surgery. Follow-up echocardiography at one and three months postoperatively showed a small residual VSD, an RVOT gradient of 25 mmHg, and good biventricular contractility. **Discussions :** The coexistence of ToF with mesocardia and limb defects (such as ulnar hemimelia) represents a rare syndromic association requiring a highly individualized surgical approach. A primary surgical goal in this case was the preservation of the pulmonary annulus. Although this technique may result in a mild residual gradient, it is often the preferred strategy to prevent long-term pulmonary regurgitation and subsequent right ventricular failure. **Conclusions:** Early total surgical correction of Tetralogy of Fallot is feasible and effective, even in patients with complex anatomical variations like mesocardia and multisystemic malformations. This case underscores the necessity of a multidisciplinary approach to manage both the complex cardiac pathology and associated syndromic manifestations, ensuring optimal long-term developmental outcomes.

Keywords: Tetralogy of Fallot, Mesocardia, Ulnar Hemimelia, Congenital Heart Disease

SURGICAL MANAGEMENT IN PULMONARY TUBERCULOSIS-A COMPLEX CASE

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Introduction: Pulmonary tuberculosis remains a significant global health problem. Although antituberculous therapy is the cornerstone of the treatment, surgical intervention remains a life-saving option for selected cases that present with complications such as cavitary tuberculosis associated with massive hemoptysis, pleural empyema with bronchopleural fistula and extensive destruction of the pulmonary parenchyma. **Case Report:** A 57 year-old male patient, smoker, from rural area and with no significant past medical history, presented with acute onset severe dyspnea at rest, left-sided chest pain and acute respiratory failure (oxygen saturation < 90%), diagnosed with left-sided pneumothorax. Emergency management included left pleural drainage that improved oxygenation, resulting in partial improvement of respiratory status. Further investigations, including sputum examination and bronchoalveolar lavage were negative for Mycobacterium tuberculosis. The initial evolution was favourable, however the patient developed subcutaneous emphysema extending to the contralateral hemithorax, neck and cervical region. Clinical deterioration with worsening respiratory failure (oxygen saturation = 80-85%) occurred after 7 days, requiring thoracotomy, which revealed a cavitary lesion in the upper left lobe with pleuro-pulmonary fistula. Left pneumonectomy was carried out. Postoperative evolution was initially favourable and the patient was discharged on day 10 in good general condition. Histopathological examination confirmed pulmonary tuberculosis. At 21 days postoperatively, the patient developed bronchial stump dehiscence and infected post-pneumonectomy cavity. Surgical management included Eloesser procedure for infection control. An attempt to close

the bronchial fistula using surgical adhesive was unsuccessful due to intense coughing on day 5 postoperatively. The patient underwent ongoing local care, with a plan for staged thoracoplasty and myoplasty for definitive closure. **Discussions** : This case highlights the diagnostic and therapeutic challenges of pulmonary tuberculosis, especially in the absence of bacteriological confirmation. Delayed diagnosis may lead to severe complications requiring radical intervention. Pneumonectomy can be life-saving, however this approach carries significant risk of complications such as bronchial stump fistula. The management of such complications remains complex and often requires staged procedures. The Eloesser procedure proved effective for infection control and it also played a crucial role in preparing the patient for definitive reconstruction. **Conclusions**: This case demonstrates the critical role of surgery in the management of complicated pulmonary tuberculosis, even in the absence of initial microbiological confirmation. Pneumonectomy is very effective, but it carries significant postoperative risks. Early surgical decision-making, combined with multidisciplinary care, is essential for improving patient outcomes.

Keywords: pneumonectomy, Eloesser procedure, pulmonary tuberculosis, bronchopleural fistula

SURGICAL MANAGEMENT OF A DISTAL THIRD FEMORAL SPIRAL FRACTURE (AO/OTA A1) USING INTRAMEDULLARY NAILING AUGMENTED WITH CERCLAGE WIRING: A CASE REPORT

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Introduction: A femoral shaft fracture is defined as occurring in the section of the femoral bone starting 5 cm below the lesser trochanter and ending approximately 5 cm above the tuberculum adductorium. These fractures range from simple straight or diagonal breaks to complex "butterfly" fragments or comminuted bone. From a surgical standpoint, it highlights the challenge of restoring anatomical alignment and length while balancing mechanical stability and preservation of local blood supply. Its relevance lies in discussing the decision-making process for hybrid fixation and the clinical outcomes of using cerclage cables in orthopedic trauma. **Case Report:** A 48-year-old male was admitted to the Orthopedics and Traumatology Clinic I in Targu Mures following a low-energy trauma caused by a fall from the same level. Upon emergency admission, the patient presented with acute pain and functional impotence of the left lower limb. Radiology confirmed a distal third spiral fracture to the left femur. Preoperative management included the application of a trans-tuberosity skeletal traction system for stabilization. Following anesthesiological clearance, the patient underwent a surgical procedure under spinal anesthesia. The intervention consisted of an open reduction and internal fixation of the fracture. A Stryker T2 intramedullary nail (10x380mm) was inserted and locked proximally and distally with corresponding screws. To ensure the stability of the spiral fracture site, two cerclage wires were applied under fluoroscopic control. The postoperative treatment protocol included analgesics, anti-inflammatories, gastroprotection, and thromboprophylaxis. Upon discharge, the patient was mobile using assistive devices, with a recommendation for non-weight-bearing on the left lower limb for the next 6 to 8 weeks. **Discussions** : Femoral fractures are typically classified according to either Winquist-Hansen charts or AO/OTA charts. This particular fracture corresponds to the A1 category of the AO/OTA classification. Demographically, femoral shaft fractures are encountered by predilection in young male adults as a result of trauma produced by high-energy forces, but also in children or the elderly, especially associated with bone brittleness and osteoporosis. Upon performing a literature search across Google Academics, Researchgate and Pubmed using terms such as "OTA A1", "Distal Femoral Fracture", "Cerclage Wire in DFF Management", case reports and consensus guidelines were analyzed. **Conclusions:** This case is a compelling example of complex femoral shaft fracture management using an intramedullary nail combined with cerclage wiring to stabilize a long, displaced spiral fracture.

Keywords: Orthopedic Surgery, Distal Femoral Fracture, CM Stryker T2, Traumatic Lower Limb Injury

SURGICAL MANAGEMENT OF A RECURRENT PANCREATIC PSEUDOCYST: A CASE REPORT

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Introduction: Pancreatic pseudocysts are common complications of acute and chronic pancreatitis, most

frequently associated with alcohol-related disease. Diagnosis is typically established by cross-sectional imaging, while endoscopic ultrasound may be used to further characterize cystic lesions. Although many pseudocysts resolve spontaneously, invasive treatment is indicated in symptomatic cases or when complications occur. Current therapeutic options include endoscopic, percutaneous, and surgical drainage, with endoscopic approaches increasingly favored due to their minimally invasive nature. **Case Report:** A 43-year-old female with a history of alcohol-induced chronic pancreatitis and recurrent acute pancreatitis presented with severe epigastric pain radiating to the back. Cross-sectional imaging revealed a large pancreatic pseudocyst measuring approximately 12 cm at the head of the pancreas. The patient had previously undergone surgical drainage, but the catheter became dislodged, leading to recurrence of the pseudocyst. An endoscopic transmural drainage was later performed, achieving initial clinical improvement through a cystogastric communication. This communication failed after about one month, resulting in re-accumulation of the pseudocyst. A repeat endoscopic attempt was considered but aborted due to increased risk of aspiration from retained gastric contents. Given the large size, recurrent nature, and failure of prior minimally invasive interventions, a surgical cystojejunostomy was planned. This procedure creates an anastomosis between the pseudocyst and a jejunal loop to allow continuous internal drainage into the small intestine and provide a definitive therapeutic solution. **Discussions :** The management of pancreatic pseudocysts depends on symptom severity, cyst size, location, and the underlying pancreatic pathology. Endoscopic drainage, either transmural or transpapillary, has become the preferred first-line therapy for most pseudocysts due to its minimally invasive nature, avoidance of external drains, and high initial success rates. However, in patients with chronic pancreatitis, especially those with alcohol-related disease or structural ductal abnormalities, endoscopic drainage is associated with higher recurrence rates and may fail to provide long-term resolution. In recurrent or refractory pseudocysts, repeated endoscopic interventions may not achieve sustained success. Surgical internal drainage, such as cystojejunostomy, offers a definitive and durable solution by allowing continuous drainage into the gastrointestinal tract. Studies have shown that surgical approaches are associated with lower recurrence rates in large, complex, or refractory pseudocysts despite their more invasive nature. **Conclusions:** Careful selection and placement of cervical cerclage may help extend pregnancy in high-risk cases, although early delivery remains possible, emphasizing the importance of tailored patient management.

Keywords: Pancreatic pseudocyst, Chronic pancreatitis, Minimally invasive treatment, Surgical cystojejunostomy

SURGICAL MANAGEMENT OF A SCHATZKER VI TIBIAL PLATEAU FRACTURE: A CASE REPORT

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Introduction: Tibial plateau fractures are complex intra-articular injuries that may significantly affect knee stability and long-term joint function. High-energy bicondylar fractures classified as Schatzker type VI are particularly challenging due to metaphyseal-diaphyseal dissociation, articular depression, and frequent associated soft tissue injuries. Successful management requires careful evaluation of the soft tissues, anatomical restoration of the articular surface, and stable fixation that allows early mobilization while minimizing complications. **Case Report:** A 39-year-old male presented after an accidental fall from height (fall from a chair), sustaining trauma to the left knee. Radiographic and CT evaluation revealed a bicondylar tibial plateau fracture consistent with Schatzker type VI. On admission, the limb was immobilized in a femoro-podal splint, and the patient received analgesic, anti-inflammatory, and thromboprophylactic therapy while soft tissue conditions were closely monitored. After several days of observation and adequate soft tissue recovery, surgical treatment was performed. Open reduction and internal fixation were achieved through a dual approach. The lateral compartment fracture was reduced and stabilized with a traction screw and an angular stable plate, while the medial compartment was fixed using a locking plate with multiple screws. A submeniscal arthrotomy of the lateral compartment revealed an associated lateral meniscal lesion, which was repaired during the procedure. Postoperative imaging confirmed satisfactory reduction of the articular surface and stable fixation with dual plating. The early postoperative course was favorable. **Discussions :** Schatzker VI fractures involve bicondylar instability and metaphyseal-diaphyseal dissociation, making stable reconstruction technically demanding. Dual plating provides reliable stabilization of both columns and helps maintain articular reduction. Submeniscal arthrotomy also allows direct visualization of the joint surface and identification of associated meniscal injuries that can be repaired during the same procedure. In this case, dual-column fixation combined with meniscal repair resulted in stable reconstruction of the tibial plateau. **Conclusions:** Dual-column fixation with anatomical reduction and treatment of associated meniscal injuries represents an effective strategy for restoring joint congruity and stability in Schatzker VI tibial plateau fractures.

Keywords: Schatzker VI, Tibial Plateau Fracture, Osteosynthesis

SURGICAL MANAGEMENT OF BICUSPID AORTIC VALVE DISEASE WITH ASCENDING AORTIC ECTASIA IN A 38-YEAR-OLD FEMALE

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Introduction: Bicuspid aortic valve (BAV) is the most common congenital cardiac malformation frequently associated with aortopathy. In such patients, ascending aortic dilatation may occur as a consequence of the underlying valvulo-aortic pathology, even in the absence of other causative conditions. **Case Report:** We report the case of a 38-year-old female diagnosed with bicuspid aortic valve disease associated with ascending aortic ectasia measuring 43 mm. Clinical and imaging evaluation excluded other causes of aortic enlargement. Although the absolute aortic diameter was below the conventional threshold for aneurysm repair, application of the relevant aortic indexing scores supported surgical management in the context of the patient's body size, age, and associated valvular pathology. The patient underwent elective surgical treatment consisting of aortic valve replacement and ascending aortic recalibration. The procedure was performed successfully, with smooth intraoperative course and satisfactory postoperative results. The postoperative course was uneventful, with good hemodynamic evolution and satisfactory recovery. **Discussions :** This case underscores the complexity of decision-making in patients with BAV-associated aortopathy. Although absolute aortic diameter remains a central criterion for surgical indication-typically 55 mm, but lower thresholds around 43 mm in BAV-associated aortopathy-it may not adequately reflect the individual risk of aortic complications, such as aortic dissection and aortic rupture, particularly in younger patients or those with smaller body size. Aortic indexing scores provide a more individualized assessment by relating aortic dimensions to patient-specific parameters such as body height, weight, and gender. In this case, such indexing supported earlier surgical intervention despite the aortic diameter being below traditional thresholds. **Conclusions:** This case highlights the importance of individualized surgical decision-making in young patients with BAV-associated aortopathy. Even in the presence of moderate ascending aortic ectasia, the use of aortic indexing scores may support early operative treatment. Combined aortic valve replacement and aortic recalibration can provide a safe and effective surgical strategy in selected patients.

Keywords: Ascending aortic ectasia, Aortic valve replacement, Aortic recalibration, BAV-associated aortopathy

SURGICAL MANAGEMENT OF GIANT POST-APPENDECTOMY PARARECTAL INCISIONAL HERNIA ASSOCIATED WITH ADHESIVE SYNDROME TECHNICAL CONSIDERATIONS AND OUTCOME

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Introduction: Incisional hernia represents a frequent long-term complication following abdominal surgery, with incidence rates ranging between 10-20%. Giant incisional hernias, defined by significant fascial defect and voluminous hernia sac, are associated with progressive abdominal wall weakness, visceral displacement, and dense intra-abdominal adhesions. Surgical repair remains challenging due to distorted anatomy and increased risk of enterotomy, recurrence, and wound complications. This report highlights the operative management of a giant pararectal incisional hernia occurring decades after appendectomy. **Case Report:** A 48-year-old male presented with progressive right-sided abdominal wall bulging and discomfort. Surgical history revealed an open appendectomy. Clinical examination identified a large pararectal hernia extending inferiorly, with reducible but voluminous sac content. Imaging confirmed giant postoperative eventration with associated adhesive syndrome. Elective surgical repair was performed via an open approach. Extensive adhesiolysis was required to reduce small bowel loops from the hernia sac safely. Careful hemostasis was achieved, and the fascial defect was evaluated. Abdominal wall reconstruction was performed using monoplane polypropylene mesh placed in a supraaponeurotic position, ensuring adequate overlap. Subcutaneous drainage was inserted, followed by layered closure. Postoperative evolution was favorable, without early complications. The patient was discharged with recommendations for weight control and gradual resumption of physical activity. **Discussions :** Giant incisional hernias result from progressive fascial failure and altered intra-abdominal pressure dynamics. Adhesive syndrome significantly increases operative risk. While sublay mesh placement is often preferred, supraaponeurotic repair

remains a valid option in selected cases with favorable tissue conditions. Proper mesh overlap and meticulous closure are essential to reduce recurrence risk. **Conclusions:** Open repair of giant incisional hernia remains a safe and effective approach when careful adhesiolysis and adequate mesh reinforcement are performed. Early surgical correction may prevent further abdominal wall deterioration and improve patient quality of life.

Keywords: Incisional hernia, Pararectal hernia, Mesh repair, Adhesive syndrome

SURGICAL MANAGEMENT OF GLABELLAR BASAL CELL CARCINOMA WITH SUPRA-PERIOSTEAL EXCISION AND MUSCULOCUTANEOUS HATCHET FLAP RECONSTRUCTION.

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Introduction: The most prevalent malignant skin tumor, basal cell carcinoma, affects the face's sun-exposed regions. Chronic UV exposure is the key etiological component. Despite having a very low risk for metastasis, BCC is locally invasive and, if neglected, can result in serious functional and cosmetic harm. Because of the restricted tissue flexibility and the presence of significant muscle and structural features, lesions in the glabellar region are very difficult to treat. Surgical excision remains the therapy of choice for BCC, aiming to achieve total tumor removal with clear margins while preserving facial function and beauty. Reconstruction of central facial abnormalities demands careful selection of technique. The glabellar hatchet flap is a dependable local flap that effectively closes abnormalities in this area and offers good tissue match. **Case Report:** A 66-year-old male patient came in the clinic with a glabellar lesion that had been present for approximately 1.5 years and had demonstrated gradual progressive growth. A clinical evaluation highlighted the possibility of skin cancer other than melanoma. Histopathological examination of the biopsy revealed basal cell carcinoma. Under the proper anesthesia, surgical excision was carried out. The tumor was removed with a 5 mm surgical margin. To guarantee sufficient oncologic clearance, the procerus and transverse nasalis muscles were removed from the excision plane. A glabellar hatchet flap raised above the periosteum was used to reconstruct the ensuing deficiency. The procerus, corrugator supercili and depressor supercili muscles were all integrated into the flap. **Discussions :** As demonstrated in this instance, delayed presentation is not unusual for BCC, which often manifests as a slow-growing lesion. Complete surgical excision with histologically clean margins remains the most successful treatment. Deeper excision might be necessary in high-risk facial regions to stop recurrence. Reconstruction of glabellar abnormalities is problematic due to limited skin mobility. Excellent color and texture matching and tension redistribution are provided by the glabellar hatchet flap. Incorporating muscle components improves flap movement and vascularity, leading to beneficial functional and cosmetic results. **Conclusions:** In order to have the best results, glabellar basal cell carcinoma must be diagnosed early and treated surgically. In anatomically complicated facial regions, wide local excision combined with rebuilding utilizing a glabellar hatchet flap is a safe and efficient method that produces satisfying aesthetic results and good oncologic management.

Keywords: basal cell carcinoma, glabellar hatchet flap, procerus and transverse nasalis muscles, wide local excision

SURGICAL TREATMENT OF A DISTAL FEMUR FRACTURE IN AN ELDERLY PATIENT WITH MULTIPLE COMORBIDITIES AND REFUSAL OF BLOOD TRANSFUSION

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Introduction: Distal femur fractures represent approximately 3-6% of all femoral fractures. These types of injuries predominantly result from high-energy trauma in younger individuals, similar fracture patterns may also occur in elderly patients following low-energy trauma such as ground-level falls. In elderly patients, treatment is challenging due to poor bone quality, pre-existing implants, and poor rehabilitation compliance. Opposing muscle forces often prevent closed reduction and stabilization, necessitating surgical treatment with plate and screw fixation. Patients over 80 years of age with distal femur fractures experience high mortality rates, reaching up to 33% at 12 months and up to 50% at 5 years. **Case Report:** We present the case of an 82-year-old female who sustained a

supraintercondylar fracture of the left femur following a low-energy, ground-level fall. She presented to the emergency department with left thigh pain, functional impairment, and painful limitation of movement. Imaging studies confirmed the diagnosis. Her past medical history included diabetes mellitus with neuropathy, right adrenal tumor, solitary kidney status following left nephrectomy for renal tumor, acute kidney injury superimposed on chronic kidney disease, previously treated breast cancer, total hysterectomy, hypothyroidism, and bronchial asthma. The patient refused allogeneic blood transfusion due to religious beliefs. After appropriate preoperative and anesthetic preparation, open reduction and internal fixation (ORIF) with plate and screws was performed under spinal anesthesia, followed by immobilization in a femoro-plantar cast. The postoperative course was uneventful, with no signs of infection. Postoperative anemia was managed conservatively with intravenous iron administration. The patient was discharged in improved general condition, with immobilization maintained in a femoro-plantar cast for 10-12 weeks. Functional rest was recommended, with gradual mobilization to a seated position. **Discussions** : Distal femur fractures in elderly patients are severe injuries associated with high mortality rates. Management of elderly patients with multiple comorbidities is challenging due to increased perioperative risk and postoperative complications. Surgical treatment with open reduction and internal fixation is commonly recommended to allow early mobilization and to reduce complications related to prolonged immobilization. A particular aspect of this case was the refusal of allogeneic blood transfusion, which limited perioperative management options. Postoperative anemia was successfully managed conservatively, highlighting the importance of careful perioperative planning and a multidisciplinary approach in such complex cases. **Conclusions**: Supraintercondylar femur fractures in elderly patients with multiple comorbidities represent a significant therapeutic challenge. Favorable outcomes can be achieved through rigorous perioperative planning, appropriate surgical treatment, and multidisciplinary management, even for patients who refuse blood transfusions.

Keywords: Distal Femur Fracture, Elderly Patient, Open Reduction and Internal Fixation, Blood Transfusion Refusal

SUSTAINED DISEASE-FREE SURVIVAL IN STAGE IV BRAF V600E-MUTANT ASCENDING COLON ADENOCARCINOMA WITH HEPATIC METASTASES

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Introduction: Colorectal cancer is one of the leading causes of cancer-related mortality worldwide. Prognosis is primarily determined by infiltration and extent defined by the TNM staging system, classifying tumors from stage I to IV. Therapeutic outcomes are particularly unfavorable in stage IV adenocarcinoma presenting BRAFV600E mutations, characterized by reduced responsiveness to standard chemotherapy with significantly shortened survival. Curative treatments are rarely achievable with patients usually being managed with palliative treatment. We report a rare case of stage IV BRAFV600E mutated ascending colon adenocarcinoma with liver metastases who achieved a sustained disease-free exceeding 3.5 years survival following a curative-intent approach. **Case Report**: This is a case about a 69-year-old female presenting in July 2022, claiming inexplicable weight loss and anemia resulting in gastrointestinal consultation. The patient has a history of HTA, CIC, Heart failure NYHA class II, lower extremity varicose veins and sigmoid diverticulosis. The CT revealed that the cecum and proximal ascending colon demonstrated irregular parietal thickening affecting approximately 60% of the circumference involving all wall layers without breaching the serosa. Several lymphadenopathies and hepatic lesions with signs of necrosis were highly suspicious for metastatic disease. The Colonoscopy revealed a malignant colon tumor; biopsies confirmed the suspicion: moderately differentiated adenocarcinoma with molecular profiling proving a KRAS/NRAS wild-type and BRAFV600E mutation. The patient underwent a right hemicolectomy and 8 cycles of XELOX chemotherapy. The hepatic metastases were treated with percutaneous microwave ablation achieving complete radiological response. At present the patient has an ECOG 0 performance status and no evidence of active disease. **Discussions** : Our case shows how important it is to identify metastatic disease early and can sometimes still be treated with curative intent. It also shows that a multimodal treatment strategy including surgery, chemotherapy and local ablation, can lead to very good outcomes even in patients with unfavorable prognoses. Although BRAFV600E mutation is usually associated with poor prognosis, it should not automatically exclude patients from a curative treatment approach when possible. **Conclusions**: Our case shows that sustained disease-free survival is achievable. The patient's disease-free survival highlights that molecular markers alone should not dictate treatment decisions. Each patient needs careful individual treatment selection. With the right proactive treatment strategy, the course of this aggressive cancer can be better than initially expected.

Keywords: BRAF V600E mutation, colorectal adenocarcinoma, hepatic metastases, multimodal therapy

SYNCHRONOUS ENDOMETRIAL ADENOCARCINOMA AND PAPILLARY UROTHELIAL CARCINOMA: A RARE DUAL MALIGNANCY

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Introduction: Synchronous primary malignancies of the female genital and urinary tract are rare and pose diagnostic and therapeutic challenges. Endometrial adenocarcinoma is the most common type of uterine cancer, accounting for over 85% of EC (endometrial cancer) cases, and is frequently associated with a hyperestrogenic state. It typically has a favorable prognosis and is often diagnosed at an early stage. Papillary urothelial carcinoma is a distinct tumor arising from the urothelium, most commonly in the bladder, characterized by thin finger-like growth patterns. The coexistence of these two malignancies as synchronous primary tumors is uncommon and raises important considerations regarding diagnosis and management. **Case Report:** A 68-year-old female patient presented with postmenopausal bleeding. A pelvic and abdominal contrast-enhanced MRI showed a thickened, heterogeneous endometrium (up to 14 mm), suggestive of endometrial hyperplasia. The right ovary had a cystic lesion with internal debris and homogeneous gadolinium uptake, measuring approximately 25x21x28 mm. The urinary bladder presented a vegetative formation (9-11 mm) on the posterior right wall. An endometrial curettage was performed, with the pathological report confirming a grade 1 (FIGO) well-differentiated endometrial adenocarcinoma. A minimally invasive cystoscopy with TURBT (transurethral resection of bladder tumor) identified a papillary urothelial carcinoma, with tumor fragments collected for pathology. Based on the pathological findings, the patient underwent a total hysterectomy with right lateral laparoscopic adnexectomy. Sentinel lymph node mapping using indocyanine green (ICG) was performed, and the nodes were negative, so no pelvic or para-aortic lymphadenectomy was necessary. After 4-5 days of postoperative hospitalization, the patient is scheduled to follow up with urology to plan further management of the bladder cancer. **Discussions :** For early-stage endometrial cancer MIS(minimally invasive surgery) is considered the preferred route because it is safe,effective and offers a faster recovery. Synchronous cancers are extremely rare, with only a limited number of cases reported, accounting for approximately 2-5% of all cancer patients, with each of the tumor being indepently malignant. **Conclusions:** Multidisciplinary coordination and early detection through imaging and minimally invasive procedures are crucial in managing synchronous primary cancerous tumors of the female genital and urinary tract to optimize surgical and oncologic outcomes.

Keywords: synchronous primary malignancies, papillary urothelial carcinoma, endometrial adenocarcinoma, minimally invasive procedures

SYSTEMIC SARCOIDOSIS AND HIGH BURDEN VENTRICULAR EXTRASYSTOLES IN A PATIENT WITH MECHANICAL AORTIC VALVE

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Introduction: Sarcoidosis is a rare, systemic granulomatous disease of unknown etiology characterized by the formation of non-caseating granulomas. While it primarily affects the lungs, its clinical presentation can be heterogeneous, making the diagnosis challenging when it mimics other pulmonary diseases or overlaps with cardiac comorbidities. **Case Report:** A 50-year-old male presented for a cardiology evaluation due to dyspnea, palpitations, fatigue and dry cough for 1-2 months. His past medical history included a mechanical aortic valve and bilateral total hip arthroplasty. He denied smoking or family history of autoimmune disorders. Physical examination revealed no signs of heart failure, normal blood pressure (100/70 mmHg) and heart rate (86 bpm), SpO2 of 87-94%, and on the left lower leg erythema nodosum was observed. The ECG showed sinus rhythm, left axis deviation, first-degree atrioventricular block and left anterior fascicular block. Echocardiography revealed a normally sized left ventricle with an ejection fraction of 50%, a normofunctional aortic valve prosthesis, no wall motion abnormalities. The Holter monitoring showed 26% ventricular extrasystoles. Laboratory tests were within normal ranges (including ANCA, ANA, RF, ACE) except for NTproBNP, which was 340 pg/ml. Pulmonary evaluation involved a normal spirometry, a chest X-ray and subsequent high-resolution computed tomography (HRCT) of the lungs, which revealed diffuse bilateral micronodular opacities and hilar lymphadenopathy. Given the

clinical suspicion of miliary tuberculosis, serial sputum samples were collected for acid-fast bacilli smear microscopy and rapid molecular testing. However, repeated testing consistently yielded negative results, even in the endobronchial specimens obtained via flexible bronchoscopy. The patient underwent video-assisted thoracoscopic lung-pleural biopsy and the histopathologic examination showed numerous non-necrotic epithelioid granulomas with interstitial and lymphangitic distribution, involving the pleura, the interlobular septa, and the bronchovascular bundle. **Discussions :** The patient was diagnosed with sarcoidosis with pulmonary, cutaneous and mediastinal involvement. Therefore, oral therapy with methylprednisolone and methotrexate was initiated, resulting in significant subjective, clinical, and radiological improvement during follow-up visits. The HRCT revealed almost complete remission of the micronodules, miliary lesions and mosaic aspect. The dimensions of the inflammatory lymph nodes were also reduced. Although cardiac involvement could not be tested by imaging modalities (MRI - owing to prostheses, FDG-PET CT - not available/affordable), it might be possible as the burden of ventricular extrasystoles decreased to 0.14%. **Conclusions:** This case highlights the importance of a multidisciplinary approach, involving pulmonology, cardiology, rheumatology, radiology, thoracic surgery, and pathology in balancing an aggressive immunosuppressive treatment with the management of complex valvular and skeletal comorbidities.

Keywords: systemic sarcoidosis, ventricular extrasystole, dyspnoe, miliary pattern

SYSTEMIC SCLEROSIS WITH INTERSTITIAL LUNG DISEASE AND CARDIAC INVOLVEMENT: DIAGNOSTIC AND THERAPEUTIC CHALLENGES

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Introduction: Systemic sclerosis (SSc), also known as scleroderma, is a rare autoimmune connective tissue disease characterized by vasculopathy, fibrosis, and immune dysregulation. It affects multiple organs including skin, gastrointestinal tract, lungs, and heart. Interstitial lung disease (ILD) and cardiac involvement are the leading causes of morbidity and mortality in SSc. Treatment is tailored to organ involvement, combining immunosuppressants - both conventional (mycophenolate mofetil, methotrexate) and biologic (rituximab, tocilizumab) - and antifibrotics (nintedanib). **Case Report:** A 69-year-old woman presented with Raynaud phenomenon, progressive skin induration, polyarthralgia, exertional dyspnea, and heartburn. Physical exam revealed sclerodactyly, positive "prayer sign", digital pitting scars, skin thickening on face, forearms, arms, thorax and abdomen, microstomia, perioral radial furrowing, facial telangiectasias, and bilateral basal crackles. Laboratory findings showed elevated C-reactive protein, positive antinuclear and anti-Scl-70 antibodies. She was diagnosed with diffuse cutaneous systemic sclerosis (dcSSc). High-resolution chest computed tomography (HRCT) demonstrated bilateral ground-glass opacities, septal thickening, and incipient posterobasal honeycombing, consistent with fibrotic ILD. Spirometry showed normal forced vital capacity (FVC) and mildly reduced diffusing capacity for carbon monoxide (DLCO). Echocardiography revealed diastolic dysfunction and mild pericardial effusion. Cardiac magnetic resonance imaging (MRI) with gadolinium contrast showed fibro-inflammatory changes on the right ventricular free wall, mildly reduced biventricular function, consistent with SSc-associated cardiomyopathy. Upper endoscopy identified dilated esophagus with food residue, Barrett's esophagus and antral gastritis. Initial treatment with methotrexate, followed by tocilizumab, failed to control disease progression. Treatment was escalated to mycophenolate mofetil, rituximab, and nintedanib, resulting in favorable response with skin improvement, reduced ground-glass opacities, and stable lung and cardiac function. **Discussions :** Anti-Scl-70 antibodies, characteristically associated with dcSSc, are linked to a higher risk of ILD and SSc-associated cardiomyopathy. HRCT is the gold standard for diagnosing ILD. Risk factors for progressive ILD include older age, diffuse cutaneous form, anti-Scl-70 antibodies, HRCT fibrosis extent, and reduced FVC/DLCO. Cardiac MRI with gadolinium is the preferred modality for detecting myocardial inflammation, fibrosis, and right ventricular dysfunction in SSc. Esophageal involvement is common, manifesting as dysmotility, esophagitis, and Barrett's esophagus, which require close endoscopic surveillance. **Conclusions:** This case highlights multiorgan involvement in SSc and the diagnostic and therapeutic challenges encountered in clinical practice. A comprehensive multiorgan assessment, including immunology tests, chest HRCT, cardiac ultrasound and MRI, and upper endoscopy, is essential for accurate diagnosis. Optimal outcomes require early detection and multidisciplinary management combining immunosuppressive, antifibrotic, and symptomatic therapies.

Keywords: systemic sclerosis, anti-Scl-70 antibodies, interstitial lung disease, multidisciplinary management

THE "BROKEN" HEART CLUB: TRIPLE-VESSEL CAD MEETS AORTIC STENOSIS

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Introduction: Triple-vessel coronary artery disease represents the manifestation of advanced atherosclerosis, carrying significant prognostic impact and complex therapeutic implications. In the presence of major cardiovascular risk factors, such as chronic smoking and severe dyslipidemia, the progression of coronary disease is accelerated, necessitating aggressive and individualized therapeutic interventions. **Case Report:** We present the case of a 73-year-old male patient, a former smoker with a significant history of atherosclerotic cardiovascular disease, previously diagnosed with angiographically documented triple-vessel CAD, NYHA II heart failure, and Grade III hypertension, who presented for cardiological re-evaluation in the context of high cardiovascular risk. The patient's medical history includes prior percutaneous coronary intervention via a right radial approach, with the implantation of drug-eluting stents in the affected coronary arteries. Both the Left Anterior Descending artery and the Circumflex artery exhibited approximately 90% stenosis in their proximal segments, while the Right Coronary Artery was occluded in its mid-segment; these lesions were treated with DES and balloon angioplasty. Overall, a satisfactory angiographic result was achieved in the treated vessels, despite the severity of the multivessel disease. Subsequent echocardiographic evaluation revealed the progression of aortic stenosis, which has become severe, with a firm indication for aortic valve replacement. The association of triple-vessel CAD-marked by residual post-angioplasty lesions and recurrent stenotic foci-with severe aortic stenosis significantly complicates the therapeutic strategy, requiring a careful multidisciplinary approach to determine the optimal sequence for revascularization and valvular correction. Associated cardiovascular risk factors include chronic tobacco and alcohol consumption (subsequently discontinued) and severe dyslipidemia. The initial lipid profile showed significantly elevated LDL-cholesterol levels, prompting the initiation of statin therapy with progressive titration to the maximum tolerated dose. Under treatment, a significant reduction in LDL-cholesterol levels was achieved, reaching the optimal threshold for the planned intervention. **Discussions :** The defining particularity of this case is the severity of the aortic stenosis and the implications of valve replacement approaches in the context of impaired renal function. Although the patient is a suitable candidate for Transcatheter Aortic Valve Implantation, the renal dysfunction raises additional management challenges, particularly regarding the use of contrast media and potential peri-procedural complications for both minimally invasive coronary and valvular interventions. **Conclusions:** This case highlights the importance of rigorous risk stratification in patients with extensive coronary artery disease, the necessity of managing modifiable risk factors, and the complexity of choosing a revascularization and valve replacement strategy in the presence of comorbidities such as renal dysfunction.

Keywords: Triple-vessel coronary artery disease, Severe aortic stenosis, Percutaneous Coronary Intervention, Drug-Eluting Stents

THE CHALLENGE OF DIAGNOSIS IN WILSON DISEASE: AN ONSET MASKED BY VIRAL INFECTIONS

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Introduction: Wilson disease is an autosomal recessive disorder consisting of impaired copper metabolism and biliary excretion, which leads to toxic accumulation in the liver, brain, kidneys and cornea. Wilson disease has a worldwide incidence of 1 in 30,000 births. The aim of this case report is to highlight the importance of achieving an early diagnosis when the patient presents in an advanced biochemical stage. **Case Report:** A 14-year-old male elite youth athlete presents persistent elevated aminotransferases since 2024 when he suffered successive viral infections with Epstein-Barr and Parvovirus B19. During a gastrointestinal infection this year, the alanine aminotransferase and aspartate aminotransferase levels reached 569 U/L and 250 U/L respectively. At present, the patient has no complaints and the clinical examination revealed only a constitutional growth impairment (height growth curve under 5th percentile), for which an endocrinological cause was ruled out. An abdominal ultrasound was performed which revealed right lobe hepatomegaly and increased hepatic echogenicity. Viral hepatitis, autoimmune hepatitis, celiac disease, alpha-1 antitrypsin deficiency and other pathologies that may cause chronic liver disease were ruled out. The suspicion of Wilson disease was confirmed by increased free serum copper

(46.75 µg/dl), decreased serum ceruloplasmin levels (0.022 g/L) and increased 24-hour urinary copper excretion (283.80 µg/24h). Ophthalmologic evaluation revealed no Kayser-Fleischer ring. A native cerebral magnetic resonance imaging (MRI) scan was performed, which revealed a few high-signal T2 lesions with demyelinating characteristics located in the bilateral periventricular white matter. Chelation therapy with D-penicillamine has been initiated alongside B6 vitamin supplements and dietary restriction of high copper-containing foods. **Discussions :** The discrepancy between the lesions visible on MRI and the complete absence of neurological symptoms reveals a preclinical stage of neurologic involvement which ensures the optimal moment to initiate the copper-chelating treatment probably with very favorable long-term prognosis. In this case the onset of the metabolic disease was masked by successive viral infections, which initially provided a plausible but incomplete explanation for the elevated liver enzymes. **Conclusions:** The persistence of hepatic cytolysis after viral infection must orient clinicians to screen for metabolic diseases. In Wilson disease neuroimaging studies should be performed even in the absence of neurological symptoms as the structural brain modifications may precede the occurrence of neurologic symptoms and the Kayser-Fleischer ring. Growth impairment in an active adolescent should be investigated beyond constitutional and endocrinological causes.

Keywords: Wilson disease, metabolic disease, viral infections, neuroimaging

THE CHALLENGE OF METACHRONOUS MALIGNANCY: A CASE OF DE NOVO PAPILLARY THYROID CARCINOMA FOLLOWING TREATED UROTHELIAL CANCER

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Introduction: Papillary thyroid carcinoma (PTC) is a common but distinct endocrine malignancy, frequently presenting as a suspicious cervical lymphadenopathy, due to the invasion of adjacent structures such as lymphatic nodules. However, in a patient with significant history of malignancy, new cervical findings can be misattributed to recurrence. **Case Report:** We present the case of a 68-year-old male patient whose oncological history intersected with the diagnosis of subsequent development of PTC. The patient underwent Transurethral Resection of Bladder Tumor (TURBT) in 2018, following the diagnosis of urothelial papillary carcinoma with a high malignancy grade (G3), with periodic urological evaluations. He presented in 2024 with a painful, growing left cervical adenopathy. The cervical MRI found a suspicious, heterogeneous tumor lesion with microcalcifications measuring 30x22x32 mm, suggestive of an adenopathic block. Histopathological examination indicated metastatic PTC in the left cervical lymph nodes, with extracapsular spread and invasion of soft and adipose tissue. While thyroid and parathyroid markers were within normal limits, thyroid ultrasound confirmed the presence of a hypoechoic EU-TIRADS 5 micronodular lesion at the capsule level in the left thyroid lobe. A total thyroidectomy was performed. Histopathology confirmed the diagnosis of conventional variant PTC of the left thyroid lobe, stage pT1aN0. The patient was recommended to undergo whole-body scintigraphy with I131. **Discussions :** The appearance of a cervical mass seven years after a papillary urothelial carcinoma represents a classic diagnostic challenge. Although imaging initially suggested a metastatic recurrence, subsequent biopsy confirmed a second primary neoplasm: papillary thyroid carcinoma (PTC). Treatment included a total thyroidectomy, which additionally requires close lifelong monitoring and hormone replacement/suppression therapy, along with further investigations. **Conclusions:** This case highlights the importance of an accurate histological diagnosis to avoid misdiagnosis in favor of recurrence and to guide subsequent treatment plans, including surgical interventions such as total thyroidectomy.

Keywords: Papillary thyroid carcinoma, cervical adenopathic block, total thyroidectomy, histological diagnosis

THE CLINICAL SPECTRUM OF PSORIASIS: A CASE-BASED REPORT ON PHENOTYPIC INTERPLAY

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Introduction: Psoriasis vulgaris is a chronic immune mediated inflammatory skin disease characterized by well delimited erythematous plaques with silvery scales. In some patients, lesions may present with phenotypic heterogeneity, underlying the complex clinical spectrum of this disease and highlighting the need for an adequate semiology-based approach to diagnosis and treatment. **Case Report:** A 72 years old female patient with grade I

obesity (BMI 31 kg/m²), arterial hypertension, type 2 diabetes mellitus and congestive heart failure was admitted to the Dermatology Department for evaluation of erythematous skin lesions located in the inframammary and inguinal folds. The patient had previously been treated with both topical and systemic antifungal therapy for several months, without clinical improvement. Dermatological examination revealed macerated purplish-red plaques located in the inguinal and inframammary folds, with superficial exudation. Well-defined erythematous plaques covered with multilayered white scales were noticed in the lumbosacral region and lower limbs, along with similar retroauricular lesions. Plantar examination revealed an indurated erythematous plaque covered with fine scales and superficial fissures. Nail examination showed onycholysis, subungual hyperkeratosis and the characteristic oil drop sign, suggestive of psoriatic nail involvement. Based on the aforementioned findings, the diagnosis of chronic plaque psoriasis associated with scalp, plantar, and inverse exudating psoriasis was established. **Discussions :** Psoriasis is currently recognized as a systemic inflammatory disease frequently associated with metabolic comorbidities such as obesity, diabetes mellitus and cardiovascular disease. These conditions may contribute to an increased inflammatory activity and atypical clinical presentations. Exudative lesions in intertriginous areas may mimic other inflammatory dermatoses such as intertrigo, candidiasis or seborrheic dermatitis, which makes the diagnosis more challenging. In addition, nail involvement, including onycholysis and the oil drop sign, is considered a characteristic marker of psoriatic disease and may reflect increased disease severity. **Conclusions:** This case illustrates the clinical variability of psoriasis and the possibility of exudative manifestations, particularly in patients with metabolic comorbidities. Recognizing these atypical presentations is important for establishing an accurate diagnosis and appropriate therapeutic management.

Keywords: Psoriasis Vulgaris, Exudative Psoriasis, Inverse Psoriasis

THE CONSEQUENCES OF ABSENCE OF ROUTINE SCREENING: A CASE OF ADVANCED OVARIAN TUMOUR

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Introduction: Mucinous borderline tumours are neoplasms characterized by atypical epithelial proliferation without stromal invasion. May remain undetected prolonged periods, during which they can reach considerable or even massive dimensions. These tumours are often diagnosed during routine examinations or only after the onset of symptoms resulting from intra-abdominal compression. This case is remarkable due to the exceptionally large size of the tumour as well as the complexity of the surgical procedure required for its complex excision. **Case Report:** A 48-year-old patient presented to the Emergency Department with abdominal pain. On physical examination, a distended abdomen extending up to the xiphoid process was observed with diffuse tenderness on palpation. Abdominal and pelvic CT scan revealed a voluminous mass measuring 32 cm in diameter, exerting a compressive effect on the adjacent organs and in direct contact with the uterus and adnexa. Surgical intervention was performed via a xipho-pubian laparotomy. Upon opening the pelvic cavity, a giant tumour which occupies the entire peritoneal and extending to the xiphoid process were identified (approximately 14 liters of grayish fluid were aspirated). Adhesions between the rectum and the posterior surface of the cervix and the uterosacral ligament were also noted, prompting the involvement of a general surgeon. Adhesiolysis, right salpingectomy, total hysterectomy with left adnexectomy, appendectomy and infracolic omentectomy were performed. Histopathological examination revealed a cystically transformed left ovary measuring 290x210x100 mm, with a final diagnosis of left ovarian mucinous borderline tumour. **Discussions :** The absence of regular gynecological examinations, together with the patient's unawareness of constitutional changes and delayed presentation to medical care, allowed the tumour to progress to a considerable size. Fortunately, the histological type of the ovarian mass is associated with a favourable prognosis and a good postoperative recovery **Conclusions:** Non-attendance at routine screening examinations may permit the progression of neoplastic conditions to advanced stages, at which point they can reach considerable size and substantially impair quality of life. Strengthening public health education and improving access to preventive care may play a critical role in reducing the incidence of such presentations

Keywords: Borderline tumour, hysterectomy, salpingectomy, adnexectomy

THE CORRELATIONS BETWEEN PERCEIVED SOCIAL SUPPORT AND AFFECTIVE SYMPTOMS IN THE IMMEDIATE POSTPARTUM PERIOD

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Introduction: The immediate postpartum period represents the 2-3 days after childbirth, a period that can be associated with important emotional changes, such as maternity blues, which consist of emotional lability, irritability, anxiety and crying episodes. These symptoms are usually mild and can resolve spontaneously within a few days. Their presence may indicate an increased risk for subsequent postpartum mood disorders. Therefore, identifying the factors that may influence these early symptoms, such as the perceived social support, is essential for improving maternal mental health. **Case Report:** This study included 100 women assessed within 2-3 days after delivery. Affective symptoms were evaluated using the Stein Maternity Blues Scale (SMBS), while perceived social support was measured using the Multidimensional Scale of Perceived Social Support (MSPSS) and the Social Support Questionnaire (SSQ). Participants showed low levels of affective symptoms (SMBS: Md = 5.00, IQR = 4.25) and relatively high perceived social support (MSPSS: Md = 68.00, IQR = 20.00). Significant negative correlations were found between SMBS scores and perceived social support, both for MSPSS total ($r = -0.264$, $p = 0.008$) and SSQ ($r = -0.328$, $p < 0.001$), indicating that higher levels of affective symptoms were associated with lower perceived social support. Additionally, participants with higher SMBS scores reported significantly lower levels of perceived social support (MSPSS total: $p = 0.041$; SSQ: $p = 0.027$). **Discussions :** The findings are consistent with existing literature suggesting that social support plays a protective role in postpartum mental health. Women with lower perceived social support appear more vulnerable to affective symptoms even in the immediate postpartum period. These results highlight the importance of assessing social support early after childbirth. Identifying women with limited support may help guide targeted interventions oriented towards reducing emotional distress and preventing the progression to more severe mood disorders. **Conclusions:** Perceived social support is significantly associated with affective symptoms in the immediate postpartum period. Lower levels of support correlate with higher maternity blues scores, underscoring the importance of early screening and support-oriented interventions to improve maternal mental health and prevent the progression to more severe mood disorders.

Keywords: postpartum period, maternity blues, affective symptoms, social support

THE DANGERS OF ARTIFICIAL INTELLIGENCE IN ADOLESCENT MENTAL HEALTH: A CASE REPORT OF AN AI-ASSISTED SUICIDE ATTEMPT

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Introduction: Severe depressive episodes are characterized by low mood, anxiety and irritability. In children and adolescents it is diagnosed in accordance to ICD-10, also associated with "masked depression", manifesting through no changes in routine but growing efforts to meet daily tasks, such as more effort for studying or social interactions. Oftentimes suicidal ideation is only communicated after a plan of action in this direction. **Case Report:** We report the case of a 15-year-old-adolescent who is presented to the Emergency Department of Piatra Neamţ County Emergency Hospital, with strangulation marks around his neck and self-harm wounds on the forearms, after calling his friend at the last seconds of his suicide attempt. His symptoms of suicidal ideation to escape the aggressive family environment, self-devaluation, insomnia, social withdrawal, decreased drive and motivation determined the diagnosis of severe depressive episode without psychotic symptoms F32.2 (ICD-10). Further investigation revealed that his suicide attempt was counselled by an artificial intelligence agent, at first having a neutral attitude, it validated the negative attitude the child was having, making it legitimate, further advising calling a friend or the emergency services. After the patient insisted with his strangulation attempt, he was advised to "be careful not to hurt himself in blunt objects while attempting the act". During the 2-week hospitalization his insomnia improved; treatment with sertraline and risperidone continued for a year after discharge. Also the improvement of the intrafamilial relationships helped the severe depressive episode go into full remission. **Discussions :** Childhood and adolescence depression is often motivated by adverse childhood experiences, family conflict, bullying and deficits in social functioning. As this case highlights, the family is more often than not blindsided to their children mental status. The challenges the depressive patients face usually prevent them from receiving

useful help. As the use of the AI grows, adolescents are increasingly inclined to use it for everything. **Conclusions:** Although artificial intelligence is a very useful tool, it should not replace social interaction, nor professional help, thus enhancing difficulty in reaching patients with widely treatable psychiatric conditions such as severe depressive episodes. Through this case, we intend to raise awareness of the dangers of AI leading to unwanted deaths and untreated mental health conditions.

Keywords: depression, artificial intelligence, suicide attempt

THE DIAGNOSTIC CHALLENGE: PERFORATED GASTRIC ULCER OR GASTRIC CANCER

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Introduction: Gastric perforation is a life-threatening surgical emergency. Perforated gastric cancer (PGC) is a rare complication accounting for less than 1% of acute abdomen cases and less than 5% of advanced gastric cancers. This condition represents a significant diagnostic challenge, as distinguishing PGC from a benign perforated gastric ulcer (BPGU) preoperatively or intraoperatively is extremely difficult. Clinical presentations are often indistinguishable, and severe peritonitis may obscure the underlying malignancy. **Case Report:** An 80-year-old female patient presented with severe abdominal pain and clinical signs of generalized peritonitis. Preoperative computed tomography revealed irregular thickening of the gastric wall at the antral level, along with pneumoperitoneum in the upper abdominal compartment. The initial preoperative and intraoperative diagnosis was a perforated gastric ulcer. The patient underwent emergency subtotal gastrectomy. Macroscopically, an ill-defined, firm, whitish tumor measuring 95 × 60 mm was identified at the antral level, showing perforation and extension into the posterior gastric wall. Histopathological examination of the resected specimen unexpectedly revealed a poorly differentiated gastric adenocarcinoma with a micropapillary component, associated to a chronic ulcer. The tumor is located at the margin of the ulcer, extends into the subserosa, and is associated with perforation of the gastric wall, with no metastatic involvement in the two examined perigastric lymph nodes. **Discussions :** Consistent with existing literature, a preoperative diagnosis of malignancy in gastric perforations is established in only about 30% of cases. Inflammatory changes secondary to diffuse peritonitis often interfere with accurate intraoperative assessment of tumor infiltration, leading PGC to mimic BPGU. The surgical management of PGC remains controversial, as it must simultaneously address the life-threatening peritonitis and achieve adequate oncological clearance. Studies demonstrate that that performing a curative, margin-negative resection during the initial surgery, provided the patient is hemodynamically stable, significantly improves long-term median survival. **Conclusions:** The clinical presentation and macroscopic intraoperative appearance of PGC are often indistinguishable from those of BPGU. Because intraoperative assessment can be misleading due to severe inflammation, postoperative histopathological examination remains the only definitive method for confirming malignancy. This case reinforces the medical necessity of maintaining a high index of suspicion for malignancy in elderly patients presenting with gastric perforations, and it highlights the life-saving and oncological value of achieving margin-negative gastrectomy in emergency settings.

Keywords: perforated gastric cancer, perforated gastric ulcer, generalized peritonitis, histopathological examination

THE FACES OF PERIPHERAL EMBOLIZATION: THE ROLE OF LUCK IN PERIPHERAL EMBOLIZATION

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Introduction: Acute superior mesenteric artery (SMA) embolism and acute upper limb ischaemia (AULI) are vascular emergencies that present significant diagnostic and therapeutic challenges. Statistically, embolic events account for 40-50% of all acute mesenteric obstructions. This case is significant as it documents major embolic events in both upper limb and the mesenteric circulation within a 24-hour period, necessitating multiple emergency surgical interventions. **Case Report:** We present a case of a 83-year-old female with a history of hypertension, diabetes mellitus and smoking, was admitted to the Vascular Surgery Clinic with pain, numbness and coldness in the left upper limb. The patient underwent open acute brachialis embolectomy with heparinization and arteriotomy,

restoring the pulsatile blood flow. Within 5 hours, the patient developed sudden severe abdominal pain, vomiting and diarrhea, raising immediate suspicion of an SMA embolization. After CTA confirmed the diagnosis, SMA embolectomy was performed via total median laparotomy. Due to a significant amount of blood and haematoma found in the abdominal cavity, a second look laparotomy was performed. This revealed an ischaemic segment of the jejunum, resulting in the resection of 50 cm of the intestine and the creation of a side-to-side ileo-ileostomy.

Discussions : This case highlights the high risk of recurrent embolic events in patients with undiagnosed sources of the emboli. Further tests showed an ascending aorta aneurysm that served as the likely source. AULI and SMA embolism are two uncommon sites for embolization: while AULI is often treatable under local anesthesia, SMA embolism remains a highly lethal emergency with a narrow intervention window. Long-term ischaemia in the upper limb can cause severe disability and limb loss, but prompt surgical intervention is superior to anticoagulation alone, particularly when performed within a 12-hour window. In this patient, despite early successful brachial embolectomy and the initiation of postoperative anticoagulation to decrease further risk, a second embolic event occurred within six hours. The clinician's high index of suspicion allowed for the timely identification of the second site, leading to an emergency SMA embolectomy. **Conclusions:** Clinicians must maintain high vigilance and low threshold for suspecting mesenteric ischaemia in any patient with a recent peripheral embolic event. Sequential embolization from central sources requires an urgent, comprehensive diagnostic workup of the entire arterial system. Ultimately, while multidisciplinary coordination is essential, this case serves as a reminder that even prompt surgical intervention cannot always prevent irreversible intestinal damage in the face of aggressive systemic embolic disease.

Keywords: Acute mesenteric ischaemia, Brachial embolectomy, Aortic aneurysm, Sequential embolization

THE HIDDEN BURDEN: DEPRESSION AS A BARRIER TO EFFECTIVE DIABETES MANAGEMENT

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Introduction: Recurrent diabetic ketoacidosis (DKA) in patients with type 1 diabetes mellitus (T1DM) is frequently associated with poor treatment adherence and unrecognized psychological comorbidities. Beyond medical factors, depression, emotional distress, and social vulnerability may significantly impair diabetes self-management. Early identification of psychosocial contributors is essential to prevent repeated episodes of metabolic decompensation, to avoid hospitalizations, and to improve long-term clinical outcomes. **Case Report:** : We report the case of an 18-year-old female patient with T1DM, diagnosed since 2010, who was admitted to the Diabetology Department 4 times within a six-month period in 2025 for DKA. On each admission, her HbA1c values were above 10%, indicating persistently poor glycemic control. Given the recurrent DKA episodes and significant hyperglycemic imbalance, further evaluation was undertaken to identify the underlying cause. It was found that the patient had intentionally omitted insulin doses and failed to monitor her blood glucose values. Psychosocial assessment revealed that she was raised in a single-parent household by her father, whom she perceived as emotionally unsupportive. She described progressive social isolation related to her chronic illness. Based on these findings, the psychiatric consultation was performed and a diagnosis of depressive disorder was established. Psychological counseling and social work support were initiated, leading to subsequent clinical and behavioral improvement.

Discussions : : This case illustrates the complex interplay between chronic illness, psychosocial factors, and metabolic control in a young patient with T1DM. Recurrent DKA is often multifactorial, and in this patient, repeated episodes were linked to intentional insulin omission secondary to depression, social isolation, and limited familial support. Psychological comorbidities such as depression can significantly impair adherence to diabetes management, increasing the risk of severe metabolic complications. Prompt recognition of these factors through psychosocial assessment at initial medical evaluation and multidisciplinary involvement, including psychiatric consultation, psychological counseling, and social work support, is crucial. **Conclusions:** : This case emphasizes the major importance of comprehensive psychosocial assessment into the routine diabetes management. Rapid identification and the targeted intervention can mitigate the risk of further metabolic decompensation, promote adherence to therapy, and optimize long-term clinical outcomes.

Keywords: Type 1 diabetes mellitus, Depression, Diabetic Ketoacidosis

THE HIDDEN GRIEF OF THE AGGRESSOR: TREATING DEPRESSION TO RESOLVE UNSOCIALIZED CONDUCT DISORDER

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Introduction: Unsocialized conduct disorder involves recurrent dissocial or aggressive behaviour in association with diffuse psychopathological changes in the person's relationship with other children. A mild depressive episode in adolescents is usually tied with conduct disorders, with symptoms such as reduced capacity for day-to-day activities, sleep disturbances, somatic symptoms and reduced self-esteem. **Case Report:** We present the case of a 15-year-old-boy who was brought to the Pediatric Psychiatry Compartment of Piatra Neamţ County Emergency Hospital by the Forensic Psychiatric Commission in the role of the aggressor as part of a bullying group. The aggressions culminated with choking one of his bullying partners with a scarf until he lost consciousness. Further analysis revealed the turning point of his behaviour was losing his father a couple of years prior. Admission and the diagnosis of unsocialized conduct disorder (F91.1), mild depressive episode reactive to the loss of a family member were established by recognising resistance to authority, impulsivity, severe outward aggression, emotional lability, irritability, low frustration tolerance and lack of empathy. In adolescents, irritability is a substitute for depressive moods. Through treating his depression with sertraline and valproic acid and inclusion in a family therapy program the unsocialized conduct disorder remitted. **Discussions :** Adolescent conduct disorders involving disturbances in peer relationships frequently go unnoticed by adults; consequently, the cumulative impact of bullying becomes visible only after reaching a critical point. In this case, the patient's mother took on the responsibilities of her late husband (role overload), unintentionally leading to inadequate supervision of the adolescent and the neglect of his emotional needs. The early identification and treatment of depressive symptoms could prevent the implicit development of conduct disorders in adolescents. **Conclusions:** In conclusion, in adolescents, depression can be masked disruptive behaviour, which may also manifest as bullying. Bullying may represent a cry for help from a developing child experiencing a crisis, or it can indicate emotional neglect within the family environment. Accurately identifying behavioral symptoms and promptly recognizing the signs of "masked depression" are key factors in preventing severe bullying incidents and successfully treating potentially life-threatening psychological distress, such as depression, in adolescents.

Keywords: bullying, conduct disorder, depression

THE IMPACT OF IMPAIRED INSIGHT ON THE RECOGNITION OF AN ONCOLOGICAL DIAGNOSIS IN A PATIENT WITH SCHIZOPHRENIA – A CASE REPORT

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Introduction: Schizophrenia is characterized by hallucinations and delusional ideas that are resistant to logical argumentation, often accompanied by a strong motivational and energetic component. Impaired insight in schizophrenia can affect both psychiatric management and the recognition of comorbid somatic conditions. **Case Report:** A 62-year-old female patient with a documented psychiatric history and long-term non-adherence to antipsychotic treatment was brought to the psychiatric emergency unit due to psychomotor agitation, verbal and physical aggression, persecutory delusions, suspiciousness, interpretative ideation, and unpredictable behavior. Cranial CT imaging excluded intracranial pathology. Physical examination revealed a right-sided papillomatous breast tumor with hemorrhagic crusting and purulent discharge, later confirmed by a surgically consult. The patient exhibited impaired insight into her psychiatric disorder, which also prevented recognition of the oncological condition. Persistent delusional ideation and cognitive deficits contributed to her inability to acknowledge both conditions and compromised her medical decision-making capacity. **Discussions :** Long-term treatment non-adherence led to progressive functional decline and psychotic relapse. Impaired insight related to schizophrenia extended beyond psychiatric symptoms, delaying recognition and management of the oncological disease. Establishing a therapeutic alliance during hospitalization improved psychiatric stability and enabled partial adherence to treatment, emphasizing the importance of structured psychiatric support in patients with severe mental illness and comorbid medical conditions. **Conclusions:** Impaired insight in schizophrenia can prevent recognition of life-threatening somatic illness, delaying diagnosis and complicating care. Early psychiatric

intervention and multidisciplinary management are essential to improve clinical outcomes in such patients.

Keywords: schizophrenia, impaired insight, breast cancer

THE IMPACT OF NUCLEAR GENES ON MITOCHONDRIAL FUNCTION: A CASE REPORT OF MIOPATHY IN A PAEDIATRIC PATIENT

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Introduction: Mitochondria, often called the powerhouses of the cell, are crucial for producing energy and keeping the cell's homeostasis. Each mitochondrion has its own genetic material, mitochondrial DNA (mtDNA), which can vary in amount. The replication of mtDNA depends on enzymes encoded by nuclear genes, such as thymidine kinase 2 (TK2) gene. TK2 is an enzyme that helps recycle nucleotides needed for DNA synthesis. Variants in nuclear DNA can cause these enzymes to function incorrectly or not at all, leading to reduced mtDNA levels associated with mitochondrial-DNA-depletion syndrome 2. This syndrome is characterized by a myopathic phenotype with muscle weakness, fatigue and has an autosomal recessive inheritance pattern. **Case Report:** We present the case of a female patient with a history of motor delay, developmental regression, fatigability, and cardiopulmonary involvement. Her symptoms began at 1 year and 3 months of age with progressive muscle weakness. Electromyography showed moderate chronic myopathic changes. Laboratory investigations revealed elevated CK (884 U/L), LDH (653 U/L), and GOT (72 U/L), with normal GPT, indicating muscle damage. She has no family history of genetic diseases. Initially, the patient was genetically tested for spinal muscular atrophy and muscular dystrophies and other muscle disorders with negative results. Furthermore, genetic investigations were conducted using extensive next-generation sequencing (NGS) of nuclear DNA and mtDNA, which identified a homozygous pathogenic variant in TK2 gene, confirming the diagnosis of TK2-related mtDNA depletion syndrome.

Discussions : The prevalence of TK2-related mtDNA depletion syndrome is extremely low, about 1.64 cases per 1,000,000 people, with only 107 cases reported in the medical literature by 2018. Childhood-onset cases make up about 40% of all cases. Therefore, the diagnosis requires a high index of clinical suspicion and extensive genetic testing. Given the phenotypic variability and heterogeneity of mitochondrial myopathies, an extensive NGS panel testing can detect the exact variant, while excluding other possibilities. Although the disease progresses more slowly than the infantile form, most affected children will need a wheelchair by age 10 due to worsening muscle weakness. Treatments include physiotherapy and deoxynucleoside therapy, which involves oral doses of mtDNA precursors, has been shown to help improve respiratory performance. **Conclusions:** TK2-related mtDNA depletion syndrome is a rare disease that causes severe muscle problems and can shorten life expectancy. Early diagnosis through NGS is important to begin treatment as soon as possible and improve outcomes. Genetic counselling, including testing family members, identifying carriers and discussing future family planning, is essential for managing these cases.

Keywords: mitochondrial DNA depletion syndrome, myopathy, TK2 gene, NGS

THE IMPORTANCE OF EARLY PRESENTATION AND DETECTION OF MALIGNANT MELANOMA

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Introduction: Malignant Melanoma is a genuine skin malignancy whose frequency has increased significantly world wide in recent decades. Melanoma begins as an uncontrolled proliferation of genetic mutated melanocytes. Risk factors for melanoma include: increase in age, any history of skin cancer, multiple melanocytic nevi, fair skinned as well as too much exposure to sunlight. Diagnosis and correct surgical treatment at an early stage are keys to achieve better outcome. **Case Report:** We report a case of a 58 years old male with a cutaneous malignant melanoma located on his back. The lesion was surgically excised on June 23, 2025 and examined histopathologically on July 3, revealing a radial growth-phase invasion of the papillary dermis (Clark level III, Breslow thickness 0.6mm; mitotic index: 1-2 / mm³). There was no ulceration, lymphovascular or perineural invasion nor satellite nodules. A wider local re-excision and an elliptical skin flap had been sent to the histopathological laboratory on 14 July. The result had demonstrated dense polymorphic inflammatory infiltrate deep within a fibrotic scar in the dermis and granulomatous inflammatory response to suture material. The

examined sections show no evidence of tumor tissue. The majority of the laboratory investigations were normal while alkaline phosphatase was mildly elevated (322U/L) and the estimated glomerular filtration rate was 70 ml/min/1.73m² on August 7. A contrast-enhanced thorax, abdomen and pelvis CT performed on August 12 to determine the stage of the disease and diagnosis classification also revealed bilateral pulmonary micronodules, postsurgical thickening right thoracic subcutaneous tissue without signs of secondary nodes (thorax-abdomen-pelvis) or damage to bone. **Discussions** : Thin, superficial spreading melanoma (pT1aN0M0) has an excellent prognosis after adequate surgical treatment. Early diagnosed patients have an almost curable nature. There can be incidental pulmonary micronodules that are also difficult, but serial follow-up CT scans will demonstrate the benign etiology and changes that may occur with time so less invasive procedures may ultimately be needed. **Conclusions**: Early diagnosis and definitive anamnestic surgery are essential to control early systemic dissemination of primary melanoma. Stable pulmonary micronodules pose a difficult pitfall within incidentalomas and serve as an essential reminder that uniform standardized follow up is critical to be alert for early recurrence or metastasis.

Keywords: Thin melanoma, Breslow thickness, Clarke level III, Superficial spreading

THE INFLUENCE OF CROHN'S DISEASE ON THE BOWEL'S WALLS AND THE IMPORTANCE OF NONINVASIVE SCREENING METHODS: A CASE REPORT

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Introduction: Patients with Crohn's Disease (CD) suffer from a chronic and relapsing inflammatory bowel condition, which usually affects the terminal part of the ileum. Most of the time, the inflammation is kept under control with immunosuppressive medication and requires consistent clinical surveillance. In our case of fistulising CD, the anti-tumour necrosis factor agents play a mandatory role. **Case Report**: We present the case of a 30-year-old male patient with impaired general condition, who was diagnosed a year prior with CD. During colonoscopy, we identified inflammation around the ileocecal valve, with nodular aspect and aphthous lesions on the ileum's mucous membrane, stenosis and exulcerating lesions. The cecum, surprisingly, showed no signs of lesions. In our case, the most affected part of the bowel was the anal canal and perianal zone with multiple fistulas. After the intestinal echography has been performed, one of the fistulas has been given the Limberg score of 3, indicating a thickened wall (usually more than 8mm) in the perianal zone and long segments of vascularization along the fistulisation. The patient had previously been treated with azathioprine and vedolizumab, without achieving a sustained therapeutic response. The treatment has been switched to infliximab, an anti-TNF agent, with a promising clinical response. After a more recent determination, fecal calprotectin levels were considerably elevated, indicating an active/relapsing phase of CD. Laboratory results from a complete blood count showed a mild anemia, leukocytosis, and elevated CRP. **Discussions** : This case illustrates a severe fistulising CD, mainly affecting the perianal region, with the unusual finding of a spared cecum. Intestinal ultrasound, together with elevated fecal calprotectin, was helpful for noninvasive assessment. Consistent surveillance is needed to adjust treatment in patients with inflammatory bowel disease (IBD), which underscores the need for noninvasive monitoring. Considering these, early identification and treatment remain key to better patient outcomes. **Conclusions**: To conclude, CD alters the internal wall of the bowel, leading to a general impaired condition, which can be easily misinterpreted and go on undetected for years until the right diagnosis is actually made.

Keywords: inflammation, echography, fistula, anti-TNF agent

THE INTERPLAY BETWEEN RECREATIONAL SUBSTANCE USE AND UNDERLYING THROMBOPHILIA IN A YOUNG PATIENT WITH CRITICAL CORONARY ARTERY DISEASE

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Introduction: Cardiovascular disease in young adults is increasingly linked to independent risk factors, including consumption of toxic substances. NHANES data suggest that cocaine increases the risk of non-fatal myocardial infarction sevenfold in patients aged 18-45. This accounts for 25% of cases in this demographic. Cocaine is a potent cardiovascular toxin which acts through mechanisms such as acute coronary vasospasm via alpha-

adrenergic stimulation and a pro-thrombotic state mediated by enhanced platelet aggregation and endothelial dysfunction. Combined with genetic predispositions like thrombophilia, these triggers can lead to thrombotic events and heart failure. **Case Report:** We present a young male smoker and user of recreational substances with a history of cocaine use. The patient presented to the emergency department in December 2024 with dyspnea following alcohol and cocaine consumption. Initial investigations revealed no significant abnormalities, leading to discharge on a home diuretic regimen. One month later, he returned with signs of acute heart failure. ECG revealed a complete right bundle branch block and diffuse ST-T changes, although toxicology was negative for cocaine at this second presentation. Laboratory findings showed elevated biomarkers: hs-cTnI (560 ng/L), D-dimers (3279 ng/L), and NT-proBNP (7774 pg/mL). Echocardiography demonstrated impaired systolic function and a voluminous mass in the left ventricular apex. A thoracic CT confirmed a large apical thrombus. Considering slow clinical improvement, persistent thrombosis despite maximal anticoagulation, and ECG changes, coronary angiography was performed to rule out an ischemic component. Results revealed a critical lesion in the proximal left anterior descending artery, and a drug-eluting stent was implanted. During follow-up, the patient was readmitted for right heart failure and a new pulmonary embolism. Consequently, the thrombophilia panel was reassessed, and a more intensive anticoagulation regimen was administered. **Discussions :** This case highlights the diagnostic challenge of coronary artery disease in young drug users. While the acute risk of myocardial infarction is highest immediately following exposure, literature demonstrates cardiovascular events can occur even when the substance is no longer detectable, as cocaine accelerates underlying coronary lesions. In this patient, the critical LAD stenosis points to a persistent vascular substrate. Subsequent refractory thrombosis and pulmonary embolism were driven by synergy between this structural lesion and genetic thrombophilia. This "multi-hit" mechanism necessitated a more aggressive anticoagulation strategy. **Conclusions:** Rapid recognition of high-risk thrombotic markers is vital. In young patients who consume recreational substances, screening for thrombophilia is essential for a comprehensive risk assessment. Targeted anticoagulation therapy is crucial to reduce long-term morbidity and cardiovascular mortality.

Keywords: Cocaine, Thrombophilia, Acute coronary syndrome, Intracardiac thrombus

THE INTERPRETATION OF FECAL CALPROTECTIN IN A PEDIATRIC PATIENT WITH GASTROINTESTINAL SYMPTOMS: A CASE REPORT

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Introduction: Fecal calprotectin is a non-invasive biomarker used in the evaluation of gastrointestinal disorders, particularly for detecting intestinal inflammation. Despite its high sensitivity, its limited specificity requires careful interpretation in the clinical context. In certain situations, elevated values may reflect transient or non-specific inflammatory processes, raising important considerations in the diagnostic approach. **Case Report:** We present the case of a 16-year-old female patient with a history of chronic constipation, abdominal pain, and a recent episode of acute gastroenteritis 3 weeks ago, who was admitted for further evaluation of persistent gastrointestinal symptoms. The patient presented in stable general condition, with abdominal distension, pain in the left flank and periumbilical region, and slowed intestinal transit. Initial laboratory investigations reported elevated fecal calprotectin level of 5400 µg/g. Inflammatory markers were in normal limits, while fecal occult blood testing was positive. Abdominal ultrasound revealed fecal impaction and abdominal meteorism. Therapeutic treatment was initiated, including lactulose, bisacodyl, fiber supplementation, and prokinetic therapy. Clinical evolution under treatment was favorable, with improvement of symptoms. Follow-up evaluation included repeat fecal calprotectin measurement, which demonstrated a significant decrease to 200 µg/g. **Discussions :** Fecal calprotectin is used to differentiate between inflammatory and non-inflammatory gastrointestinal diseases together with other invasive and non-invasive investigations. The patient's recent history of gastroenteritis could reflect transient mucosal inflammation and the fecal impaction with positive fecal occult blood test further supports mucosal stress, which could lead to high fecal calprotectin level. The significant decrease in fecal calprotectin levels during symptomatic treatment suggests mucosal healing in transitory inflammation. The absence of systemic inflammatory markers, normal abdomino-pelvic ultrasound findings and relatively normal levels of fecal calprotectin after the treatment cannot exclude other gastrointestinal cases of inflammation, therefore further invasive investigations such as endoscopy with biopsy and histopathological exam should be performed. **Conclusions:** This case illustrates the importance of interpreting fecal calprotectin levels within the clinical and paraclinical context. Elevated values may be associated with transient or non-specific inflammatory processes, and their dynamic evolution can provide valuable information in guiding clinical decision-making.

Keywords: fecal calprotectin, gastroenteritis, abdominal pain, pediatric

THE INVISIBLE THREAT: MANAGING ACUTE POSTOPERATIVE BLOOD LOSS IN OVARIAN FIBROMA

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Introduction: Ovarian fibroma represents a solid benign tumor that originates from the stromal component of the ovaries, especially during the menopause period. Patients are usually asymptomatic, and the formation is discovered accidentally during the routine gynecologic examination. **Case Report:** We present a 64-year-old patient, in climax for 16 years, who is being admitted to the hospital for an ovarian cyst detected in the outpatient clinic. Laboratory tests performed at the time of admission remained within normal parameters, but the ultrasound examination highlighted a uterus enlarged in dimensions, of 130/91 mm, with an inhomogeneous ecostructure. In the left latero-uterine area, a multilocular transonic formation was visualized, of 110/77 mm, which also presented a solid component. The right adnexa had a normal appearance, with no free fluid detected in the Douglas cul-de-sac. Given the correlated diagnosis of ovarian cyst and uterine fibroid, surgical intervention by exploratory laparotomy was decided. Intraoperatively, a cystic, multilocular left adnexal tumor (20×15 cm) was identified, implanted on a solid formation suggestive of ovarian fibroma (10×12 cm). The right adnexa and uterus had a normal appearance, but both presented adhesions. Adhesiolysis, left cystectomy, and subsequently total hysterectomy with bilateral adnexectomy were practiced, mounting an abdominal drain. On the first postoperative day, the patient's condition degraded suddenly, presenting clinical signs of hypovolemic shock, respectively arterial hypotension, tachycardia, pallor, and dyspnea, against the background of a sharp decrease in hemoglobin to 8.5 g/dL. Ultrasound reevaluation confirmed the presence of a massive hemoperitoneum, imposing emergency reintervention. At relaparotomy, 1500 mL of blood and clots were evacuated, but without identifying an active source of bleeding. Compressive packing in the small pelvis, multiple drainage, and transfusional support were opted for. Under complex antibiotic, anticoagulant, and rebalancing treatment, the evolution became favorable, despite an initial inflammatory syndrome. On the third postoperative day, the mesh and drainage tubes were suppressed under anesthesia, the patient being out of any danger. **Discussions :** The case's particularity consists in the presence of a massive hemoperitoneum without a detectable active source, a situation that validated the efficiency of compressive packing and transfusional support. Therapeutic success depended on the early recognition of clinical signs and prompt relaparotomy, vital elements for the patient's survival. **Conclusions:** Consequently, rigorous monitoring and aggressive "damage control" type intervention are essential for hemodynamic stabilization and favorable recovery of gynecological patients in critical condition.

Keywords: Fibroma, Cyst, Tumor, Hemoperitoneum

THE INVISIBLE THREAT: SILENT PROGRESSION OF HCC IN THE BACKGROUND OF MACRONODULAR CIRRHOSIS

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Introduction: Cirrhosis is a chronic liver disease characterized by fibrosis, the formation of fibrous septa, and the replacement of normal hepatic parenchyma with structurally abnormal nodules. Clinically, it is generally manifested by progressive liver failure, portal hypertension, and the development of hepatocellular carcinoma (HCC). The latter is the most common primary malignant liver tumor and occurs predominantly in patients with HBV/HCV infection, alcoholic cirrhosis, and aflatoxin exposure. According to studies, in Western countries, approximately 90% of these tumors develop in cirrhotic patients. **Case Report:** A 64-year-old patient, known with liver cirrhosis, portal hypertension, and peripheral neuropathy, presented to the Gastroenterology Department of the County Emergency Clinical Hospital Târgu Mureș with postprandial epigastric pain. Laboratory investigations revealed elevated INR, AST, direct bilirubin, and total bilirubin levels, along with decreased albumin. Abdominal ultrasound did not identify any newly developed pathology. After 6 days, the patient underwent endoscopic and clinical and biological reassessment. Laboratory findings again showed elevated INR, AST, direct and total bilirubin, and decreased albumin. Upper gastrointestinal endoscopy established the following diagnoses: grade I/II esophageal

varices, portal hypertensive gastropathy, and a history of duodenal bulb ulcer. On 06.10.2025, a routine evaluation was repeated, showing increased direct and total bilirubin levels and leukocyte count, along with decreased serum albumin and HDL cholesterol. It is noteworthy that in January 2025, an MRI with intravenous contrast was performed, describing a liver with an irregular, macronodular contour consistent with cirrhosis, severe steatosis, and no focal lesions suggestive of HCC. At the beginning of 2026, during routine check up, an elevated alpha-fetoprotein level was identified. **Discussions** : A contrast-enhanced MRI (Gadovist) was performed, establishing the diagnosis of hepatocellular carcinoma located in segment VIII. The patient was subsequently admitted for transarterial chemoembolization (TACE) of a branch of the hepatic artery using doxorubicin. The procedure was uneventful, with no intra- or post-procedural complications. The patient had a favorable clinical course over the next 48 hours and was discharged. **Conclusions**: This case is notable for the rapid diagnosis and treatment of an oncological condition that developed silently on the background of cirrhosis, with minimal indicators for the detection of hepatocellular carcinoma. This favorable outcome was achieved due to appropriate medical management and effective multidisciplinary collaboration, significantly reducing the risks associated with hepatocellular carcinoma.

Keywords: cirrhosis, hepatocellular carcinoma, alpha-fetoprotein

THE KRASAVITOV FLAP IN RECONSTRUCTIVE PLASTIC SURGERY OF THE THIGH: MANAGEMENT AND POSTOPERATIVE COMPLICATIONS

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Introduction: The Krasavitov flap method is a well-established technique for reconstructing soft-tissue injuries, particularly in cases of skin degloving or avulsion. The purpose of the procedure is to utilize local denuded tissue without sacrificing other tissue resources, such as local or free flaps, or distant split-thickness skin grafts. The technique involves processing the flap similarly to a full-thickness skin graft and reapplying it to the recipient site. In the absence of a vascular pedicle, viability depends on adequately thinning the tissue to allow nutrition through capillary diffusion and prevent necrosis. **Case Report:** In this case, a 70-year-old patient with a personal medical history of obesity, type 2 diabetes, and a nonfunctional femoropopliteal bypass on the right thigh, which was found during the investigations before the surgery. He presented in the emergency room with lower limb crush injury, involving circular degloving of the skin on the right thigh (100cm/40cm of skin), extending from the inguinal region to the distal third of the lower leg. The Krasavitov flap was performed after skin preparation of the undermined area, which was fixed with surgical staples. The healing process was affected by ischemic and necrotic complications in a span of 10 days in the right lower leg due to the non-functional femoropopliteal bypass and the vascular problems, which compromised the revascularisation of the flap. Considering these, another intervention was necessary because the necrotic tissue reached the immediate proximity of the upper part of the knee. Even though the procedure was performed impeccably, the healing process was weakened. This led to amputation up to the middle third of the thigh. A favorable postoperative condition followed by pink-colored grafts and 75 per cent adhesion. **Discussions** : Normally, the Krasavitov procedure is highly efficient in such cases, due to its advantages in postoperative recovery. However, the comorbidities presented in this case, more precisely, the peripheral arterial occlusive disease and diabetic angiopathy, threatened the healing of the wound, which required a different approach and management. **Conclusions:** This case highlights the importance of adaptability in polytraumatic surgical cases, where even though the best surgical technique is conducted, preexisting patient conditions can make successful healing impossible.

Keywords: The Krasavitov Flap, Peripheral Arterial Occlusive Disease, Crush Injury, Necrotic Complications

THE MISSING TACHYCARDIA: INTERMEDIATE-HIGH RISK PULMONARY EMBOLISM IN A BRADYCARDIC PATIENT

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Introduction: Pulmonary embolism (PE) is a common cardiovascular emergency and a life-threatening condition that can be challenging to diagnose due to non-specific signs and symptoms. Tachycardia is one of the most

frequent clinical findings in PE and constitutes a key component of the Wells score. However, coexisting comorbidities can alter the typical presentation, lowering clinical suspicion. We present the case of a bradycardic patient diagnosed with intermediate-high risk PE, in which further investigations revealed underlying hypothyroidism. **Case Report:** A 65-year-old female presented to the emergency department with acute shortness of breath and dry cough that started the day prior to presentation, following air travel. Her medical history included multiple surgical procedures after a car accident one year earlier. Electrocardiogram showed heart rate of 60 and T-wave inversions in the lateral leads. Wells score was 3 points (intermediate clinical probability). Peripheral venous Doppler ultrasound was negative. Transthoracic echocardiography revealed right ventricular strain: positive McConnell sign, decreased TAPSE, positive D sign, mild mitral and tricuspid regurgitation and left ventricular ejection fraction of 45%. D-dimer and cardiac biomarkers (troponin I, NT-proBNP, CK-MB) were elevated. Based on patient's symptoms, Wells score, laboratory and imaging findings, CT pulmonary angiography was performed and demonstrated filling defects in the right main pulmonary artery and left lobar artery, associated with pulmonary infarction. Treatment was initiated with unfractionated heparin, dose-adjusted according to activated partial thromboplastin time, later transitioned to long-term apixaban. During hospitalization, heart rate persisted at 50-55, leading to evaluation of thyroid function. Laboratory tests confirmed hypothyroidism with elevated TSH (40.65 uIU/mL) and low FT4 (0.4 ng/dL), therefore levothyroxine therapy was initiated. **Discussions :** Given PE's nonspecific presentations, clinicians must maintain a high index of suspicion, including PE in the differential diagnosis even when classical signs are absent. Besides prolonged sitting during air travel, there were no other significant risk factors for PE; however, this element still prompted clinicians to take PE into consideration for differential diagnosis. Adherence to structured guidelines reduces the risk of missed or delayed diagnosis; in this case, protocol adherence led to timely detection despite an intermediate Wells score. Moreover, atypical presentations should not be dismissed as coincidental; additional evaluation may reveal contributing comorbidities, as demonstrated by bradycardia uncovering severe hypothyroidism which attenuated the expected sympathetic chronotropic response in PE. **Conclusions:** This case emphasizes the importance of clinical decision tools, vigilance in atypical presentations and investigation for underlying comorbidities that may modify classical manifestations.

Keywords: pulmonary embolism, bradycardia, hypothyroidism

THE OTHER FACE OF IMMUNOTHERAPY: A CASE OF SEVERE MULTISYSTEM TOXICITY UNDER NIVOLUMAB

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Introduction: Globally, lung cancer ranks as the first leading cause of cancer-related mortality. The development of innovative therapies has significantly improved patient outcomes. However, achieving the optimal balance between therapeutic benefit and treatment-related toxicity remains a major clinical challenge. Immune checkpoint inhibitors now are key players in the treatment of advanced lung cancer, nevertheless, their benefits come at the cost of multisystem immune-related toxicity, which may necessitate premature treatment cessation. **Case Report:** A 63-year-old patient diagnosed with stage IIIB (T3N2M0) squamous non-small cell lung cancer was referred to our hospital for oncologic treatment. Initial CT imaging revealed a left hilar mass causing complete obstruction of the left upper lobe bronchus, along with multiple mediastinal lymphadenopathies. Bronchoscopic biopsy confirmed invasive squamous cell carcinoma, with negative ALK and EGFR status and PD-L1 TPS of 40%. The patient initially started induction chemotherapy with the aim of potential conversion to operability. After four cycles, imaging demonstrated disease progression, leading to treatment discontinuation and initiation of nivolumab. During treatment, the pulmonary disease remained stable; however, at the 28th cycle, the patient developed severe palmoplantar psoriasis vulgaris, which required temporary treatment interruption. During follow-up, the patient was subsequently diagnosed with insulin-dependent diabetes mellitus. Imaging reassessment later demonstrated disease progression, leading to a switch to docetaxel. **Discussions :** Immune-related adverse events have a few key features: they occur simultaneously or sequentially, may persist even after treatment withdrawal, and in some cases may be associated with clinical benefit from immune checkpoint inhibitors. Several studies suggest that immune-related adverse events, particularly skin and endocrine toxicities, may correlate with improved response and survival in non-small cell lung cancer patients treated with nivolumab possibly reflecting enhanced immune activation. In our case, the temporal association between nivolumab administration and the onset of severe psoriasis supports a PD-1 inhibitor-related immune-mediated adverse event. Although cutaneous toxicity is among

the most common immune-related adverse events associated with immune checkpoint inhibitors, psoriasis represents an uncommon clinical phenotype. The subsequent development of diabetes mellitus further raised suspicion of an endocrine/metabolic immune-related adverse event, highlighting the multisystem and sequential nature of nivolumab toxicity. Importantly, these adverse events had direct therapeutic consequences, leading to temporary treatment interruption, subsequent tumor progression, and the need to switch to a new treatment line.

Conclusions: This case underscores the clinical complexity of immune-related adverse events during nivolumab therapy, as severe multisystem toxicity may not only impair quality of life but also directly affect treatment decisions and disease control.

Keywords: #Immune checkpoint inhibitors, #Multisystem toxicity, #Therapy-related complications

THE OVERLAP OF POLYMYALGIA RHEUMATICA AND GIANT CELL ARTERITIS: DIAGNOSTIC CHALLENGES IN A PATIENT WITH REFRACTORY HEADACHE

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Introduction: Giant cell arteritis (GCA) is an inflammatory vasculitis, which usually affects medium to large sized arteries in patients older than 50 producing headache, tenderness of the temporal arteries and jaw claudication. It has numerous complications, the most severe ones including vision loss, stroke, aortic aneurysms and arterial dissection. The association of GCA and polymyalgia rheumatica (PMR), an inflammatory rheumatic condition causing pain especially in shoulders and hips, complicates the disease development and prolongs the duration of treatment. **Case Report:** We report the case of an 83-year-old woman diagnosed with PMR 3 years prior who accused significant headache, with tenderness of the temporal arteries, occipital scalp sensitivity, recently installed blurred vision and jaw claudication. She had been treated with corticosteroids at a lower dose (Prednison 7.5 mg/day) due to refractory symptoms of PMR. Blood tests underlined systemic inflammatory syndrome (CRP=16 mg/L VSH=40 mm/h), therefore GCA suspicion is raised, later confirmed by the ultrasound aspect of the temporal artery showing inflammation of the vessel wall named the "halo sign". Computer Tomography Angiography of the supraaortic trunks excluded extra-cranial impairment. The ophtalmologic examination excluded optic neuropathy. Her previous dose of corticosteroids was increased to 50 mg/day with remission of the inflammatory symptoms after few days of treatment. The cephalgia alone persisted, even associated with analgesics- Duloxetine and low dose of Gabapentin. A corticosteroid injection in both Arnold's point was performed with major improvements of the headache and also the blurred vision. **Discussions :** This case is particularly notable due to the development of GCA in a patient with a refractory PMR. Although both conditions share common inflammatory pathways (IL-6) and specific alleles of human leukocyte antigen (HLA) DR4, GCA occurs in only 15-20% of people with PMR. This case highlights the clinical spectrum of these diseases. Another particularity is that the headache had several etiologies, each requiring a different treatment and the dose increase reflected the shift from a common to a serious condition. Additionally, the blurred vision was not attributed to the GCA and was rather interpreted in the context of the Arnold's neuralgia- suggested by pain at the Arnold's trigger points. **Conclusions:** The transition from a PMR phenotype to GCA underscores the importance of longitudinal monitoring and early diagnosis in order for a patient to benefit of rapid treatment. The underlying cause of the headache, the main symptom in GCA, needs to be very well defined in order to choose the appropriate treatment.

Keywords: Giant cell arteritis, Polymyalgia rheumatica, Headache, Temporal arteries

THE PRICE OF NON-ADHERENCE IN CROHN'S DISEASE: PROGRESSIVE FIBROSTENOSIS AND THE ESSENTIAL ROLE OF ADVANCED IMAGING

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Introduction: Crohn's disease is a chronic, relapsing inflammatory disorder causing transmural inflammation, ulceration, strictures, and fistulas throughout the gastrointestinal tract. Its unpredictable course requires regular monitoring and therapeutic adherence. Management includes corticosteroids, immunomodulators, biological therapies and targeted immunotherapies. Our objective is to illustrate how poor treatment adherence over several years influenced the evolution of Crohn's disease in a high-risk patient, and to emphasize the importance of comprehensive imaging techniques when standard endoscopic evaluation becomes impossible. **Case Report:** We

present the case of a 43 year old woman with long standing Crohn's disease. In 2008, ileocolonic involvement prompted right hemicolectomy, with histopathologic confirmation on the resected right colon. Managed as high risk, she received adalimumab until 2017, then infliximab for nonresponse. In 2019, entero MRI demonstrated multiple pelvic small bowel stenoses with prestenotic dilatation, leading to enteral resections; Due to poor compliance to follow-up tests , for several years the patient wasn't under medical observation . In October 2024, abdominal ultrasound was performed; colonoscopy was not undertaken because the patient refused the procedure.

Discussions : After a period without adequate monitoring, the patient presented with chronic symptoms and biochemical evidence of low-grade inflammation (2025). Attempted colonoscopy failed because of severe fibrotic anal stenosis. Cross-sectional imaging demonstrated: mildly thickened jejunal loops, a segment of the descending colon with chronic inflammatory characteristics (T2 hypointensity, diffusion restriction, homogeneous enhancement), sigmoid spasm with upstream dilation, and extensive perirectal and perianal fibrosis causing luminal narrowing. These findings enabled assessment of disease activity, complication burden, and therapeutic planning despite the absence of endoscopic visualization. Based on imaging severity and structural damage, re-initiation of biologic therapy, planned anal dilatations, and possible surgical intervention were recommended.

Conclusions: This case highlights how non-adherence can profoundly impact Crohn's disease outcomes, leading to progressive fibrosis, stenosis, loss of endoscopic access, and recurrent surgical needs. It also underscores the complexity of Crohn's disease and the essential role of advanced imaging modalities-such as entero-MRI and dedicated pelvic MRI-for disease evaluation when colonoscopy is not possible. Comprehensive monitoring, sustained therapy, and patient adherence are critical for preventing irreversible complications.

Keywords: Crohn's disease, non-adherence, entero-MRI, biologic therapy

THE RECONSTRUCTIVE CHALLENGE OF A RECURRENT TRACHEOESOPHAGEAL FISTULA: A MULTI-STAGE SURGICAL APPROACH USING THE ALT FREE FLAP

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Introduction: Tracheoesophageal fistulas represent a severe complication following salvage total laryngectomy, significantly impacting quality of life and vital prognosis due to the high risk of aspiration and malnutrition. This case is significant as it demonstrates the limitations of conventional reconstructive techniques and highlights the challenge of preventing life-threatening aspiration pneumonia. **Case Report:** A 58-year-old male presented with a decade-long oncological history, beginning with a right pyriform sinus squamous cell carcinoma (T3N2cM0) diagnosed in 2015. Following primary chemoradiotherapy and a subsequent salvage total laryngectomy with bilateral neck dissection in 2019, the patient developed a recalcitrant posterior tracheoesophageal fistula. The reconstructive journey was arduous: in 2024, an initial attempt at hypopharyngeal reconstruction was performed using a left Anterolateral Thigh (ALT) free flap and a right pectoral flap to cover the massive soft tissue defect. Despite these efforts, the fistula persisted, leaving the patient dependent on a feeding gastrostomy, a permanent tracheostoma, and a nasogastric tube. In February 2026, a third major reconstructive attempt was undertaken using a second ALT free flap harvested from the right thigh to achieve surgical closure of the posterior tracheoesophageal defect. The postoperative course was complicated by a partial dehiscence and a donor-site hematoma, which were successfully managed using Negative Pressure Wound Therapy (VAC Therapy) and secondary suturing. By March 2026, clinical evaluation confirmed full flap integration, a patent tracheostoma, and stable healing of all surgical sites. **Discussions :** In comparison with existing literature, this case emphasizes the inherent difficulty of reconstruction within intensely fibrotic and devitalized tissues post-irradiation, where local flaps are often insufficient. The management of postoperative complications through Negative Pressure Wound Therapy proved decisive in salvaging the flap and achieving definitive closure of the defect. Furthermore, the implications for management highlight the necessity of a multidisciplinary approach and constant biological monitoring, including transfusion support, to ensure the success of this kind of surgery in malnourished oncological patients. **Conclusions:** The successful closure of this recurrent fistula underscores that even after multiple failed reconstructions, a meticulous surgical approach using the ALT flap can achieve definitive results. This case underlines the effectiveness of aggressive wound management combined with free tissue transfer in highly compromised oncological patients.

Keywords: Salvage Laryngectomy, Tracheoesophageal Fistula, ALT Flap, VAC Therapy

THE ROLE OF ESKETAMINE IN THE MANAGEMENT OF TREATMENT-RESISTANT DEPRESSION

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Introduction: Treatment-resistant depression (TRD) has been defined in various ways. While there is a general agreement that TRD involves the lack of a satisfactory response after at least two antidepressant medications prescribed at appropriate doses and for an adequate duration, some experts sustain that these treatments should belong to at least two pharmacologically distinct classes. Others consider that non-response to a minimum of two antidepressants from the same class may also meet the criteria for TRD. **Case Report:** We present the case of a 45-year-old male patient from a rural area, retired due to disability, with a known history of depressive disorder, previously operated lumbar disc herniation, chronic low back pain with radiculopathy, and sensorimotor polyneuropathy. The patient had multiple previous psychiatric hospitalizations and presented with a psychopathological profile characterized by depressive ideas of self-devaluation and incapacity, depressed mood, anxiety, low tolerance to stress and frustration, emotional lability, anhedonia, hypobulia, bizarre associations, suicidal ideation, multiple self-inflicted knife wounds on both forearms and mixed insomnia. The patient had previously undergone at least two different antidepressant treatments - Sertraline, Venlafaxine, Duloxetine - without significant clinical improvement. Consequently, he was enrolled in the National Program for Treatment-Resistant Depression and initiated on esketamine therapy. The first dose of 28 mg (two vials) was administered in December 2024, followed by twice-weekly administration for the next two weeks. Starting from the third week, the dose was increased to three vials. The maintenance phase, consisting of a single weekly administration, was initiated in the fifth week. During hospitalization, the patient showed a favorable clinical course, with progressive improvement in symptomatology. **Discussions :** The particularity of this case lies in the relatively rapid clinical response observed despite several negative prognostic factors: pharmacologically documented treatment resistance, multiple psychiatric and somatic comorbidities, residence in a rural area, and disability-related retirement. The management of TRD remains challenging due to several limitations, including the absence of a universally accepted definition, relatively low remission rates and methodological limitations in clinical studies. Recent randomized controlled trials demonstrate that esketamine outperforms placebo in TRD (reduction of 3-7 points on the Montgomery-Åsberg Depression Rating Scale; effect size 0.5-0.6), with rapid onset of action and remission rates of 20-25% compared with 7-10%. **Conclusions:** The outcomes observed in this case suggest the potential effectiveness of esketamine therapy in the management of TRD. These observations highlight the importance of expanding dedicated programs for this condition, including the National Program for Treatment-Resistant Depression.

Keywords: Treatment-resistant depression, Comorbidities, Esketamine, Placebo

THE SILENT BLEEDER : AN EXTRA-GASTROINTESTINAL STROMAL TUMOUR MASQUERADING AS A SUBHEPATIC HEMATOMA

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Introduction: Extra-gastrointestinal stromal tumors (EGISTs) are rare mesenchymal neoplasms arising outside the gastrointestinal tract, accounting for less than 5% of all stromal tumors. Although they share histological and immunohistochemical features with gastrointestinal stromal tumors (GISTs), their atypical location frequently leads to delayed diagnosis or misinterpretation as postoperative or inflammatory lesions. EGISTs may present with hemorrhagic components and nonspecific symptoms, posing significant diagnostic challenges. **Case Report:** We report the case of a 51-year-old female presenting with persistent ulcer-like dyspeptic symptoms, partially responsive to proton pump inhibitors. The patient had undergone laparoscopic cholecystectomy in April 2025, with a postoperative CT scan in May 2025 reported as normal. In January 2026, abdominal ultrasound revealed a heterogeneous subhepatic mass with both solid and fluid components, located above the muscular plane, in close contact with the gastric antrum, with internal Doppler signal and minimal pelvic free fluid suggestive of hematic content. Upper gastrointestinal endoscopy was unremarkable. An emergency contrast-enhanced CT scan

described a suspected active subhepatic hematoma with minimal hemoperitoneum. Retrospective review of the prior CT scan identified the same lesion, previously smaller in size. Importantly, biological workup did not reveal anemia, highlighting a clear discordance between clinical and imaging findings. Subsequent contrast-enhanced MRI demonstrated a heterogeneous perigastric mass with necrotic areas, diffusion restriction, and heterogeneous enhancement, raising suspicion for a stromal tumor. Endoscopic ultrasound (EUS) confirmed the diagnosis of extra-gastrointestinal stromal tumor (eGIST) and demonstrated its hemorrhagic nature. Given these findings, emergency surgical intervention was performed. **Discussions** : EGISTs may present as exophytic masses and can closely mimic postoperative hematomas, especially in recently operated patients. This case highlights the importance of reconsidering initial imaging and correlating findings across modalities. The absence of anemia despite imaging suggestive of active bleeding represents a diagnostic pitfall. EUS played a decisive role by confirming both the tumoral nature and hemorrhagic component of the lesion, directly impacting management. Multimodal imaging including ultrasound, CT, MRI, and EUS is essential for accurate characterization. Definitive diagnosis relies on histopathology and immunohistochemistry (KIT, DOG1), while surgical resection remains the cornerstone of treatment in complicated cases. **Conclusions**: EGIST should be considered in the differential diagnosis of heterogeneous subhepatic or perigastric masses, particularly in postoperative patients. Clinico-imaging discordance, especially in the absence of anemia, should prompt further evaluation. EUS can be decisive in establishing diagnosis and guiding urgent therapeutic management in hemorrhagic cases.

Keywords: Extra-Gastrointestinal Stromal Tumour, Mesenchymal neoplasm, Subhepatic mass, Hemorrhage

THE USEFULNESS OF BIOLOGIC THERAPY IN HIDRADENITIS SUPPURATIVA: EVIDENCE FROM A CLINICAL CASE

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Introduction: Hidradenitis suppurativa (HS) is a chronic, recurrent inflammatory disease affecting the apocrine glands. The lesions are typically located in the big skin folds and are characterized by painful nodules, abscesses, draining sinuses, and scarring. Even though conventional therapies like systemic antibiotics may alleviate the milder and moderate forms, biologics have emerged as promising agents for refractory and severe cases. **Case Report:** A 20-year-old woman with recent weight gain presented with painful nodules, fistulas, and abscesses in the inguinal and axillary regions, consistent with HS Hurley stage II-III. Clinical examination revealed dilated reddish-violet tracts in the axillary, inguinal, submammary, and abdominal folds. Baseline investigations were within limits. The patient was started on doxycycline 100 mg daily for 30 days, once daily topical fusidic acid-hydrocortisone cream, and lifestyle measures (weight reduction, avoidance of smoking and alcohol, a balanced diet, sun protection), and referral for endocrinological evaluation. The patient presented with persistent painful lesions after three months of treatment, indicating the need for escalation to biologics. Adalimumab 80 mg subcutaneously every 2 weeks was initiated; lesions progressively subsided, with almost complete clearing at 6-month follow-up. **Discussions** : HS management is guided by disease severity and response to first line treatments. Oral tetracyclines such as doxycycline have antibacterial and anti-inflammatory properties, but may fail to adequately suppress the complex cytokine-driven inflammation underlying HS. In moderate to severe or refractory disease, biologic agents, particularly adalimumab, are recommended after inadequate response to systemic antibiotics. By targeting the inflammatory pathways involved in HS, adalimumab offered sustained therapeutic efficacy, as demonstrated by the rapid and sustained improvement in this case. **Conclusions:** This case shows that while antibiotics are the first treatment for moderate HS, quickly identifying non-responders is key to preventing extended ineffective treatment and cumulative damage. Prompt escalation to biologics such as adalimumab can lead to significant disease control and improved quality of life for patients with persistent or more severe HS.

Keywords: hidradenitis suppurativa, biologic therapy, Hurley staging system, Adalimumab

THERAPEUTIC CHALLENGE: THE BALANCE BETWEEN MUSK-POSITIVE MYASTHENIA GRAVIS AND CHRONIC HEPATITIS B REACTIVATION: A CASE REPORT

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Introduction: Myasthenia Gravis (MG) is a chronic autoimmune neuromuscular junction disorder, with the anti-muscle-specific tyrosine kinase (MuSK) subtype representing a distinct clinical condition. MuSK-positive MG (MuSK-MG) is an antibody-mediated pathology characterised mainly by involvement of bulbar and respiratory muscles. It is rare among subtypes of MG, accounting for less than 10% of all cases, it is more aggressive with a less understood pathological mechanisms and more difficult to treat. Patients frequently experience more severe myasthenic crises compared to the common acetylcholine receptor (AChR) antibody-positive phenotype. Furthermore, electromyography (EMG) in MuSK-MG may reveal myopathic aspects in the facial muscles, rarely seen in AChR-MG. Known for its poor response to standard anticholinesterase inhibitors, MuSK-MG necessitates early immunosuppressive therapy intervention, with Rituximab (a monoclonal anti-CD20 antibody) as the first-line therapy for long-term remission. During the myasthenic crises, i.v. immunoglobulins are almost ineffective, plasmapheresis being used with more results. **Case Report:** We present the case of a 50-year-old female known with autoimmune thyroiditis and childhood-acquired Hepatitis B (HBV). In June 2022, the patient was diagnosed with MuSK-MG (Osserman Class IIB). The disease rapidly progressed from diplopia to generalised weakness, including bulbar (dysphagia, dysarthria), mild respiratory failure and axial muscle involvement. Over 4-years, the patient required multiple hospitalisations for respiratory insufficiency and flaccid tetraparesis. In this timeline, the serum anti-MuSK antibody titers remained high (>12.0 nmol/L). Despite maintenance therapy with Pyridostigmine (240 mg/day) and Azathioprine (100 mg/day), the patient required intermittent interventions, firstly intravenous immunoglobulin (IVIg), then therapeutic plasma exchange (plasmapheresis), providing only temporary clinical stabilisation for a period of 3 months. A significant complication occurred in June 2025 after adding 32 mg of methylprednisolone to the chronic MG treatment: a sudden reactivation of Chronic Hepatitis B (DNA $> 10^9$ IU/mL), necessitating immediate antiviral therapy with Tenofovir. Follow-up testing confirmed a response, viral loads decreased to 13 IU/mL (February 2026). **Discussions :** The therapeutic management of this patient presents a significant clinical dilemma. The high risk of HBV reactivation represents a relative contraindication to Rituximab and corticosteroids, as these agents can enhance viral replication. Therefore, plasmapheresis was the most effective and safest intervention for managing neuromuscular symptoms without compromising hepatic safety. **Conclusions:** The balance between neuromuscular stability and hepatic safety in MuSK-MG requires a rigorous, multidisciplinary clinical involvement. In cases where immunosuppressive escalation is restrained by chronic viral pathology, plasmapheresis represents a long-term rescue therapy.

Keywords: MuSK-MG, chronic B hepatitis, plasmapheresis

THERAPEUTIC CHALLENGES IN STEROID-REFRACTORY GASTROINTESTINAL IGA VASCULITIS: A PEDIATRIC CASE

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Introduction: IgA vasculitis (IgAV) is the most common small-vessel vasculitis in children, involving IgA immune complex deposition in the skin, joints, gastrointestinal (GI) tract, and kidneys. While GI involvement is frequent and often self-limiting, severe manifestations such as intense abdominal pain or hemorrhage occur in a subset of patients. Current guidelines support systemic corticosteroids for moderate-to-severe GI symptoms; however, management for patients who show an inadequate response remains poorly defined due to a lack of standardized evidence. The aim of this report is to evaluate the clinical efficacy of second-line immunosuppressive therapy in a pediatric patient with severe GI IgAV that proved refractory to high-dose corticosteroid treatment. **Case Report:** An 11-year-old boy presented with palpable purpura on the lower limbs and bilateral knee and ankle arthralgia following streptococcal pharyngitis. He was afebrile and hemodynamically stable, without abdominal or urinary symptoms. Laboratory evaluation revealed elevated serum IgA levels and antistreptolysin O titers, while complement levels and renal function remained within normal limits. Throat swab culture was positive for group A beta-hemolytic *Streptococcus*. Despite conservative management with penicillin and nonsteroidal anti-inflammatory drugs, his condition deteriorated. An abdominal ultrasound demonstrated inflammatory thickening of the jejunal and terminal ileal walls with minimal ascites, consistent with GI vasculitic involvement. Systemic corticosteroid therapy with methylprednisolone was initiated. However, the patient developed severe abdominal pain and GI bleeding, with elevated inflammatory markers, indicating corticosteroid-refractory disease. Given the severity of GI involvement, second-line immunosuppressive therapy with intravenous cyclophosphamide was initiated, alongside pulse methylprednisolone, followed by gradual steroid tapering. GI symptoms resolved completely. The patient achieved sustained clinical remission and showed no evidence of renal involvement at

follow-up, although long-term nephrological surveillance was recommended. **Discussions** : Severe GI involvement in IgAV represents a challenging clinical phenotype. While corticosteroids typically reduce intestinal edema, refractory cases require aggressive intervention to prevent complications like perforation or long-term morbidity. This case highlights the necessity of excluding alternative diagnoses such as inflammatory bowel disease or infection before escalating treatment. The successful use of cyclophosphamide in this instance suggests it is a viable rescue therapy for severe, resistant cases, addressing a critical gap in current IgAV treatment protocols. **Conclusions**: This case demonstrates that second-line immunosuppression with cyclophosphamide is an effective intervention for pediatric patients with severe gastrointestinal IgAV refractory to standard corticosteroid therapy. While such cases present a therapeutic challenge, prompt recognition of steroid resistance and individualized therapeutic escalation are essential to achieve rapid clinical stabilization and ensure favorable outcomes.

Keywords: IgA vasculitis, Gastrointestinal involvement, Corticosteroid-refractory disease, Cyclophosphamide

THROMBOTIC COMPLICATIONS OF ACUTE MYOCARDIAL INFARCTION: A CASE OF CARDIOEMBOLIC STROKE

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Introduction: Cardiovascular and cerebrovascular diseases are leading causes of mortality in Romania. Their coexistence in the acute phase significantly increases the risk of secondary ischemic events. Key risk factors for stroke following acute myocardial infarction (AMI) include diabetes, hypertension, and cardiogenic shock. **Case Report:** A 55-year-old female with diabetes and hypertension presented with retrosternal pain, dyspnea, and vertigo (onset: 2 hours). Examination revealed hypotension (80/60 mmHg), tachycardia (110 bpm), and psychomotor agitation. The ECG showed 5-6 mm ST-segment elevation in the anterior territory (Killip class III). Echocardiography confirmed severely reduced left ventricular ejection fraction and septal hypokinesia. Urgent coronary angiography identified a left anterior descending artery lesion, treated with primary angioplasty and stent implantation. The postoperative course was complicated by hemodynamic instability requiring vasopressor support. Subsequent echocardiography revealed a hyperechoic left ventricular apical thrombus. Despite intravenous anticoagulation, on the fourth day, the patient developed a sudden motor deficit. Repeat echocardiography confirmed the thrombus's disappearance, while cranial CT angiography revealed an acute occlusion of the left internal carotid artery. Emergency mechanical thrombectomy was performed, leading to a complete recovery of neurological and cardiac functions. At the one-month follow-up, the patient remained stable with adequate glycemic control and cardiovascular rehabilitation. **Discussions** : Rapid recognition of neurological symptoms and urgent neurointerventional treatment are crucial in diabetic patients with recent AMI. This case underscores the complexity of managing multi-site thrombosis and the "golden hour" for reperfusion. **Conclusions:** AMI carries a high risk of thromboembolic complications, especially in comorbid patients. Vigilant monitoring and prompt multidisciplinary intervention are vital for optimal recovery and preventing long-term disability.

Keywords: Acute myocardial infarction, Left ventricular thrombus, Ischemic stroke, Mechanical thrombectomy

THYROID ADENOLIPOMA (THYROLIPOMA) – RARE BENIGN TUMOR OF THE THYROID GLAND: CASE REPORT

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Introduction: The presence of fatty tissue in the thyroid gland is unusual, as normal thyroid parenchyma does not contain fat cells. Thyroid lesions containing fatty tissue are rare. Thyroid adenolipoma (thyrolipoma) is a benign tumor characterized by varying degrees of association between thyroid follicles and mature adipose tissue. This lesion is mainly described in case studies in the literature, and the pathogenetic mechanisms involved in its development are not yet fully understood. **Case Report:** A 70 year old male patient, who presented to the endocrinology clinic with a progressively enlarging neck mass. The clinical examination revealed a nodule located in the inferior portion of the right lobe of the thyroid gland. Ultrasound evaluation revealed a heterogeneous nodule measuring 22×27 mm, surrounded by rich peripheral vascularization. The fine-needle aspiration cytology results classified the lesion as a follicular neoplasm Bethesda IV, thus necessitating a multidisciplinary evaluation. The

case was evaluated by a multidisciplinary team involving an endocrinologist, a thyroid surgeon, and a pathologist, which guided the diagnostic workup and therapeutic decision-making. Surgical management was pursued, and postoperative histopathological examination confirmed the diagnosis of a benign thyroid adenolipoma. **Discussions** : The differential diagnosis of thyroid lesions containing fatty tissue includes diffuse thyroid lipomatosis, parathyroid lipoadenoma, and other rare thyroid tumors with fatty tissue stroma. Adequate recognition of this lesion is important because the presence of fatty tissue in a thyroid nodule may raise suspicion of various pathological processes. **Conclusions**: In summary, thyroid adenolipoma is a rare but benign lesion. Our case highlights the importance of proper histological examination in thyroid nodules that exhibit atypical stromal features.

Keywords: Thyroid adenolipoma, Thyrolipoma, Fine-needle aspiration, Bethesda

TIME DOES NOT GO BACK: THE IMPORTANCE OF RAPID TREATMENT PLANNING AND TOP-DOWN THERAPY IN CROHN'S DISEASE

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Introduction: Crohn's disease is an Inflammatory Bowel Disease (IBD) that can involve any segment of the gastrointestinal tract and can be associated with extraintestinal manifestations. It typically affects young patients between 15 and 30 years of age. Diagnosis consists of clinical, laboratory, endoscopic, histologic and radiologic findings and the persistent inflammation may lead to complications. For Crohn's disease, the treatment's goals are to alter the course of the disease, reducing disability and increasing quality of life. **Case Report:** We present the case of a 22-years-old male, smoker, diagnosed with ileocecal Crohn's Montreal A2L3B3p disease in 2023, without ongoing treatment. Since October of 2025 he is followed by our clinic. He presented with a 5-day history of intense rectal pain, loose stools with mucus occurring every 2 days, and an 8-kg weight loss over the past 7 months. Laboratory tests are performed and a fecal calprotectin of 1460 mcg/g, increased fibrinogen, elevated CRP and hyposideremia are identified. Abdominal-pelvic CT is performed and it showed the thickening of the ileum and a perirectal abscess. Treatment with Amoxicillin and Metronidazole was initiated in according to antibiogram (E. Coli and Enterococcus faecalis). Due to poor prognostic factors in Crohn's disease - including young age, smoking, perianal involvement, and a penetrating disease pattern - infectious screening was performed prior to initiating biologic therapy with Infliximab. In November the patient presents with severe abdominal pain. The patient was diagnosed with gallbladder microlithiasis and pancreatitis, which were subsequently managed. After evacuation and healing of the perianal abscess, a pelvic MRI was performed, revealing a low extrasphincteric rectal fistula (St. James grade IV) with a right perineal cutaneous opening; multiple ileal segments with wall thickening, possibly associated with entero-enteric fistulous tracts; and moderate inter-ileal pelvic ascites. Accordingly, contact was made with a tertiary center specialized in the surgical management of Crohn's disease for patient transfer. **Discussions** : This case illustrates the complications of Crohn's disease diagnosed in 2023 and not yet treated: the disease is progressing to additional segments of the gastrointestinal tract, with intestinal complications such as perianal fistula formation, and extraintestinal manifestations including gallbladder microlithiasis and pancreatitis. **Conclusions:** Our case is a proof that strict surveillance should be done according to the aggressive phenotype of the disease. Furthermore, the important changes appeared in a couple of months communicate the importance of a faster planning of therapeutic management to start with a top-down therapy based on biological treatment (anti-TNF agent Infliximab).

Keywords: Crohn's disease, Top-down therapy, Calprotectin, Fistula

TINNITUS AS A MANIFESTATION OF FIBROMUSCULAR DYSPLASIA

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Introduction: Fibromuscular dysplasia (FMD) is a rare idiopathic, noninflammatory and nonatherosclerotic disease that causes abnormal cellular proliferation and architectural distortion inside the walls of medium and small-sized arteries. The lesions could be either focal, causing a single stenotic lesion, or multifocal, manifesting as alternating areas of stenosis and dilatations contributing to a classic "string of beads" aspect. Clinical manifestations vary depending on the vascular territory involved and may include headaches, transient ischemic attacks, ischemic

strokes, and pulsatile tinnitus. In some rare cases, pulsatile tinnitus may represent the initial clinical manifestation of the disease, occurring before the diagnosis is established through vascular imaging. **Case Report:** We report the case of a 46-year-old female with a history of two short episodes of loss of consciousness, followed by a fall from the same level, without any warning signs and without urinary incontinence. The patient recovered quickly but had difficulty speaking about 1-2 minutes after the episodes. She presented for a neurological consultation for pulsatile tinnitus that appeared 3 months prior. The neurological examination was unremarkable, apart from the bilateral pulsatile tinnitus more evident on the left side. A carotid and vertebral Doppler ultrasound was done, which showed significantly increased flow velocities in the left middle cerebral artery (MCA), suggesting the presence of severe intracranial stenosis. A brain magnetic resonance imaging angiography was indicated but could not be performed due to claustrophobia. We followed with a brain computed tomography (CT) and angio-CT of the cerebral arteries, which were unremarkable. Therefore, due to the persistence of symptoms, a cerebral arteriography with digital subtraction was recommended, revealing a focal concentric stenosis of approximately 80-90% in the M1 segment of the left MCA and an irregular aspect of the bilateral internal carotid arteries in the cervical segment, highly suggestive of fibromuscular dysplasia. **Discussions :** Pulsatile tinnitus is a recognized manifestation of fibromuscular dysplasia, frequently associated with involvement of carotid arteries and appears in approximately one third of patients with FMD. **Conclusions:** This case shows that pulsatile tinnitus can be an early sign of FMD. Early identification of the disease may help reduce the risk of future complications, including ischemic stroke. Increased awareness of this association is important, especially in middle-aged women, who represent the group most frequently affected by FMD.

Keywords: pulsatile tinnitus, fibromuscular dysplasia, stenosis, string of beads

TOO SLOW, TOO LONG, TOO DANGEROUS: ACQUIRED LONG QT AND BRADYCARDIA LEADING TO TORSADES IN AN OCTOGENARIAN

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Introduction: Torsades de pointes (TdP) is a life-threatening polymorphic ventricular tachyarrhythmia associated with QT prolongation. Acquired long QT syndrome (LQTS), usually due to medications, electrolyte disturbances, or bradyarrhythmias, provides the substrate for TdP. **Case Report:** We present the case of a 73-year-old female with a history of arterial hypertension, type 2 diabetes, COPD, heart failure, and atrial fibrillation controlled with amiodarone and beta-blocker, who was admitted for signs and symptoms of cardiac decompensation. On admission, the electrocardiogram showed sinus bradycardia with a competitive junctional rhythm (HR- 51 bpm), and markedly prolonged QTc (604 ms), with flattened/biphasic T waves, findings suggestive of hypokalemia and hypocalcemia, later confirmed by routine blood work-up. Bayés' sign was also present - a surrogate for advanced atrial remodelling. In addition, premature ventricular complexes (PVCs) were observed with similar coupling intervals to the QTc interval. Echocardiography showed normal systolic function with dilated atria (mild restrictive profile) and mild valvular regurgitations. During decongestion, a 24-hour Holter-ECG was performed, revealing self-terminating episodes of polymorphic ventricular tachycardia (torsades de pointes, longest episode: ~40 seconds), therefore the beta-blocker and amiodarone treatment was immediately discontinued along with aggressive intravenous electrolyte supplementation. Repeated ECGs showed progressive shortening of QTc down to ~395 ms, whereas Holter-ECG reassessments showed major improvements in the tachyarrhythmic profile, though lower heart rates persisted. After correction of fluid and electrolyte imbalances and adjustment of chronic therapy, the patient was discharged and referred towards cardiac implantology for bicameral pacing and/or implantable cardioverter defibrillator possibilities. **Discussions :** Although the current presentation of TdP was oligosymptomatic (lightheadedness) and self-terminating in our case, we would emphasize that it commonly devolves into ventricular fibrillation and cardiac arrest. Although the presentation on admission is of a classical cardiac decompensation, the main trigger is uncommon - bradycardia - which should raise the clinician's awareness of the possible complications during decongestion. Treatment of such cases revolves around the elimination of precipitating factors for LQTS - discontinuation of negative chronotropic agents parallelly with potent K⁺, Mg²⁺ and Ca²⁺ supplementation, as is exemplified. **Conclusions:** Our case highlights the importance of strict monitoring during compensation of heart failure cases when bradyarrhythmias are present, since the high possibility of transient (and correctable) electrolyte imbalances due to intense diuretic therapy may further elevate the proarrhythmic risk profile of a diseased heart, thus leading to possibly lethal dysrhythmias. Inaction or delayed therapeutic response in such cases may prove fatal, therefore we underline the importance of a proactive approach.

Keywords: Torsades de pointes, electrolyte disturbances, Bayés' sign, ventricular fibrillation

TOTAL HIP ARTHROPLASTY IN SECONDARY HIP OSTEOARTHRITIS FOLLOWING FEMORAL HEAD NECROSIS USING AN UNCEMENTED PROSTHESIS

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Introduction: Femoral head necrosis represents one of the main causes of secondary hip osteoarthritis, predominantly affecting young and active patients. Vascular impairment of the femoral head leads to progressive changes in the subchondral bone, followed by structural collapse and gradual degradation of the articular cartilage. Clinically, the disease manifests through mechanical pain, reduced range of motion, and impaired hip function. Once advanced degenerative changes occur, conservative treatment no longer provides significant benefit, and total hip arthroplasty becomes the optimal therapeutic solution. Currently, uncemented prostheses are widely used due to their osteointegration capacity and long-term stability. **Case Report:** The analyzed group included 56 patients who underwent 66 uncemented total hip arthroplasties for secondary hip osteoarthritis following femoral head necrosis. The mean age at the time of surgery was 48 years, with a mean postoperative follow-up period of 5.9 years. Uncemented femoral and acetabular components with press-fit fixation were implanted, belonging to modern prosthetic systems (LINK type). Outcome assessment included clinical examination, functional evaluation using the Harris Hip Score (HHS), periodic radiological follow-up, and monitoring of potential complications or revision procedures. **Discussions :** Most patients demonstrated significant functional improvement, reflected by increased HHS values. The stability of both femoral and acetabular components was maintained throughout the follow-up period, with no signs of loosening or aseptic failure. The revision rate was zero in the analyzed cohort. Furthermore, no cases of osteolysis or significant prosthetic wear were observed during the follow-up interval. These findings support the effectiveness of modern uncemented systems in the treatment of secondary osteoarthritis following femoral head necrosis, particularly in young and active patients. **Conclusions:** Uncemented total hip arthroplasty represents an effective therapeutic option in the management of secondary hip osteoarthritis following femoral head necrosis. In the analyzed cohort, this method ensured pain relief, improved joint function, and satisfactory prosthetic stability at mid-term follow-up, without the need for revision surgery. The obtained results confirm the safety and effectiveness of modern uncemented systems in active patients.

Keywords: Femoral head necrosis, Secondary hip osteoarthritis, Uncemented total hip arthroplasty, Osteointegration

TOTAL KNEE ARTHROPLASTY IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Introduction: Rheumatoid arthritis (RA) is a chronic inflammatory autoimmune disease with multisystem involvement, characterized by progressive synovitis leading to cartilage destruction and subchondral bone damage. Etiology and pathogenesis of RA are mainly influenced by genetic variants, particularly HLA-DRB1*01 and 04 alleles, while other HLA alleles (DRB110, DPB1) and non-HLA genes also increase disease susceptibility. Presence of RF and anti-CCP antibodies has diagnostic and prognostic value. Advanced stages are associated with ligamentous laxity, bone defects, and periarticular soft-tissue deformities and knee involvement may require total knee arthroplasty (TKA) to relieve pain and restore function. **Case Report:** A 44-year-old female with long-standing RA on DMARDs, corticosteroids, and biologic therapy, presented with advanced right knee osteoarthritis, varum instability without valgum, lateral collateral ligament (LCL) insufficiency and recurvatum. Her medical history included pulmonary fibrosis, Spina bifida, autoimmune thyroiditis, Raynaud phenomenon, and prior left knee arthrodesis 11 years ago due to severe degenerative changes, as constrained implants were not available at that time. Clinical examination revealed global joint deformity, muscle hypotrophy, tenderness along joint line and on patellar mobilization, limited active and passive range of motion and varum instability suggestive of LCL insufficiency. Radiographic evaluation demonstrated tricompartmental joint space narrowing, subchondral sclerosis, osteophyte formation, a medial tibial plateau bone defect and lateral tibial subluxation. A cemented constrained total knee arthroplasty (Stryker Total Stabilized) was performed, using appropriately selected femoral

and tibial components, including a stem extension and constrained insert, to address both ligamentous instability and bone loss. Postoperative course was uneventful, with prolonged antibiotic treatment (3 days), early mobilization and favorable functional recovery. **Discussions** : TKA in RA patients involves an elevated risk of infection, impaired wound healing, and periprosthetic fractures due to chronic immunosuppressive therapy and poor bone quality. Therefore, close collaboration with rheumatologist is essential. In this case, DMARDs therapy was discontinued one week preoperatively and resumed post-healing and biologic therapy was stopped two weeks preoperatively and restarted after wound healing. Appropriate antibiotic prophylaxis and thromboprophylaxis were also administered postoperatively. Furthermore, patient's existing left knee arthrodesis imposed additional biomechanical demands. This case demonstrates that severe deformities require higher-constrained implants for restoring joint stability and function. **Conclusions**: Constrained TKA is an effective solution for complex RA-related knee destruction. Careful preoperative planning and multidisciplinary management are crucial to optimize outcomes and minimize complications.

Keywords: Rheumatoid arthritis (RA), Total knee arthroplasty (TKA), Varum instability, Constrained implants

TOTAL KNEE ARTHROPLASTY SECONDARY TO GONARTHROSIS WITH VARUS KNEE DEFORMITY

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Introduction: Gonarthrosis associated with genu varum is a common degenerative knee pathology, characterized by predominant involvement of the medial femorotibial compartment as a consequence of deviation of the mechanical axis of the lower limb. Chronic overload of the medial compartment leads to progressive cartilage degeneration, subchondral sclerosis, osteophyte formation, and worsening axial deformity, resulting in pain and significant functional limitation in advanced stages. Total knee arthroplasty (TKA) represents the therapeutic gold standard for advanced gonarthrosis, with the primary goals of restoring lower limb alignment, relieving pain, and improving joint function. Thorough preoperative planning, appropriate implant selection, and correct soft tissue balancing are essential factors for the success of the procedure. **Case Report:** This paper is based on an analysis of the specialized literature concerning gonarthrosis associated with genu varum and its treatment through total knee arthroplasty. Clinical and imaging diagnostic criteria were evaluated, including weight-bearing radiographs for assessment of the mechanical axis and quantification of the deformity. In addition, preoperative planning strategies, techniques for correction of varus deformity, and available implant options were analyzed. Both conventional total knee arthroplasty techniques and robot-assisted arthroplasty are discussed, with an emphasis on alignment accuracy and ligament balancing. **Discussions** : Data from the specialized literature indicate that total knee arthroplasty provides good to excellent outcomes in the treatment of advanced gonarthrosis associated with genu varum, leading to significant pain relief and correction of lower limb alignment. In most cases, posterior-stabilized implants are sufficient; however, severe deformities or ligamentous instability may require implants with a higher degree of constraint, such as constrained condylar designs. Soft tissue balancing, particularly medial release techniques, plays a crucial role in achieving symmetrical flexion and extension gaps. Robot-assisted arthroplasty improves alignment accuracy and reduces radiological deviations; however, its long-term clinical superiority compared with conventional techniques is still under evaluation. **Conclusions:** Total knee arthroplasty represents an effective and reliable solution for advanced gonarthrosis associated with genu varum. The success of the procedure depends on careful preoperative planning, precise axial correction, appropriate implant selection, and rigorous soft tissue balancing. Modern technologies, such as robot-assisted surgery, may enhance procedural accuracy, although validation of long-term outcomes remains necessary.

Keywords: Gonarthrosis, Genu varum, Total knee arthroplasty, Mechanical axis

TRAUMATIC BRAIN INJURY WITH BILATERAL BRONCHOPNEUMONIA, SEPTIC SHOCK, AND POST-RESUSCITATION SYNDROME IN A PATIENT WITH POLYCYTHEMIA VERA: A CASE REPORT

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Introduction: Traumatic brain injury (TBI) in elderly patients is often complicated by systemic comorbidities and

secondary infections, which markedly elevate morbidity and mortality rates. Myeloproliferative disorders, including polycythemia vera, further exacerbate a prothrombotic and inflammatory state, thereby complicating critical care management. The coexistence of TBI, septic shock, and hematologic disease represents a rare and challenging clinical scenario. To describe the complex clinical course and management of an elderly traumatic brain injury patient who developed severe bilateral bronchopneumonia, septic shock, and post-resuscitation syndrome amid underlying polycythemia vera with extreme thrombocytosis. **Case Report:** We report the case of a 70-year-old male with a history of polycythemia vera, severe thrombocytosis, hypertension, chronic alcohol use, and smoking, who sustained a traumatic brain injury following a fall. Laboratory tests showed leukocytosis, elevated inflammatory markers, extreme thrombocytosis, and tissue hypoxia post-arrest. Elevated lactate (5.6 mmol/L) and decompensated respiratory acidosis (pCO₂ 68 mmHg, SO₂ 93%) indicated impaired oxygenation. The initial CT scan showed multiple intracranial hematomas, including epidural, subdural, and intraparenchymal collections. Additionally, focal parenchymal hypodensities suggest chronic ischemic changes, likely related to longstanding hypertension and polycythemia vera associated hyperviscosity. Thoracic CT revealed extensive bilateral pulmonary consolidations, mainly in the lower right and middle lobes, with air bronchograms and a 32 mm right pleural effusion, suggestive of severe bronchopneumonia. An abdominal CT revealed moderate ascites due to multiple factors, including chronic alcohol use, hypoalbuminemia, and severe illness. The clinical condition worsened when he experienced progressive bradycardia, leading to cardiac arrest. After stabilization, he was transferred to the ICU, intubated, and placed on mechanical ventilation. Treatment included broad-spectrum antibiotics, hematologic therapy (Hydrea, Aspirin, Clexane), neuroprotective agents, sedation, analgesia, and supportive care. . Despite aggressive efforts, he remained critically ill, requiring continuous monitoring. **Discussions :** The development of severe bilateral bronchopneumonia led to septic shock, further complicated by a cardiac arrest requiring prolonged resuscitation. Managing the case in the intensive care unit involved balancing neuroprotection, infection control, hematologic care, and organ support, highlighting the importance of a multidisciplinary approach, in order to improve outcomes. **Conclusions:** Elderly patients with TBI and underlying hematologic conditions face a higher risk of serious infections and cardiovascular complications. The case emphasizes the need for personalized treatment plans and highlights the challenges of managing patients with multiple comorbidities, offering valuable insights for clinicians facing similar high-risk scenarios.

Keywords: Traumatic brain injury, Polycythemia vera, Cardiac arrest, Elderly patients

TREATMENT RESISTANCE IN ACUTE MYELOBLASTIC LEUKEMIA IN THE CONTEXT OF SARS-COV-2 INFECTION: A COMPLEX CLINICAL CASE

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Introduction: Acute myeloblastic leukemia (AML) is an aggressive hematologic malignancy, often requiring intensive chemotherapy. However, treatment resistance remains a significant challenge in the management of AML, especially in patients with concurrent infections such as SARS-CoV-2. This case report examines the progression and complications of a 58-year-old patient with AML, including treatment resistance, in the context of COVID-19 infection. **Case Report:** The patient, with a known history of hypertension, was admitted from the emergency department with high fever (40°C), chills, myalgias, productive cough, and bilateral petechiae on the lower limbs, progressively worsening over five days. Laboratory tests showed severe pancytopenia (Leukocytes: 1,620/mm³, Hemoglobin: 7 g/dl, Platelets: 11,000/mm³), and a rapid test for SARS-CoV-2 was positive. Imaging revealed pulmonary fibrosis and a right postero-basal pleural effusion. The patient was diagnosed with acute myeloblastic leukemia and started treatment with Cytarabine, Idarubicin, and Mylotarg, which was initially well tolerated. However, the patient developed several infections, including *Clostridium difficile*, *Pseudomonas Aeruginosa*, and *Candida albicans*, which were managed with appropriate antibiotics and antifungals. Despite treatment, the patient's leukemia showed resistance to therapy, with the persistent presence of blasts in the peripheral blood (22%) after chemotherapy. Additional cycles of chemotherapy were initiated, but further pancytopenia and fever persisted. The resistance to treatment led to the introduction of alternative therapies, including Azacitidine and Venetoclax, considering the TP53 mutation as a poor prognostic factor. Unfortunately, resistance remained, and the patient's condition continued to deteriorate with further episodes of infection and persistent leukemic blast presence. **Discussions :** Treatment resistance in acute myeloblastic leukemia, particularly in the context of SARS-CoV-2 infection, poses significant therapeutic challenges. The patient's persistence of leukemic blasts despite aggressive chemotherapy underscores the complexity of managing AML with concurrent viral infections. The addition of novel agents such as Azacitidine and Venetoclax, combined with

careful infection management, represents a critical strategy for patients with treatment-resistant AML. However, the continued presence of blasts and the development of multiple infections indicate that further therapeutic innovations are necessary. **Conclusions:** This case emphasizes the importance of personalized, multidisciplinary care and the need for constant adaptation of treatment strategies in the face of AML resistance and concurrent infections.

Keywords: AML, Azacitidine, Venetoclax, TP53

TREPONEMA PALLIDUM INFECTION IN A BRAIN-DEAD ORGAN DONOR – CASE REPORT AND IMPLICATIONS FOR ORGAN TRANSPLANTATION.

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Introduction: Syphilis is a chronic infectious disease caused by *Treponema pallidum*, characterized by multiple clinical stages and a wide spectrum of systemic manifestations, including neurological and psychiatric involvement in late stages. Although serological positivity for syphilis is not considered an absolute contraindication for organ donation, it raises important concerns regarding infection transmission, recipient safety, and post-transplant management. With the increasing demand for organs, the use of marginal donors, including those with certain infections, has become more common under strict screening and prophylactic protocols. **Case Report:** We present the case of a 54-year-old male patient with a history of bipolar affective disorder and progressive cognitive impairment, who was admitted following a cardiorespiratory arrest and successfully resuscitated after approximately 30 minutes. Further investigations established the diagnosis of massive pulmonary thromboembolism, and the patient was admitted to the intensive care unit in critical condition, requiring mechanical ventilation, vasoactive support, and advanced life support therapy. Neurological status progressively deteriorated, and brain death was confirmed according to national protocols. During the routine evaluation for organ donation, serological testing revealed infection with *Treponema pallidum*, suggestive of tertiary syphilis. After obtaining family consent, multiple organs were approved for donation, including liver, kidneys, corneas, bone, and tendons. Kidney transplantation was performed in two recipients, both presenting delayed graft function initially, followed by favorable evolution with recovery of renal function and good general condition at discharge. **Discussions :** The use of organs from syphilis-positive donors remains controversial but is increasingly accepted due to organ shortage. Literature data suggest that transmission of *Treponema pallidum* through transplantation is rare and can be prevented through appropriate recipient prophylaxis and post-transplant serological monitoring. This case also raises the possibility that the patient's psychiatric history and cognitive decline may have been associated with neurosyphilis, highlighting the importance of considering organic causes in patients with psychiatric symptoms and cognitive deterioration. **Conclusions:** Syphilis infection in organ donors is not an absolute contraindication for transplantation when appropriate screening, prophylaxis, and follow-up protocols are followed. This case highlights both the importance of careful donor evaluation and the need to consider neurosyphilis in patients with psychiatric disorders and cognitive decline. The safe use of organs from infected donors may help increase the donor pool without compromising recipient outcomes.

Keywords: Tertiary Syphilis, Brain Death, Transplant, Cardiorespiratory Arrest

TROUSSEAU'S SYNDROME AS THE FIRST MANIFESTATION OF ADVANCED PANCREATIC CANCER – A RAPID AND FATAL MULTISITE THROMBOTIC CASCADE

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Introduction: Cancer-associated thrombosis is a leading cause of mortality in oncologic patients and may represent the first clinical manifestation of an occult malignancy. This paraneoplastic hypercoagulable state, classically described as Trousseau's syndrome, is driven by tumor-derived procoagulant factors-particularly tissue factor-alongside systemic inflammation, endothelial dysfunction, and platelet activation. We present a dramatic case of rapidly progressive, multisite arterial and venous thrombosis revealing an advanced pancreatic malignancy. **Case Report:** A 68-year-old woman with a history of hypertension and chronic venous insufficiency was admitted for an acute left middle cerebral artery ischemic stroke and underwent intravenous thrombolysis, with favorable short-term neurological recovery. She was discharged on antiplatelet therapy according to current

guidelines. Twenty days later, she presented with progressive edema of the left lower limb. Venous Doppler ultrasonography demonstrated extensive left tibio-popliteal-femoral deep vein thrombosis. Laboratory investigations revealed mild anemia (Hb 11.46 g/dL), marked inflammatory syndrome (CRP 129.8 mg/L, leukocytosis, ferritin 1011 ng/mL), hepatocytolysis (AST 107 U/L, ALT 86 U/L, GGT 482 U/L), markedly elevated D-dimers (>5000 ng/mL), increased vitamin B12 levels (1258 pg/mL), and significantly elevated tumor markers (CEA 329 ng/mL, CA 19-9 61 U/mL). Contrast-enhanced abdominal CT revealed a 40×61 mm pancreatic body mass encasing the splenic artery, multiple hepatic metastases, and bilateral renal lesions suggestive of secondary involvement. Although histopathological confirmation was not obtained, imaging and laboratory findings suggested advanced metastatic pancreatic cancer. Therapeutic anticoagulation was promptly initiated. Within 48 hours, the patient developed two additional acute ischemic strokes involving the right middle and anterior cerebral artery territories. Neurological deterioration was fulminant, and the patient died one week later. **Discussions** : This case highlights the devastating thrombotic potential of malignancy-associated hypercoagulability. The rapid succession of thrombotic events reflects the aggressive behavior of advanced pancreatic cancer and the systemic prothrombotic state. Although antiplatelet therapy was appropriately initiated after the initial ischemic stroke, subsequent events demonstrated that platelet inhibition alone was insufficient to counteract the malignancy-driven coagulation cascade. Even after the introduction of therapeutic anticoagulation, the thrombotic burden progressed, underscoring the limited capacity of antithrombotic therapy to alter the course of advanced paraneoplastic coagulopathy. **Conclusions**: Recurrent, unexplained thrombotic events involving both arterial and venous territories should raise immediate suspicion of an underlying occult malignancy. This case illustrates how advanced pancreatic cancer may remain clinically silent until it manifests through a catastrophic, multisystem thrombotic cascade. Early recognition of Trousseau's syndrome is crucial for prompt oncologic evaluation and therapeutic decision-making, although prognosis remains poor in advanced stages.

Keywords: Trousseau's syndrome, Cancer-associated thrombosis, Recurrent ischemic stroke, Deep vein thrombosis

TUBERCULOSIS IMITATES CLINICAL MANIFESTATIONS OF BREAST NEOPLASM; THE IMPORTANCE OF CONSIDERING ALTERNATIVE POSSIBILITIES

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Introduction: Breast tuberculosis is an unusual form of extrapulmonary tuberculosis, an infection caused by the bacterium *Mycobacterium tuberculosis*. Its clinical presentation often mimics that of breast neoplasms, and imaging studies alone cannot reliably distinguish it from malignancy. Therefore, histopathological and microbiological examinations are required for a definitive diagnosis. **Case Report:** A 72-year-old female presented with fatigue, left axillary pain, and poor general condition. Breast ultrasound revealed a large hypoechoic nodular lesion in the left breast, located in the axillary tail, with irregular borders, internal vascularization, and microcalcifications. Multiple enlarged hypoechoic lymph nodes were also noted in the left axillary region. Mammography confirmed these findings, initially raising suspicion for adenopathy with potential neoplastic involvement. Laboratory testing for breast cancer markers, including CA 15-3, was within normal limits. A core biopsy of adipose tissue was performed. Microbiological analysis of the biopsy tissue detected *Mycobacterium tuberculosis*, while sputum testing was negative. Histopathological examination revealed a chronic granulomatous inflammatory process, characterized by large granulomas composed of epithelioid cells, multinucleated giant cells, fibrosis, and small areas of central necrosis. Within the lymphocytic corona surrounding the granulomas, small collagen deposits were observed. In some granulomas, the fibrotic process appeared to originate from the periphery. No breast parenchymal tissue or malignant cells were identified. Ziehl-Neelsen staining was negative for acid-fast bacilli, but the granulomatous morphology, combined with microbiological findings, confirmed the diagnosis of tuberculosis. Her medical history included a childhood episode of tuberculosis, with prior treatment. The patient started a full initial course of anti-tubercular therapy, which included isoniazid 400 mg, rifampicin 600 mg, pyrazinamide 1500 mg, ethambutol 1600 mg, streptomycin 1 g, vitamin B6, and silymarin. During the course of treatment, the patient developed marked elevations in liver enzymes (AST/GOT and ALT/GPT), as well as gastrointestinal manifestations. Due to these severe side effects, the therapy was discontinued. **Discussions** : In this case, an initial misdiagnosis occurred due to the similarity between the clinical presentation of malignant breast tumors and extrapulmonary breast tuberculosis. Imaging studies alone were insufficient to differentiate between these conditions. Core biopsy and histopathological analysis allowed confirmation of the diagnosis, enabling the initiation of appropriate anti-tubercular therapy and avoiding unnecessary surgical intervention. **Conclusions:**

Given the relatively high prevalence of tuberculosis in Romania, breast tuberculosis should be included in the differential diagnosis of suspicious breast masses. Core-needle biopsy with microbiological testing is essential before considering surgical intervention. Early recognition and appropriate investigations can prevent misdiagnosis and unnecessary procedures.

Keywords: Axillary lymphadenopathy, Breast neoplasia, Granulomatous inflammation, Tuberculosis

TUMORS CAN DEVELOP IN WEIRD PLACES: CAROTID BODY TUMOR – PARAGANGLIOMA OF THE CAROTID BODY (CHEMODECTOMA)

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Introduction: Highly vascularized, non-epithelial tumor originating from the derived paraganglionic cells of the parasympathetic autonomic nervous system (which includes the chemoreceptor cells of the carotid body, located at the level of the bifurcation of the common carotid artery). Highest incidence is in the 5th-6th decades of life, with a female-to-male ratio of 1,7:1. This kind of tumors are typically associated with hypertension (prevalence of 0.2-0.6% compared to 0.05% in the general population), slow growth and the dysfunction of the cranial nerves that pass through or near the carotid sheath (CN IX, X, XI, XII). **Case Report:** We present a 72-year-old patient known for hypertension, atrial fibrillation, and knee osteoarthritis. He complains of vertigo, tinnitus in the right ear, and the appearance of a small right lateral cervical mass which can be mobilized laterally but not up and down. The Doppler ultrasound examination reveals the presence of a right-sided tumor mass with a diameter of 2 cm at the level of the bifurcation of the common carotid artery, with less than 40% atherosclerotic stenosis of the right internal carotid artery. The CT scan shows an enhancing tumor mass with a small central filling defect, centered on the right carotid glomus, in contact with the occipital branch of the right ECA, without suspicious adjacent changes. The tumor was a Shamblin grade I lesion, measuring 20 x 18 x 12 mm. The recommended approach was surgical excision, a procedure considered one of the most challenging in cervicofacial surgery, with consideration of angiographic embolization. Histopathological findings reveal a nodular tumor formation, well-demarcated by a thin fibrous pseudocapsule and large, round cells with distinct borders, abundant, clear cytoplasm and nuclei with mild atypia. **Discussions :** Although these tumors can be misleading due to their often indolent growth, they are potentially life-threatening. This is primarily due to the risk of local compression of adjacent anatomical structures and their association with hereditary germline syndromes. In the presented case, such a syndrome was identified, as membranous immunostaining for carbonic anhydrase IX was positive, prompting further specific investigations for von Hippel-Lindau disease. **Conclusions:** This case highlights a Shamblin grade I carotid body tumor with benign histology but potentially severe outcome due to location and VHL syndrome association. Positive CA IX immunostaining mandates genetic screening and multidisciplinary surveillance.

Keywords: non-epithelial tumor, carotid glomus, Shamblin scale

TYPE 1 DIABETES REVEALED IN PREGNANCY : A CASE REPORT

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Introduction: Diabetes mellitus is one of the most challenging metabolic disorders encountered during pregnancy and is associated with an increased risk of miscarriage, congenital malformations, and adverse maternal and fetal outcomes. Physiological changes in pregnancy lead to progressive insulin resistance, increased insulin requirements, and may unmask inadequate pancreatic β -cell reserve. **Case Report:** We report the case of a 23-year-old primigravida at 8 weeks' gestation, with a history of hypercholesterolemia, admitted for severe hyperglycemia associated with glucosuria, polyphagia, and fatigue. She had documented mildly elevated fasting glucose levels for approximately one year prior to admission and had attended a single obstetric consultation after pregnancy confirmation. On admission, plasma glucose was 343 mg/dL and HbA1c was 13.4%, indicating prolonged and marked metabolic decompensation. Urinalysis showed significant glucosuria and ketonuria without metabolic acidosis. Endogenous insulin secretion was impaired, with a low C-peptide level of 0.77 ng/mL (reference range 1.1-4.4 ng/mL), while positive anti-GAD antibodies supported autoimmune β -cell dysfunction. Intensive insulin therapy with a basal-bolus regimen and intravenous hydration was initiated. Continuous glucose

monitoring was recommended at discharge to optimize glycemic control during pregnancy. **Discussions :** This case highlights the importance of early identification, classification, and treatment of diabetes, which facilitates the early initiation of adequate insulin therapy, essential for restoring metabolic equilibrium in pregnant patients. In the case of our patient, anti-GAD antibodies were identified in the first trimester of gestation, with autoimmune diabetes being diagnosed for the first time during pregnancy. Moreover, the metabolic demand during pregnancy further increase insulin requirements and may precipitate glycemic imbalance. In this context, continuous glucose monitoring represents a valuable tool for improving glycemic management by enabling better detection of glucose variability and facilitating more precise insulin adjustments. **Conclusions:** This case illustrates how pregnancy may reveal previously undiagnosed autoimmune diabetes. Prompt recognition of insulin deficiency and rapid initiation of intensive insulin therapy are essential for achieving metabolic stabilization. Early diagnosis and an appropriate management remain crucial for reducing maternal and fetal complications.

Keywords: Autoimmune diabetes, Pregnancy, Blood glucose monitorization, Insulin treatment

ULCERATIVE COLITIS WITH A SEVERE FLARE-UP POSTPARTUM AND AN ASSOCIATED CASE OF PYODERMA GANGRENOSUM - CASE REPORT

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Introduction: Rectosigmoiditis is a form of ulcerative colitis, an autoimmune disease. It requires increased attention throughout pregnancy and postpartum in order to prevent its progression and potential life-threatening complications. **Case Report:** A 31 year old patient, 4 weeks postpartum, with a history of left sided colitis presents with diffuse abdominal pain, multiple stools containing blood and mucus and recent extended skin lesions (pyoderma gangrenosum). In her past medical history, she discontinued unadvised her chronic medication (including biological therapy) before pregnancy. She was admitted 4 weeks postpartum in the Gastroenterology Department with severe Pyoderma Gangrenosum lesions and severe flare-up of the disease, developing during admission Clostridium Difficile infection and toxic megacolon. **Discussions :** This case illustrates the risks associated with the unadvised discontinuation of maintenance therapy in patients with an autoimmune disorder who are planning a pregnancy. The patient independently stopped her medication due to concerns regarding potential impact on fertility and pregnancy. This case highlights the importance of appropriate patient doctor communication, preconception counseling and therapeutic planning. **Conclusions:** The clinical management of both patients planning a pregnancy and those who are already pregnant should be carried out by a multidisciplinary medical team, ensuring that medical decisions are made in the patient's best interest and that complications can be prevented.

Keywords: uncontrolled autoimmune disease, postpartum, pyoderma gangrenosum

UNPROVOKED VENOUS THROMBOEMBOLISM WITH SEVERE INFLAMMATION AND ANEMIA: REACTIVE PROCESS OR OCCULT MALIGNANCY?

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Introduction: Venous thromboembolism (VTE) is a multifactorial condition that may represent either an isolated thrombotic event or the first manifestation of an underlying systemic disorder. When associated with unexplained anemia and marked inflammatory markers, VTE raises concern for infection, chronic inflammatory disease, or occult malignancy. Differentiating between a reactive inflammatory process and a paraneoplastic phenomenon remains a major diagnostic challenge in internal medicine. **Case Report:** A 66-year-old male with a history of arterial hypertension, obesity, and gout was admitted for acute left lower limb pain and significant edema. Duplex ultrasonography confirmed extensive deep vein thrombosis of the left femoro-popliteal axis. CT pulmonary angiography revealed acute pulmonary embolism involving the superior lingular branch, along with chronic thromboembolic changes in the left lower lobar artery. Laboratory evaluation demonstrated markedly elevated D-dimers (>5000 ng/mL), progressive hypochromic anemia (hemoglobin decreasing from 11.6 g/dL to 10.6 g/dL), elevated ferritin (746 ng/mL), low serum iron, and severe inflammatory syndrome (C-reactive protein up to 158 mg/L). Thrombophilia testing identified heterozygous Factor V Leiden mutation without additional high-risk inherited defects. During hospitalization, the patient developed left lower limb cellulitis, contributing to systemic

inflammation. Given the coexistence of VTE, anemia, and markedly elevated inflammatory markers, thoraco-abdomino-pelvic CT imaging was performed and showed no evidence of malignancy. Upper gastrointestinal endoscopy identified gastric antral vascular ectasia (GAVE), a potential source of chronic blood loss contributing to anemia. Colonoscopy revealed sessile colonic polyps without features suggestive of malignancy. The patient was treated with low-molecular-weight heparin followed by apixaban, antibiotic therapy, and supportive care, with favorable clinical and biological evolution. **Discussions** : VTE associated with anemia and systemic inflammation necessitates thorough evaluation for occult malignancy. However, inflammatory anemia secondary to infection and chronic blood loss from GAVE may mimic paraneoplastic syndromes. Although heterozygous Factor V Leiden mutation increases thrombotic susceptibility, it alone does not fully explain the severity of the inflammatory response observed in this case. Importantly, malignancy-related VTE may precede cancer diagnosis by months. Therefore, even in the absence of imaging evidence, vigilant follow-up remains essential. **Conclusions**: This case highlights the diagnostic complexity of VTE accompanied by severe inflammation and anemia. While current investigations support a reactive inflammatory and hemorrhagic mechanism, the possibility of occult malignancy cannot be entirely excluded. Structured evaluation and close longitudinal monitoring are critical for optimizing patient outcomes.

Keywords: Venous thromboembolism, Gastric antral vascular ectasia(Gave Syndrom), Multifactorial anemia, Occult malignancy;

UNRECOGNIZED PSYCHIATRIC DIAGNOSIS IN AN ADOLESCENT WITH AUTOIMMUNE HISTORY - A CASE REPORT

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Introduction: Depression in adolescents with chronic medical conditions is frequently underdiagnosed, despite its significant impact on morbidity and mortality. Previous studies report a higher prevalence of depressive symptoms in adolescents with chronic illnesses, particularly autoimmune and endocrine disorders, compared to the general population. Early recognition remains challenging, particularly when psychiatric symptoms are masked by complex medical histories, a phenomenon known as diagnostic overshadowing. **Case Report:** We report the case of a 15-year-old female patient admitted on February 16th with somnolence, dizziness, diplopia, blurred vision, horizontal nystagmus, generalized weakness, Gait instability, and a positive Romberg sign. Her medical history included type 1 diabetes mellitus and Hashimoto thyroiditis, treated with levothyroxine 25 µg daily. She also had a history of ovarian cystectomy and prior presyncope episodes. Neurological examination revealed asymmetry in deep sensation, raising suspicion of a central nervous system pathology such as multiple sclerosis and cerebral edema, therefore, a brain MRI was planned. Prior to imaging, the patient disclosed intentional ingestion of 11 tablets of Xanax in a suicide attempt. **Discussions** : Toxicology screening showed elevated benzodiazepine levels (1079 ng/mL), while cocaine, amphetamines, and opioids were negative. In literature, benzodiazepine toxicity is a known "medical mimic" of neurological emergencies. Psychiatric evaluation established suicidal ideation and further assessment revealed a high-vulnerability profile: a burdensome chronic illness, polyautoimmunity, and early-onset self-harm beginning at age 12- a significant predictor of lethal attempts. The pro-inflammatory nature of her autoimmune conditions may have further exacerbated her emotional dysregulation. This case illustrates how initial neurological presentations can delay recognition of underlying intentional overdoses in "medically complex" patients. **Conclusions**: This case illustrates how psychiatric pathology can remain concealed in adolescents with complex chronic medical conditions, even under long-term specialist supervision. In accordance with ISPAD and international guidelines, systematic mental health screening from an early age is essential. Strengthening physician-patient communication and incorporating routine psychological assessment into multidisciplinary care is vital to look beyond the "organic mask" of autoimmune symptoms, reduce stigma, and prevent life-threatening outcomes like suicide.

Keywords: Depression, Substance Abuse, Autoimmune History

UNSUPPRESSED CORTISOL LEVEL IN A PATIENT WITH BILATERAL ADRENAL ADENOMAS: A DIAGNOSTIC DILEMMA

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Introduction: Cushing syndrome is a rare clinical disorder caused by prolonged exposure to elevated circulating cortisol levels originating from the adrenal gland. Pseudo-Cushing refers to conditions that mimic Cushing syndrome clinically and/or biochemically, but do not involve autonomous cortisol overproduction. In cyclic-Cushing, a periodic increase in autonomous cortisol or ACTH secretion is described. **Case Report:** A 66-year-old woman with a medical history of type 2 diabetes mellitus, hypertension, mild depressive symptoms, anxiety with recurrent panic attacks and recurrent infections was evaluated during endocrinology follow-up. Her comorbidities had previously been managed individually. She had also undergone a cholecystectomy in 2019. During routine preoperative investigations, an adrenal incidentaloma was identified in the right adrenal gland. The patient also had a history of obesity followed by weight loss several years earlier; despite this, physical examination showed persistent central obesity, dorsocervical fat pad ("buffalo hump"), proximal myopathy, and mild hirsutism. The endocrine workup included repeated overnight low-dose dexamethasone suppression tests (DST) (three times, unsuppressed cortisol levels) and basal cortisolemia, urinary free cortisol and late-night salivary cortisol measurements, each with normal values. ACTH level was also within normal limits (high-normal value). Additional imaging included contrast-enhanced magnetic resonance (MR) of the pituitary region and contrast-enhanced abdominal computed tomography (CT). MR showed an empty sella with flattening of the pituitary gland. Abdominal CT demonstrated enlargement of the right adrenal nodule and an additional adrenal nodule in the left adrenal gland. **Discussions :** The suspicion of Cushing syndrome in this patient with adrenal incidentalomas was based on her clinical features and paraclinical evidence of hypercortisolism. ACTH-dependent hypercortisolism is suggested by the non-suppressed value of ACTH and the bilaterality of adrenal adenomas. Further pharmacological tests (2x2 mg DST) are necessary to confirm autonomous hypercortisolism. Due to her psychiatric comorbidity, pseudo-Cushing could not be excluded. Another challenge is the exclusion of cyclic Cushing; for this reason, periodic cortisol level measurements are necessary, correlated with symptom worsening. **Conclusions:** This case illustrates an atypical presentation of Cushing syndrome with bilateral incidentalomas that does not readily lend itself to standard guideline-based management. The patient remains under close observation with regular follow-up.

Keywords: Cushing syndrome, Pseudo-Cushing, Cyclic-Cushing, Adrenal incidentaloma

UNUSUAL SITE OF A THROMBOTIC EVENT: SPLENIC INFARCTION AND HETEROZYGOUS MTHFR POLYMORPHISM

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Introduction: Thrombophilia is an inherited or acquired predisposition to thrombosis, manifested by venous or arterial thrombotic events, sometimes occurring in uncommon territories. The presence of a heterozygous MTHFR mutation has a controversial relationship with thrombosis, which is why clinical evaluation must exclude other causes of hypercoagulability. Splenic infarction is a rare but suggestive presentation of a thromboembolic event. Identifying thrombophilia in a patient with splenic infarction requires the evaluation of additional risk factors. **Case Report:** We report the case of a 36-year-old male smoker, presenting to the emergency department with a one-week history of moderate abdominal pain, for which he followed treatment with analgesics and antispasmodics at home, with partial improvement of symptoms, accompanied by dry cough. Laboratory tests revealed mild leukocytosis with neutrophilia, elevated inflammatory markers, and a chest X-ray confirmed the presence of left basal pulmonary consolidation with air bronchogram. Abdominal computed tomography reveals a discrete hypodense lesion on non-contrast imaging with no post-contrast enhancement, at the level of the antero-inferior splenic pole, indicative of a splenic infarction. During hospitalization, a thrombophilia profile is performed, identifying the presence of the MTHFR A1298C gene in the heterozygous form, with negative factors II and V (proteins C and S - in progress at the time of discharge). Negative ANA-screen and anticardiolipin antibodies ruled out antiphospholipid syndrome. In order to establish the etiological diagnosis of the lower respiratory tract infection,

COVID and influenza PCR tests were performed, as well as the determination of *Legionella pneumophila* and *Streptococcus pneumoniae* urinary antigens, all presenting negative results. Under anticoagulant, antibiotic, and anti-inflammatory treatment, the patient's condition improved. **Discussions** : The role of the MTHFR mutation has been controversial over time: multiple studies highlight the importance of testing for the mutation in patients with suspected thrombophilia, while others suggest a weak correlation between the presence of the MTHFR mutation and clinically manifest hereditary thrombophilia. In our case, a positive mutation result alone, without the association of other mutations specific to thrombophilia, is not sufficient to support a diagnosis of hereditary thrombophilia. Another necessary investigation is the measurement of serum homocysteine, as the isolated presence of the MTHFR mutation, without associated hyperhomocysteinemia, has limited clinical relevance. **Conclusions**: In the presented case, the overlap of the MTHFR mutation with smoking and inflammatory syndrome in the context of pneumonia may represent a plausible mechanism for the development of splenic infarction, even in a young patient.

Keywords: Thrombophilia, MTHFR Mutation, Splenic Infarction, Antiphospholipid Syndrome

UPPER BODY LIFT IN A PATIENT WITH IDIOPATHIC THROMBOCYTOPENIC PURPURA

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Introduction: Idiopathic thrombocytopenic purpura (ITP) is an acquired immune-mediated disease that is characterized by low platelet counts and a high risk of bleeding. Although body contouring surgery in patients who have experienced massive weight loss can greatly improve the quality of life, these major surgeries are fraught with high risks of complications such as hematoma and seroma. Many surgeons are reluctant to undertake elective cosmetic surgery in patients with ITP because of the high risk of life-threatening bleeding and thromboembolism. This case report describes the first reported major upper body lift in a patient with ITP. **Case Report:** A 44-year-old female with a long history of ITP and massive weight loss (BMI reduction from 46.24 to 33.67 kg/m²) presented with severe upper body skin laxity, frequent infections, and psychological problems. Her preoperative platelet count was critically low at 20 x10⁹/L. After consultation with a hematologist, she was given a course of intravenous immune globulin (IVIG), and a platelet transfusion was administered on the day of surgery, which increased her platelet count to 382 x10⁹/L. The patient underwent a one-stage upper body lift, which included brachioplasty, transverse back lift, and augmentation mastopexy. Hemostasis was carefully maintained, and no drains were used. **Discussions** : Surgical patients with ITP pose a challenge in terms of the risks of bleeding versus the risks of VTE. While there are no guidelines regarding elective cosmetic surgery in patients with ITP, a platelet count > 50 x 10⁹/L is a necessity. In our patient, the combination of IVIG therapy prior to surgery and platelet transfusion prior to surgery provided a safe window. In terms of postoperative care, our patient received low molecular weight heparin prophylaxis 8 hours after surgery. This was well tolerated without issues related to bleeding. **Conclusions:** With appropriate preoperative care and coordination between surgical teams and hematologists, it is possible to provide safe major body contouring procedures in patients with ITP. This patient's case illustrates the fact that patients should not automatically be denied the opportunity to have elective procedures to improve the quality of life if they have ITP.

Keywords: Upper body lift, Immune thrombocytopenia, Idiopathic thrombocytopenia, Cosmetic surgery

UPPER LIMB DEEP VEIN THROMBOSIS IN LUNG CANCER: THE ROLE OF CANCER-ASSOCIATED HYPERCOAGULABILITY AND MECHANICAL COMPRESSION

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Introduction: Upper extremity deep vein thrombosis (UEDVT) is a relatively rare condition, accounting for approximately 4 - 10% of all cases of thrombosis in the deep veins. It may be classified as primary, Paget-Schroetter syndrome, or secondary, most likely caused by central venous catheters, extrinsic venous compression, or cancerous tumors. Among malignancies, thoracic tumors are frequently involved in UEDVT due to cancer-associated hypercoagulability. **Case Report:** A 77-year-old male, a heavy smoker, presented to the pneumology department with progressive dyspnea, productive cough, and weight loss. A CT was performed, which showed a

large central mass located in the left upper lobe measuring approximately 8 cm, with massive mediastinal invasion and supraclavicular and bilateral mediastinal lymphadenopathy. Bronchoscopy showed a complete obstruction of the upper lobe bronchus. Histopathological examination confirmed a non-small cell carcinoma with neuroendocrine differentiation. The cancer was staged as advanced lung cancer T3N3M1 - stage IV. During the course of the disease, the patient developed left vocal cord paralysis, most likely due to recurrent laryngeal nerve involvement and an upper extremity venous thrombosis of the right arm involving the subclavian vein. **Discussions :** Malignancies have an important role in cancer-associated thrombosis due to several pathophysiological mechanisms involved. Malignant tumors promote a hypercoagulability state through the release of substances that promote coagulability, activation of platelets and endothelial cells, and systemic inflammation. In addition, the malignancy located in the thoracic cavity may lead to direct mechanical compression of vascular structures or indirectly by mediastinal lymphadenopathy. In the presented case, both mechanisms were likely involved.

Conclusions: Upper extremity deep vein thrombosis is a rare but important complication of thoracic malignancies. In patients with lung cancer, the presence of single upper limb edema or cyanosis should raise suspicion for UEDVT. This case illustrates the interaction between malignancy-associated hypercoagulability and mechanical compression in the deep venous thrombosis in the upper limb.

Keywords: Upper Extremity Deep Vein Thrombosis (UEDVT), lung cancer, cancer-associated thrombosis, subclavian vein thrombosis

URETEROHYDRONEPHROSIS IN A CONGENITAL SOLITARY KIDNEY

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Introduction: This paper covers the diagnostic steps and management options in a patient with a congenital solitary kidney complicated with ureterohydronephrosis. It is an important pathology since the single remaining kidney is vital for the patient's survival and ureterohydronephrosis can cause a huge range of complications. In preexisting studies those pathologies were handled as separate entities but not as a whole. The aim is to provide physicians with an overview of management steps in such a particular case. The topic is based on a case, a four-month-old boy, and discussed on literature reviewing. **Case Report:** The patient was born with a solitary left kidney that was postnatally associated with ureterohydronephrosis grade IV. After securing a proper diagnosis with ultrasound, the approach of a thorough follow up of the renal function was established. This included blood and urine tests, as well as renal ultrasound and antibiotic prophylaxis. Investigations have shown that the probable etiology of the ureterohydronephrosis is a ureteral stricture. The possibility of surgery in aggravating medical circumstances was explained. **Discussions :** The conservative approach of monitoring the renal development, with laboratory tests and ultrasound imaging, is often favoured because there is a possibility of spontaneous resolution of the ureterohydronephrosis up to the age of 18 months. Antibiotic prophylaxis is associated in this case to prevent urinary tract infections. Lifestyle adjustments include a proper hydration and the avoidance of nephrotoxic drugs. Renin angiotensin aldosterone system inhibitors can be adjuvant in later childhood, when the kidney is more matured, to counteract proteinuria and hypertension in chronic kidney disease. Surgical interventions have the benefit of fast resolution of the ureterohydronephrosis, but can be more difficult in infants and are associated with complications. For example, recurrence of the stricture, bleedings and infections that could result in sepsis. Surgery must be considered in renal function deterioration. The particularity of this case is that the infant only has a solitary kidney that cannot profit from contralateral compensation from a second kidney. Meaning that a decline in renal function can more easily evolve to renal failure and a medical emergency. **Conclusions:** In conclusion, a proper diagnostic approach and lifelong follow up are essential for an improved outcome and other treatment options should be considered and induced in renal function deterioration. A delay can cause a life-threatening situation for the patient.

Keywords: Ureterohydronephrosis, Congenital solitary kidney, Management

URETHRAL STENOSIS AND HORSESHOE KIDNEY IN PEDIATRIC LIVER TRANSPLANTATION

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Introduction: Horseshoe kidney is the most common congenital renal fusion anomaly. It happens in about 1 in 400-600 births. It is often linked to problems with the urinary tract, such as ureteropelvic junction obstruction, vesicoureteral reflux, and nephrolithiasis. Urethral stenosis is a different problem that can cause problems with urination and holding urine. It's not common to see congenital renal anomalies and lower urinary tract pathology in the same patient with a complicated history of cancer and transplants. This makes diagnosis and treatment more difficult. This case shows how important it is to fully evaluate urinary symptoms in kids who have had a liver transplant and have complicated medical histories. **Case Report:** A 14-year-old boy with prior hepatoblastoma treated by surgery, chemotherapy, and orthotopic liver transplantation in 2015 presented for evaluation of urinary symptoms. He was receiving long-term tacrolimus and ursodeoxycholic acid. In January 2026, he developed 24-hour acute urinary retention; cystoscopy revealed urethral stenosis, and a temporary suprapubic catheter was placed. After removal, further renal evaluation was performed. In March 2026, urinalysis showed hematuria with 95% isomorphic and 5% dysmorphic erythrocytes; calcium/creatinine ratio was normal. Ultrasound demonstrated horseshoe kidney without dilation. He remained stable and was discharged with hydration advice and specialist follow-up. **Discussions :** People with horseshoe kidneys often remain asymptomatic, but the altered anatomy can predispose them to urinary tract infections and obstruction. In this patient, urethral stenosis was the primary cause of urinary retention, rather than the renal anomaly itself. Distinguishing upper urinary tract anomalies from lower urinary tract obstruction is essential. This case highlights the diagnostic complexity of urinary symptoms in pediatric patients with prior oncologic disease and liver transplantation. The coexistence of horseshoe kidney and urethral stenosis requires careful multidisciplinary evaluation. Long-term hepatoblastoma survivors on tacrolimus need close monitoring to prevent infection, obstruction, and progressive renal damage. **Conclusions:** This case exemplifies the diagnostic intricacy of urinary symptoms in pediatric patients with a history of oncological disease and liver transplantation. The presence of horseshoe kidney and urethral stenosis necessitates meticulous multidisciplinary assessment to differentiate anatomical anomalies from functional obstruction. Early identification and proper management are essential to avert prolonged renal complications in immunosuppressed individuals

Keywords: horseshoe kidney, urethral stenosis, liver transplantation

UTERINE FIBROID AND PREGNANCY: CESAREAN DELIVERY AND MYOMECTOMY — A CASE REPORT

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Introduction: Large uterine fibroids in pregnancy remain a therapeutic challenge, particularly when they distort the lower uterine segment and complicate delivery. Although cesarean myomectomy has traditionally been approached with caution because of hemorrhagic risk, carefully selected cases may benefit from a one-stage surgical approach. **Case Report:** We report the case of a 43-year-old multiparous woman with four prior vaginal births and one spontaneous abortion, transferred from a secondary hospital for acute fetal distress in a term pregnancy associated with a voluminous uterine fibroid. She had been known with uterine fibromatosis for approximately 2-3 years. Ultrasound assessment at admission showed a single live fetus in cephalic presentation, fetal heart activity around 140 bpm, and a large intramural fibroid measuring approximately 12.1 × 12.6 cm, described as anterior/praevia and involving the lower uterine segment. The placenta was posterior, without signs of abruption. Vaginal examination noted minimal opalescent amniotic fluid leakage and no visible cervical epithelial lesions macroscopically. Laboratory tests documented anemia, with hemoglobin values ranging from 9.1 g/dL to 7.6 g/dL preoperatively. The patient underwent cesarean delivery under general anesthesia. Intraoperatively, a large intramural praevia fibroid of about 13 cm was identified, obstructing the usual uterine access. Because of its location, myomectomy was performed first, followed by cesarean delivery through a separate uterine incision. A male neonate was delivered, weighing 3200 g, length 53 cm, with Apgar scores of 8 at 1 minute and 9 at 5

minutes. The placenta was manually extracted. Hemostasis was secured, the uterus was repaired, and the postoperative course was favorable. Postoperative hemoglobin was 8.5 g/dL. **Discussions** : This case illustrates that, in selected patients, cesarean myomectomy may be not only feasible but necessary when a large fibroid blocks access to the uterine cavity or delivery route. Surgical judgment, careful hemostasis, and individualized intraoperative decision-making are critical. **Conclusions**: A large lower-segment intramural fibroid should not automatically preclude myomectomy during cesarean section. In experienced hands and with appropriate case selection, a single-stage approach can achieve good maternal and neonatal outcomes

Keywords: Uterine fibroid, Pregnancy, Cesarean myomectomy

UTERINE STROMAL SARCOMA WITH MASSIVE INTRAVAGINAL EVOLUTION: A CASE REPORT

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Introduction: Uterine endometrial stromal sarcoma represents a rare form of uterine cancer, originating from stromal cells. It accounts for approximately 1% of malignant uterine tumors and has no specific symptoms, which may delay the diagnosis. **Case Report:** We present the case of a 73-year-old patient known with DM, hypertension, and morbid obesity, who complained of intense pelvic pain, postmenopausal metrorrhagia and loss of appetite. Following the gynecological examination, the Babeş-Papanicolau test was positive. Initial CT TAP and MRI revealed the presence of a 5 cm mass at the level of the uterine cervix and an endometrial tumoral formation. During oncological treatment, the patient presented an episode of severe abdominal pain. Emergency CT revealed intraperitoneal fluid with gas bubbles, for which an exploratory laparoscopy was performed with the diagnosis of peritonitis, without identifying a digestive perforation. At the 6-month reevaluation, the endometrial tumor continued its evolution, increasing significantly in size and causing compression, associated with unilateral edema of the left lower limb due to venous compression. In the oncological board, the indication for surgical exploration was established. Surgical intervention was performed through a median pubo-supraumbilical iterative laparotomy. A hostile abdomen was found, with extensive adhesions and plastic peritonitis, which were difficult to lyse. Bilateral ureterolysis was difficult. An enormous vaginal tumor of approximately 17 cm was identified, blocking the entire pelvis, on which the uterus was found exophytic, with normal dimensions. Section and ligation of the lumbo-ovarian ligaments and round ligaments were performed under ureteral control, allowing entry into the subperitoneal pelvic space. Difficult dissection of the bladder from the vagina was carried out below the trigone level, followed by section and ligation while preserving the ureters and uterine vessels at the pelvic floor. The ureters were dissected to the bladder insertions, allowing safe section and ligation of the cervico-vaginal structures. Identification of the anterior vaginal wall was performed using a blunt instrument introduced transvaginally, after which it was incised. Digital guidance for a circumferential colpotomy allowed the removal of the specimen. **Discussions** : Generally, sarcomas of this size, with invasion or compression of neighboring organs, make complete excision difficult or even impossible. Family history (mother with breast cancer) suggests the possibility of a genetic predisposition. **Conclusions:** Total hysterectomy with bilateral adnexectomy is recommended to reduce the risk of tumor dissemination. In the presented case, the onset of symptoms and a positive Papanicolaou test signaled the presence of neoplasia, prompting paraclinical investigations.

Keywords: Papanicolaou test, plastic peritonitis, total hysterectomy

VANISHING LUNG SYNDROME COMPLICATED BY XDR NDM-PRODUCING ACINETOBACTER BAUMANNII INFECTION – A RADIOLOGICAL CASE REPORT

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Introduction: Vanishing lung syndrome, also known as giant emphysematous bullae (GEB), leads to shortness of breath and serious complications. It is diagnosed based on specific radiographic findings when at least one-third of the lung field is occupied by large emphysematous bullae. Smoking, alpha-1 antitrypsin deficiency, or, rarely, previously diagnosed Tuberculosis (TB) are the major causes of the development of giant emphysematous bullae.

Case Report: We report the case of a 33-year-old woman with a known history of TB and two large

emphysematous bullae that occupy almost completely the left lung. The patient was already hospitalized and receiving treatment for bronchopneumonia when her clinical status deteriorated, so she was transferred from a local hospital to the Emergency County Clinical Hospital of Târgu Mureș. A complete clinical and paraclinical approach was undertaken for the appropriate management of the patient. The chest Computed-Tomography (CT) revealed two large emphysematous bullae measuring approximately 4×8 cm and 7×8 cm and occupying more than two-thirds of the left lung field, with associated extensive calcified post-tuberculous sequelae in the right upper lung. Lab tests revealed leukocytosis with neutrophilia, hyperkalemia, elevated CK-MB levels, hepatocytolysis, and cholestasis. The patient developed rapid clinical deterioration and was admitted to the intensive care unit with severe respiratory acidosis and hemodynamic instability. Further microbiological tests were made, revealing the presence of NDM (New Delhi metallo- β -lactamase)-producing *Acinetobacter baumannii*, exhibiting an extensively drug-resistant (XDR) profile. Despite appropriate medical treatment, consisting of targeted antibacterial therapy according to antibiogram results, vasoactive and positive inotropic support, mechanical ventilation, analgesia, corticosteroid therapy, and hydro-electrolytic rebalancing, the patient's condition continued to deteriorate. The patient developed cardiorespiratory arrest, and despite advanced cardiopulmonary resuscitation efforts, death was declared. **Discussions** : This case highlights how severe underlying structural lung disease drastically reduces functional pulmonary parenchyma, increases the air-filled spaces that do not participate in gas exchange and predisposes to life-threatening infectious complications. The air-trapped phenomena increases the risk of severe bacterial colonization and consequently the life-threatening evolution of respiratory failure. **Conclusions**: Vanishing lung syndrome remains a rare but severe clinical entity, with TB being a key risk factor for this pathology. Imaging studies, like chest CT and chest radiograph, are essential for the proper evaluation and management of structural lung abnormalities.

Keywords: vanishinglungsyndrome, tuberculosis, infection

VASCULAR PARADOX IN JEJUNAL TUMORS MASSIVE UPPER GASTROINTESTINAL HEMORRHAGE SECONDARY TO TUMOR NECROSIS

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Introduction: Neoplasms of the primary small bowel are rare, constituting less than 3% of GI neoplasms. Patients typically present with occult bleeding, anemia or obstructive symptoms. Acute massive hemorrhage is an unusual and life-threatening presentation. This case presents an unusual clinical case of a highly vascular jejunal tumor that paradoxically progressed to a necrotic centre that caused massive gastrointestinal bleeding. **Case Report:** A 60-year-old female patient with a history of gastric ulcer disease presented to the Emergency Department with melena and evidence of upper gastrointestinal(GI) bleeding. The contrast-enhanced CT examination revealed the presence of a well-circumscribed exophytic mass in the proximal jejunum; the mass was approximately 5-7 cm in diameter, with strong arterial enhancement and retention of vascularity in the venous phase. Other smaller nodular lesions were seen in the left hypochondrium. This indicates multifocal disease dependent on vascularity from the branches of the superior mesenteric artery. In light of the ongoing bleeding, an emergency exploratory laparotomy was carried out. Massive adhesion and multiple jejunal parietal tumors on operation. The main injury showed central tumor necrosis with active bleeding. Management by surgery involved adhesiolysis and segmental jejunal resections with entororaphy. The recovery after surgery went well, and symptoms resolved. **Discussions** : This case illustrates a "vascular paradox" in small bowel tumors, where hypervascularization coexists with central necrosis. Rapid tumor growth may exceed its vascular supply, leading to ischemia, necrosis, and eventual hemorrhage. The exophytic growth pattern explains the absence of obstructive symptoms despite a significant tumor burden. Emergency surgical resection remains the treatment of choice in cases complicated by active bleeding. Multifocality raises suspicion for specific histological subtypes such as gastrointestinal stromal tumors (GIST) or metastatic disease, requiring further histopathological evaluation. **Conclusions:** Jejunal tumors may present atypically with acute hemorrhage due to tumor necrosis. Recognition of this vascular paradox is important for timely diagnosis and surgical management. Emergency resection is lifesaving and provides both therapeutic and diagnostic benefit.

Keywords: Jejunal tumor,, Gastrointestinal bleeding,, Tumor necrosis ,, Vascular paradox

WEIGHT AS A CLINICAL ENDPOINT RATHER THAN A STARTING POINT: A CASE OF DELAYED ETIOLOGIC EVALUATION

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Introduction: High body mass index (BMI) can drive symptoms and serve as a goal for treatment. However, focusing only on weight may lead clinicians to attribute other clinical features (such as fatigue, menstrual irregularities, or emotional instability) to BMI alone. This approach risks insufficient investigation and delayed diagnosis of underlying conditions. **Case Report:** A 28-year-old woman with longstanding weight fluctuations (BMI 18-32 kg/m²) and persistent secondary amenorrhea presented repeatedly during adolescence and early adulthood with a combination of symptoms including marked fatigue, emotional instability, and recurrent compulsive eating episodes. During multiple consultations, these symptoms were consistently attributed to body weight, and weight loss was the only recommended treatment as primary intervention. At age 24, during a period of marked fatigue, laboratory testing revealed mildly elevated C-reactive protein (10.4 mg/L) and hypertriglyceridemia (2.73 g/L), but no further metabolic or endocrine evaluation was performed, the patient was, once again, advised to lose weight. The patient adopted restrictive dieting, which led to increased weight instability accompanied by alternating restriction and bulimia nervosa. The eating disorder was treated as a primary psychiatric condition, and secondary amenorrhea remained uninvestigated. At age 25, cognitive instability, impulsivity, and emotional lability prompted neuropsychiatric assessment. Attention-Deficit/Hyperactivity Disorder was diagnosed, and methylphenidate (30 mg/day) was initiated, and although the patient noted an improvement in emotional regulation and eating behavior, secondary amenorrhea persisted without further evaluation. A later consultation with a midwife prompted a hormonal assessment. This evaluation revealed biochemical hyperandrogenism (delta-4 androstenedione 8.4 nmol/L), polycystic ovarian morphology on ultrasound, and insulin resistance (HOMA-IR 5.838). Metformin therapy (2000 mg/day) was initiated. Combined neuropsychiatric and metabolic treatment resulted in approximately 10 kg weight loss in one year, restoration of menstrual cycles, correction of metabolic abnormalities, and a marked improvement in emotional regulation and behavioral stability. **Discussions :** In this case, weight functioned as a visible marker rather than the primary cause of disease. Attribution of inflammatory, metabolic, reproductive, and behavioral abnormalities to body mass delayed recognition of underlying endocrine and neurodevelopmental disorders. The coexistence of PCOS and ADHD aligns with recent findings pointing toward shared pathophysiological pathways, including dopaminergic dysregulation, insulin resistance, and chronic low-grade inflammation. **Conclusions:** In patients with persistent multisystem symptoms, clinicians should look beyond body weight and explore a wider spectrum. This case illustrates how focusing exclusively on BMI can mask serious underlying endocrine and neurodevelopmental disorders.

Keywords: Weight bias, delayed diagnosis, ADHD, PCOS

WHEN "WAIT AND SEE" FAILS: THE CASE FOR REVERSE TOTAL SHOULDER ARTHROPLASTY

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Introduction: Surgical neck fractures of the humerus account for 5% of all human fractures and represent the third most common fracture site in patients over the age of 65. This presentation aims to illustrate the therapeutic progression of such a fracture, from an initially failed conservative management to a surgical resolution involving reverse total shoulder arthroplasty (RTSA) with the preservation of tendinous insertions. **Case Report:** We report the case of a 66-year-old female patient with a medical history of hypertensive and valvular heart disease and a previously operated colon tumor. She sustained a right humeral surgical neck fracture following a ground-level fall, resulting in postero-inferior displacement of the humeral head. Initially, the patient opted for conservative treatment, declining surgical intervention. However, fracture reduction failed to maintain stability, resulting in nonunion. Consequently, the decision was made to proceed with reverse total shoulder arthroplasty while preserving the musculotendinous insertions. A deltopectoral approach was utilized, followed by anatomical plane dissection and capsulotomy to expose the humeral head. The humeral head was excised, ensuring the

preservation of the surrounding musculotendinous structures. Subsequently, glenoid preparation and humeral canal reaming with progressively sized reamers were performed. After trialing the components, the final endoprosthesis was implanted using a hybrid fixation method: a cemented humeral stem and a glenoid component secured with two screws. Following joint lavage, the musculotendinous insertions were sutured (tuberosity reattachment), the anatomical planes were closed, and a sterile dressing was applied. Finally, the limb was immobilized in a shoulder brace with an abduction pillow. **Discussions** : The postoperative course was favorable; the patient remained afebrile and hemodynamically and respiratory stable. At the time of discharge, passive mobilization of the right upper limb was initiated, with no local signs of inflammation. **Conclusions**: This case highlights the importance of decisional adaptability in the management of displaced surgical neck fractures and the necessity of pivoting from conservative to surgical treatment in patients with multiple comorbidities.

Keywords: Surgical neck fracture, Reverse Total Shoulder Arthroplasty, Hybrid fixation, Tuberosity reattachment

WHEN A BENIGN CONDITION BECOMES A SURGICAL CHALLENGE: MADELUNG'S DISEASE

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Introduction: Madelung's disease is a rare disorder characterized by an unusual accumulation of subcutaneous fat deposits primarily around the neck, shoulders, upper arms. Even though it's predominantly an aesthetic problem it can lead to compressive symptoms and can be mistaken for liposarcoma posing a diagnostic challenge.

Case Report: We present the case of a 52-year-old male patient that presented at the Compartment of Plastic Surgery with extensive cervical soft tissue tumor in the anterior cervical and presternal region. Surgical excision was performed under general anesthesia, the procedure consisted of parallel transverse incisions to respect the skin tension lines, careful dissection and excision of the soft tissue tumor. The surgical procedure was technically challenging due to the anatomical location and the extensive cranio-cervical spread of the lipoma, reaching the posterior cervical region and mandibular area. The dissection required meticulous technique because of the proximity to major vascular structures, including the internal jugular vein and carotid artery. The excised tissue was sent for histopathological examination. Post operative evolution was favorable, clean surgical wounds, without inflammatory signs. **Discussions** : Madelung's disease is frequently associated with metabolic disorders and chronic alcohol consumption, both considered important factors in its pathogenesis. Our patient had a history of grade I hypertension, mild mitral and aortic insufficiency, mild thrombocytopenia and hepatocytolysis, together with a history of chronic alcohol intake, suggests an underlying metabolic imbalance that may have contributed to the development of abnormal adipose tissue accumulation. Chronic alcohol use is known to impair mitochondrial function and alter lipid metabolism, mechanisms that are believed to promote the progressive growth of adipose deposits in MD. The hepatic involvement observed in our case further supports the systemic impact of long-term alcohol exposure and its possible role in disease progression. **Conclusions:** Even though Madelung's disease is a benign condition, extensive lesions can make surgical management difficult, especially in anatomically complex areas. Our case highlights the importance of careful planning and attention during surgery, while also reinforcing the link between chronic alcohol consumption, metabolic imbalance, and disease development.

Keywords: Madelung's disease, Hepatocytolysis, Subcutaneous Fat Deposits

WHEN A RARE TUMOR RETURNS AGAIN AND AGAIN: RECURRENT CLIVAL CHORDOMA COMPLICATED BY PROGRESSIVE HYPOPHYSECTOMY – A MULTIDISCIPLINARY CHALLENGE

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Introduction: Chordomas are rare tumors that originate from remnants of the embryonic notochord and most commonly arise along the axial skeleton. Clival chordomas account for a small proportion of skull base tumors but are clinically important because of their proximity to major neurovascular and endocrine structures. Although these tumors usually grow slowly, local recurrence is frequent even after combined treatment. In addition to the oncological challenges, involvement of the hypothalamic-pituitary region or treatment-related damage may lead to significant endocrine complications. **Case Report:** We report the case of a 65-year-old woman with a history of

clival chordoma treated initially with surgical resection followed by Gamma Knife stereotactic radiosurgery. During follow-up, the patient developed several documented local recurrences, occurring in 2019, 2022, 2023 and 2024. She was admitted to our department for endocrine evaluation because of previously diagnosed hypopituitarism. Hormonal testing confirmed pluritropic pituitary insufficiency requiring chronic hormone replacement therapy. The patient also had a history of subtotal thyroidectomy performed in 2014. Histopathological examination at that time revealed a papillary thyroid microcarcinoma, and the patient subsequently developed hypothyroidism managed with levothyroxine. Bone mineral density testing showed osteopenia, while laboratory investigations identified vitamin D deficiency, for which supplementation was initiated. **Discussions** : Chordomas of the skull base remain difficult to treat because their location often prevents complete surgical removal. For this reason, adjuvant stereotactic radiosurgery is frequently used as part of the therapeutic strategy. Nevertheless, recurrence rates remain high. In patients undergoing repeated surgical or radiotherapeutic procedures, damage to the hypothalamic-pituitary axis may occur over time. This case highlights the need for systematic endocrine follow-up in patients with skull base tumors, as early recognition of hormonal deficiencies allows timely initiation of replacement therapy. **Conclusions**: Recurrent clival chordoma is an uncommon condition associated with complex long-term management issues. Close collaboration between neurosurgery, oncology and endocrinology is essential, particularly for the detection and treatment of endocrine complications that may develop during follow-up.

Keywords: clival chordoma, Gamma Knife radiosurgery, hypopituitarism, skull base tumor

WHEN AGGRESSIVE SURGERY MATTERS: OPTIMAL CYTOREDUCTION IN ADVANCED UTERINE CARCINOSARCOMA

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Introduction: Endometrial carcinosarcoma, high-grade tumor, also known as a malignant mixed müllerian tumor is a rare and highly aggressive uterine malignancy characterized by the coexistence of both epithelial (carcinomatous) and mesenchymal (sarcomatous) components. Stage IVB indicates abdominal peritoneal metastases beyond the pelvis and poor prognosis. **Case Report**: We present a case of a 67-year-old female patient admitted to the Department of Obstetrics and Gynecology with abdominal and pelvic pain, and symptoms suggestive of partial bowel obstruction. Preoperative imaging revealed a bulky fibroid uterus and extensive peritoneal disease associated with peritoneal carcinomatosis and partial bowel obstruction. A xipho-pubic laparotomy was performed revealing widespread peritoneal carcinomatosis with multiple metastatic implants involving the mesentery, mesocolon, small bowel serosa, transverse and sigmoid colon and the pouch of Douglas. A peritonectomy using the Deraco technique was performed, including excision of the diaphragmatic, parietal, and pelvic peritoneum. Due to tumoral infiltration of the omentum, both inframesocolic and supramesocolic omentectomy were carried out. Multiple tumor nodules were resected along with the right diaphragmatic muscle and the appendix. Additionally, a total extracapsular Wiert hysterectomy with bilateral salpingo-oophorectomy was performed, achieving optimal macroscopic cytoreduction. Histopathological examination confirmed the diagnosis of endometrial carcinosarcoma with p53 abnormalities. The tumor infiltrated the endometrium, myometrium, the isthmic and endocervical mucosa. Metastatic involvement was identified in the right fallopian tube, ovaries, pelvic peritoneum, omentum, diaphragmatic peritoneum and the appendix. Immunohistochemical analysis showed positivity for EMA and CK7, consistent with malignant mixed müllerian tumor. Postoperatively, the patient received three cycles of systemic chemotherapy with Paclitaxel and Carboplatin, well tolerated, without acute toxicity and no taxane-induced peripheral neuropathy. Chemotherapy is ongoing.

Discussions : The cornerstone of treatment for stage IVB endometrial carcinosarcoma is cytoreductive surgery. Optimal debulking plays a critical role in improving survival outcomes, even in advanced diseases. The preferred palliative chemotherapy regimen consists of carboplatin and paclitaxel. The phase III NRG Oncology GOG-0261 clinical trial demonstrated longer progression-free survival and non-inferior overall survival with carboplatin plus paclitaxel compared to the combination of paclitaxel and ifosfamide, while offering a more favorable toxicity profile.

Conclusions: This case suggests that, when the patient's condition allows it, aggressive cytoreductive surgery similar to that used in advanced ovarian cancer may be beneficial in stage IVB uterine carcinosarcoma. Postoperatively, the evolution was favorable, with no major complications, a 9-day hospital stay and was able to start adjuvant chemotherapy 14 days after surgery, supporting this surgical approach.

Keywords: Endometrial Carcinosarcoma, Cytoreductive Surgery, Extracapsular Hysterectomy, Peritoneal Carcinomatosis

WHEN ATRIAL FIBRILLATION TRAVELS: A CASE OF MULTIVISCERAL SYSTEMIC EMBOLISM

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Introduction: Atrial fibrillation (AF) is a primary cause of thromboembolic events. Although ischemic stroke is the most common manifestation, rare instances occur where peripheral embolization involves other vascular beds, resulting in renal, mesenteric, or splenic infarctions, or critical limb ischemia. The diagnostic challenge in these cases arises from non-specific clinical symptoms and the necessity for urgent, targeted imaging. **Case Report:** A 65-year-old male with a history of chronic heart failure (NYHA class II), grade III hypertension, and morbid obesity presented to the emergency department with acute, intense right flank pain radiating to the right lower limb. Physical examination revealed a blood pressure of 180/118 mmHg and an irregular heart rate of 90 bpm, leading to a new diagnosis of AF. Laboratory tests showed a marked inflammatory syndrome, elevated D-dimer levels, and signs of significant cell lysis. Given the predominant abdominal symptoms, contrast-enhanced computed tomography (CT) was performed, revealing occlusions of the right renal and splenic arteries with extensive areas of parenchymal infarction. Additionally, a segmental filling defect was identified in the distal part of the superior mesenteric artery. Systemic thrombolysis was initiated, followed by anticoagulation with unfractionated heparin and a subsequent transition to oral anticoagulants. Reevaluation via CT angiography (CTA) at 48 hours documented the recanalization of the right renal and superior mesenteric arteries, while the splenic artery filling defect persisted alongside residual infarction. The clinical course was favorable, with resolution of symptoms and normalization of renal function. **Discussions :** The management of cardioembolic organ infarction remains a challenge, with literature debating between conservative anticoagulation and invasive reperfusion (thrombolysis or endovascular intervention). In this case, systemic thrombolysis was justified by the presence of multiple occlusions and the high risk of renal failure. Given a CHA2DS2-VA score of 4, the multivisceral embolization was a consequence of a chronic pro-thrombotic state exacerbated by morbid obesity. **Conclusions:** This case highlights the necessity of considering visceral infarction in the differential diagnosis of abdominal pain in patients with AF. Early diagnosis through CTA is crucial for prompt reperfusion therapy. Systemic thrombolysis represents an effective therapeutic option in selected cases of multiple arterial embolism, preventing long-term functional sequelae and organ loss.

Keywords: Renal Infarction, Splenic Infarction, Atrial Fibrillation, Systemic Thrombolysis

WHEN BACK PAIN SIGNALS CANCER: RAPID-ONSET PARAPLEGIA FROM VERTEBRAL METASTASES

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Introduction: Epidural metastases resulting in spinal cord compression are the second most common neurological complication of cancer after brain metastases. While lung, breast, and prostate cancers are the most common causes, hepatocellular carcinoma represents an uncommon but increasingly recognized source. Compressive myelopathy is an emergency, requiring early diagnosis and treatment to prevent irreversible neurological deficits. **Case Report:** We report the case of a 79-year-old male presenting with a two-month history of lumbar and thoracic pain with anterior radiation, as well as a recent five-day onset of lower limb weakness. Neurological examination revealed rapid deterioration, over 12 days, from motor weakness (MRC 3/5) to complete flaccid paraplegia (MRC 0/5) with urinary retention. Due to neurological decline, an MRI and a CT scan were performed, revealing metastatic-appearing vertebral lesions (T4-T7) with epidural extension leading to compressive myelopathy, a pulmonary lesion in the left inferior lobe, presumed to be the primary tumor and a hepatic lesion in the right lobe. Histopathological examination did not confirm a pulmonary origin of the tumor and indicated instead a poorly differentiated hepatocellular carcinoma. Immunohistochemical analysis showed positivity for HepPar-1, CK AE1/AE3, and CD10. Subsequently, the patient was assessed by neurosurgery, which deemed the case non-surgical and recommended palliative management, including radiotherapy to alleviate the pain. **Discussions :** Back pain is often the earliest symptom, appearing months before neurological deficits and is frequently overlooked, especially in elderly patients. Patients may not have a prior oncological history, with epidural

metastases representing the first manifestation. Current evidence recommends surgical treatment within the first 48h of motor deficit onset. In this case, the therapeutic window was exceeded, leaving palliative care as the only available treatment. **Conclusions:** This case highlights the importance of rapid recognition of signs and symptoms that may indicate an underlying malignancy presenting with epidural metastases. Clinicians should remain aware that vertebral metastases may originate from rare primary tumors. Early recognition of atypical sources is crucial for timely diagnosis and management.

Keywords: Compressive myelopathy, hepatocellular carcinoma, epidural metastases, flaccid paraplegia

WHEN CHRONIC ULCERS TURN MALIGNANT

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Introduction: Chronic leg ulcers, especially in patients with type 2 diabetes mellitus (T2DM) and chronic venous insufficiency (CVI), carry a risk of malignant transformation (Marjolin ulcer) after prolonged nonhealing. Most Marjolin ulcers are squamous cell carcinoma (SCC) arising in scarred or ulcerated skin. Basosquamous carcinoma, also known as metatypical basal cell carcinoma, is an uncommon, aggressive nonmelanoma skin cancer that shares characteristics with SCC and basal cell carcinoma (BCC). **Case Report:** An 83-year-old woman with CVI and T2DM had a chronic, non-healing ulcer on her right lower leg that persist for several years. Despite receiving standard wound care, the ulcer had irregular nodular margins and occasionally bled. A punch biopsy was carried out due to its unusual appearance and chronic nature. Histopathology revealed an infiltrative neoplasm with two distinct components: one of atypical keratinocytes forming keratin pearls and intercellular bridges (SCC component), and another of basaloid cells forming nests with peripheral palisading and stromal retraction (BCC component). These characteristics were indicative of basosquamous (metatypical) carcinoma.

Discussions : Chronic ulcers undergo malignant transformation due to persistent inflammation and poor tissue repair, which fosters an environment that is conducive to carcinogenesis. While most cases progress to squamous cell carcinoma, the identification of combined squamous and basal cell features characterises a metatypical (basosquamous) carcinoma, an uncommon but clinically significant entity. When compared to traditional basal cell carcinoma, its dual differentiation is linked to more aggressive biological behaviour, which affects the prognosis and treatment strategy. **Conclusions:** Any chronic ulcer with atypical features should prompt biopsy to exclude malignancy. Early histological diagnosis of mixed carcinomas allows timely wide excision and tailored management. Because early detection of malignant transformation can improve outcomes, this case highlights the significance of biopsy and vigilance in chronic leg ulcers.

Keywords: basosquamous carcinoma, chronic leg ulcer, Marjolin ulcer, squamous cell carcinoma

WHEN ENDOCRINE DISEASE COMPLICATES THE HEART: ACUTE PULMONARY EDEMA AS A HEMODYNAMIC CHALLENGE

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Introduction: Acute pulmonary edema is a frequent cause of respiratory failure in patients with advanced cardiovascular disease. Concomitant endocrine disorders such as central hypothyroidism and hypercortisolism may worsen fluid retention, hypertension, metabolic imbalance, and myocardial dysfunction in individuals with structural heart disease. This interaction creates a complex hemodynamic setting where rapid decompensation may occur and requires multidisciplinary management. **Case Report:** We report the case of a 63-year-old woman with extensive cardiovascular and systemic comorbidities, including three-vessel coronary artery disease with previous inferoposterior myocardial infarction, ischemic dilated cardiomyopathy, congestive heart failure with moderately reduced ejection fraction (NYHA II), secondary moderate mitral regurgitation, mild tricuspid regurgitation, grade 3 arterial hypertension, chronic obstructive pulmonary disease (GOLD III E), type II diabetes mellitus, obesity, dyslipidemia, chronic kidney disease stage III, hyperparathyroidism, central hypothyroidism under evaluation, ACTH-dependent hypercortisolism with suspected Cushing disease, chronic hepatitis B, iron deficiency, and chronic venous insufficiency. The patient developed acute respiratory failure due to pulmonary edema while hospitalized in the Neurosurgery Clinic for evaluation of a pituitary tumor, Cushing disease, primary osteoporosis, and D7-D8 vertebral compression fracture. On ICU admission she was conscious, breathing

spontaneously under a face mask, with oxygen saturation 88%, heart rate 80 bpm, and blood pressure 155/104 mmHg. Treatment included CPAP, intravenous furosemide, nitroglycerin, antihypertensive therapy, and correction of hydro-electrolytic and acid-base disturbances. Multidisciplinary evaluation was performed. Clinical improvement allowed transfer back to the Neurosurgery Clinic. **Discussions** : ACTH-dependent hypercortisolism contributes to sodium retention, volume expansion, systemic hypertension, insulin resistance, and catabolic changes, increasing myocardial workload and impairing vascular function. In chronic kidney disease, reduced sodium and fluid excretion further predisposes to pulmonary congestion. Secondary mitral regurgitation and left ventricular dysfunction facilitated the rapid rise in filling pressures leading to pulmonary edema. **Conclusions**: ACTH-dependent hypercortisolism may trigger acute pulmonary edema in patients with structural heart disease and multiple comorbidities. Early recognition, prompt hemodynamic stabilization, and multidisciplinary care are essential.

Keywords: critically ill patient, Pulmonary edema, Endocrine disorders, acute respiratory failure

WHEN GLYCEMIA DECEIVES: THE DIAGNOSTIC CHALLENGE OF SGLT2I-ASSOCIATED DIABETIC KETOACIDOSIS DURING ACUTE INFECTION

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Introduction: Diabetic ketoacidosis (DKA) is a life-threatening acute complication of diabetes mellitus. Although traditionally associated with type 1 diabetes, it is increasingly reported in type 2 diabetes (T2DM), particularly in patients treated with SGLT2 inhibitors (SGLT2i). In this setting, DKA may be masked by relatively normal or only moderately elevated blood glucose levels. We present a case of DKA in a 70-year-old male, precipitated by a respiratory infection during SGLT2i therapy. **Case Report:** A 70-year-old male with a 30-year history of T2DM presented to the emergency department with a 10-day history of nausea, vomiting, and generalized weakness, associated with fever and chills over the preceding three days. His chronic treatment included empagliflozin/metformin (5/1000 mg) and gliclazide (60 mg). Laboratory investigations revealed moderately elevated blood glucose (278 mg/dL), high anion gap metabolic acidosis (anion gap 31.3 mmol/L; pH 7.097; HCO_3^- 2.98 mmol/L), significant ketonuria, and elevated inflammatory markers (procalcitonin 1.285 ng/mL). Chest radiography confirmed right-sided atypical pneumonia. Blood glucose was measured at presentation in the emergency setting, without documented fasting status. HbA1c was 6.7% (the patient had maintained HbA1c < 7% over the past 2 years on oral therapy). During hospitalization, SGLT2 inhibitor therapy was discontinued, and the patient received intravenous fluids, electrolyte correction, broad-spectrum antibiotics, and basal-bolus insulin regimen. Following treatment, the patient showed a favorable clinical course, with rapid improvement and normalization of metabolic and inflammatory parameters. The patient was discharged with good glycemic control and continued basal insulin therapy, with planned quarterly outpatient follow-up. **Discussions** : This case highlights the risk of metabolic decompensation associated with SGLT2 inhibitor use during acute illness. These agents promote lipolysis and glycosuria, exacerbated by infection-related stress and dehydration. A major diagnostic challenge is the deceptively moderate blood glucose level (278 mg/dL). Although slightly above the threshold for euglycemic DKA (moderately elevated glycemia in the context of HbA1c 6.7%), it masked a severe underlying metabolic acidosis (pH 7.097). While this case was initially interpreted as SGLT2i-associated DKA, the long duration of diabetes suggests a possible contribution of impaired endogenous insulin secretion, which should also be taken into account. **Conclusions:** These findings support the multifactorial nature of DKA in type 2 diabetes, in which SGLT2 inhibitor therapy, acute infection, and insulin deficiency in long-standing diabetes may act together. An HbA1c value of 6.7% suggests relatively good recent glycemic control, making chronic poor control unlikely to be the sole triggering factor.

Keywords: Diabetic Ketoacidosis, Type 2 Diabetes, SGLT2 Inhibitors, Pneumonia

WHEN HEALED BONES BREAK AGAIN: ITERATIVE FOREARM FRACTURE AFTER OSTEOSYNTHESIS REMOVAL

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Introduction: Forearm fractures involving both radius and ulna are common in high-energy trauma and are

typically managed by open reduction and internal fixation (ORIF). Implant removal after fracture healing is frequently requested by patients; however, it carries a documented but underestimated risk of refracture. Iterative fractures following hardware removal remain a clinically significant complication, particularly in active young patients. This case illustrates the biomechanical vulnerability of previously osteosynthesized bone and emphasizes the need for careful postoperative counseling. **Case Report:** A 32-year-old female from an urban environment sustained an open, comminuted fracture of the left radius and ulna following a bicycle accident. She underwent ORIF with two plates and 13 screws (chromium-nickel alloy). Postoperative evolution was favorable, with cast immobilization and radiological confirmation of healing. Several months later, the patient reported pain and swelling after prolonged physical effort. At her request, osteosynthesis material was surgically removed approximately 17 months after the initial procedure. Early postoperative evolution was uneventful. Two weeks after hardware removal, following minimal physical effort, the patient sustained an iterative fracture of the left radius. Surgical reintervention was performed with internal fixation using one titanium plate and six screws. Postoperative recovery was favorable, and immobilization in a cast was maintained. **Discussions :** Refracture after implant removal is a recognized complication, with reported incidence varying between 2-33% depending on fracture type, location, and timing of removal. Stress shielding, cortical thinning at screw sites, and incomplete biomechanical remodeling may predispose to structural weakness. Forearm bones are particularly vulnerable due to their load-bearing rotational biomechanics. Hardware removal should not be routine and must be carefully indicated. Adequate patient education regarding activity restriction after implant removal is essential. In this case, refracture occurred after minimal stress, emphasizing that radiological healing does not always correlate with complete biomechanical recovery. **Conclusions:** Implant removal following forearm fracture fixation carries a significant risk of refracture, even in young patients with apparent radiological consolidation. Careful surgical indication, postoperative protection, and structured patient counseling are crucial to prevent iterative fractures. This case contributes to clinical awareness regarding the biomechanical consequences of hardware removal in diaphyseal forearm fractures.

Keywords: Forearm fracture, Iterative fracture, Open Reduction Internal Fixation, Stress Shielding

WHEN IMAGING SPEAKS FIRST: INCIDENTAL DISCOVERED BRAIN METASTASES

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Introduction: Despite advances regarding tumor screening and the identification of modifiable risk factors, the global incidence of neoplasia continues to rise. Studies show that more than 50% of patients with brain metastases are asymptomatic and most of them are incidentally discovered during routine imaging or investigations performed for other conditions. The most frequent primary tumors that metastasize to the brain are lung cancers, followed by breast cancer and malignant melanoma. **Case Report:** We present the case of a 71-year-old patient, hypertensive and diabetic, with a progressive decrease in muscle strength in both lower limbs, more pronounced in the left lower limb over approximately 3 years. Neurological examination revealed signs of lower motor neuron involvement: flaccid paraparesis more pronounced in the left lower limb, associated with left calf muscle atrophy, absent deep tendon reflexes in the lower limbs, hypoesthesia in the left L4-L5 dermatomes and impaired vibration sense in the left lower limb. Additionally, signs of upper motor neuron involvement were identified, including bilateral Marinescu-Radovici sign and a right Babinski sign. Lumbar spine MRI revealed multiple lumbar disc protrusions with radicular involvement while nerve conduction studies and electromyography revealed a sensorimotor axonal polyneuropathy. Given the presence of a severe stenosis of the right internal carotid artery we considered necessary to perform a brain CTA followed by MRI with contrast enhancement which revealed multiple space-occupying lesions diffusely distributed both infratentorially and supratentorially, associated with vasogenic edema and peripheral contrast-enhancement. Some lesions showed cystic transformation, while others exhibited hemorrhagic changes. The approximative volume of brain lesions represented almost 1/6 of total brain volume. Additional imaging investigations identified multiple pulmonary nodules, one with microspiculated appearance, as well as a pulmonary cyst in the left lower lobe. A parasitic infection was considered and subsequently excluded based on negative serological tests. The patient was transferred to the Neurosurgery Clinic for biopsy, with further therapeutic management to be determined based on the histopathological findings. **Discussions :** Neuroplasticity allows the brain to reorganize its structure and function to compensate for damage caused by brain metastases, aiding in functional preservation. However, the tolerance of such a significant volume of lesions give us an indirect proof that neuroplasticity is an essential process for brain reorganisation. **Conclusions:** This case underscored the importance of thorough neurological evaluation and imaging studies in a presymptomatic diagnosis.

Keywords: Brain metastases, pulmonary nodules, neuroplasticity, silent evolution

WHEN INFECTION MASKS NEOPLASIA: METASTATIC TRIPLE-NEGATIVE BREAST CANCER PRESENTING AS A RECURRENT BREAST ABSCESS DURING PREGNANCY

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Introduction: Pregnancy-associated breast cancer (PABC) is defined as a malignancy diagnosed during pregnancy or within the first postpartum year. Although it represents only 0.2-0.4% of all breast cancers, it is the most frequent gestational malignancy. Diagnosis is often difficult because physiological breast changes can mask tumors or mimic inflammatory conditions like mastitis or abscesses, leading to advanced stages at the time of detection. **Case Report:** We report the case of a 29-year-old woman, 31 weeks pregnant, who was admitted for emergency hemostasis of a persistent, hemorrhagic breast wound. Her medical history revealed two prior surgical interventions for a recurrent breast abscess performed at another hospital. Due to the lesion's refractory nature to standard surgical management, including debridement and attempted hemostasis, an incisional biopsy was performed. Histopathological examination confirmed an aggressive Triple-Negative Breast Cancer. Following the procedure, the patient developed uterine contractions and premature rupture of membranes, requiring an emergency C-section. After surgery, a CT scan was performed and revealed a primary right-sided breast tumor with multiple pulmonary metastases. Further genetic testing confirmed a BRCA1 mutation. Palliative systemic chemotherapy was initiated, achieving a significant clinical and therapeutic response. The patient subsequently underwent a modified radical mastectomy with axillary lymph node dissection. Histopathology confirmed a complete pathological response (ypTis). Further targeted therapy with Olaparib was initiated. One year later, the patient presented for neurological symptoms including ataxia and imaging revealed a cerebellar metastasis for which neurosurgical tumor ablation was performed. **Discussions :** Recurrent, atypical, or hemorrhagic breast abscesses during pregnancy should raise suspicion for underlying malignancy. Prompt histopathological evaluation is essential in lesions that fail to respond to conventional therapy. Even in advanced stages, modern treatments like PARP inhibitors such as Olaparib, have improved outcomes in patients with BRCA mutations. However, aggressive subtypes such as TNBC remain associated with a high risk of recurrence. **Conclusions:** This case aims to highlight the diagnostic pitfalls and the necessity of a multidisciplinary approach in managing an aggressive Triple-Negative Breast Cancer (TNBC) in a 31-week pregnant patient. The particularity of this case is the atypical clinical presentation, mimicking a refractory breast abscess with difficult-to-control hemorrhage, already complicated by pulmonary metastases.

Keywords: breast cancer, triple-negative breast cancer, BRCA1, pregnancy

WHEN INFLAMMATION MEETS INSTABILITY: A CASE STUDY OF SEVERE ULCERATIVE COLITIS WITH CARDIAC INVOLVEMENT AND MULTIFACTORIAL DETERIORATION

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Introduction: Ulcerative colitis is a chronic inflammatory bowel disease characterised by relapsing: remitting mucosal inflammation of the colon. Severe flares can produce systemic manifestations, metabolic instability, and functional decline. Although inflammation is central to disease activity, evidence shows that nutritional depletion, psychosocial stressors and lifestyle factors significantly modulate flare severity. This case argues the interaction between biological and behavioural factors can amplify disease instability, resulting in a more complex clinical presentation. **Case Report:** A 57 year old male construction worker was diagnosed with Ulcerative Colitis in March 2024 after months of intermittent diarrhoea and abdominal discomfort. Despite initial improvement on mesalazine (Pentasa 1 g qid), his condition deteriorated between December 2024 and February 2025, during which he experienced a 15 kg weight loss, worsening anxiety, and difficulty adhering to dietary recommendations, alongside weekend alcohol consumption. In late April 2025, he developed a two week escalation of watery diarrhoea, crampy left sided abdominal pain, anorexia, and reduced functional capacity, and presented to the emergency department on 30 April 2025. On admission, he appeared dehydrated, with left sided abdominal tenderness. Nursing assessments noted reduced oral intake, impaired mobility, and dependence in self care. Laboratory investigations

showed leukocytosis (13,600/mm³), thrombocytosis (500,000/mm³), normocytic anaemia (Hb 9.6 g/dL), elevated C reactive protein (90.6 mg/L) and erythrocyte sedimentation rate of 100 mm/h consistent with active inflammation. Electrolytes, renal function, and hepatic enzymes were normal. Repeated stool cultures and *Clostridioides difficile* assays were negative, excluding infectious colitis. Electrocardiography confirmed sinus bradycardia, likely secondary to beta blocker therapy. Abdominal ultrasonography revealed normal hepatobiliary and pancreatic structures, with an incidental 3.5 cm hyperechoic renal lesion. He received intravenous hydration, electrolyte correction, nutritional support, and continuation of mesalazine. By 5 May 2025, nursing documentation recorded improved mobility, increased oral intake, and declining inflammatory markers. **Discussions** : Although Ulcerative Colitis flares are often attributed primarily to mucosal inflammation, this case shows that such an interpretation is incomplete. The patient's deterioration occurred despite appropriate maintenance therapy, suggesting that inflammation alone could not explain the severity of his presentation. **Conclusions**: This case demonstrates how severe Ulcerative Colitis flares can escalate when biological inflammation intersects with nutritional depletion and psychosocial stressors. Recognising these interacting factors is essential for timely assessment and targeted intervention. As research continues to clarify the systemic nature of inflammatory bowel disease, long term management will increasingly rely on integrating pharmacologic therapy with sustained lifestyle modification and patient education.

Keywords: Ulcerative Colitis,, Inflammatory bowel disease,, C-reactive protein elevation,, Mesalazine Therapy,

WHEN INNOVATION MEETS PRECISION: A NEW SURGICAL TECHNIQUE IN EARLY BREAST CANCER

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Introduction: Invasive ductal carcinoma (IDC) is the most common type of breast cancer (BC). It develops in the milk ducts and invades the surrounding breast tissue. BC usually gives lymph node metastasis to the axilla. New surgical techniques, such as targeted axillary dissection (TAD), have been developed to reduce surgical invasiveness while maintaining oncologic safety. TAD combines the removal of a previously confirmed metastatic lymph node and sentinel lymph node dissection. **Case Report:** A 46-year-old female patient diagnosed with IDC T2N1M0, confirmed by histopathological examination, presents for surgery. Six months prior, the tumor and an axillary lymph node confirmed to be metastatic (targeted lymph node-TLN) were clipped, after which she underwent neoadjuvant systemic therapy (NAST). Left breast sectorectomy is performed along with sentinel node biopsy, and clipped lymph node excision. The sentinel node biopsy was achieved using a colorimetric method. Postoperatively, the patient is discharged after 2 days in a good general condition. The postoperative histopathological examination reveals R0 resection, non-metastatic sentinel nodes, and metastatic clipped lymph node. **Discussions** : The treatment and management of IDC are evolving towards more personalized and less aggressive therapies. One important development is that these selected patients who respond well to NAST are more likely to have breast-conserving surgery instead of a mastectomy. NAST used in early-stage BC N+ that converts to clinically N- status makes a patient suitable for TAD. TAD combines sentinel lymph node biopsy (SLNB) with the removal of the TLN. Compared to the axillary lymph node dissection (ALND), the TAD technique has fewer long-term complications, such as permanent nerve pain or chronic lymphedema, allowing patients to have a better quality of life after surgery. **Conclusions:** The IDC surgical management is shifting toward de-escalated approaches such as TAD. This surgical technique eliminates the need for ALND. For patients, TAD offers oncologically safe outcomes while protecting their quality of life.

Keywords: targeted lymph node, neoadjuvant systemic therapy, invasive ductal carcinoma, metastatic

WHEN LANGUAGE FAILS: ACUTE EXPRESSIVE APHASIA AND DISORIENTATION AS A DIAGNOSTIC GATEWAY TO CEREBRAL NEOPLASM

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Introduction: Acute expressive aphasia with temporospatial disorientation is a neurological emergency that commonly suggests ischemic stroke. However, abrupt cortical dysfunction may also be the presenting manifestation of an intracranial mass lesion, making early imaging essential for distinguishing vascular from non-

vascular etiologies. **Case Report:** We report the case of a 55-year-old woman with grade II arterial hypertension and type II diabetes mellitus on oral therapy, admitted for sudden-onset language impairment, disorientation, and a subtle pyramidal sign. On presentation, she was conscious and cooperative, with mild neurological impairment (Glasgow Coma Scale 14), without meningeal signs, cranial nerve deficits, sphincter dysfunction, or clinical evidence of intracranial hypertension. Emergency evaluation included non-contrast cranial CT followed by contrast-enhanced brain MRI. CT excluded acute intracranial hemorrhage and demonstrated a left frontal intra-axial expansive lesion with surrounding edema and significant mass effect, without definite signs of recent ischemic stroke. MRI characterized the lesion as an irregular infiltrative process centered in the left frontal white matter, extending into the anterior corpus callosum and abutting the frontal horn of the left lateral ventricle. It measured 44 × 51 × 38 mm, had poorly circumscribed margins, heterogeneous structure, focal diffusion restriction, predominantly peripheral inhomogeneous gadolinium enhancement, and a small hemorrhagic component. Extensive digitiform vasogenic edema produced marked locoregional mass effect with an approximately 15 mm midline shift. No imaging features of recent territorial ischemia were identified. On this basis, the patient underwent left frontal craniotomy with subtotal lesion ablation. Early postoperative CT demonstrated expected post-craniotomy changes, limited pneumocephalus, preserved basal cisterns, and no acute hemorrhagic or progressive mass-effect complication, while the clinical course was favorable, with recovery to full cooperation and discharge without focal neurological deficit. **Discussions :** The radiologic profile was most suggestive of a high-grade primary glial neoplasm, particularly glioblastoma, while metastatic disease, cerebral abscess, and diffuse astrocytic tumor remained in the differential diagnosis. This case underscores the diagnostic challenge posed by stroke-like presentations caused by non-vascular intracranial pathology. In this patient, staged CT and MRI excluded a purely vascular event, delineated lesion extent and aggressiveness, and narrowed the differential diagnosis toward a malignant infiltrative neoplasm. **Conclusions:** Acute aphasia and disorientation should not be interpreted exclusively within a vascular framework. In patients with stroke-like onset, emergency neuroimaging may reveal an underlying cerebral neoplasm and directly guide urgent neurosurgical management, while postoperative imaging remains essential for documenting the immediate surgical result and excluding early complications.

Keywords: expressive aphasia, glioblastoma, stroke mimic, brain MRI

WHEN LIFE-SAVING THERAPY BECOMES LIFE-THREATENING: STEVENS–JOHNSON SYNDROME IN SEVERE MEDIASTITIS

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Introduction: Stevens-Johnson syndrome (SJS) is a rare, life-threatening mucocutaneous hypersensitivity reaction, most commonly drug-induced. While sulfonamides and antiepileptic drugs represent classical triggers, beta-lactams are less frequently involved, and carbapenem-associated SJS remains exceptionally rare. In critically ill patients exposed to multiple antimicrobial agents, identifying the causative drug is particularly challenging, especially in the context of severe infections such as mediastinitis. **Case Report:** We describe an adult patient admitted to the intensive care unit for severe mediastinitis following cervical esophageal injury, with suspected *Streptococcus constellatus* infection. The clinical course was complicated by acute respiratory failure requiring mechanical ventilation and acute kidney injury (Kidney Disease: Improving Global Outcomes [KDIGO] stage 3). The patient received multiple antimicrobial therapies, including meropenem and caspofungin, with subsequent addition of colistin. After approximately 8 days of meropenem and caspofungin therapy, and 4 days after initiation of colistin, the patient developed high-grade fever (39.9°C), hemodynamic instability requiring norepinephrine (0.08 µg/kg/min), and a rapidly progressive mucocutaneous eruption. Dermatological examination revealed epidermal detachment involving <10% of body surface area, bullous thoracic lesions, and oral mucosal involvement, consistent with SJS. Infectious causes were considered unlikely. Following allergological evaluation, meropenem was identified as the most probable causative agent and was promptly discontinued. Intravenous immunoglobulin (IVIG) therapy and supportive intensive care measures were initiated, resulting in progressive resolution of cutaneous and mucosal lesions and subsequent hemodynamic stabilization. **Discussions :** This case illustrates the diagnostic complexity of SJS in critically ill patients receiving multiple concomitant therapies. Although penicillins are more frequently implicated, carbapenem-induced SJS remains exceedingly rare. The concomitant use of colistin and caspofungin further complicated causal attribution. Notably, recent pharmacovigilance data

suggest a statistical safety signal associating colistin with SJS and toxic epidermal necrolysis (TEN), whereas caspofungin is only exceptionally linked to such reactions, with extremely low or unknown frequency. The temporal relationship and clinical evolution supported meropenem as the most likely trigger. This case underscores the importance of systematic evaluation and multidisciplinary collaboration in differentiating drug-induced reactions from infection-related deterioration. **Conclusions:** Meropenem should be recognized as a potential, though rare, trigger of SJS in critically ill patients. Early recognition, prompt withdrawal of the suspected agent, and initiation of appropriate therapy are essential for favorable outcomes. This case highlights the pivotal role of a multidisciplinary team in managing severe cutaneous adverse reactions in complex intensive care settings.

Keywords: Stevens-Johnson Syndrome, Meropenem, Mediastinitis, Critical Care

WHEN LUNGS OVERSHADOW KIDNEYS: SILICA-ASSOCIATED MICROSCOPIC POLYANGIITIS IN A FORMER MINER

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Introduction: Microscopic Polyangiitis (MPA) is a primary systemic vasculitis, associated with antineutrophil cytoplasmic autoantibodies (ANCA), that predominantly affects small-caliber vessels. The major organs involved in MPA are lungs and kidneys. Occupational silica exposure is a recognized trigger of ANCA-associated vasculitis, including MPA, which disrupts immune tolerance through persistent inflammation, T-cell dysregulation and enhanced autoantibody production. **Case Report:** We report the case of a 44-year-old male, former miner, admitted for hemoptysis and malaise, diagnosed with superinfected bronchiectasis. Pulmonary evolution was favorable following cefuroxime combined with amoxicillin. Nevertheless, nephritic syndrome with recent renal failure was identified (based on proteinuria, microscopic hematuria and azotemia) alongside systemic inflammation (elevated ESR, CRP). For the etiology of glomerular syndrome, hematological and infectious causes were excluded, whereas p-ANCA antibodies were positive, suggesting an autoimmune process. Renal biopsy did not reveal intraglomerular immune deposits on immunofluorescence (consistent with ANCA-positive pauci-immune vasculitis), while optical microscopy, demonstrated extracapillary proliferation with crescents. The glomerular syndrome, hemoptysis and systemic inflammation suggested renopulmonary syndrome. Together with biopsy findings and p-ANCA antibodies positive, the features confirmed the diagnosis of MPA. Remission induction therapy was initiated with methylprednisolone and cyclophosphamide, followed by prednisone tapering combined with cyclophosphamide to achieve remission. Follow-up indicated decrease in the patient's disease activity, however, two years later the patient presented for reevaluation with hypertension, but without fever or other clinical signs. Laboratory tests revealed elevated creatinine, proteinuria and recurrent active hematuria. Disease relapse was initially considered, with management options including renal biopsy reassessment or ongoing immunosuppressive therapy. Given the absence of systemic inflammation and clinical features of active disease, immunosuppressive therapy was maintained, substituting cyclophosphamide with azathioprine. **Discussions :** There are two key considerations associated with this condition. First of all, the diagnosis challenge is further complicated by the tendency of pulmonary symptoms to precede or overshadow renal involvement and initial treatment is frequently directed toward a suspected infection, postponing appropriate immunosuppressive therapy. Secondly, monitoring MPA in former miners with silica exposure can be difficult, especially regarding relapse, due to overlapping clinical features, limited specificity of current biomarkers, and the need for integrated clinical, serological, and imaging assessment. **Conclusions:** These challenges emphasize the difficulty of accurately diagnosing and monitoring this condition, highlighting the need for increased clinical vigilance and more reliable biomarkers to guide management.

Keywords: silica, lungs, vasculitis, kidneys

WHEN MEDICINE IS NOT ENOUGH: THE CLINICAL CHALLENGES IN MANAGING A PACIENT WITH SEMILOBAR HOLOPROSENCEPHALY AND CHOANAL ATRESIA

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Introduction: Bilateral agenesis of the nasal fossae is the congenital absence of both nasal fossae, accompanied by cleft palate, which means that the palatal processes did not fuse during the embryonic period, and

holoprosencephaly is the failure of the brain to divide between 4th and 5th week of pregnancy. The presence of these three associated facial and cerebral malformations signifies the involvement of the same molecular pathway of development, namely the Sonic Hedgehog protein. The aim of the study is to highlight the clinical challenges of managing a rare case of multiple congenital malformations, and high mortality risk. **Case Report:** We present the case of a 9-month-old female infant, born prematurely at 36 weeks gestation, diagnosed with lobar holoprosencephaly, choanal atresia, and cleft palate. The patient presented with cardiorespiratory arrest due to AEFP, was successfully resuscitated, and was transferred to the Pediatric ICU requiring mechanical ventilation. During hospitalization, the patient was cardiorespiratory and hemodynamically unstable, and extubation was not possible. Following an ENT consultation, a tracheostomy is recommended, and the patient continues to be mechanically ventilated via alternating CPAP and T-piece ventilation. At the same time, a fibroscopy is attempted, and a nasogastric tube is inserted, revealing the absence of nasal cavities and a common nasal cavity with complete choanal atresia. Multiple genetic tests were performed to establish a diagnosis, but she did not fit into any genetic syndrome. However, she did present a mutation. The patient's condition is unstable, as she is permanently tracheostomized, with periods of respiratory decompensation, requiring repeated airway suctioning and alternating VM via TS with T-piece and TS-CPAP. Repeated attempts are made to breathe through the tracheostoma in ambient air, but episodes of desaturation with hypercapnia occur. **Discussions :** This case represents a rare combination of holoprosencephaly, bilateral choanal atresia, and cleft palate. Similar cases reported in the literature require mechanic ventilation care and intensive care. One of the clinical challenges is the persistent respiratory instability due to absence of nasal passages and impaired autonomous respiratory function. **Conclusions:** After careful evaluation of the case, we conclude that the patient's condition is compromised due to the absence of autonomous cerebral and respiratory functions. The risks of prolonged mechanical ventilation and associated nosocomial infections are insurmountable, so the therapeutic outlook is palliative, ensuring the patient's comfort. The case emphasizes the importance of early diagnosis, careful airway management and the role of palliative treatment.

Keywords: tracheostoma, palatoschisis, choanal atresia, semilobar holoprosencephaly

WHEN ONCOLOGY DEFIES AGE: STAGE IV HIGH-GRADE SEROUS OVARIAN CARCINOMA IN A 26-YEAR-OLD WOMAN

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Introduction: High-grade serous ovarian carcinoma (HGSOC) is the most aggressive subtype of epithelial ovarian cancer and the principal contributor to ovarian cancer-related mortality. It is defined by rapid peritoneal dissemination, advanced-stage presentation, and unfavorable survival outcomes. The median age at diagnosis exceeds 60 years. When diagnosed in early adulthood, the disease challenges not only therapeutic strategy, but also the deeply rooted perception that ovarian cancer is a malignancy of later life. **Case Report:** We report the case of a 26-year-old woman diagnosed with stage IV high-grade serous ovarian carcinoma, complicated by extensive peritoneal carcinomatosis and intestinal involvement requiring left-sided colostomy formation. The patient is currently undergoing systemic chemotherapy. She was admitted for severe chemotherapy-induced thrombocytopenia (platelets: $15 \times 10^3/\mu\text{L}$, blood group B3), necessitating intensive monitoring and supportive care. Management included 6 units of platelet transfusions, resulting in recovery to $102 \times 10^3/\mu\text{L}$, and corticosteroid therapy with dexamethasone (3 vials, tapered progressively). During hospitalization, she experienced intermittent hypertensive episodes, but remained cooperative and afebrile. During the admission, she developed severe, stabbing pain in the right scapular region, progressive in intensity and partially refractory to analgesics. In the context of advanced disease, this symptom raised concern for possible bone metastasis, prompting urgent imaging reassessment. The case was further complicated by the dual burden of advanced malignancy and treatment-related toxicity in a patient at the beginning of adult life, emphasizing both medical and psychosocial complexity. **Discussions :** Ovarian carcinoma in young adults may be underestimated due to age-related bias and nonspecific symptoms, delaying recognition until advanced disease. High-grade serous ovarian carcinoma in a 26-year-old woman is rare, especially with extensive FIGO-documented loco-regional spread involving uterine, rectosigmoid, epiploic, and peritoneal sites, reflecting aggressive tumor biology. Early-onset ovarian cancer is increasingly recognized as multifactorial, involving hereditary predisposition particularly BRCA and homologous recombination repair mutations polygenic susceptibility, subtype-specific biology, and environmental factors. In this case, early onset of HGSOC and a family history of colorectal cancer raise suspicion for hereditary predisposition, though no

genetic testing was performed. Advanced stage at presentation and treatment-limiting thrombocytopenia highlight the aggressive course and management complexity. This case emphasizes oncologic vigilance regardless of age and the need for hereditary cancer assessment in young patients with aggressive ovarian malignancies. **Conclusions:** Cancer does not negotiate with age. When advanced ovarian carcinoma emerges in early adulthood, its biological aggression remains uncompromising. Timely recognition, rejection of age-based assumptions, and meticulous monitoring during systemic therapy are essential to prevent avoidable harm in this vulnerable population.

Keywords: Advanced stage (Stage IV) ovarian cancer, Chemotherapy-induced thrombocytopenia, Young adult patient, High-grade serous ovarian carcinoma (HGSOC)

WHEN PNEUMONIA MASKS PULMONARY EMBOLISM: A DIAGNOSTIC CHALLENGE

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Introduction: Pneumonia is a frequent cause of acute respiratory symptoms, typically presenting with cough, dyspnea, fever, and radiological findings such as parenchymal consolidation. However, these clinical and imaging features are often nonspecific and may also occur in other respiratory or cardiovascular conditions. Pulmonary embolism is a serious disorder with a variable clinical presentation that can mimic or coexist with pulmonary infections. In some cases, inflammatory lung changes may initially be interpreted as pneumonia, obscuring the presence of pulmonary embolism and delaying diagnosis. Therefore, a broad differential diagnosis and appropriate imaging are essential for an accurate diagnosis. **Case Report:** A 56-year-old male with significant occupational exposure to respiratory hazards, including long-term work as a welder and prior asbestos exposure while employed in a company distributing asbestos-containing materials, presented with progressively worsening respiratory symptoms. Approximately three months before admission, he developed persistent cough, fatigue, and exertional dyspnea, initially during moderate physical activity and later at minimal exertion. The clinical course was complicated by a viral respiratory infection with prolonged evolution and recurrent bacterial superinfections, without significant improvement under outpatient antibiotic therapy. At presentation, the patient required non-invasive ventilation (CPAP), with peripheral oxygen saturation (SpO₂) of 97%. Vital signs revealed tachycardia (HR 141 bpm), tachypnea (RR 37/min), and arterial hypertension (BP 171/61 mmHg). Chest computed tomography showed multiple pulmonary nodules and consolidation in the left lower lobe. In the context of the patient's occupational history, these findings initially raised suspicion of asbestos-related lung disease, including possible asbestosis. However, recent bronchoscopy did not reveal malignant or specific pathological lesions, and the parenchymal changes were ultimately interpreted as inflammatory, consistent with pneumonia. Computed tomography pulmonary angiography revealed filling defects in the right pulmonary artery and its lobar branches, confirming acute pulmonary embolism. Laboratory tests showed marked leukocytosis with neutrophilia, elevated CRP (>150 mg/L), markedly increased D-dimer levels (>5000), and elevated cardiac biomarkers. Anticoagulant therapy with weight-adjusted enoxaparin (0.8 mL twice daily for a body weight of 73 kg) was initiated. **Discussions :** In the present case, chest CT examination revealed parenchymal changes suggestive of fibrotic lesions which, in the context of occupational exposure to respiratory hazards, initially raised suspicion of pneumoconiosis, such as asbestosis or silicosis. However, further investigations, including bronchoscopy and clinical correlation, did not support the diagnosis of an interstitial lung disease. **Conclusions:** Pulmonary embolism should be considered in patients with suspected pneumonia and respiratory failure, as it represents a potentially reversible cause of cardiac arrest.

Keywords: Pneumonia, Inflammatory lesions, Pulmonary embolism, Dyspnea

WHEN PRADER-WILLI IS NOT THE ANSWER: A NEONATAL CASE OF SCHAAF-YANG SYNDROME

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Introduction: Schaaf-Yang syndrome (SYS) is a rare neurodevelopmental disorder that shares significant early-life phenotypic overlap with Prader-Willi syndrome (PWS). SYS presents at birth with hypotonia in all individuals and distal joint contractures in the majority of cases. **Case Report:** We present the case of a female neonate born

at term by breech presentation, appropriate for gestational age, who required early neonatal hospitalisation due to marked hypotonia and significant feeding difficulties. The patient needed specialised feeding support and showed signs of generalised hypotonia and a poor sucking reflex. Additional findings during the neonatal period included transient hypoglycemia, persistent fetal circulation, patent foramen ovale, and patent ductus arteriosus. Cranial ultrasonography raised suspicion of corpus callosum hypoplasia, even if midline structures were largely preserved. The clinical picture prompted consideration of a congenital neuromuscular disorder and a syndromic etiology resembling Prader-Willi syndrome. Genetic investigations were pursued. The analysis of chromosomal copy number variation showed no deletions or duplications in the PWS region. Whole exome sequencing subsequently revealed a heterozygous truncating variant in the MAGEL2 gene (c.2216C>A, p.Ser739*), designated as likely pathogenic. This molecular discovery confirmed the diagnosis of Schaaf-Yang syndrome. **Discussions** : In the neonatal stage, hypotonia, feeding issues, and failure to thrive are the predominant characteristics of both SYS and PWS. In contrast to PWS, SYS is not caused by imprinting defects or deletions involving the 15q11-q13 region, but rather by pathogenic variants in the paternally expressed MAGEL2 gene. Patients with SYS are more likely to have arthrogryposis, joint contractures, and a higher prevalence of autism spectrum disorder, whereas hyperphagia and obesity usually develop later in PWS. The identification of a truncating mutation in the MAGEL2 gene and the failure to detect a methylation defect frequently observed in PWS were crucial in establishing a diagnosis of SYS. This highlights the fact that clinical manifestations alone are insufficient indicators of disease in neonates, where a thorough genomic analysis is necessary to establish a diagnosis in neonates presenting with severe hypotonia and failure to thrive. **Conclusions**: Schaaf-Yang syndrome should be considered in the differential diagnosis when neonates display a Prader-Willi-like phenotype. This is due to the fact that timely application of advanced molecular genetic testing, including exome sequencing, and greater awareness among paediatricians and clinical geneticists enable accurate diagnosis, clinical management, prognosis assessment, and genetic counselling.

Keywords: Schaaf-Yang syndrome, MAGEL2, Prader-Willi-like phenotype

WHEN PREGNANCY "GIVES BIRTH" TO COMPLICATIONS: CEREBRAL VENOUS THROMBOSIS – CASE PRESENTATION

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Introduction: Cerebral venous thrombosis (CVT) is a rare cause of stroke (0.5-3% of all strokes), characterized by partial or complete occlusion of the dural venous sinuses and/or cerebral veins. Pregnancy and the postpartum period are major risk factors, due to the state of physiological hypercoagulability. Clinical manifestations are variable, most commonly including headache, altered level of consciousness, seizures, and focal neurological deficits. **Case Report:** We present the case of a 29-year-old primiparous patient with an evolving pregnancy (10 weeks), with no relevant medical history or chronic medication. The patient presented to the Emergency Department with a 7-day history of headache and altered level of consciousness. At the neurological examination, the patient was conscious (GCS 14 points), but bradylalic and bradypsychic, without other focal deficits. Imaging investigations (CT and MRI) revealed spontaneous hyperdensity involving the superior and inferior sagittal sinuses, bilateral transverse sinuses, the right sigmoid sinus, as well as the deep venous system (Galen's vein and internal cerebral veins). FLAIR T2 sequences indicated bilateral thalamic hypersignal and cerebral edema with compressive effect on the lateral ventricles. Under anticoagulation with low-molecular-weight heparin (LMWH), the neurological evolution was favorable. However, gynecological monitoring highlighted the cessation of pregnancy, followed by complete miscarriage. The patient was discharged with normal neurological status and recommendations to continue anticoagulant therapy. **Discussions** : The case underlines the difficulty of the clinical diagnosis of CVT, where the onset is often subacute (over 48 hours) and the symptomatology is dominated by headache (90% of cases) and signs of intracranial hypertension. Hemodynamic and hematologic changes during pregnancy can precipitate extensive thrombotic events that affect both the superficial and deep venous systems. **Conclusions:** CVT is a rare but potentially severe pathology with insidious onset and non-specific symptoms. Pregnancy can be a favorable context for the onset of this condition. Prompt diagnosis, based on clinical correlation and imaging, as well as rapid initiation of anticoagulation, are essential for a favorable prognosis. The multidisciplinary approach is crucial in the management of CVT-associated obstetric cases.

Keywords: Cerebral Venous Thrombosis, Pregnancy, Low-Molecular-Weight Heparin, Thalamic Edema

WHEN ROUTINE SURGERY TURNS CATASTROPHIC: DUAL ISCHEMIC EVENTS REVEALING LARGE VESSEL ARTERITIS

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Introduction: Large vessel arteritis is a rare inflammatory condition affecting the aorta and its major branches, often remaining asymptomatic until severe ischemic complications occur. **Case Report:** We present the case of a 46-year-old male with cardiovascular risk factors (smoking, hypertension, dyslipidemia, obesity) who developed acute chest pain immediately after undergoing septoplasty. He was diagnosed with anterior ST-elevation myocardial infarction, with coronary angiography revealing thrombotic occlusion of the left anterior descending artery, successfully treated by percutaneous coronary intervention with stent implantation. Within the next 24 hours, the patient developed neurological symptoms (including dysarthria, vertigo, and right facial asymmetry), suggesting acute stroke. Initial CT revealed possible ischemic lesions. Although a cerebral MRI was planned, the patient declined further evaluation and requested discharge, leaving on standard medical therapy following myocardial infarction. Two weeks later, he was readmitted with fever, signs of left-sided heart failure, atrial fibrillation with rapid ventricular response, and a marked systemic inflammatory syndrome. Infectious causes, including endocarditis, were initially ruled out. Angio-CT revealed diffuse circumferential thickening of the aortic wall extending to its major branches, including the carotid, subclavian, mesenteric, and renal arteries, with associated stenoses and focal dissection. Based on imaging and clinical findings, a diagnosis of large vessel arteritis was established. The patient showed clinical improvement under corticosteroid therapy and was later started on methotrexate. **Discussions :** This case demonstrates that even routine procedures, despite appropriate preoperative evaluation, may unmask severe underlying pathology. The combination of systemic inflammation, endothelial dysfunction, and postoperative hypercoagulability likely contributed to the observed vascular events. The coexistence of myocardial infarction and stroke in a relatively young patient should raise suspicion of non-atherosclerotic causes, particularly vasculitis. **Conclusions:** What initially appeared to be a typical atherosclerotic ischemic event was ultimately revealed to be a systemic disease, in which early detection could prevent life-threatening complications.

Keywords: Large vessel arteritis, Myocardial infarction, Systemic vasculitis

WHEN SOMATIC MUTATIONS TELL A GERMLINE STORY: AN UNEXPECTED DIAGNOSIS OF ATTENUATED FAP

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Introduction: Colorectal cancer (CRC) is a frequent type of cancer, with an increased number of cases worldwide. Although most of these cases are sporadic, the disorder may appear as a result of various genetic syndromes such as familial adenomatous polyposis (FAP). FAP is caused by variants in the APC gene and is characterized by the development of hundreds of colonic polyps which can become malignant. Nowadays, liquid biopsy is used frequently to guide targeted therapies. However, these techniques can also have diagnostic value by revealing unexpected germline alterations with important clinical implications. **Case Report:** We report the case of a 47-year-old patient diagnosed with transverse colon adenocarcinoma, staged pT2N2M1, with a single hepatic metastasis measuring 1.8 cm. The treatment plan included partial colectomy followed by systemic chemotherapy (FOLFOX regimen). To evaluate the eligibility for targeted therapy, liquid biopsy was performed and circulating tumor DNA (ctDNA) was analyzed. Molecular study showed multiple somatic alterations, including a pathogenic APC variant with a high variant allele frequency. This finding suggested a possible germline origin. Other discovered variants include TP53 and CHEK2, while microsatellite status was stable (MSS) and tumor mutational burden was low (6 mutations/Mb). Therefore, the patient was not eligible for immunotherapy. Bearing in mind the possible germline alteration, further genetic testing was undertaken and the patient was found to carry a pathogenic germline APC mutation. Colonoscopy evaluation revealed only four colonic polyps, supporting the diagnosis of attenuated (atypical) FAP. **Discussions :** This case demonstrates that somatic tumor testing, besides helping with therapeutic

decision-making, can also contribute to the diagnostic process. Even though liquid biopsy was performed to find mutations for alternative treatment options, it helped identify a germline APC mutation. Attenuated FAP is characterized by a small number of polyps and the later onset of CRC. This can delay the diagnostic process. The discovery of this variant is important, as it enables a better understanding of the disorder and suggests the need for genetic testing in family members. This case shows that germline variants should be considered in patients with high variant allele frequency mutations when tumor genetic sequencing is undertaken. **Conclusions:** Tumoral liquid biopsy can reveal potential treatment options but can also point out the hereditary source of the disorder, representing a useful diagnostic tool. In atypical presentations such as attenuated FAP, genetic findings may prove to be crucial for accurate diagnosis and correct patient management.

Keywords: Colorectal cancer, APC mutation, Familial adenomatous polyposis, Liquid biopsy

WHEN STANDARD REPAIR IS NOT ENOUGH: DISTAL ACHILLES TENDON RUPTURE REQUIRING CALCANEAL BONE TUNNELING

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Introduction: Acute Achilles tendon rupture is a common injury, particularly among active adults aged 30-50 years. Most ruptures occur in the hypovascular midsubstance region and can be treated successfully with end-to-end repair using open, minimally invasive, or percutaneous techniques. However, distal ruptures at or near the calcaneal insertion are uncommon and present unique surgical challenges. In such cases, standard repair techniques may not provide sufficient fixation due to limited distal tendon stump or poor tissue quality. Augmented fixation with calcaneal bone tunneling or suture anchors may be required to restore tendon continuity and ensure stable reattachment. **Case Report:** A 40-year-old female presented with acute pain in the posterior aspect of the left ankle following a sudden dorsiflexion movement. Clinical examination revealed a palpable gap in the distal Achilles region and loss of active plantarflexion strength. Imaging confirmed a complete distal Achilles tendon rupture near its calcaneal insertion. Intraoperatively, the distal stump was insufficient for conventional end-to-end repair. A transcalcaneal bone tunnel technique was therefore employed. Non-absorbable sutures were passed through the proximal tendon using a Krackow locking configuration and secured through drilled calcaneal tunnels to achieve stable fixation. In addition, due to the fact that the tendon's rupture occurred very low, precisely at the level of the tendon insertion on the calcaneus, 2 more suture anchors were used in order to overstabilize the suture. The ankle was immobilized in equinus postoperatively. Progressive rehabilitation was initiated according to protocol. At follow-up, the patient demonstrated satisfactory wound healing, restoration of plantarflexion strength, and gradual return to functional activities without rerupture. **Discussions :** Distal Achilles tendon ruptures account for a minority of cases but are technically demanding. Unlike midsubstance tears, insertional ruptures often lack adequate distal tissue for secure suturing. Biomechanical studies suggest that bone tunnel fixation provides strong tendon-to-bone contact and load resistance comparable to suture anchor techniques. Overstabilization with soft 2 tissue anchors was performed in order to further enhance the resistance of the suture. Proper tensioning in equinus position and structured rehabilitation are essential to optimize outcomes and reduce complications such as rerupture, stiffness, or wound problems. Early recognition of the rupture pattern is critical for selecting the appropriate surgical strategy. **Conclusions:** Distal Achilles tendon ruptures may not be amenable to standard end-to-end repair. Calcaneal bone tunneling offers a secure and reproducible method for tendon reinsertion when distal tissue is inadequate. Individualized surgical planning and careful postoperative management are key to achieving favorable functional outcomes.

Keywords: Achilles tendon rupture, Distal rupture, Calcaneal bone tunnel, Transosseous repair

WHEN STENTS FAIL: MANAGEMENT OF IN-STENT RESTENOSIS IN A HIGH-RISK PATIENT

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Introduction: In-stent restenosis (ISR) is characterized by a significant reduction of the luminal diameter within the stented segment after a successful percutaneous coronary intervention (PCI) and remains the most common cause of stent failure, angiographically characterized by >50% diameter stenosis within the stent or 5 mm of its

edges, **Case Report:** I would like to present the case of a 37-year-old male patient who reports episodes of chest pain described as constrictive in nature, associated with stabbing sensations localized to the left lateral thoracic region, radiating to the upper limb. The episodes have a variable duration ranging from 1-30 minutes. The patient was admitted in our department presenting: ischemic heart disease, HTA-grade 2, cardiac insufficiency NYHA 2, dyslipidemia, obesity and having a history of prior percutaneous coronary intervention with deployment of two stents in Left Main Coronary Artery (LMCA)-Left Anterior Descending artery (LAD) segment and Left Circumflex artery (LCx) (07.2025). Coronary angiography showing : RCA: non-dominant, no angiographically significant lesions; retrograde filling of the LCx is noted via collaterals originating from the RCA; the LCx fills retrogradely up to the mid-segment. LMCA: bifurcated, presents a previously implanted stent with critical subocclusive restenosis at the bifurcation; specifically, the stent implanted in the LCx shows total occlusion; no antegrade flow is visualized toward the LCx; distal LAD flow is TIMI III. **Discussions :** The T-stenting technique was employed from the LMCA (Left Main Coronary Artery) toward the LCx, resulting in the restoration of flow. The intervention was subsequently completed with sequential Drug-Eluting Balloon (DEB) angioplasty: one Agent DEB 3×15 mm (deployed at 18 atm for 20 seconds) at the level of the LMCA toward the LAD, and a second Agent DEB 3×15 mm from the LMCA toward the LCx. This achieved reconstruction of the carina and the vascular lumen, effectively treating the in-stent restenosis. The procedure concluded with a favorable angiographic result and distal TIMI III flow. **Conclusions:** In conclusion, in-stent restenosis (ISR) remains a significant clinical complication and continues to represent one of the leading causes of stent failure, accounting for approximately 5-10% of repeat percutaneous coronary interventions in contemporary practice.

Keywords: Stent, Restenosis, Coronary intervention, LMCA

WHEN SUSPECTED PELVIC HYDATID CYSTS CONCEAL ADVANCED OVARIAN NEOPLASIA: DIAGNOSTIC CHALLENGES AND CLINICAL IMPLICATIONS

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Introduction: Echinococcosis causes hydatid cysts that can present as large intra-abdominal masses with mixed cystic and solid components, frequently mimicking malignant neoplasms. Differentiating advanced malignancy from hydatid disease is particularly challenging when imaging is inconclusive, and clinical presentation includes ascites, pleural effusion, and respiratory failure, leading to diagnostic errors and adverse outcomes. **Case Report:** A 43-year-old woman with a history of hepatic cystic echinococcosis (treated with albendazole for 28 days in 2024) presented to the emergency department with a 3-day history of progressive dyspnea, tachypnea, marked abdominal distension, bilateral lower extremity edema, and cachexia. Initial laboratory evaluation revealed an inflammatory syndrome (CRP 88 mg/L), elevated LDH (616 U/L) and CK (539 U/L), mild anemia (Hb 10.8 g/dL), markedly elevated D-dimers (>5000 ng/mL), and increased serum CA-125 (113 U/mL). CT scan revealed a giant intra-abdominal mass (~45×30 cm), heterogeneous in composition, with both cystic and solid components, hepatomegaly with multiple hypodense lesions, large bilateral pleural effusions, and massive ascites. The patient was admitted to Internal Medicine Clinic No. 1. A therapeutic thoracentesis evacuated >1000 mL of sero-hemorrhagic pleural fluid. Despite supportive measures including oxygen therapy, fluid and electrolyte correction, empiric antibiotics, and anticoagulation, the patient developed acute hypoxemic respiratory failure requiring temporary ICU transfer. Repeat contrast-enhanced CT confirmed the abdominopelvic mass and revealed peritoneal carcinomatosis, hepatic metastases, bilateral pleural effusions, and moderate ascites. Gynecological consultation excluded acute pathology. Given the clinical presentation, imaging findings, and tumor marker elevation, a multidisciplinary decision was made to perform an exploratory laparotomy. Intraoperatively, a massive abdominopelvic tumor of ovarian origin was identified with diffuse peritoneal carcinomatosis, rendering the disease unresectable (tumor biopsy pending). Despite maximal intensive care, the patient developed progressive hemodynamic instability, extreme bradycardia progressing to asystole, and died despite resuscitation efforts. **Discussions :** This case illustrates the difficulty of differentiating echinococcosis from ovarian neoplasia, especially with a suggestive history that may misdirect clinical suspicion and delay diagnosis. Compared to existing literature, where echinococcosis mimics adnexal tumors, in this case, advanced ovarian neoplasia was initially interpreted as hydatid recurrence, significantly impacting diagnostic reasoning and management. **Conclusions:** By its particularity, the case highlights the importance of maintaining a broad differential diagnosis when evaluating abdominopelvic masses. Early integration of tumor markers, careful clinical correlation, and comprehensive imaging are essential to avoid diagnostic errors, enable timely diagnosis, and optimize management.

Keywords: Echinococcosis, Hydatid cyst, Ovarian Neoplasia, Tumor Marker CA-125

WHEN THE THRESHOLD IS CROSSED: CARDIOTOXICITY BEYOND THE GUIDELINES

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Introduction: Chemotherapy-related cardiac dysfunction (CTRCD) lies at the critical intersection between cardiology and oncology. A reduction in the left ventricular ejection fraction (LVEF) during active cancer treatment often triggers a therapeutic dilemma: interrupt life-saving chemotherapy to protect the heart or attempt to preserve both. Although current guidelines recommend initiation of heart failure therapy and chemotherapy interruption, evidence addressing functional recovery under sodium-glucose cotransporter-2 (SGLT2) inhibitors in CTRCD remains sparse. **Case Report:** A 63-year-old male with rectal adenocarcinoma underwent neoadjuvant and adjuvant chemotherapy with FOLFOX (folinic acid, fluorouracil, oxaliplatin) and capecitabine following surgical resection. Baseline cardiologic evaluation demonstrated preserved LVEF (>50%). After two years of chemotherapy and radiotherapy, metastatic lesions were identified during oncological follow-up. At that time, the patient developed exertional dyspnea (New York Heart Association class II-III) and transthoracic echocardiography revealed a reduction in LVEF to 40%. N-terminal pro-B-type natriuretic peptide (NT-proBNP) was elevated at 2785 pg/mL, consistent with chemotherapy-related cardiac dysfunction. Although guidelines recommend chemotherapy interruption in moderate symptomatic cardiotoxicity, the multidisciplinary team elected to continue life-saving chemotherapy in parallel with guideline-directed heart failure therapy: beta-blocker, mineralocorticoid receptor antagonist, diuretic and SGLT2 inhibitor. At one month follow-up, LVEF remained stable without further decline. After two months of optimized therapy, repeat echocardiography demonstrated improvement in LVEF.

Discussions : This case is not merely defined by cardiotoxicity, but by the inflection point created by the necessity to continue life-saving chemotherapy for progressive metastatic disease. A decline in LVEF to 40% is more than a numerical threshold; it is a boundary that often redirects therapy. While SGLT2 inhibitors are well established in heart failure management, their role in chemotherapy-induced systolic dysfunction remains insufficiently defined in current recommendations. In this patient, early comprehensive heart failure optimization, including SGLT2 inhibition, was associated with stabilization of ventricular function, followed by improvement in LVEF at a moment when interruption of oncologic therapy appeared imminent. The contrast was pronounced: a guideline-triggering ejection fraction on one side, and the preservation of oncologic continuity on the other. **Conclusions:** In cardio-oncology, a reduced ejection fraction during chemotherapy is not merely a value; it is a decision threshold. This case suggests that decisive optimization of heart failure therapy, including SGLT2 inhibition, may stabilize cardiac function sufficiently to sustain life-saving oncologic treatment. When cardiac protection and cancer control appear to diverge, precision within a multidisciplinary team may allow both to continue.

Keywords: Cardio-oncology, Cardiotoxicity, SGLT2 inhibitor, Reduced ejection fraction

WHEN THE UNCOMMON BECOMES REALITY: PARASITIC INFECTION IN A CHRONIC LEG ULCER

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Introduction: Skin discontinuities of the lower limbs represent a complex medical condition with etiologies ranging from trauma to chronic diseases such as diabetes and venous insufficiency. These lesions significantly impair quality of life and require a multidisciplinary diagnostic approach. Accurate etiological identification, supported by modern investigations, is essential for personalized management. **Case Report:** A 76-year-old patient, with a medical history of arterial hypertension and chronic venous insufficiency (CEAP C6), presented with worsening pain and the onset of bleeding from an ulcer located on the right lower limb. The patient was afebrile and hypersthenic, in a relatively stable condition, at the time of admission. Local Dermatological Examination: A leg ulcer is present on the medial aspect of the right leg, measuring 15 × 10 cm, undermined from the skin plane by approximately 2 cm, with festooned margins and foci of microhemorrhages; on the ulcer bed, multiple parasitic organisms (worms) are observed. On the lateral aspect of the right leg, there is another ulcer measuring approximately 5 × 5 cm, with characteristics similar to the first. The patient received appropriate treatment, the

wounds were managed accordingly, and ultimately the clinical outcome was favorable under therapy.

Discussions : Leg ulcers are chronic lesions, predominantly of venous origin, characterized by a lack of spontaneous healing and a recurrent course. Major complications include infection (up to 75%), osteomyelitis, hemorrhage and malignant transformation, all contributing to a significant decrease in quality of life. Parasitic infestation of chronic leg ulcers (myiasis) is rarely reported in modern clinical practice, with only isolated cases described in the literature. Chronic venous insufficiency and poor wound care are recognized predisposing factors. Another particular feature of the case is represented by microhemorrhages. Due to capillary fragility and venous hypertension, erythrocytes extravasate into the perilesional tissues, leading to microhemorrhages at the level of lower limb ulcers. Their degradation results in hemosiderin deposition and the creation of a proinflammatory environment, which amplifies oxidative stress and affects local microcirculation; and contribute to the persistence of chronic inflammation and delayed ulcer healing. **Conclusions:** The present case is unusual due to the presence of two rarely encountered complications: a parasitic infection within the ulcer bed and associated microhemorrhages, highlighting the complexity of the lesion and an unfavorable local environment that may further impair healing.

Keywords: leg ulcer, chronic venous insufficiency, microhemorrhages, parasitic organisms

WHEN THERAPY TURNS AGAINST THE PATIENT: DRUG-INDUCED LEUKOCYTOCLASTIC VASCULITIS IN AN ELDERLY PATIENT

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Introduction: Leukocytoclastic vasculitis is an inflammatory condition affecting small cutaneous blood vessels, frequently triggered by infections, medication or systemic diseases. The lesions most commonly appear on the extremities and typically manifest as palpable purpura. Non-steroidal anti-inflammatory drugs (NSAIDs) are among the most frequently reported medications associated with these hypersensitivity reactions. The management of drug-induced vasculitis poses a significant therapeutic challenge in dermatology, particularly in patients with complex metabolic and cardiovascular comorbidities. In these situations, selecting the appropriate therapy requires careful consideration of both treatment efficacy and patient safety. **Case Report:** A 70-year-old patient with insulin-requiring type 2 diabetes mellitus, atrial fibrillation on anticoagulant therapy, and chronic heart failure, presented in the Dermatology Clinic with erythematous-purpuric lesions on both calves expanding over five days. These symptoms emerged three days after ketoprofene administration for an underlying orthopedic condition. Clinical examination revealed bilateral palpable purpura with negative diascopic testing. The lesions exhibited a distinct tendency toward superficial ulceration and tissue necrosis on the posterior left calf, accompanied by severe pruritus and a burning sensation. Laboratory revealed neutrophilia, hyperglycemia, a highly elevated erythrocyte sedimentation rate, and fluctuating international normalized ratio (INR) due to anticoagulant therapy. Extensive microbiological evaluations, including coproculture and exudates, were negative. Diagnosed with drug-induced leukocytoclastic vasculitis, the patient was managed by withdrawing the offending medication, alongside intravenous methylprednisolone, broad-spectrum antibiotics, and antihistamines. Following a favorable clinical evolution, the patient was discharged on a tapering oral corticosteroid regimen. **Discussions :** While medical literature supports the association between NSAIDs use and cutaneous vasculitis, this case is notable for the rapid onset of necrotic lesions in a highly vulnerable, polymedicated patient. Systemic corticosteroid administration to an elderly diabetic patient with poorly controlled blood glucose levels significantly increases the risk of infections and metabolic decompensation. This scenario highlights the necessity of continuous adjustments to balance immunosuppression, infection control, and glycemic management. **Conclusions:** Prompt recognition of the drug reaction, immediate withdrawal of the causative medication, and initiation of systemic corticosteroids are essential for clinical improvement. This case underscores the complex risk-benefit considerations in managing iatrogenic vasculitis in frail, elderly patients and emphasizes the need for highly individualized treatment strategies.

Keywords: Leukocytoclastic vasculitis, NSAIDs, palpable purpura, polymedicated patient

WHEN TUMOR MARKERS MISLEAD: CARDIORENAL SYNDROME AS A DIAGNOSTIC MIMICKER

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Introduction: Neuroendocrine tumors of unknown primary origin can arise from any neuroendocrine tissue, and they are more often challenging to locate due to variable and non-specific symptoms, which can complicate diagnosis and management. **Case Report:** A 66-year-old patient with a history of arterial hypertension, severe mitral regurgitation, moderate tricuspid regurgitation, chronic kidney disease and a prior left hip arthroplasty was admitted to the Internal Medicine Clinic No. 1 for evaluation of a suspected left ovarian tumor. Initial work-up included thoraco-abdominopelvic CT and tumor markers, revealing elevated CA-125 (548.20 U/mL) and HE4 (475 pmol/L). Diagnostic laparoscopic surgery was performed and ovarian malignancy was excluded. Ascitic fluid cytological analysis showed no atypical cells. During hospitalization, the patient's condition deteriorated with cardiac decompensation, acute kidney injury progressing to renal failure requiring dialysis, generalized edema (anasarca), and severe hypertension (220/110 mmHg). Despite continuous intravenous diuretic therapy and vasodilator treatment (nitroglycerin), blood pressure control remained suboptimal. Pheochromocytoma was excluded by normal plasma metanephrine levels and absence of relevant findings on CT imaging. The patient developed polyserositis with progressive pleural effusions, pericardial effusion, and ascites. CT pulmonary angiography excluded pulmonary embolism. Laboratory tests revealed markedly elevated Chromogranin A (589.700 ng/mL), but normal serum calcitonin (2.63 pg/mL), and low serotonin (15.6 mcg/L). CYFRA 21-1 levels were elevated (4.25 ng/mL). Extensive diagnostic evaluation including gastroscopy, colonoscopy, bronchoscopy, and bone marrow examination revealed no definitive primary neoplastic lesion. The patient remained critically ill, requiring advanced life support measures including controlled mechanical ventilation, vasopressor and inotropic support, continuous renal replacement therapy, plasma exchange, antibiotherapy, corticosteroids, anticoagulation, albumin supplementation, immunoglobulins, and transfusion of blood products. Despite aggressive multidisciplinary management, the clinical course remained unfavorable with persistent multi-organ dysfunction consistent with severe cardiorenal syndrome. The patient developed severe bradycardia progressing to asystole, unresponsive to advanced resuscitation maneuvers. **Discussions :** The patient died from progressive multi-organ failure in the setting of severe cardiorenal syndrome with refractory cardiac decompensation, acute kidney injury requiring dialysis, and polyserositis. While elevated tumor markers raised concern for occult malignancy, these biomarkers are nonspecific and commonly elevated in severe heart failure and renal failure. This biomarker constellation and clinical aspect may suggest an occult epithelial malignancy possible of Müllerian origin (ovarian, fallopian tube), likely high-grade serous carcinoma, potentially with neuroendocrine differentiation. **Conclusions:** This case highlights the challenges in diagnosing and managing progressive multi-organ failure and underscores the importance of a multidisciplinary approach integrating targeted imaging and biomarker evaluation in cases of unidentifiable tumors.

Keywords: neuroendocrine tumor, cardiac decompensation, pleuritis

NUTRITION AND DIETETICS

BEHAVIORAL PATTERNS IN SOCIAL MEDIA USE, NUTRITION, PHYSICAL ACTIVITY, AND MENTAL HEALTH AMONG YOUNG ACTIVE INDIVIDUALS

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Introduction: In the current digital landscape, social media has become more than just a tool; it is a core part of how young people manage their fitness, diet, and mental well-being. The rapid growth of fitness related content on digital platforms has supported both beneficial health behaviours and an increased risk of psychological pressure. This study analysed the influence of social media on nutritional choices, exercise patterns, and mental health among young individuals engaged in fitness activities. **Case Report:** We conducted a cross-sectional observational study on a sample of 252 participants. Data collection relied on a questionnaire covering sociodemographic traits, social media habits, nutrition, physical activity, mental health (via the DASS scale), and sleep quality (PSQI). Statistical processing involved Chi-square tests and correlation analysis ($p < 0.05$). **Discussions :** The sample was mostly female (81.35%), primarily urban residents (74.6%), and students (52.38%). Instagram emerged as the leading information source; 25.8% of participants spent 1-2 hours daily watching fitness content, while 15.5% exceeded 2 hours. Following influencers is very common (70%), but most users seem to have only moderate trust in the information provided by them. Also, social media makes over 50% of the participants feel "sometimes" motivated to exercise, 15.47% reported frequent aesthetic pressure. Our analysis found a significant link between this perceived pressure and mental health scores ($p = 0.0007$). Beyond this, the data shows a clear, statistically significant connection: Poor sleep quality (higher PSQI scores) was significantly associated with worse mental health outcomes ($p < 0.0001$). Regarding nutrition, 50.4% noted that social media affects their dietary choices, and 42.46% were influenced by their supplement use. **Conclusions:** Social media leaves a complex influence on young fitness practitioners, serving both as a motivator and a source of pressure that impacts sleep and mental health. Therefore, promoting balanced, evidence-based content is essential to mitigating risks and supporting long-term health.

Keywords: social media, fitness, nutrition, mental health

EATING HABITS AND CHALLENGES DURING AN 8-HOUR WORKDAY: A COMPARISON ACROSS PROFESSIONAL ENVIRONMENTS

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Background: In the current professional work environments, characterized by intense work rhythms and extended hours, employees' nutrition during the standard 8-hour workday has become a critical lifestyle factor affecting long-term health and workplace performance. While international literature highlights how occupational environments can either foster or undermine healthy habits, there is a notable scarcity of comparative research focused on the specific challenges across different professional sectors. **Objective:** The study aimed to provide a comparative perspective on eating habits and nutritional barriers encountered during the workday of employees who bring food from home, who order out their lunch or have a canteen, offering evidence-based insights for the development of effective workplace wellness strategies. **Material and methods:** A cross-sectional study was conducted using an anonymous online questionnaire among a sample of 54 employed adults from diverse sectors, including administration, education, and healthcare. Data collection focused on demographic profiles, work activity types (sedentary vs. active), meal structures, and the participants' perception of organizational support for healthy eating. **Results :** The findings indicate a significant fragmentation of meal patterns, with many employees skipping breakfast (33.3% of the respondents) or relying solely on stimulants like coffee (51.8% of the respondents eat nothing nutritional before starting the work day). Regarding lunch, 63% of respondents eat at the workplace, with 33.3% frequently eating at their workstation in front of a computer. The Chi-square test revealed no statistically significant association between the availability of a workplace canteen and the nutritional quality of the lunch meal ($p = 0.376$), suggesting that employees in environments lacking facilities tend to compensate by bringing home-prepared meals. The most prevalent barriers identified included time constraints, fatigue, and restricted access to fresh food, highlighting a systemic deficiency in proactive wellness policies across the surveyed environments. Furthermore, 85% of participants reported a total lack of workplace wellness programs. **Conclusions:** Current working conditions often force employees into "dietary compromises" that prioritize convenience over health.

These results underscore the need for integrated wellness programs that move beyond simple recommendations, advocating for structural changes such as protected meal times and improved food accessibility to support occupational health and professional efficiency.

Keywords: workplace nutrition, eating habits, dietary behavior, workplace wellness

EVALUATION OF POTENTIAL FOOD-DRUG INTERACTIONS OF AN ADAPTOGENIC FUNCTIONAL FOOD

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Background: Stress, nutritional imbalance, and pollutants are risk factors for prolonged inflammation. Persistent inflammation may lead to insulin resistance, cardiovascular diseases, and depression. A functional food was developed whose ingredients have adaptogenic and immunomodulatory properties. The product serves as a supportive dietary approach to glycemic control, due to the inclusion of low-glycemic-index ingredients. This is in the patenting process. Providing information on potential interactions between functional foods and pharmacological treatments on product labels represents an important step toward ensuring safe and effective therapeutic management, and the legislative implementation of nutrivicilance. **Objective:** The evaluation of potential adverse interactions between the functional food ingredients and pharmacological treatments as well as the assessment of their possible beneficial effects in relation to certain therapies. **Material and methods:** To verify the state of knowledge regarding the interaction of active compounds of the ingredients of the newly developed functional food with drugs, we used the Web of Science, PubMed and DrugBank and Drugs.com databases, for the period 2020-2026. We used specific keywords, such as adverse reactions, drug interactions, for the ingredients in the food composition. **Results :** Cordyceps sinensis may present potential interactions with selective serotonin reuptake inhibitors (SSRIs), including sertraline, which could increase the likelihood of upper gastrointestinal bleeding. The β -glucans contained in the formulation may interact with antihyperglycemic drugs, potentially amplifying their glucose-lowering effect and increasing the risk of hypoglycemia. Lentinan, a polysaccharide derived from medicinal mushrooms, has been investigated in combination with cisplatin in the treatment of hepatocellular carcinoma. Experimental studies on cellular models have suggested that this combination may enhance therapeutic efficacy, with the potential to reduce the required chemotherapeutic dose and possibly limit the development of chemotherapy resistance.

Conclusions: Our newly developed functional food interacts with antidiabetic therapy and with sertraline, leading to side effects. The findings also highlight the importance of nutrivicilance, as well as the need to update current regulations regarding food labeling, particularly those established under Regulation (EU) No 1169/2011 of the European Parliament and of the Council.

Keywords: food, adaptogen, interactions, nutrivicilance

IMPACT OF SEDENTARY WORK AND OCCUPATIONAL STRESS ON EATING BEHAVIOR

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Background: Work-related stress is characterized by increased pressure that, over time, can become overwhelming and affect quality of life, with negative impacts on physical and mental health. Continuous, stressful workdays affect productivity and significantly influence eating behavior. Stressful work conditions, particularly those associated with sedentary work, are positively associated with a greater preference for processed snacks. **Objective:** The purpose of this research was to investigate the impact of a stressful work environment and sedentary work habits on dietary patterns in several workplaces in Mureş County, Romania. **Material and methods:** Cross-sectional data collected from 207 actively working adults across various fields of activity (health, education, justice, business and management, accounting, finance, sales, administrative, marketing, industry, energy, oil and gas, construction, IT, pharmaceutical, human resources, and services) were collected from November 2025 to February 2026. Participants answered an online questionnaire distributed via social media platforms. Stress levels were measured using the Perceived Stress Scale (PSS-10), a valid and reliable instrument consisting of 10 items: six positively worded and four negatively worded. The types of snacks participants consumed daily were grouped into two categories: unhealthy sweet and salty snacks, and fruits. Lifestyle behavior

regarding daily movement was assessed using a question with three response options: sedentary, moderately active, and very active. **Results :** Our data indicated a significant association between stress level and preferences for unhealthy sweet and salty snacks ($p < 0.028$). Individuals with high perceived stress levels are more likely to consume unhealthy snacks (sweet and salty processed snacks) at 74% compared to participants reporting low stress levels (59.5%). In contrast, fruit consumption as a snack is almost twice as frequent among low-stressed participants (40.5%). Additionally, lifestyle habits significantly influence eating behavior ($p < 0.001$), with sedentary individuals tending to prefer unhealthy snacks (74.4%) more than those who lead an active lifestyle. The negative impact of high perceived stress is also reflected in participants' physical activity: 67.7% of individuals experiencing high stress levels are significantly more likely to rarely or never engage in exercise. **Conclusions:** We observed an inverse correlation between high stress levels and the quality of food choices, indicating that a sedentary lifestyle is often associated with the preference for sweet and salty snacks as a first choice.

Keywords: work-related stress, work-related sedentarism, eating behavior, sedentarism

INTEGRATING FOOD EXPERTISE INTO PERSONALIZED NUTRITIONAL COUNSELLING

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Background: Personalized nutritional counselling represents an essential component of preventive medicine and modern nutritional interventions. Food expertise refers to the set of scientific methods and competencies used to evaluate the food quality and its impact on human health, to develop appropriate and personalized dietary recommendations. Recent studies demonstrate that personalized nutritional interventions, based on food expertise, may improve metabolic parameters and may contribute to the prevention of chronic diseases, including cardiovascular, metabolic and oncologic pathology. **Objective:** This paper analyses the role of food expertise in personalized nutritional counselling, presenting current intervention models and relevant scientific evidence. **Material and methods:** This study is conducted as a systematic review evaluating current intervention models supported by scientific evidence, searched in several international databases: Medline, PubMed, Scopus. After screening, full-text reading was performed to select articles based on the inclusion criteria: studies conducted in humans, studies providing association estimates between dietary acrylamide/heavy metals/acrolein exposure and cardiovascular/cancer risk factors; studies with any epidemiological design. The final selected 22 studies were analysed qualitatively, focusing on: the role of food expertise in dietary recommendations, intervention models used in personalized nutrition, reported health outcomes, including cardiometabolic parameters, cancer prevention, and dietary adherence. **Results :** Dietary exposure to acrylamide and its most reactive metabolite, glycidamide, has been associated with adverse health outcomes, including increased cardiovascular disease risk, abdominal obesity, elevated glucose and HbA1c levels, elevated lipid levels and increased systolic blood pressure. Oat-based foods are widely recommended for dysphagia management and glycemic control. The results demonstrate that optimizing roasting temperatures may help mitigate adverse metabolic effects, providing critical insights for the development of functional foods for the elderly and dysphagic populations with specific glycemic management needs. Exposure to heavy metals such as arsenic, lead and cadmium has been associated with carcinogenic risk. Rice consumption represents a major source of exposure, although cooking methods may influence the removal of toxic element content while also affecting other nutrients from various types of rice food. Similarly, improper processing of vegetable oils may increase peroxide, iodine and acrolein values, promoting the accumulation of free radicals, and may contribute to cancer development. **Conclusions:** Personalized nutritional counselling, based on food expertise and individual data, may help to improve cardiometabolic parameters, increase adherence to dietary recommendations, reduce chronic disease risk and optimize nutritional interventions. Integrating food expertise into personalized nutrition enables the translation of biological and genetic data into practical and effective dietary strategies and is essential for improving public health outcomes.

Keywords: food expertise, personalized nutrition, nutrition counselling, dietary interventions

NUTRITIONAL APPROACH TO PATIENTS WITH METABOLIC SYNDROME IN PRIMARY CARE: IMPLICATIONS FOR THE ROLE OF THE DIETITIAN

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Background: Metabolic syndrome (MS) affects a growing proportion of the population and represents a major cardiovascular and metabolic risk factor. Although nutritional intervention is recognized as the cornerstone of MS management, the role of the registered dietitian remains underutilized in the Romanian primary care system. General practitioners (GPs) are often the sole healthcare providers managing these patients, yet their capacity for individualized nutritional counseling is limited by time, resources, and training constraints. **Objective:** To assess the current practices, perceived barriers, and support needs of GPs regarding the nutritional management of patients with MS, and to highlight the necessity of structured collaboration with registered dietitians. **Material and methods:** A cross-sectional descriptive study was conducted using a structured 48-item questionnaire administered to GPs. Preliminary data from 50 respondents (out of approximately 170 planned) were analyzed. Variables included demographic and professional data, MS diagnostic practices, types of nutritional interventions offered, frequency and quality of dietitian collaboration, perceived barriers, and continuing medical education needs. **Results :** The vast majority of GPs acknowledged nutrition as essential in MS prevention, with 92% rating its role as very important (scores 4-5/5) and 98% agreeing that nutritional intervention can prevent type 2 diabetes and cardiovascular disease. Despite this, individualized dietary planning was offered by only 14% of respondents, while oral advice remained the dominant intervention (64%). Formal collaboration with a dietitian was reported as frequent by only 10% of GPs, with 62% indicating no collaboration or only occasional referrals. The primary barriers to dietitian referral were financial constraints of patients (52%), absence of a formal referral framework (38%), and insufficient consultation time (26%). Self-reported confidence in nutritional counseling was moderate (scores 3-4 in 80%), and patient adherence to recommendations was perceived as low to moderate. An overwhelming majority supported reimbursed dietetic consultations, standardized protocols, and educational programs as key systemic improvements. **Conclusions:** These preliminary findings reveal a significant gap between GPs' recognition of nutrition's importance in MS management and their ability to deliver effective nutritional care. The data strongly support the integration of registered dietitians as essential members of the primary care team for MS patients. Structural reforms - including formal referral pathways, reimbursement of dietetic services, and continuing education - are urgently needed to optimize metabolic outcomes and reduce the long-term burden of MS-related complications.

Keywords: metabolic syndrome, primary care, nutritional counseling, registered dietitian

NUTRITIONAL AWARENESS AMONG TYPE 2 DIABETES PATIENTS: A STUDY AT THE DEPARTMENT OF DIABETOLOGY, NUTRITION, AND METABOLIC DISEASES, TÂRGU MUREȘ COUNTY EMERGENCY HOSPITAL

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Background: Diabetes mellitus type 2 is a chronic metabolic disease characterized by high glucose levels in the blood, caused by peripheral insulin resistance or relative insulin deficiency. Healthy eating in patients with prediabetes and diabetes helps to manage blood glucose levels and improves quality of life. **Objective:** This paper aims to assess the nutritional knowledge of patients with type 2 Diabetes Mellitus. **Material and methods:** This cross-sectional questionnaire-based study involved patients diagnosed with Diabetes type 2, who were admitted to the Department of Diabetes, Nutrition and Metabolic Diseases of Targu Mures Emergency County Clinical Hospital over the period 01.06-31.12.2025 (n=30), and who consented to answer a questionnaire distributed in physical form. The statistical analysis was performed using Microsoft Excel database. **Results :** Among the 30 patients enrolled in our study, 63% (n=19) were females, with an average age of 62.17 years. Nutritional knowledge was assessed using the following questions: "Do you know what the carbohydrates are?" with a positive answer in 17 patients; "Do you know the types of carbohydrates?" with a negative answer in 17 patients; "Do you know how to calculate the carbohydrates in food?" with a negative answer in 26 patients; "Do you know what the glycemic index is?" with a positive answer in 19 patients; "Do you know what the proteins are?" with a positive answer in 19 patients; "Do you know what the lipids are?" with a negative answer in 16 patients; "Do you follow a nutritional plan?" with a negative answer in 20 cases; "Do you read the food label?" with a positive answer in 19 patients; "Do you keep a diet diary?" with a negative answer in 28 cases; "Are you familiar with the food pyramid?" with a negative answer in 24 patients; "Do you know what the plate method is?" with a negative answer in 23 patients. All participants in the study knew which foods are permitted in the diabetic diet, whereas 28 knew which foods should be avoided. When asked to rate the perceived impact of lifestyle on glucose levels on a scale from 1 to 10, 53% (n = 16) reported scores of ≤7, including values below 5. **Conclusions:** Nutrition is still not well known among

diabetic patients, leading to poor glycemic control and long-term complications, which emphasize the importance of nutritional education in diabetic patients.

Keywords: NUTRITIONAL KNOWLEDGE., DIET., DIABETES MELLITUS TYPE 2.

STUDY ON THE ASSOCIATION BETWEEN NUTRITIONAL CHOICES AND EMOTIONAL STATE AMONG UNIVERSITY STUDENTS IN TÂRGU MUREȘ

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Background: Nutrition plays an essential role in maintaining health and emotional balance, influencing physical and cognitive performance as well as the ability to adapt to stress. The period of academic studies is characterized by major changes, fatigue, and a chaotic schedule, factors that may influence eating behaviors. **Objective:** The aim of this study was to obtain data regarding the eating habits and food choices of students during their academic studies, in order to determine the existence of a relationship between eating behavior and emotional state. **Material and methods:** The study was conducted in 2026 and included a sample of 106 students from G.E. Palade University from Targu Mures, of whom 55 (51.9%) were from Mureș county and 51 (48.1%) from other Romanian counties (group 2). A questionnaire consisting of 40 questions was used, covering demographic data, eating habits, meal frequency, types of food consumed, and aspects related to affective state. The questionnaire was distributed online via Google Forms, with informed consent obtained and participant anonymity ensured. **Results :** Daily breakfast consumption was reported more frequently by participants from Mureș (69.1%) compared to group 2 (52.9%). The exam session period influenced eating behavior in 69.1% of participants from Mureș and in 76.5% of others. Regarding energy drink consumption during demanding periods, most participants from Mureș reported never consuming them (67.3%), compared to 49% of other participants, where the proportion of frequent consumers was higher (11.8% vs. 1.8%). Statistically significant differences were identified for coffee consumption during exam sessions, which was more frequent (several times per day) among students from group 2 compared to those from Mureș ($p = 0.017$), for takeaway food choices, influenced mainly by taste in Mureș and by convenience in other counties ($p = 0.019$), as well as for late evening or night-time food consumption during stressful periods, more frequently reported in other counties ($p = 0.020$). **Conclusions:** These results suggest the existence of a relationship between eating behavior and moods among students, highlighting the importance of living away from home and emphasizing the need to promote healthy eating habits and counseling interventions tailored to individual needs.

Keywords: eating habits, emotional state, stress

THE IMPACT OF A NUTRITIONAL INTERVENTION ON PERCEIVED STRESS, SLEEP QUALITY, AND ACADEMIC PERFORMANCE IN STUDENTS FROM TÂRGU MUREȘ UNIVERSITY DURING THE EXAM SESSION

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Background: Previous studies report that approximately 40-87% of university students worldwide experience high levels of academic stress, with peak values during the examination periods. The mechanisms underlying this stress involve chronic and excessive activation of the hypothalamic-pituitary-adrenal axis and dysregulation of the gut-brain axis. These mechanisms contribute to increased cortisol levels, anxiety, disruption of the circadian rhythm and sleep, and decreased cognitive performance. Observational studies demonstrate the association between nutrition and reduced stress levels; however, data from the scientific literature remain limited in Eastern Europe. **Objective:** The present study aims to evaluate the effectiveness of a standardized anti-stress nutritional plan intervention on perceived stress levels, anxiety and depression symptoms, sleep quality, and academic performance among students in Târgu Mureș during the exam session. **Material and methods:** This pretest-posttest interventional study was conducted in 2025, at G.E Palade University of Târgu Mureș, Romania, on a group of 30 students aged 18-25 years, without chronic diseases or restrictive diets. The protocol included two exam sessions: Session 1 (control), during which the participants' habitual diet was evaluated, and Session 2 (intervention), during which a standardized anti-stress nutritional plan was implemented for 5 weeks. This diet included foods rich in magnesium, zinc, B-complex vitamins, omega-3 fatty acids, flavonoids, probiotics, and

prebiotic fibres, with strict restriction of refined sugar and ultra-processed foods. The following validated instruments were used: Perceived Stress Scale (PSS-10), Depression Anxiety Stress Scales (DASS-21), and Pittsburgh Sleep Quality Index (PSQI), administered at the beginning and end of each session. Academic performance was also recorded and compared between the two sessions by reviewing the grades obtained. **Results :** The intervention was associated with reductions in PSS-10 and DASS-21 scores, improvements in PSQI scores, and higher academic grades during the intervention session. **Conclusions:** Based on these observations, practical, accessible nutritional strategies can be proposed to manage academic stress in higher education institutions.

Keywords: academic stress, nutritional intervention, students, exam session

THE IMPACT OF BODY IMAGE AND MOTIVATION TYPES ON ADHERENCE TO A HEALTHY DIETARY PATTERN

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Background: Body image dissatisfaction has been associated with disordered eating behaviors and reduced dietary adherence. According to Self-Determination Theory, autonomous motivation predicts sustained healthy eating, while controlled motivation is linked to short-term compliance and behavioral variability. Mediterranean diet adherence represents a validated marker of dietary quality, making it a suitable outcome for assessing the behavioral impact of motivation and body image. This study examined these relationships in a Romanian adult population. **Objective:** To investigate the relationships between body image dissatisfaction, motivation types for eating regulation, and adherence to the Mediterranean diet. **Material and methods:** Cross-sectional observational study on 160 Romanian adults (91.2% female; age 40.1 ± 9.8 years; BMI 24.6 ± 4.5 kg/m²), recruited through online platforms. Instruments: BSQ-16B (body image; $\alpha=0.948$), REBS (motivation subtypes per Self-Determination Theory; $\alpha=0.924$ autonomous composite), and MEDAS (Mediterranean diet adherence; ≥ 9 points = good adherence). Spearman correlations, Mann-Whitney U, and Chi-square tests were applied ($p<0.05$). **Results :** Body image dissatisfaction was severe in 78.1% of participants and was associated with emotional eating ($p=0.514$, $p<0.001$) and controlled motivation ($p=0.549$, $p<0.001$), but showed no significant association with Mediterranean diet adherence ($p=0.003$, $p=0.972$). Notably, 95.3% of participants seeking weight loss scored in the severe BSQ range, yet showed no better dietary adherence than the rest (MEDAS 7.3 vs 7.5, $p=0.821$). Autonomous motivation was significantly associated with Mediterranean diet adherence ($p=0.434$, $p<0.001$), with participants in the high-autonomous group achieving good adherence at more than twice the rate of the low-autonomous group (42.9% vs 17.1%). Controlled motivation was not significantly associated with dietary quality ($p=-0.068$, $p=0.396$), and was higher among participants with a history of dieting (2.92 vs 2.43, $p=0.021$). Overall, 69.4% of participants showed low Mediterranean diet adherence (MEDAS mean 7.4 ± 2.1). **Conclusions:** Body image dissatisfaction was associated with controlled motivation and emotional eating, but not with Mediterranean diet adherence. Autonomous motivation was positively associated with dietary adherence, confirming its role as a predictor of healthy eating behavior. Controlled motivation was not significantly associated with dietary quality. These findings support the relevance of motivation type in understanding adherence to healthy dietary patterns.

Keywords: body image, eating behavior motivation, Mediterranean diet adherence, Self-Determination Theory

PHYSIOTHERAPY

A STUDY ON THE USE OF DAVID EQUIPMENT IN UPPER BODY POSTURAL IMBALANCES

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Background: Modern computer-aided rehabilitation systems, such as the DAVID Spine Concept, provide a standardized and objective approach to assessing and correcting muscle imbalances. By integrating principles of applied biomechanics with advanced digital technology, this system enables precise measurement of spinal muscle strength and mobility. This paper aims to evaluate the effectiveness of the DAVID Spine system in correcting trunk postural imbalances. **Objective:** This study aims to evaluate the effectiveness of the DAVID Spine system in managing upper body postural imbalances by assessing the impact of a standardized therapeutic program on muscle strength, segmental mobility, pain intensity, and functional capacity in patients with cervical and scapulohumeral disorders. The research hypothesis is that applying a therapeutic program based on DAVID devices leads to significant improvements in pain, muscle strength, and functional capacity in patients with upper body postural imbalances. **Material and methods:** A sample of 21 patients aged 35-70 with upper body postural imbalances completed a standardized 12-session neuromuscular training program using the DAVID Spine system over a period of 4-6 weeks (2-3 sessions per week). The program incorporated the DAVID F110, F130, F210, and F410 devices. Assessments were conducted at baseline and after completion of the program, using the following outcome measures: pain intensity (VAS), the Oswestry Disability Index (ODI), and DAVID isometric tests for spinal extensor and flexor strength. **Results :** The application of the therapeutic protocol based on the DAVID Spine system in a sample of 21 patients resulted in significant improvements in both clinical and functional parameters. After 12 treatment sessions, 92% of patients reported a reduction in pain (VAS) of at least 30%, with the mean score decreasing from 6.4 to 3.2 ($p < 0.001$). Additionally, 88% of patients demonstrated increased muscle strength (15-40%, mean 28.5%), while 85% showed improvements in segmental mobility (approximately 22%). Functional scores (ODI/NDI) decreased by an average of 35% in 80% of patients, indicating reduced disability. A significant correlation was observed between the severity of muscle deficits and symptom intensity ($r = 0.72$; $p < 0.01$). **Conclusions:** The DAVID Spine program has proven to be an effective and safe method for correcting postural imbalances and rehabilitating patients with chronic spinal pain. The implementation of this technology in rehabilitation centers enables standardized assessment and personalized interventions based on objective data.

Keywords: DAVID devices, Postural imbalances, Upper body

ADAPTATION OF THE FORCE CURVE IN PATELLAR CHONDROMALACIA: APPLICATION OF THE VARIABLE LOAD CURVE METHOD IN FUNCTIONAL KNEE REHABILITATION.

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Background: The knee joint is one of the most complex and highly demanded joints of the human body, playing an essential role in supporting body weight and performing functional and sports activities. Patellar chondromalacia is a frequently encountered condition, especially in active young individuals, characterized by degenerative changes of the patellar articular cartilage (softening, edema, fissuring), usually associated with anterior knee pain, crepitus, and in some cases, joint effusion. The VLC (Variable Load Curve) method allows the personalization of the load curve throughout the entire range of motion. Through a controlled robotic system, the load can be increased in ranges supported by the musculature and joint and reduced in critical angles, with the aim of protecting the cartilage and stimulating neuromuscular adaptations. **Objective:** The aim of this study is to analyze how the adaptation of the force curve, through the use of the VLC method of the Kineo Intelligent Load system, influences the functional recovery of the affected knee. **Material and methods:** This study included 16 subjects aged between 18 and 32 years from the OKF Medical Center clinic. The inclusion criteria were patients diagnosed with patellar chondromalacia, while the exclusion included patients presenting other musculoskeletal injuries of the lower limb, cardiovascular diseases, etc. The subjects were divided into two equal groups: an experimental group and a control group. The experimental group benefited from a physiokinetotherapy rehabilitation protocol combined with the use of the VLC method. The control group followed the same rehabilitation protocol but without the use of the VLC training method. The exercises used in the rehabilitation program were based on increasing muscle strength, motor control re-education, and proprioceptive exercises. **Results :** After completing the rehabilitation program, muscle testing applied to the two groups indicated that subjects in the experimental group achieved

significantly better values compared to those in the control group. These results suggest that the use of the VLC training method contributed to better improvements in quadriceps strength and in functional knee stability for the experimental group during the rehabilitation program. **Conclusions:** Integrating the VLC method into rehabilitation programs improved muscle strength, functional knee stability, and overall recovery in patients with patellar chondromalacia. These results are consistent with existing evidence supporting neuromuscular control and individualized resistance training in patellofemoral rehabilitation. By adjusting load throughout the range of motion adding resistance in favorable angles and reducing it in critical positions the VLC system may improve muscle activation and promote more effective functional knee recovery.

Keywords: knee joint, Patellar chondromalacia, VLC (Variable Load Curve), knee recovery

ANALYSIS OF THE EFFECT OF A PREVENTIVE PHYSIOTHERAPY PROGRAM ON MOTOR FUNCTION AND JOINT STABILITY IN JUNIOR FEMALE BASKETBALL PLAYERS

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Background: This prospective study aimed to evaluate whether a preventive physiotherapy program improve motor function and joint stability in junior female basketball players, while minimizing the risk of injuries both during matches and during training sessions. For young athletes, prevention is crucial to achieving a long and successful athletic career, the earlier we develop proper motor skills and work purposefully to eliminate deficiencies, the lower the risk of accidents. Extensive research has been conducted on preventive measures, but not much attention has been paid to basketball. **Objective:** The aim of our research was to analyse the effects of a preventive physiotherapy program, which includes neuromuscular training, in terms of motor function and stability of the articulations. **Material and methods:** The study involved 30 female basketball players aged 10 to 16 from the BC SIRIUS sports club. The young athletes were divided into two groups: 15 who followed the preventive program and 15 who did not. Both groups underwent an initial assessment at the beginning of the study and a final assessment after four months, which evaluated upper and lower body strength, static and dynamic balance, speed, and posterior chain flexibility, with two tests administered for each component. **Results :** The research is still under progress, and the final assessments will be finalized after the submission of this abstract. **Conclusions:** Additional information regarding the impact of a preventive physiotherapy program on female junior basketball players will be presented at Marisiensis Congress.

Keywords: basketball, prevetion, female athletes

ANALYSIS OF THE EFFECT OF NEUROMUSCULAR ELECTROSTIMULATION IN ACL REHABILITATION

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Background: Anterior cruciate ligament (ACL) injuries represent one of the most common and functionally limiting knee pathologies, especially among physically active individuals. These injuries frequently require surgical reconstruction followed by a structured rehabilitation program aimed at restoring joint stability, muscle strength, and functional performance. One of the major challenges in post-ACL reconstruction recovery is the persistent weakness and inhibition of the quadriceps muscle, which can delay return to activity and increase the risk of re-injury. In recent years, neuromuscular electrostimulation has gained increasing attention as an adjunct therapeutic modality in rehabilitation programs. Its role is to enhance muscle activation, improve neuromuscular control, and facilitate strength recovery, particularly in cases where voluntary contraction is insufficient. Integrating electrostimulation into conventional physiotherapy protocols may optimize recovery outcomes and accelerate functional reintegration. **Objective:** The aim of this study was to analyze the effects of electrostimulation on quadriceps muscle strength, motor control, and functional recovery in patients undergoing ACL rehabilitation. **Material and methods:** The study included 30 subjects aged between 18 and 45 years, divided into two groups: an experimental group that followed a physiotherapy program combined with neuromuscular electrostimulation, and a control group that followed a standard physiotherapy protocol. The rehabilitation program consisted of progressive exercises aimed at restoring joint mobility, muscle strength, and functional stability. In addition, the experimental group received neuromuscular electrostimulation applied to the quadriceps muscle, using stimulation

parameters adapted to each stage of recovery and patient tolerance. Assessments included thigh circumference, active knee extension lag, isometric muscle strength, and concentric strength balance, in order to objectively evaluate the recovery process. **Results** : Preliminary results indicate that patients in the experimental group who received neuromuscular electrostimulation in addition to physiotherapy showed superior improvements compared to the control group. A statistically significant increase in quadriceps muscle strength was observed, along with a greater reduction in knee extension lag. Additionally, improvements in thigh circumference suggested better muscle trophicity, while enhanced concentric strength balance reflected improved neuromuscular control. These findings are consistent with the data presented in the undergraduate thesis, supporting the beneficial role of electrostimulation in accelerating functional recovery after ACL reconstruction. **Conclusions**: Neuromuscular electrostimulation may improve quadriceps activation, muscle strength, and knee stability, contributing to a more effective rehabilitation process and reducing the risk of re-injury.

Keywords: ACL, electrostimulation, rehabilitation, quadriceps

CLINICAL STUDY ON THE EFFECTS OF KINESIO TAPING ON LUMBO-PELVIC PAIN AND ABDOMINAL SUPPORT DURING PREGNANCY

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Background: Pregnancy represents a complex physiological state with significant hormonal and biomechanical adaptations. Increased levels of relaxin, together with the anterior displacement of the center of gravity, lead to ligamentous instability, compensatory lumbar lordosis, and impaired neuromuscular control of the lumbo-pelvic complex. These changes contribute to the development of low back pain and pelvic girdle pain (prevalence 63-75%) impacting mobility, daily activities, and quality of life. In this context, kinesio taping represents a noninvasive therapeutic procedure used to provide mechanical support and optimise trunk stabilising musculature. **Objective:** The aim of this study was to evaluate the potential effectiveness of kinesiology taping in reducing low back pain and pelvic girdle pain, improving functional capacity, and enhancing segmental stability and abdominal support in pregnant women. **Material and methods:** The prospective study included 20 pregnant women in the second and third trimesters, presenting with lumbopelvic pain, recruited from the Emergency County Hospital Bistrița. During the study period (November 2025-January 2026), all eligible pregnant women who met the inclusion criteria were recruited, resulting in a final sample of 20 participants. The research followed a pre-post experimental design using an intra-subject comparison approach, without a control group. Initial assessment included three validated instruments: the Oswestry Disability Index (ODI) for low back pain, the Pelvic Girdle Questionnaire (PGQ) for pelvic pain and functional limitations, and the Pregnancy Mobility Index (PMI) for evaluating mobility in activities of daily living. Kinesiology taping was applied to the abdominal region using standardised techniques aimed at providing mechanical support and improving neuromuscular control of the lumbopelvic complex. Final assessment was performed after 5 days, using the same evaluation tools. Data were analysed to compare pre-intervention and post-intervention outcomes. **Results** : The mean Oswestry Disability Index (ODI) decreased from 17% pre-intervention to 3.12% post-intervention. The Pregnancy Mobility Index (PMI) decreased from 28.38% to 3.81%. The Pelvic Girdle Questionnaire (PGQ) decreased from 32.28% to 4.82%. No adverse skin reactions were observed. All 20 participants completed the 5 days intervention. **Conclusions:** Kinesiology taping appears to be a potentially effective and well-tolerated non-invasive method for reducing lumbo-pelvic pain and improving functional capacity in pregnant women. However, the small sample size, short intervention period, and lack of a control group limit the generalisability of these findings. Further studies with larger sample sizes and longer follow-up periods are needed.

Keywords: Lumbo-pelvic pain, Kinesio taping, Pregnancy, Rehabilitation

COPENHAGEN ADDUCTION EXERCISE: EFFECTS OF ADDUCTOR MUSCLE STRENGTH AND RECOVERY IN AMATEUR FOOTBALL PLAYERS WITH MUSCLE INJURIES

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Background: Adductor related groin injuries represent a frequent cause of pain and functional impairment in

football players, often resulting in decreased athletic performance and extended time away from sporting activities. Suboptimal rehabilitation protocols can raise the risk of persistent symptoms and can lead to recurrence. Recent rehabilitation frameworks underline the value of structured strength progression and neuromuscular re-education for functional muscle recovery. The Copenhagen Adduction Exercise has gained recognition as a targeted method aimed at promoting adductor strength and motor control in injury management. **Objective:** This study aimed to evaluate the effectiveness of the Copenhagen Adduction Exercise in the rehabilitation of adductor muscle injuries in amateur football players, with an emphasis on pain reduction and improvements in muscle strength required for daily and sport-specific activities. **Material and methods:** This study included 16 recreational football players diagnosed with adductor muscle injuries. Participants were allocated into two groups: an experimental group that followed a structured physiotherapy program including the Copenhagen Adduction Exercise, and a control group that received conventional rehabilitation methods. The intervention period lasted 8 weeks. Clinical evaluations were performed at regular intervals to monitor changes in pain intensity, adductor muscle strength, and functional performance. Pain level was assessed using standardized pain rating scales (VAS, NPRS), while adductor muscle strength was evaluated through isometric and concentric hip adduction strength testing performed on the KINEO system, along with the Copenhagen Adduction Test. Functional recovery was determined using sport-specific functional performance assessments. **Results :** Both groups demonstrated improvements in adductor strength between baseline and post-intervention testing. The experimental group showed an isometric strength increase of 21.7% and an eccentric strength increase of 30.1%. The control group demonstrated smaller gains, with 18.6% improvement in isometric strength and 13.8% in eccentric strength. Between-group comparison shows that the experimental Copenhagen protocol produced greater improvements in both contraction types, with the most pronounced difference observed in eccentric strength development. **Conclusions:** The Copenhagen Adduction Exercise included in a structured rehabilitation program produced greater improvements in adductor muscle strength compared to conventional rehabilitation, particularly in eccentric strength. These findings support its use as an effective and specific method for adductor injury rehabilitation, with potential benefits for functional recovery and recurrence prevention in amateur football players.

Keywords: adductors, copenhagen, muscle strength, functional recovery

EVALUATION OF THE EFFECTS OF UNSTABLE SURFACE TRAINING ON POSTURAL BALANCE AND FUNCTIONAL WALKING CAPACITY IN PATIENTS WITH POST-STROKE SEQUELAE.

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Background: Stroke is a major cause of global disability, often resulting in impaired gait and postural instability. These deficits significantly impact patient autonomy and increase fall risks. Conventional rehabilitation is essential, but integrating unstable surface training-using balance boards and proprioceptive pads-is proposed to enhance neuromuscular control by challenging the sensory system and promoting motor learning through continuous center-of-gravity perturbations. **Objective:** The primary aim is to evaluate the impact of unstable surface exercises on postural balance and walking capacity in post-stroke patients. Specific objectives include quantifying improvements in functional balance using the Berg Balance Scale, measuring dynamic mobility via the Timed Up and Go (TUG) test, and assessing gait efficiency through the 10-Meter Walk Test. **Material and methods:** This clinical research involves patients with post-stroke sequelae recruited from a medical rehabilitation program. The intervention consists of a structured program of unstable-surface exercises that focus on weight transfer, postural stabilization, and gait adaptation. Assessment tools include the Berg Balance Scale (14 items), the TUG test (measuring dynamic mobility), and the 10-Meter Walk Test (measuring walking speed). The study has received ethical approval from the Ethics Committee of UMFST "George Emil Palade" (Decision No. 3956 from 17.12.2025.) **Results :** As data collection and measuring are currently in progress, comprehensive results are not yet available. A detailed statistical analysis of the parameters-including changes in the Berg Balance Scale, TUG, and 10-Meter Walk Test scores-will be presented at the Marisiensis International Scientific Congress. **Conclusions:** The final conclusions regarding the effectiveness of unstable surface training on postural stability and the restoration of functional independence in post-stroke patients will be presented along with the results during the Marisiensis International Scientific Congress.

Keywords: stroke rehabilitation, unstable surfaces, postural balance, proprioception

IMPACT OF PERSONALIZED ISOMETRIC EXERCISE PROTOCOLS ON VASCULAR OPTIMIZATION FOR ARTERIOVENOUS FISTULA: A SYSTEMATIC REVIEW

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Background: Autologous arteriovenous fistula (AVF) is widely recognized as the preferred vascular access for patients undergoing hemodialysis. The maturation process of the AVF is essential for the functionality of the vascular access, and further research on the factors that positively influence this process is of major importance. Although current guidelines acknowledge upper limb exercise training as a potentially beneficial approach for AVF maturation, the supporting evidence is inconsistent and exercise protocols lack standardization. **Objective:** This study aims to assess the influence of personalised isometric exercise protocols on vascular parameters and AVF maturation outcomes, according to recent literature. **Material and methods:** This systematic review includes 17 randomised controlled trials published over the past 15 years. To select eligible publications, we conducted an electronic literature search in PubMed, Scopus, Web of Science, Cochrane Library, and Google Scholar. After database screening and eligibility assessment, studies that did not meet the inclusion criteria were excluded. Variables analyzed included research method, follow-up period, demographic characteristics of a total of 1202 participants from all included studies (gender, age), AVF type, analysis method, exercise programme type (isometric exercise, handgrip, structured programmes or device-assisted), and the outcomes included vein diameter, blood flow, clinical maturation, and ultrasound maturation. **Results :** Most studies found that exercise interventions led to substantial changes in vascular parameters, particularly increased vein diameter and blood flow. However, findings regarding AVF maturation were inconsistent: some trials reported enhanced clinical and ultrasound maturation, while others found no significant benefit compared with standard therapy. Structured and personalized exercise regimes, particularly isometric training, have proven to produce better results than basic or high-intensity regimens. Preoperative interventions were mainly associated with increased vessel diameter, whereas postoperative programmes were linked to earlier maturation. Compared with standard or non-specific therapies, studies assessing structured and customised exercise regimens showed more consistent improvements in vascular parameters and AVF development. These regimens, which frequently combined patient education with progressive isometric exercises, seemed to improve clinical outcomes and adherence. New gamified and device-assisted therapies showed improvements in patient adherence and blood flow, although their impact on structural maturation remained limited. **Conclusions:** Personalized isometric exercise protocols improve vascular parameters and may promote AVF maturation, although outcomes remain heterogeneous. Structured, customized techniques demonstrate greater effectiveness than conventional therapies and may also enhance patient adherence, underscoring the need for optimized, standardized exercise strategies.

Keywords: Arterovenous Fistula, Exercise Therapy, Hemodialysis, AVF maturation

IS SUPERVISED EXERCISE THERAPY STILL THE GOLD STANDARD FOR INTERMITTENT CLAUDICATION

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Background: Peripheral artery disease (PAD) is an increasingly prevalent atherosclerotic condition that impairs the walking capacity of patients and their quality of life (QoL). Supervised exercise therapy (SET) is a well-established and standardized intervention that has been extensively studied and demonstrated to increase walking distance, particularly the distance to the onset of claudication pain, improving overall quality of life. In recent years, however, alternative therapeutic approaches such as revascularization and new exercise strategies have emerged, challenging the role of SET as the standard of care. Thus, it is necessary to evaluate whether SET remains as effective as these newer treatment modalities. **Objective:** This study aims to review the importance of supervised exercise therapy in the improvement of walking distance in patients affected by intermittent claudication, and also to compare its outcomes with alternative therapeutic methods. **Material and methods:** We conducted a systematic literature search on Pubmed and Google Scholar using specific terms: "supervised exercise therapy",

"intermittent claudication", "exercise training", and "peripheral artery disease". Study selection was performed rigorously according to predefined eligibility criteria. The main inclusion criteria were randomized controlled trials (RCTs) published within the last 15 years, evaluating SET, either alone or in comparison with alternative therapeutic strategies. We analysed 1381 patients from all 12 selected studies and examined factors such as patient age, gender, Ankle-Brachial Index, type of treatment, comparison group, program duration, follow-up, testing methods, and main outcomes on walking ability and quality of life. **Results** : SET has been shown to significantly improve walking performance, including both pain-free and maximum walking distance, compared to usual care or just walking advice. Some studies also suggest that SET may be more effective than endovascular interventions. Compared to revascularization, SET offered similar long-term improvements in walking ability and quality of life. Combining both treatments gave the best results overall. Both supervised and home-based exercise programs led to similar improvements in function, but community-based programs had smaller effects. Recent research focused more on alternative ways to deliver exercise therapy, such as home-based and remotely supervised programs. These approaches showed similar improvements in walking outcomes. Due to lower adherence specifically associated with supervised exercise therapy, recent research has shifted toward alternative exercise strategies, despite its proven effectiveness. **Conclusions**: SET remains a highly effective intervention for improving walking performance in patients with intermittent claudication; however, there is a growing interest in alternative exercise methods due to its poor adherence.

Keywords: Peripheral, exercise, walking, adherence

JOB SATISFACTION AMONG PHYSIOTHERAPISTS IN THE EUROPEAN CONTEXT: A COMPARATIVE STUDY

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Background: Professional satisfaction in physiotherapy is a multifaceted construct, often perceived through the lens of clinical outcomes and influenced by the degree of professional autonomy. Within the contemporary European context, factors such as legislative constraints and interprofessional relationships play a significant role in shaping whether specialists experience fulfilment or occupational stress. **Objective:** The central aim of this research is to conduct a comparative analysis of job satisfaction levels among physiotherapists across various European settings. The specific objectives include quantifying how national health systems and decision-making autonomy shape professional perception, identifying motivational factors, and exploring the correlations between socio-economic environments and workplace well-being. **Material and methods:** A comparative, cross-sectional study was conducted on a group of active physiotherapists from Romania, Moldova, Italy, Spain, Portugal, Malta, and Poland. The estimated sample size is 130, with participants recruited from multiple rehabilitation clinics across all included countries. A non-probability convenience sampling strategy was employed, with participants included based on their availability and willingness to participate. Data were collected using a multi-sectional online questionnaire. The first section collected socio-demographic and professional data, including gender, age, and years of professional experience. The second section utilized the Job Satisfaction Survey, a translated and culturally adapted 36-item tool that evaluates nine specific dimensions: remuneration, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of work, and communication. The translation and cultural adaptation process followed standard forward and backward translation procedures to ensure semantic and conceptual equivalence across languages. Responses were recorded on a six-point Likert scale, in accordance with the methodology proposed by Spector. Data collection was conducted online from March 20 to May 20, 2026, with questionnaires distributed via institutional contacts in each participating country. **Results** : As data collection is still in progress, comprehensive results are not yet available; a detailed analysis, including cross-country comparisons and the effects of demographic variables on satisfaction levels, is to be presented at the Marisiensis International Scientific Congress. **Conclusions:** The final conclusions regarding the quality of professional life and the influence of the European socio-professional profile on physiotherapy satisfaction are to be presented along with the results during the Marisiensis International Scientific Congress.

Keywords: physiotherapy, questionnaire, job satisfaction, European context

MUSICIANS FACING PAIN: THE PREVALENCE OF MUSCULOSKELETAL DISORDERS AMONG PROFESSIONAL MUSICIANS

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Background: Playing-related musculoskeletal disorders are frequently reported among professional musicians. These may negatively affect performance, functional ability, and quality of life. Assessment of the location, intensity, and interference of these disorders are important for a better understanding of the need for preventive and treatment actions. However, relatively few studies have been performed to investigate the incidence and occupational impact of these conditions in professional orchestral settings. **Objective:** The aim of our research was to evaluate the incidence of musculoskeletal disorders among professional musicians and to assess their impact on daily and professional activities. **Material and methods:** The research was conducted at the Culture Palace of Tîrgu Mureş, Mureş County, Romania, between January 26 and May 2, 2026. The study was conducted on a group of 52 professional musicians from the Philharmonic Orchestra of Tîrgu Mureş. Data collection was carried out physically by applying 3 validated questionnaires: the Musculoskeletal Pain Interference and Intensity Questionnaire for Musicians (MPIIQM), the Brief Pain Inventory (BPI), and the Quick Disabilities of the Arm, Shoulder and Hand (QuickDASH). The analyzed variables included pain intensity, pain interference in daily and professional activities, and upper limb functional limitations associated with instrumental performance. **Results :** The study is still ongoing and as such, the results will be presented during the Marisiensis International Scientific Congress. **Conclusions:** The conclusions of the study will be presented along with the results during the Marisiensis International Scientific Congress. These results may contribute to the development of prevention strategies and establishing of prophylactic physiotherapy programmes in musical institutions such as professional state orchestras, conservatories, and music schools.

Keywords: musculoskeletal disorders, performance-related pain, professional musicians, pain interference

PHYSIOTHERAPEUTIC INTERVENTIONS IN MUSCULOSKELETAL, RHEUMATOLOGICAL, AND NEUROLOGICAL PATHOLOGIES: PROFESSIONAL PERCEPTIONS IN ROMANIA AND PORTUGAL

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Background: Modern physiotherapy has evolved from simple exercises to complex strategies rooted in neuroplasticity and advanced biomechanics. Although academic education aligns with European standards, daily clinical practice is often shaped by professional autonomy, legislative frameworks, and the technical resources available within different healthcare systems. In this context, the management of musculoskeletal, rheumatological, and neurological pathologies reflects a significant diversity in therapeutic approaches. **Objective:** The primary objective of this research was to conduct a comparative analysis between Romania and Portugal regarding intervention methods in medical rehabilitation, as well as specialists' perceptions of their efficacy within this field. The study further aims to examine how clinical infrastructure influences therapeutic decision-making and the integration of advanced technologies. Additionally, it seeks to identify and compare therapeutic approaches and professional perceptions of treatment effectiveness among physiotherapists managing musculoskeletal, rheumatological, and neurological conditions, with the overall goal of optimizing medical rehabilitation strategies in response to the high prevalence and impact of these pathologies on patients' quality of life. **Material and methods:** A quantitative, cross-sectional, and comparative study was conducted on a group of active physiotherapists from Romania and Portugal, aged over 21, with a minimum of one year of professional experience. The estimated number of participants was 40 (data collection is still ongoing), recruited from 2 rehabilitation clinics in Romania and 3 clinics in Portugal. The study employed a non-probability convenience sampling approach, as clinics were selected by the researcher and included based on their willingness to participate. The research instrument consisted of a 30-item questionnaire, developed and translated by the authors. Data collection was carried out online in both countries over a two-month period, between March 20th and May 20th, 2026, with the questionnaires being distributed via the email addresses of the participating clinics. **Results :** Detailed results,

including the comparative analysis of variables and the correlation between the use of evidence-based interventions and perceived professional autonomy, will be presented at the Marisiensis International Scientific Congress. **Conclusions:** The final conclusions regarding the impact of geographical and systemic barriers on clinical practice, as well as the importance of an individualized and interdisciplinary approach, will be presented along with the results during the Marisiensis International Scientific Congress.

Keywords: physiotherapy, comparative study, professional perceptions, Romania, Portugal

THE IMPACT OF ORTHOBIOLOGICAL THERAPY ON SUBCHONDRAL OSTEOSCLEROSIS AND FEMORAL-ACETABULAR BONE EDEMA IN EARLY COXARTHROSIS.

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Background: Background: Hip osteoarthritis is a common degenerative condition characterized by changes in the articular cartilage and subchondral bone. Subchondral osteosclerosis and bone marrow edema are factors involved in the onset of pain and disease progression. Orthobiologic therapies, particularly platelet-rich plasma (PRP), have attracted interest due to their regenerative and anti-inflammatory potential. **Objective:** Objective: To perform a preliminary evaluation of the effectiveness of PRP therapy in early-stage hip osteoarthritis. **Material and methods:** Materials and Methods: A pilot, prospective clinical study was conducted on 12 patients with early-stage hip osteoarthritis, divided into a PRP group (n=6) and a control group (n=6). Patients over 18 years old with hip pain and early imaging changes were included, while advanced cases or those with associated pathologies were excluded. PRP was obtained through centrifugation and administered intra-articularly under imaging guidance. Evaluation included pain scores and MRI assessment for bone marrow edema and subchondral changes. **Results** : Results: Preliminary data suggest an improvement in pain symptoms in patients treated with PRP compared to the control group. There is also a trend toward improvement in subchondral changes; however, these findings require confirmation in a larger sample. **Conclusions:** Conclusions: Preliminary results indicate that PRP therapy may have a beneficial role in the management of early-stage hip osteoarthritis. The study is ongoing, and expanding the sample size will allow for a more rigorous evaluation of the method's efficacy and reproducibility.

Keywords: hip joint, hip osteoarthritis, PRP, osteosclerosis, bone marrow edema

THE ROLE OF DIGITAL POSTURAL ANALYSIS USING MOTI PHYSIO AS AN OBJECTIVE TOOL FOR QUANTIFYING STATIC AND DYNAMIC IMBALANCES IN THE INDIVIDUALIZATION OF POSTURAL REEDUCATION PROGRAMS.

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Background: Posture represents the body's capacity to maintain optimal alignment and balance in both static and dynamic conditions through the coordinated interaction of the musculoskeletal, nervous, and proprioceptive systems. Proper posture is not a rigid position but a range of efficient and tolerable alignments for the individual, reflecting the ability to stabilize body segments with minimal energy consumption and without discomfort. Traditional postural assessment methods, such as visual inspection or plumb line observation are limited by subjectivity and low reproducibility which impedes precise monitoring of therapeutic progress. In contrast, digital postural analysis systems, such as MOTI Physio, provide objective and quantifiable measurements of postural deviations, supporting the development of data-driven rehabilitation strategies, consistent with current trends in physiotherapy research and practice. **Objective:** The aim of this study was to evaluate the role of digital postural analysis using the MOTI Physio system as an objective tool for quantifying postural imbalances and optimizing individualized postural reeducation programs. **Material and methods:** A total of 30 participants (15 males, 15 females, mean age 24.6 years) without major neurological or musculoskeletal impairments were included. Postural assessment was performed using the MOTI Physio system, which captured anterior, posterior, and lateral images to analyze segmental alignment of the head, shoulders, spine, and pelvis. Based on baseline measurements (T0), participants underwent a six-week individualized intervention consisting of three 50 minute sessions per week. The program integrated motor control exercises, segmental stabilization techniques, strengthening of hypotonic musculature, and stretching of shortened structures. Post-intervention measurements (T1) were subsequently

collected and subjected to statistical analysis. **Results** : All participants completed the program without complications. Statistical analysis indicated significant improvements across all parameters, supporting the effectiveness of the individualized intervention. These results are consistent with current literature emphasizing the value of technology-based, data-driven approaches in physiotherapy. However, the absence of a control group represents a limitation, restricting the ability to attribute improvements exclusively to the intervention. Future studies should include controlled designs to strengthen the evidence. **Conclusions:** The results support the utility of digital postural analysis systems, such as MOTI Physio, in enhancing assessment objectivity and guiding individualized rehabilitation strategies. Within a short-term intervention framework, the program demonstrated effectiveness in improving postural alignment, particularly in sagittal plane parameters. Importantly, these findings contribute to the growing body of evidence supporting the integration of objective digital assessment tools into clinical practice, with potential benefits for precision, reproducibility, and personalization of rehabilitation programs.

Keywords: Digital postural analysis, Moti physio, Neuromuscular control, Postural reeducation

THE ROLE OF STRUCTURED RECREATIONAL ACTIVITIES IN OPTIMIZING MOTOR CONTROL IN SECOND GRADE STUDENTS

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Background: Motor control represents the ability to perform directed movements, that are precise, efficient and coordinated. A good level of motor control reduces the risk of compensatory movements during action. Motor skills play an essential role in the harmonious growth of a child. They contribute to the development and improvement of physical condition associated with overall health. Playing has a major impact in motor development and thinking skills. **Objective:** The aim of our research was to analyze the effects of structured play activities in motor control development, more specifically static and dynamic balance, spatial orientation, coordination, reaction speed and fine motor skills. **Material and methods:** The research was conducted at the "Sfântul Gheorghe" Secondary School in the commune of Sângeorgiu de Mureş, Mureş County, between February 9 and April 3, 2026. Twenty - two students from class II C, aged between 7 and 8, were involved, of whom 13 were girls and 9 were boys. Despite efforts to recruit a larger sample, only a limited number of eligible participants were accessible within the study timeframe, and the observed gender imbalance was likewise a consequence of participant availability within the "Sfântul Gheorghe" Secondary School. Our research included an initial assessment, followed by a six-week kinetic program with two weekly sessions and then a final assessment. The program consisted of structured 50-minute sessions featuring age-appropriate exercises, organized progressively by difficulty. Each session included six games, with an emphasis on all motor skills. Progression was analysed as part of the final evaluation. The initial and final assessment were carried out using six tests: the Flamingo test, walking on the line for the dynamic balance, the Motorin test, the Wall Toss test, the Reaction Speed test and lastly for the fine motor skills bead stringing. **Results** : The research is still under progress, and the final assessments will be done after the submission of this abstract. Because of this, results interpretation will be presented at Marisiensis Congress. **Conclusions:** Additional information regarding the efficacy of ludotherapy in motor control development will be presented at Marisiensis Congress.

Keywords: ludotherapy, motor control, child development

NURSES

MANAGEMENT OF ACUTE HYDROCEPHALUS IN ANEURYSMAL SUBARACHNOID HEMORRHAGE: THE ROLE OF EXTERNAL VENTRICULAR DRAINAGE

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Background: Subarachnoid hemorrhage secondary to the rupture of an intracranial aneurysm represents a severe neurological emergency, frequently complicated by acute hydrocephalus. In such cases, external ventricular drainage plays a crucial role in reducing intracranial pressure and stabilizing the patient prior to definitive treatment. By rapidly controlling intracranial hypertension and improving cerebral perfusion, external ventricular drainage creates the necessary conditions for safe performance of neurosurgical or endovascular intervention. **Objective:** To present a clinical case of aneurysmal subarachnoid hemorrhage complicated by acute hydrocephalus, highlighting the importance of early external ventricular drainage, endovascular embolization and extensive supervision of post procedural patient evolution. **Material and methods:** Data were obtained from the patient's medical records during hospitalization. Diagnosis was established based on clinical and imaging data (cranial CT and CT angiography), therapeutic interventions. Clinical evolution was monitored using the Glasgow Come Scale, along with hemodynamic and respiratory parameters. **Results :** Following the procedures, the patient showed a favorable clinical course. She remained conscious with a Glasgow Come Scale score of 14-15 points, without motor neurological deficit. The external ventricular drain remained functional, and the patient maintained stable hemodynamic and respiratory parameters. The external ventricular drainage was removed after 14 days, with favorable evolution and no need for permanent cerebrospinal fluid diversion. **Conclusions:** Early diagnosis and prompt multidisciplinary management are essential in patients with aneurysmal subarachnoid hemorrhage. External ventricular drainage represents a key therapeutic option in the treatment of acute hydrocephalus and contributes significantly to patient stabilization during the acute phase.

Keywords: subarachnoid hemorrhage, external ventricular drainage, acute hydrocephalus, patient monitoring

POST-RESUSCITATION PATIENT MANAGEMENT: PROGNOSIS AND MULTIMODAL SUPPORT

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Background: Cardiac arrest remains one of the leading causes of mortality in emergency medicine and is characterized by the sudden cessation of effective cardiac mechanical activity, resulting in the absence of systemic blood circulation and, consequently, inadequate tissue perfusion of vital organs. Advances in cardiopulmonary resuscitation (CPR) have improved survival rates, however, patients who achieve return of spontaneous circulation frequently develop post-resuscitation syndrome, a complex pathophysiological condition associated with significant morbidity and mortality. **Objective:** The aim of the study was to evaluate prognosis and the application of multimodal support through the assessment of post-resuscitation patient management. **Material and methods:** This retrospective study included 41 patients who suffered a cardiac arrest during January and February of this year and were admitted to the department of Anesthesiology and Intensive Care at the Emergency County Clinical Hospital of Târgu-Mureș. **Results :** A total of 41 cases were analyzed, of which 68% were men and 32% were women. Patient age ranged from 40 to 96 years, with a mean age of approximately 71 years. Most patients had an unfavorable outcome, with 34 cases (82,93%) resulting in death. Favorable or partially favorable outcomes were observed in a small number of patients: one patient was discharged and three were transferred to other hospital wards. Additionally, three patients (7, 32%) were still under treatment at the time of data collection. Asystole was the most frequent initial rhythm 53,66%, followed by pulseless electrical activity 39,02%. Shockable rhythms were rare, including ventricular fibrillation 2,44%. The most common diagnosis was cardiac arrest 46,34%, followed by resuscitated cardiac arrest 26,83% and cardiac arrest associated with other medical conditions such as acute myocardial infarction, traumatic brain injury, liver cirrhosis or septic shock (26.83%). **Conclusions:** The management of post-resuscitation patients represents a major clinical challenge, being influenced by the severity of underlying disease and associated comorbidities, which contribute to the persistently high mortality rate.

Keywords: cardiac arrest,, post-resuscitation patient,, comorbidities,, mortality rate

THE EFFECT OF DRUG RESISTANCE ÎN MYCOBACTERIUM TUBERCULOSIS: A 5 YEAR RETROSPECTIVE ANALYSIS OF ACID-FAST BACILLI

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Background: Tuberculosis (TB) remains a major global public health issue, caused by *Mycobacterium tuberculosis*. The emergence of drug-resistance strains, particularly rifampicin-resistant TB (RR-TB), complicate disease control and treatment. Rapid diagnosis and identification of resistance patterns are essential for effective management and limiting disease transmission. **Objective:** This study aims to evaluate the drug resistance profile of *Mycobacterium tuberculosis*, with a focus on rifampicin resistance, through a retrospective analysis conducted over a five-year period (2020-2025). **Material and methods:** This retrospective observational study included 63 patients diagnosed with tuberculosis, with complete drug susceptibility testing data. A total of 1488 antibiograms were analyzed. Diagnostic methods included microscopic examination for acid-fast bacilli (AFB) and bacterial culture, along with phenotypic and molecular methods for drug susceptibility testing. Statistical analysis was performed using t-Student and chi-square tests, with significance set at $p < 0.05$. **Results :** Out of 110 analyzed antibiograms, 20 cases (18.18%) showed resistance to rifampicin, while 90 cases (81.82%) were sensitive. No statistically significant differences were identified between rifampicin resistance and patient age ($p = 0.448$) or sex ($p = 0.399$). The annual distribution of cases showed variability without a clear trend over the studied period. **Conclusions:** The study highlights a notable prevalence of rifampicin resistance, consistent with global data. Demographic factors such as age and sex were not significantly associated with resistance. Continuous monitoring of drug resistance and systematic susceptibility testing remain essential for improving tuberculosis management and preventing the spread of resistant strains.

Keywords: *Mycobacterium tuberculosis*, Rifampicin resistance, Drug resistance, Tuberculosis

PRECLINICAL DENTAL MEDICINE

A CRITICAL REVIEW AND HYPOTHESIS ON THE MOLECULAR MECHANISMS UNDERLYING OSSIFICATION OF THE SPHENOMANDIBULAR LIGAMENT

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Background: The sphenomandibular ligament (SML), a derivative of Meckel's cartilage that develops from neural crest-originated ectomesenchyme of the first pharyngeal arch, occasionally undergoes partial or total ossification. There have been 4 clinically significant cases documented worldwide that present this pathology as of 2025. **Objective:** This review aims to critically analyse the 4 reported cases SML ossification, who reveal two distinct clinical trajectories: idiopathic ossification presenting in childhood and post-traumatic ossification following inferior alveolar nerve block injections. The molecular hypothesis proposes a dual pathway model in which both trajectories merge at the same molecular endpoint: reactivation of latent osteochondral differentiation program intrinsic to the neural crest-derived mesenchyme of the first pharyngeal arch. **Material and methods:** An extensive review was conducted over the four cases and literature surrounding other pathologies that reveal similarities to the cases presented as ossification of the SML, like myositis ossificans of the masticatory muscles. Molecular signaling evidence was integrated from developmental studies of Meckel's cartilage, encompassing BMP antagonism, Wnt signaling, SOX9-Runx2 transcriptional balance, Indian Hedgehog-PTHrP feedback, EGF-mediated phenotypic maintenance, TGF- β subtype-specific regulation, and EGFR-dependent skeletal dynamics. **Results :** Critical imaging appraisal demonstrated that only one of the four published cases provided convincing multi-planar evidence confirming SML localization; the remaining cases showed superior extension to the pterygoid base rather than the sphenoidal spine, raising alternative diagnoses including pterygomandibular ankylosis and medial pterygoid myositis ossificans. Two convergent pathways were identified. Pathway A (idiopathic, paediatric) involves developmental failure of BMP antagonism, EGF-mediated chondrocyte-to-fibroblast transformation, and epigenetic suppression of osteogenic potential. Pathway B (iatrogenic) involves needle-mediated periosteal BMP release, inflammatory amplification via TGF- β and IL-6, and recruitment of multipotent neural crest-derived progenitors. Both pathways converge on Smad1/5/8 phosphorylation, Runx2 upregulation, and irreversible osteogenic commitment. **Conclusions:** Ossification of the SML is best understood as a failure of sustained suppression of an intrinsic developmental potential, and since the neural crest-derived structures of the first pharyngeal arch share a common developmental origin, they are subject to the same molecular regulatory networks.

Keywords: Sphenomandibular ligament, Myositis ossificans, Meckel's cartilage, First pharyngeal arch

ANATOMICAL VARIANTS AND CLINICAL CHALLENGES OF THE BUCCAL NERVE

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Background: The buccal nerve (BN) is a purely sensory branch of the mandibular nerve (V³), which is the third division of the trigeminal nerve (CN V). The BN is responsible for cutaneous and mucosal innervation of the cheek, the buccal vestibule and the buccal gingiva of the mandibular molar region. **Objective:** Given the buccal nerve's essential role in dental procedures like molar extractions, this study provides critical anatomical and topographical insights necessary to ensure profound anesthesia and prevent inadvertent surgical nerve injury. **Material and methods:** A narrative review of subject related studies was conducted, focusing on BN topography, anatomical relations and clinical implications. **Results :** The buccal nerve has three position variants at the anterior ramus border, each with specific injury risk. The low positioned and the already bifurcated variants lie within the zone of surgical incisions and are susceptible to direct injuries. A rare configuration was reported by Turner, with the BN originating from the inferior alveolar nerve (IAN) and exiting through a retromolar foramen. Therefore, an IAN block will also include the buccal nerve, anaesthetising them both. Several anastomoses were reported: the sensorimotor plexus is formed by the lower buccal branches of the facial nerve (FN) and the cutaneous branches of the buccal nerve. A communication at the commissure of the lip between the sensorimotor plexus, the infraorbital nerve and the mental nerve was also reported. Consequently, individual infraorbital and IAN blocks are insufficient to complete anaesthesia of the commissure, an additional BN block being necessary. The buccal nerve is frequently blocked during dental procedures requiring anaesthesia of the lower molar region, particularly the

mandibular third molar. The classical technique involves intraoral injection into the buccal mucosa adjacent to the anterior border of the mandibular ramus, at or slightly above the occlusal plane of the mandibular molars, in the retromolar region. A truly submucosal injection (1-2mm depth) is preferred. The territory of the buccal nerve may extend anteriorly, even reaching at the level of the canine. Therefore, an inferior alveolar nerve block may produce incomplete buccal gingival anaesthesia in patients where the buccal nerve territory is more extensive than average. **Conclusions:** Extended anatomical and topographical information related to the buccal nerve is needed to avoid direct injuries during surgical procedures and also assure a complete anaesthesia in patients with extended and anastomosed BN variants.

Keywords: anaesthesia, commissure, submucosal injection, buccal vestibule

ARTIFICIAL INTELLIGENCE APPLICATIONS IN CBCT IMAGE ANALYSIS IN DENTISTRY

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Background: The integration of Artificial Intelligence (AI), particularly Convolutional Neural Networks (CNNs) and Deep Learning (DL), has revolutionized the field of dental and maxillofacial radiology. Cone-beam computed tomography (CBCT) provides high-resolution 3D volumetric data crucial for accurate diagnosis and treatment planning; however, manual analysis is highly time-consuming, subjective, and prone to human error due to the complexity of anatomical structures. Consequently, automated diagnostic tools have become increasingly essential for modern dental practices. **Objective:** This study aims to evaluate the diagnostic performance, reliability, and time-efficiency of CNN-based AI systems, with a specific focus on platforms such as Diagnocat. The primary goal is to assess their capability in automating the precise segmentation of critical dental structures (including teeth, pulp cavities, and the mandibular canal) and the detection of various dental pathologies, such as periapical lesions, caries, and periodontal bone loss, in CBCT scans. **Material and methods:** A comprehensive literature analysis was conducted, focusing on recent studies that investigate CNN-based tooth segmentation and pathology detection algorithms. The review evaluated comparative research assessing the performance of AI platforms against the gold standard of evaluations performed by experienced clinicians and maxillofacial radiologists. Data regarding algorithmic accuracy, image processing time, and practical clinical applicability were extracted and synthesized. **Results :** CNN-based models consistently demonstrated high accuracy, sensitivity, and specificity in automated diagnostic tasks, particularly for individual tooth and pulp cavity segmentation. Furthermore, these automated systems performed complex segmentation tasks and generated comprehensive radiological reports in a matter of seconds, representing a major breakthrough in time-efficiency compared to tedious manual labor. The automated localization of the mandibular canal also showed high spatial precision, significantly reducing surgical planning risks for implantology and lower third molar extractions. While AI offers clinical-grade precision and unmatched speed, notable challenges remain regarding image artifacts caused by high-density metallic restorations, which can occasionally obscure adjacent pathologies. However, the synergy between CNN algorithms and clinicians successfully minimizes "observer fatigue" and enhances diagnostic consistency, regardless of the CBCT hardware manufacturer. **Conclusions:** CNN-based applications in CBCT analysis significantly enhance diagnostic accuracy and overall operational workflow efficiency. By reducing image analysis time from minutes to mere seconds and successfully identifying subtle or early-stage pathologies, these tools serve as a highly reliable "second opinion." Ultimately, AI integration supports faster, safer, and more predictable clinical decision-making in specialized fields such as endodontics, implantology, and oral surgery.

Keywords: Artificial intelligence, CBCT, Convolutional Neural Networks (CNN), time-efficiency

COLOR STABILITY OF UNGLAZED CAD/CAM MATERIALS AFTER SIMULATED ORAL EXPOSURE TO BEVERAGES: AN IN VITRO STUDY

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Background: The clinical relevance is that intraoral adjustments of the restorations and glaze removal potentially increase susceptibility to staining. **Objective:** This study aims to assess color changes of four unglazed CAD/CAM restorative materials, feldspathic ceramics (F), lithium disilicate (LD), hybrid ceramics (HC), and zirconia (Z), after exposure to common beverages, under simulated intraoral conditions. **Material and methods:** In this study 2 mm

thick, non-glazed, milled dental materials were used to simulate intraoral post-adjustment scenario of restorations: Vitablocs Mark II (F), Hass Amber Mill (LD), Vita Enamic (HC), and Vita YZ ST (Z). Samples were stored in artificial saliva at 37°C in a thermostat and immersed daily for 1 hour in coffee, orange juice, and matcha tea for a week. Samples initial color was recorded using a spectrophotometer Vita Easyshade V and colorimeter PCE-XXM30, under standardized lighting conditions, based on CIELAB system coordinates (L^* , a^* , b^*). New records were done after 1, 3 and 7 days. Color modifications were calculated as ΔE values. The statistical analysis evaluated effects of solutions on different materials at different times, as well as their interactions. **Results** : The main effect of staining solutions on ΔE was not statistically significant for spectrophotometer ($p = 0.311$) or colorimeter ($p = 0.337$). Material type and evaluation time significantly influenced color modifications ($p < 0.001$). Spectrophotometric measurements revealed the highest mean ΔE values for HC (26.15), followed by LD (15.73), F (14.99), Z (13.20). Colorimetric analysis showed lower ΔE values, with greater discoloration of HC (3.74) and F (3.62) than Z (2.88). Statistically significant interactions were recorded between solution, material, time, with multifactorial influence on color stability for both methods. **Conclusions**: Color modifications were significantly influenced by material type and evaluation time. Hybrid ceramics demonstrated the greatest susceptibility to discoloration (spectrophotometric measurements) and zirconia the highest chromatic stability. Spectrophotometric analysis proved more sensitive in detecting color differences than colorimeter. Glaze-removal during intraoral adjustments may increase susceptibility of tested materials, particularly hybrid ceramics to staining.

Keywords: spectrophotometer, colorimeter, CIELAB, CAD/CAM

COMPRESSION SYNDROMES OF THE STYLOID PROCESS

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Background: Eagle Syndrome encompasses a spectrum of compression syndromes caused by elongation or abnormal angulation of the styloid process (SP) and/or ossification of the stylohyoid chain (SHC). While SP elongation (>30 mm) has a reported prevalence of 4-28%, only approximately 4% of affected individuals are symptomatic. The clinical complexity arises from the anatomical proximity of multiple neurovascular structures - cranial nerves V, VII, IX, X, the internal carotid artery (ICA), external carotid artery (ECA), and the internal jugular vein (IJV) - all of which may be compressed depending on SP morphology and angulation. Overlapping symptomatology with temporomandibular disorders (TMD) and Ernest Syndrome frequently delays diagnosis. **Objective:** To present a comprehensive, evidence-based classification of styloid process compression syndromes, clarify their distinct pathophysiological mechanisms, delineate diagnostic criteria, and outline contemporary management strategies. **Material and methods:** A narrative review of the literature was conducted using PubMed and indexed sources. Morphometric, epidemiological, surgical, and endovascular data were synthesized. A comparative differential diagnosis table was constructed across five anterior throat pain syndromes. **Results** : Three clinically distinct entities were identified: (I) Classic Eagle Syndrome - post-tonsillectomy cranial nerve (V, VII, IX, X) compression presenting with pharyngeal pain, otalgia, dysphagia, and foreign body sensation; (II) Stylo-Carotid Artery Syndrome - ICA or ECA compression causing headache, carotodynia, transient ischemic attack (TIA), ICA dissection, or stroke; (III) Styloidogenic Jugular Venous Compression Syndrome ("Jugular Nutcracker") - IJV compression between the SP and C1 transverse process, causing intracranial hypertension, tinnitus, and perimesencephalic hemorrhage. SP length, angulation, and morphological type collectively determine which structure is compressed; length alone is insufficient for risk stratification. Ernest Syndrome - insertion tendinitis of the stylomandibular ligament (SML) - was identified as a critical differential diagnosis, diagnosed by SML palpation and local anesthetic block, with significant response to corticosteroid infiltration. Styloidectomy demonstrated superior success rates compared to IJV stenting alone; combined decompression and endovascular approaches may yield optimal outcomes in vascular variants. **Conclusions:** Styloid process compression syndromes represent a clinically underrecognized and heterogeneous group of conditions. Accurate classification based on the compressed neurovascular structure is essential for appropriate management. Systematic differential diagnosis - encompassing Classic Eagle, vascular Eagle, jugular nutcracker, and Ernest Syndrome - is mandatory to avoid misdiagnosis as TMD or primary headache disorders. Combined surgical and endovascular strategies should be considered in complex vascular cases.

Keywords: Eagle Syndrome, Ernest Syndrome, Jugular nutcracker syndrome, Styloid process elongation

DEVELOPMENT OF AN ELECTROMECHANICAL PROTOTYPE FOR THE AUTOMATED ROTATION OF THE INTRAORAL SCANNER TIP TO IMPROVE ERGONOMICS IN DIGITAL DENTISTRY

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Background: Dentistry has experienced rapid evolution in recent years through the development of digital technologies. Intraoral scanning as part of the digital workflow allows for highly accurate impressions. However, despite the numerous advantages they offer, a major limitation is represented by the scanning process, which requires repetitive hand and wrist movements to capture all dental surfaces. Continuous use may lead dental practitioners to develop work-related musculoskeletal disorders, including carpal tunnel syndrome. Therefore, improving the ergonomic aspects of intraoral scanning procedures represents an important research direction.

Objective: The study aims to design and develop an auxiliary electromechanical prototype capable of producing controlled rotational motion of the intraoral scanning tip to reduce repetitive wrist and hand movements and enhance operator ergonomics during intraoral scanning.

Material and methods: The study analyzed the functional principles of intraoral scanners and the biomechanical movements needed during scanning protocols. Based on these observations, an electromechanical prototype was designed with a mechanical transmission system made of spur gears, bearings, and a small electric motor. The device was created to be attached to the scanner tip, thus allowing controlled rotational movements to be performed within the required angular range. The prototype was built to work independently of the scanner software, ensuring in this way compatibility with other scanning devices. **Results :** The proposed prototype allows controlled rotation of the scanning tip within an angular range of approximately 60-90 degrees, corresponding to the movements required to record all tooth surfaces. The mechanical configuration provides stable and precise motion, reducing the need for continuous wrist movement during the scanning process. The design also ensures compact dimensions, allowing integration with existing intraoral scanning devices without significantly altering the scanning protocol. **Conclusions:** The development of an auxiliary electromechanical device capable of automating the rotational motion of the intraoral scanner tip may improve ergonomic conditions for dental practitioners.

Keywords: Intraoral scanner, Digital dentistry, Ergonomics, Electromechanical prototype

FALSE AND TRUE BIFID MANDIBULAR CANALS: AN EVIDENCE-BASED REVIEW

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Background: The bifid mandibular canal (BMC) is a clinically significant anatomical variant complicating dental implant placement, third molar surgery, and nerve blocks. However, existing literature frequently misinterprets accessory canals or anatomical landmarks as true bifurcations of the inferior alveolar canal. **Objective:** This study systematically evaluated published evidence to distinguish between true and false BMCs and to identify the structures most frequently misclassified. **Material and methods:** An evidence-based review was conducted across electronic databases, selecting 38 studies (53 evidence entries). BMCs were classified based on identification validity, assessment method (primarily CBCT), and anatomical location within the mandible. **Results :** False BMCs accounted for 75.5% of all entries, while true BMCs represented only 26.4%. The retromolar canal (62.5%) and mylohyoid groove (30.0%) were the most commonly misidentified. Anatomically, false BMCs were predominantly located in the ramus (85.0%), whereas true BMCs were mainly found in the mandibular body (42.9%) or spanning both regions (50.0%). This analysis highlights a critical discrepancy between clinical reports and anatomical reality. Although the BMC is vital for surgical planning, the study indicates that the vast majority of reported cases (75.5%) are erroneous classifications. This suggests a widespread tendency to confuse the retromolar canal with the BMC, particularly in the ramus region, posing risks for surgical complications. **Conclusions:** The majority of reported BMCs represent false bifurcations. Clinicians should view canals located within the ramus with suspicion, as they are likely retromolar canals, whereas true bifurcations predominantly involve the mandibular body.

Keywords: Bifid mandibular canal, Retromolar canal, Mylohyoid groove, Anatomical variation

INFRAZYGOMATIC CREST AND OSTIOMEATAL COMPLEX ALIGNMENT ON CBCT: A REPRODUCIBLE ANATOMICAL REFERENCE FOR THE EDENTULOUS POSTERIOR MAXILLA

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Background: In the edentulous posterior maxilla, the absence of dental landmarks significantly complicates imagistic orientation during implant planning. Reliable skeletal references are therefore essential. The infrazygomatic crest (IZC) is a well-defined bony structure that persists regardless of dental status, and the ostiomeatal complex (OMC) represents a consistent sinonasal landmark visible on cone beam computed tomography (CBCT). However, the spatial relationship between these two structures, and their potential utility in targeting the maxillary first molar (M1) region, remains undefined. **Objective:** To evaluate, using CBCT, whether the IZC consistently aligns with the OMC within the same coronal plane, thereby establishing a reproducible, bone-based imagistic reference for the M1 region in both dentate and edentulous patients. **Material and methods:** A retrospective analysis was conducted on 68 adult CBCT scans (136 hemi-maxillae). Both dentate and edentulous patients were included in this study. A standardized coronal slice through the midpoint of the IZC was used to assess IZC-OMC correspondence. Correspondence was defined by the presence of the OMC components within the same coronal plane as the IZC. In dentate cases, tooth position was used as an anatomical reference to infer the spatial relationship of the IZC-OMC plane to the posterior maxillary region, allowing extrapolation to edentulous conditions. **Results :** IZC-OMC correspondence was identified in 72.1% of right sides and 76.5% of left sides, with bilateral association present in 54.4% of cases. The maxillary first molar was the most frequent dental landmark (50.0% right, 54.4% left), followed by the second premolar (25.0% right, 20.6% left). Radicular analysis revealed bilateral asymmetry: the mesiobuccal (MB) root of M1 was predominant on the left (39.7%), while the right side showed a more balanced distribution between MB (25.0%) and distobuccal (DB) (19.1%) roots. **Conclusions:** The OMC-IZC-M1 topographic triad represents a surgically relevant anatomical framework for targeting the M1 region in edentulous patients. This bone-based landmark relationship may assist imagistic orientation during implant planning, particularly when positioning posterior implants in edentulous maxillae. A practical CBCT protocol is proposed: identify the OMC, locate the IZC, and confirm the M1 region.

Keywords: infrazygomatic crest, ostiomeatal complex, CBCT, surgical anatomy

LATERAL RECESS PNEUMATIZATION OF THE SPHENOID SINUS AND NEUROVASCULAR SAFETY MARGINS AT THE FORAMEN OVALE, FORAMEN ROTUNDUM AND VIDIAN CANAL: A CBCT ANALYSIS

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Background: Endoscopic skull base surgery requires precise knowledge of sphenoid sinus anatomical variants, as excessive lateral recess pneumatization may critically reduce the bony safety margins protecting the foramen ovale (FO), foramen rotundum (FR), and vidian canal (VC). Inadvertent injury to these structures carries severe neurovascular consequences, yet the relationship between pneumatization extent and structural vulnerability remains incompletely characterized on CBCT. **Objective:** To evaluate sagittal and lateral recess sphenoid sinus pneumatization patterns and quantify their impact on neurovascular safety margins and structural integrity at the FO, FR, and VC using CBCT. **Material and methods:** Forty CBCT scans (22 female, 18 male) were retrospectively analyzed. Sagittal pneumatization was classified as conchal, presellar, sellar, or postsellar, and lateral recess pneumatization as Type I (previdian), Type II (prerotundum), or Type III (postrotundum) on 80 sides. The minimum sphenoid sinus-FO bone distance (SS-FOv) and FO-FR distance were measured bilaterally. FR and VC protrusion and dehiscence into the sinus lumen were assessed per patient on coronal CBCT slices. **Results :** Postsellar pneumatization predominated (62.5%), followed by sellar (30.0%) and presellar (7.5%). Type II lateral recess pneumatization was most frequent (60.0%), followed by Type III (32.5%) and Type I (7.5%). Mean SS-FOv was 6.30 ± 4.35 mm (range 0-17.73 mm), with direct sinus-FO contact recorded on 6 sides (7.5%). SS-FOv showed a strong negative correlation with lateral recess type, decreasing progressively from Type I (12.33 ± 1.90 mm) to Type II (8.19 ± 3.48 mm) to Type III (2.06 ± 1.55 mm). Mean FO-FR distance was 16.91 ± 1.60 mm (range 13.04-20.67 mm),

remaining relatively stable across pneumatization types. FR protrusion and dehiscence were each present in 6 patients (15.0%), predominantly in Type III. VC protrusion (35.0%) and dehiscence (32.5%) were also significantly associated with Type III. **Conclusions:** Type III lateral recess pneumatization significantly reduces the SS-FOv safety margin and is significantly associated with FR and VC protrusion and dehiscence, revealing a sequential pattern of neurovascular endangerment as lateral pneumatization advances. Preoperative CBCT classification of sphenoid sinus pneumatization can stratify patients by neurovascular risk and guide safer surgical planning in endoscopic skull base approaches.

Keywords: Lateral recess pneumatization, Bony safety margin, Foramen rotundum, Foramen ovale

MANDIBULAR OSSIFICATION REVISITED: A MULTI-MECHANISM FRAMEWORK INTEGRATING PARACHONDRAL, JUXTAPARACHONDRAL, ENDOCHONDRAL, AND TRANSDIFFERENTIATION PATHWAYS

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Background: The mandible is conventionally classified as a membrane bone formed by intramembranous ossification, a designation that, while foundational in dental anatomy education, fails to reflect the mechanistic complexity of its development. Recent advances in spatial transcriptomics, lineage tracing, and molecular genetics have fundamentally revised this understanding, with direct implications for congenital malformations, temporomandibular joint pathology, and reconstructive strategies. **Objective:** To critically synthesize classical embryological evidence and contemporary molecular data, proposing a more accurate mechanistic classification of mandibular ossification, with emphasis on the active signaling role of Meckel's cartilage, the distinction between parachondral and juxtaparachondral ossification, and chondrocyte-to-osteoblast transdifferentiation. **Material and methods:** A critical narrative review of studies published between 1972 and 2026 was conducted, including landmark histological investigations, conditional knockout and lineage tracing experiments, and a human fetal spatiotemporal transcriptomic atlas, all reported in the peer-reviewed literature. Original three-dimensional DICOM renderings of mandibular anatomy were produced as illustrative material. **Results :** The reviewed evidence supports a region-specific model of mandibular development rather than a uniform intramembranous mechanism. The mandibular body develops in close spatial and molecular association with Meckel's cartilage, whose intermediate segment appears to function as an active paracrine signaling center promoting adjacent osteogenesis. In contrast, the anterior Meckel's cartilage contributes more directly to ossification through chondrocyte-to-osteoblast transition, whereas the condylar cartilage follows a distinct secondary-cartilage endochondral program. Together, these findings indicate that the mandible is developmentally heterogeneous, with at least three mechanistically different ossification patterns that help explain the biological basis of selected craniofacial malformations. **Conclusions:** The mandible is a composite bone employing at least three mechanistically distinct ossification modes in a region-specific pattern. Meckel's cartilage functions as an active paracrine signaling organ, not a passive scaffold. This framework has direct clinical implications for mandibular reconstruction, distraction osteogenesis, and condylar regeneration, and opens the possibility of prenatal intervention in congenital mandibular anomalies.

Keywords: mandibular ossification, Meckel's cartilage, chondrocyte transdifferentiation, craniofacial development

MAXILLOFACIAL MORPHOLOGY AND HYOID BONE POSITION AS PREDICTORS OF OBSTRUCTIVE SLEEP APNEA: THE DENTIST AS A DIAGNOSTIC SENTINEL

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Background: Obstructive sleep apnea (OSA) is a respiratory disorder closely linked to specific craniofacial structures, carrying significant cardiovascular, metabolic, and neurocognitive consequences. Its anatomical substrate - mandibular retrognathia, inferior hyoid position, increased anterior facial height, and reduced posterior airway space - is directly visible and measurable in the dental office through routine clinical examination, lateral cephalometry, CBCT, and MRI. The dentist thus serves as a "diagnostic sentinel" - a first-line observer capable of identifying these structural risk factors both before and after systemic symptoms appear, acting as a critical early

warning system within the broader healthcare network. **Objective:** To review and synthesize current literature regarding specific craniofacial and hyoid morphological patterns that serve as reliable predictors for OSA. **Material and methods:** A narrative review was conducted by analyzing original research articles, systematic reviews and meta-analyses. The search focused on the relationship between skeletal landmarks, hyoid bone position, soft tissue distribution, and upper airway patency. **Results :** The literature identifies a consistent association between certain craniofacial phenotypes, specific soft tissue distributions, and increased airway resistance. Key predictors include a reduced SNB angle, reflecting mandibular retrognathia, an inferiorly displaced hyoid bone, an increased vertical facial height, and an increased volume of the soft palate and tongue base. These skeletal and soft tissue traits reduce the functional space of the upper airway, regardless of the patient's body mass index (BMI). Therapeutic options range from non-surgical interventions-including titratable custom-made mandibular advancement devices (MADs) and orthopedic maxillary expansion-to maxillomandibular advancement (MMA) surgery as a definitive skeletal solution for severe cases, providing a comprehensive, research-based approach within an interdisciplinary framework. **Conclusions:** Craniofacial morphology and hyoid bone position are critical, non-invasive predictors of OSA, assessable through standard dental investigations. The dental office is an underutilized yet scientifically validated entry point in the diagnostic pathway. Integrating targeted morphological assessment with validated screening questionnaires and timely interdisciplinary referral transforms the dental professional into an active diagnostic sentinel, capable of measurably reducing the chronic diagnostic delay and improving long-term patient outcomes.

Keywords: obstructive sleep apnea, craniofacial morphology, hyoid bone position, mandibular retrognathia

MORPHOLOGICAL SUBSTRATES OF NON-ODONTOGENIC DENTAL PAIN

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Background: Non-odontogenic dental pain (NODP) refers to pain experienced in teeth or surrounding structures without an identifiable pulpal or periodontal cause. Clinicians frequently encounter patients with toothache symptoms, yet NODP remains underrecognized in dental and medical practice. This underrecognition compromises patient care and highlights a gap in dental education and interdisciplinary communication. Misdiagnosis often leads to irreversible dental procedures that ultimately offer no relief. The trigeminal nerve is the principal sensory pathway of the orofacial region; its central processing nuclei form the anatomical substrate allowing pain from muscular, neuropathic, or visceral origins to be mislocalized as dental pain. A systematic understanding of this neuroanatomical basis may be crucial in reducing diagnostic errors and minimizing unnecessary treatments. **Objective:** To characterize the morphological and neurobiological substrates of non-odontogenic dental pain by analyzing trigeminal nerve architecture, nuclear organization, and trigeminothalamic projection pathways, with the aim of establishing an anatomically grounded framework to guide clinical differential diagnosis and improve patient care. **Material and methods:** This review draws on a narrative search of relevant literature. Thirty-seven peer-reviewed articles, published between 1999 and 2025, were identified from PubMed and other clinical databases. Selection criteria were based on direct relevance to trigeminal neuroanatomy, orofacial nociception, and the classification of non-odontogenic pain. **Results :** Three main anatomical substrates of NODP were identified: musculoskeletal, neuropathic, and referred visceral origins. Convergence of afferent signals onto second-order neurons within the trigeminal subnucleus caudalis appears to be the principal mechanism underlying heterotopic dental pain. Evidence suggests the existence of a dorsal ipsilateral trigeminothalamic tract alongside the classical ventral contralateral pathway, challenging the traditional model of orofacial nociception. Notably, about 4% of patients with myocardial ischemia present with orofacial pain as their only symptom, and third molar surgery accounts for nearly half of iatrogenic trigeminal nerve injuries. Persistent orofacial pain is 2.1 times more common in women than in men. **Conclusions:** NODP originates from defined substrates within the trigeminal system. The convergence of afferent input at the subnucleus caudalis and dual trigeminothalamic projections are key anatomical mechanisms. Dental interventions remain the most common iatrogenic cause of trigeminal nerve injury. Although a cardiac-origin toothache is rare, it can have life-threatening consequences if overlooked. Integrating trigeminal neuroanatomy into clinical reasoning can help prevent unnecessary dental procedures and improve outcomes.

Keywords: non-odontogenic dental pain, trigeminal nerve, subnucleus caudalis, referred pain

MRI AND CBCT EVALUATION OF TEMPOROMANDIBULAR JOINT DISORDERS IN RELATION TO OCCLUSION TYPES AND LATERAL PTERYGOID MUSCLE INSERTION VARIATIONS

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Background: Temporomandibular disorders (TMDs) affect an estimated 5-12% of the general population. Their multifactorial etiology integrates condylar morphology, articular disc integrity, and masticatory muscle function with occlusal patterns. The superior head of the lateral pterygoid muscle (SHLP) presents three insertion variants: Type I (condyle and disc, 55.5%), Type II (condyle only 27.8%), and Type III (disc-capsule complex only, 16.7%), with Type III associated with heightened disc displacement susceptibility. Cone-beam computed tomography(CBCT) delivers sub-millimetre osseous resolution while magnetic resonance imaging(MRI) remains the reference standard for disc and muscle assessment; their combined application across malocclusion types and vertical patterns remains incompletely characterised. **Objective:** To evaluate temporomandibular joint(TMJ) condyle-fossa morphology and disc-muscle relationships by CBCT and MRI across Angle Class I, II, and III malocclusions in different vertical skeletal patterns, and to correlate findings with lateral pterygoid insertion variations. **Material and methods:** A multimodal retrospective study was conducted on adult patients stratified by skeletal class, vertical pattern (hypo-, normo-, hyperdivergent), and TMD status per the Diagnostic Criteria for Temporomandibular Disorders (DC/TMD). CBCT evaluation included mandibular fossa position, condylar dimensions and inclination, and joint space measurements. MRI assessed disc position in open- and closed-mouth views, joint effusion, and dimensions of the lateral pterygoid, masseter, and medial pterygoid muscle heads. Lateral pterygoid insertion typology was classified relative to the condylar head and articular disc. **Results :** Class II hyperdivergent patients showed the smallest anterior, superior, and medial joint spaces with anterior and superior condylar positioning. Class II TMD patients exhibited decreased superior and posterior joint spaces and a more laterally positioned mandibular fossa. In Class III patients with disc displacement, the fossa was displaced superiorly and anteriorly, the condyle more laterally, and anterior and medial joint spaces were enlarged. SHLP dimensions decreased stepwise with disc derangement severity; T2-weighted (fluid-sensitive) signal intensity increased near-linearly with derangement progression, with T1-weighted (fat-sensitive) imaging revealing fatty infiltration exclusively at the most advanced stage. MRI-CBCT fusion achieved an Area Under the Curve (AUC) of 0.83 with high inter-examiner reliability. **Conclusions:** Condyle-fossa characteristics differ significantly across malocclusion types and vertical patterns and should inform TMD diagnosis and treatment planning. Type III lateral pterygoid insertion represents a measurable anatomical risk factor for disc displacement. Multimodal CBCT and MRI evaluation, including image fusion, provides superior diagnostic accuracy over either modality alone.

Keywords: Malocclusions, Lateral pterygoid muscle, Cone-Beam Computed Tomography, Magnetic Resonance Imaging

NON-SEDATION APPROACHES FOR MANAGING FEAR IN PEDIATRIC DENTISTRY

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Background: Due to fear of dental procedures affecting up to 40% of children and adolescents around the world, treatment outcomes may be compromised, which contributes to the use of pharmacological methods such as sedation. Sedation has a high risk of dizziness, agitation, desaturation, irritability, coughing or incontinence that could be avoided by using alternatives. **Objective:** This study aimed to find the best non-pharmacological alternatives for sedation in order to decrease fear of dental procedures among the pediatric patients. **Material and methods:** A total of 7576 children aged between 4-16 years, included in 5 studies underwent dental interventions using only non-pharmacological methods. The measured physiological parameters for anxiety included blood pressure, heart rate and oxygen saturation. The behavioral management techniques included dog assisted therapy in which a trained dog sat beside the child throughout the intervention, the tell-show-do technique, distraction techniques such as audiovisual distraction and music. **Results :** Dog assisted therapy was associated with a reduction in heart rate and decreased anxiety, stimulating trust and promoting a state of relaxation. In pediatric patients, music demonstrated approximately 80% effectiveness in lowering heart rate and was similarly effective in

decreasing anxiety. Audiovisual distraction achieved an approximately 83% success rate, improving behavioral responses, but lowered heart rate in only 38% of children. Furthermore, audiovisual distraction was proven to be more advantageous than the tell-show-do method in diminishing children's fear. Only 25% of children required sedation for the purpose of completing the necessary dental treatment. For the majority of patients, non-pharmacological methods were highly successful in reducing dental phobia and anxiety. **Conclusions:** Some non-pharmacological methods were proven to be more effective than others, however, all of them had a significant impact in children's behavior and were beneficial in sustaining the physiological parameters within the normal range. In cases where sedation is not mandatory, these methods might represent the optimal decision helping pediatric patients feel comfortable during dental procedures. Moreover, the techniques studied not only help children, but also assist the doctor in completing the required dental treatment, while having a significant positive impact on their fear of the dentist and on the future of their health. Dental phobia in adults often stems from traumatic childhood experiences; therefore, helping pediatric patients overcome their fears may contribute to reducing dental anxiety in adulthood.

Keywords: Non-pharmacological, Dental fear, Pediatric patients, Dog-assisted therapy

PNEUMATIZATION-RELATED VARIANTS OF THE INTERNAL CAROTID ARTERY, OPTIC NERVE, FORAMEN ROTUNDUM, AND VIDIAN CANAL: INTER-STRUCTURAL CORRELATIONS AND COMBINED CLASSIFICATION PATTERNS

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Background: Endoscopic endonasal and transsphenoidal skull base approaches require precise preoperative knowledge of neurovascular structures adjacent to the sphenoid sinus (SS). The internal carotid artery (ICA), optic nerve (ON), foramen rotundum (FR), and vidian canal (VC) are at risk of iatrogenic injury, yet their anatomical variants are typically assessed in isolation. Whether these variants co-occur in predictable patterns remains unclear. **Objective:** To evaluate the pneumatization-related anatomical variants of the ICA, ON, FR, and VC relative to the SS, their inter-structural correlations, combined classification patterns, bilateral symmetry, and intersinus septum (ISS) relationships. **Material and methods:** A retrospective cross-sectional study was conducted on cranial computed tomography (CT) scans of 153 adult patients (306 sides) from two independent cohorts. Each side was classified using the Asal 3-type system for the ICA, the DeLano 4-type for the ON, the Lee 3-type for the VC, and the Vaezi coronal classification for the FR. Protrusion, dehiscence, Onodi cell presence, SS pneumatization grade, ISS pattern, and posterior septal termination were recorded. Spearman correlations, chi-square tests, Fisher exact tests, and Mann-Whitney U tests were applied, with significance set at $p < 0.05$. **Results** : Three significant inter-structural correlations were identified: ICA and FR types were positively correlated ($p = 0.37$, $p < 0.001$), ICA and VC types were inversely correlated ($p = -0.37$, $p < 0.001$), and FR and VC types showed the strongest inverse association ($p = -0.57$, $p < 0.001$). ON classification was independent of all other structures (all $p > 0.3$). ICA protrusion was significantly associated with FR protrusion (OR = 5.77, $p < 0.001$) and ICA dehiscence (OR = 4.71, $p < 0.001$). Onodi cells correlated near-perfectly with DeLano type 4 ($\chi^2 = 284.15$, $p < 0.001$). The most prevalent four-variable combination was ICA type 1, FR type II, ON type 1, and VC type 3 (9.2%). Bilateral symmetry ranged from 63.6% for the ON to 81.4% for the FR. The ISS was single in 75.2% of patients, with sellar termination predominating (46.4%). **Conclusions:** Sphenoid sinus neurovascular variants form interdependent patterns rather than occurring in isolation. The ICA, FR, and VC constitute a correlated triad driven by shared pneumatization, while the ON behaves independently. Preoperative CT assessment of combined classification profiles may improve surgical risk stratification for endoscopic skull base procedures.

Keywords: sphenoid sinus, anatomical variants, pneumatization, endoscopic endonasal surgery

PREVALENCE AND MORPHOLOGICAL CHARACTERISTICS OF THE TENTORIAL BAR OVER THE PORUS TRIGEMINUS: A CONE-BEAM COMPUTED TOMOGRAPHY (CBCT) STUDY

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Background: The posterior petroclinoidal dural fold forms the roof of the porus trigeminus and, when ossified,

constitutes a rigid bar of bone in direct contact with the trigeminal nerve root, herein designated the tentorial bar. Despite its recognized clinical significance in trigeminal neuralgia (TN), no radiological prevalence study has quantified this finding specifically at the porus trigeminus subsite. This anatomical gap justifies a dedicated cone beam computed tomography (CBCT)-based investigation. **Objective:** To determine the prevalence, laterality, ossification pattern, and morphometric characteristics of the tentorial bar on large field-of-view CBCT, and to compare findings by sex. **Material and methods:** A retrospective cohort of 50 large field-of-view CBCT examinations was evaluated by two independent observers using multiplanar reconstruction. Each side was classified as absent, incomplete, or complete ossification. Bar width, bar length, and porus trigeminus cross-sectional area were measured. Between-sex comparisons used the chi-square or Fisher exact test. Right-left asymmetry was assessed with McNemar's exact test. Inter-observer reliability was quantified using weighted kappa. **Results :** Tentorial bar ossification was identified in 31 of 50 subjects (62.0%). Complete ossification was found in 6 subjects (12.0%) on the right and 2 (4.0%) on the left; incomplete ossification was present in 22 (44.0%) and 24 (48.0%) respectively. Bilateral involvement was identified in 23 subjects (46.0%). No statistically significant sex differences were observed (all $p > 0.05$). Right-left asymmetry was not significant (McNemar $p = 0.727$). Mean bar width was 1.18 mm (right) and 1.14 mm (left); mean bar length was 8.58 mm (right) and 7.80 mm (left). Among bar-present subjects, porus trigeminus narrowing was mild in 77.4%, moderate in 19.4%, and severe in 3.2%. **Conclusions:** Tentorial bar ossification is a prevalent CBCT finding, substantially exceeding prior estimates of global tentorial calcification at this specific anatomical subsite. Moderate-to-severe porus narrowing in 22.6% of bar-present subjects identifies a clinically relevant subgroup. This finding should be systematically sought on large field-of-view CBCT, particularly in patients presenting with trigeminal pain of unclear aetiology.

Keywords: Tentorial bar, porus trigeminus, posterior petroclinoid fold, cone beam computed tomography

PTERYGOPALATINE GANGLION CELL DEATH AS AN UNDERRECOGNIZED MECHANISM IN DRY EYE SYNDROME: A HYPOTHESIS WITH SPECIAL ATTENTION TO DIABETIC ETIOLOGY

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Background: The pterygopalatine ganglion (PPG) is the principal parasympathetic relay governing secretory output across the lacrimal, nasal mucosal, and palatine glandular territories. Despite this central role, it remains absent from mainstream dry eye syndrome (DES) pathophysiology, where models focus on tear film instability, meibomian gland disease, and ocular surface inflammation. Diabetic patients carry a markedly elevated burden of severe DES, and while diabetic autonomic neuropathy is well characterized in cardiovascular and gastrointestinal circuits, the PPG has not been examined as an equivalent target. **Objective:** To investigate whether regulated cell death within the PPG, affecting both neurons and satellite glial cells (SGCs), represents an upstream mechanism of aqueous-deficient dry eye in diabetes. Additionally, we propose that PPG neurodegeneration contributes to a unified "diabetic secretory denervation syndrome" involving lacrimal, nasal mucosal, palatine, and conjunctival goblet cell territories. **Material and methods:** This study presents a structured review of evidence from parasympathetic denervation models, surgical PPG injury reports, and literature on diabetic autonomic neuropathy. Relevant studies examining regulated cell death in analogous ganglia (dorsal root ganglion, stellate ganglion) were included. The analysis focuses on key cell death pathways, including intrinsic and extrinsic apoptosis, necroptosis, pyroptosis, and ferroptosis. Additionally, the role of satellite glial cell (SGC) death and its association with multi-territory secretory dysfunction in diabetic patients was evaluated. **Results :** Denervation and surgical models establish a dose-response relationship between PPG neuronal viability and tear output. Multiple cell death pathways operate in diabetic autonomic ganglia: mitochondrial apoptosis via Bax/caspase-3, death-receptor apoptosis via caspase-8, AGE-RAGE-NF- κ B signaling, necroptosis via RIPK1/RIPK3/MLKL, pyroptosis via NLRP3/gasdermin-D, and ferroptosis via GPX4 depletion - directly demonstrated in diabetic stellate ganglia. SGCs exhibit parallel vulnerability, amplifying neuronal injury through the release of pro-inflammatory cytokines. Prolonged nasal mucociliary clearance, impaired palatine output, and reduced conjunctival goblet cell density are each documented in diabetic patients, yet no study has attributed these co-occurring deficits to a common upstream PPG lesion. **Conclusions:** Regulated neuronal and satellite glial cell death within the pterygopalatine ganglion may represent an underrecognized upstream mechanism of aqueous-deficient dry eye in diabetes. Converging evidence from analogous diabetic autonomic ganglia supports similar degenerative processes in the PPG. Together with coordinated secretory deficits across PPG-innervated territories, this supports a unified "diabetic secretory denervation syndrome." Further studies are needed, including direct PPG histopathology,

integrated assessment of secretory function, and development of targeted neuroprotective strategies.

Keywords: pterygopalatine ganglion, dry eye syndrome, diabetic autonomic neuropathy

RED LINES OF THE FACE: VARIABILITY OF THE FACIAL ARTERY

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Background: The facial artery (FA) is the primary vessel supplying the face. Its tortuous and variable course makes it a critical landmark in oral and maxillofacial surgery, and aesthetic procedures where inadvertent vascular compromise causes severe complications. **Objective:** To analyze the anatomical variations of the FA facial trajectory, focusing on termination patterns, symmetry, diameters, and depth, providing reference data to minimize vascular complications. **Material and methods:** A comprehensive literature synthesis of anatomical studies involving cadaveric dissections, CT angiography, and color Doppler ultrasound was conducted, focusing on the FA's route, termination types, depth, diameters, and rare variants. **Results :** The FA exhibits significant variability, classically showing four termination patterns. Bilateral discrepancies are frequent. Rare anomalies, like a double or absent FA, were identified. The artery fluctuates in depth, transitioning from a sub-muscular plane near the mandible to a vulnerable subcutaneous plane near the nasolabial fold. **Conclusions:** Recognizing the diverse FA trajectories is vital for maxillofacial surgeries, particularly designing locoregional flaps. Furthermore, the integration of pre-operative imaging modalities is essential for precise vascular mapping. The FA has high morphological diversity. Understanding its variable anatomy, is imperative for minimizing vascular complications during reconstructive surgeries, flap design, and maxillofacial trauma management.

Keywords: Anatomical Variation, Facial Flaps, Facial Artery, Maxillofacial Surgery

THE ANTILINGULA OF THE MANDIBLE AND ITS RELEVANCE AS A SURGICAL LANDMARK

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Background: Intraoral vertical ramus osteotomy (IVRO) requires precise localization of the mandibular lingula, which marks the entry point of the inferior alveolar nerve (IAN) into the mandibular canal. Since the lingula is not directly visible intraoperatively, the mandibular antilingula, a prominence on the lateral ramus situated just below the mandibular notch, has been proposed as its external surgical counterpart. The reliability of this relationship remains contested, and no prior study has derived a clinically applicable surgical safety margin from Bland-Altman limits of agreement. **Objective:** Our objective was to determine the three-dimensional spatial relationship between the antilingula and lingula using cone-beam computed tomography (CBCT), quantify inter-landmark variability through Bland-Altman analysis and coefficient of variation (CV), derive a minimum surgical safety margin, and evaluate the antilingula's reliability as a primary IVRO landmark. **Material and methods:** A retrospective CBCT-based study analyzed 29 anonymized scans (56 hemimandibles). Four linear measurements, superior (S), inferior (I), anterior (A), and posterior (P) distances to ramus borders, were recorded for both landmarks using Planmeca Romexis® Viewer. Statistical analysis included descriptive statistics, paired Student's t-test for bilateral symmetry ($\alpha = 0.05$), Pearson correlation, linear regression (R^2), Bland-Altman limits of agreement (LoA), CV of inter-landmark offsets, and quadrant distribution analysis. **Results :** The antilingula was identified in 96.55% of mandibles (28/29), with confirmed bilateral symmetry ($p > 0.05$, all planes). The antilingula was located on average 6.29 mm more superiorly and 1.52 mm more anteriorly than the lingula. Pearson r values ranged from 0.114 (S) to 0.579 (A), with R^2 below 0.34 in all planes. CV analysis revealed highly variable offsets in all directions (CV: 55.0% for S, 167.6% for A), confirming the mean offset is not representative at the individual level. Bland-Altman analysis yielded 95% LoA of -13.08 to +0.49 mm superiorly and -6.53 to +3.48 mm anteriorly, establishing recommended minimum surgical safety margins of 13.1 mm vertically and 6.5 mm horizontally. Quadrant distribution showed the lingula was inferior-posterior to the antilingula in 66.1% of cases and inferior-anterior in 28.6%, demonstrating inconsistent horizontal offset direction across patients. **Conclusions:** Despite high prevalence and bilateral symmetry, the antilingula demonstrates insufficient spatial predictability to serve as a primary IVRO landmark. Bland-Altman-derived safety margins of up to 13.1 mm and highly variable CV values highlight significant individual-level risk. Mandatory preoperative CBCT-based landmark identification is recommended over anatomical

approximation.

Keywords: Antilingula, CBCT, intraoral vertical ramus osteotomy, mandibular lingula

THE BUCCAL FAT PAD: AN ACCESSIBLE CRANIOFACIAL STEM CELL NICHE

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Background: The Buccal Fat Pad (BFP) is an encapsulated deposit of specialized adipose tissue situated deep within the cheek. A rich microvascular network and proximity to common craniofacial defect sites make the BFP a distinctive oral cavity-associated mesenchymal stromal/stem cell (MSC) niche. **Objective:** This review aims to synthesize current evidence regarding the buccal fat pad as an intraoral MSC niche and the biological characteristics of BFP-derived stem cells (BFPDCs) and their clinical relevance in craniofacial regeneration and related applications. **Material and methods:** A narrative review of the peer-reviewed literature was conducted. **Results :** The BFP provides an intraoral source of stromal vascular fraction (SVF) containing pericytes, endothelial cells, smooth muscle cells and MSCs. BFPDCs demonstrate high proliferative capacity and clonogenicity, multilineage differentiation potential and clinically relevant immunomodulatory activity. Experimental and early clinical evidence supports their use in alveolar augmentation, mandibular reconstruction, periodontal regeneration, osteochondral repair and enhanced graft integration. A contemporary mechanistic framework emphasizes MSCs as perivascular "medicinal signaling cells" with therapeutic effects dominated by paracrine angiogenic and immunomodulatory activity rather than direct long-term lineage replacement. Despite promising findings, significant translational challenges remain: variability in isolation protocols, lack of standardized preparation workflows, scaffold integration issues and limited high-quality long-term clinical trials. **Conclusions:** The BFP represents a practical and biologically meaningful intraoral MSC source with strong potential for biologically augmented craniofacial reconstruction. Further research is required to standardize cell processing methods and to validate long-term safety and efficacy through controlled clinical studies.

Keywords: buccal fat pad, buccal fat pad-derived stem cells, mesenchymal stem cells, stromal vascular fraction

THE DISCOMALLEAR LIGAMENT: A NARRATIVE REVIEW

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Background: Temporomandibular disorders (TMD) affect a significant portion of the population and are frequently accompanied by otological symptoms such as tinnitus, otalgia, hearing loss, and vertigo a symptom first described by Costen in 1934. Despite the high clinical prevalence of these complaints, the anatomical mechanism underlying the TMJ-ear connection has long remained poorly understood, creating a diagnostic and therapeutic gap between dental and otolaryngological practice. Patients presenting with ear symptoms of no apparent otological cause are often misdiagnosed or undertreated, as the structural link between the TMJ and the middle ear is not routinely considered. A precise anatomical understanding of this connection is therefore essential to guide clinical decision-making, surgical planning, and the development of targeted treatments. **Objective:** This evidence-based review synthesises current anatomical, imaging, and clinical knowledge regarding the DML, with the aim of clarifying its structure, topographic relationships, functional significance, and role in TMJ-related aural symptoms. **Material and methods:** A structured review of full-length original papers was conducted, documented at the anatomy department. Primary sources included Pinto's original cadaveric study (10 specimens, 20 joints) using a superior middle cranial fossa approach, alongside subsequent dissection, CBCT imaging, and clinical investigations from multiple independent groups. **Results :** The DML is a constant fibroelastic structure arising from the posteromedial TMJ capsule and articular disc, traversing the petrotympanic (Glaserian) fissure alongside the chorda tympani nerve, and inserting on the neck of the malleus. It shares a common malleal insertion zone with the anterior malleolar ligament (AML), suggesting both may represent distinct portions of a single ligament. The petrotympanic fissure displays three CBCT morphological subtypes, which may constrain DML mobility. Histologically, the DML consists of type I collagen with abundant elastic fibres, confirmed in 100% of cadaveric specimens. The capacity of DML traction to displace the malleus remains debated across studies. Clinically, TMD treatments significantly improved otological symptoms in over 50% of patients, and otological symptom incidence was markedly higher in TMJ-involved patients versus controls. **Conclusions:** The DML is a constant anatomical structure providing a

plausible mechanical link between TMJ dysfunction and middle ear symptomatology. Its close relationship with the AML supports a proposal for formal inclusion of both ligaments in international anatomical nomenclature. Surgical awareness of the DML is essential to prevent iatrogenic ossicular injury during TMJ procedures.

Keywords: Discomalleolar ligament, Temporomandibular joint, Petrotympanic fissure, Costen's syndrome

THE NERVE BEHIND THE BLOCK: ANATOMY, VARIATIONS, AND CLINICAL SIGNIFICANCE OF THE MYLOHYOID NERVE

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Background: The inferior alveolar nerve block (IANB) is the most frequently performed regional anaesthetic technique in dentistry, yet it is associated with a clinically significant failure rate. The mylohyoid nerve (MHN), a branch of the inferior alveolar nerve (IAN), was traditionally classified as a purely motor nerve supplying the mylohyoid muscle and the anterior belly of the digastric. Accumulating histological, histochemical, and morphometric evidence, however, tells a different story: one of a nerve with a motor and sensory composition, a remarkably variable anatomy, and a direct role in anaesthetic failure. **Objective:** To synthesise the available evidence on the possible anatomy of the MHN, encompassing fibre composition, course variations, mylohyoid canal morphology, accessory dental innervation, transmylohyoid anastomoses, and their collective implications for mandibular anaesthesia. **Material and methods:** A narrative review of over 50 studies was conducted. Sources included cadaveric dissection studies, histological and immunohistochemical analyses, dry-bone morphometric investigations, CBCT imaging studies, and clinical trials evaluating nerve block techniques. Data were extracted on fibre composition, prevalence of anatomical variants, and anaesthetic success rates. **Results :** The MHN was confirmed to carry a sensory fibre population, with dental innervation evidenced by fibre degeneration following tooth loss. The MHN was found to originate at a variable distance above the mandibular foramen, frequently escaping the reach of the standard IANB. Accessory lingual foramina suggesting dental innervation by the MHN were identified in a substantial majority of mandibles. The mylohyoid groove was found to convert into a bony canal in a clinically relevant proportion of cases, creating a physical barrier to anaesthetic diffusion. Transmylohyoid anastomoses between the MHN and the lingual nerve were confirmed as sensory and present in a significant proportion of dissections. The Gow-Gates and Vazirani-Akinosi techniques demonstrated significantly higher success rates compared to the standard IANB. **Conclusions:** The MHN is anatomically variable and clinically significant well beyond its traditional description. Its accessory dental fibres, bony canal enclosure, high origin relative to the mandibular foramen, and transmylohyoid sensory anastomoses collectively account for a substantial proportion of IANB failures. Adoption of alternative block techniques and supplementary lingual infiltration are evidence-based strategies to improve clinical outcomes.

Keywords: mylohyoid nerve, inferior alveolar nerve block, anatomical variation, mandibular anaesthesia

THE SUBLINGUAL ARTERY

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Background: The sublingual artery supplies the floor of the mouth, the sublingual gland, the anterior mandibular muscles, and the anterior inner cortex of the mandible. Accidental injury during dental implant placement in the interforaminal area can cause life-threatening sublingual haematoma and airway obstruction, challenging the notion that the anterior mandible is a surgical safe zone. A synthesis of current evidence is needed to guide safe clinical practice. **Objective:** To review the anatomical variations of the sublingual artery, explore its clinical importance in jaw procedures, and examine how preoperative imaging can help reduce surgical risk. **Material and methods:** A narrative review of peer-reviewed literature was conducted, including cadaveric dissection series, cone beam computed tomography (CBCT) studies, magnetic resonance angiography (MRA) investigations, clinical case reports, and surgical literature reviews. Data were synthesised descriptively, with anatomical classifications, morphometric measurements, and complication rates evaluated across studies. **Results :** The sublingual artery arises predominantly as a branch of the lingual artery (51-73% of specimens), and less commonly from the

submental branch of the facial artery (27-49% of cases). Bilateral dual supply was observed in up to 16.7% of sides. Three course categories were identified relative to the hyoglossus and mylohyoid muscles, with the classical medial course accounting for approximately 60% of cases. Lingual foramina, closely related to the sublingual artery, were present on the anterior inner cortex in virtually all patients, with up to 8 per patient and arterial diameter at foramen entry reaching 1.8 mm. In edentulous patients, alveolar resorption reduced the safety margin between the alveolar crest and the vessel, increasing risk. CBCT reliably delineated the intraosseous vascular course in three dimensions, while MRA also visualised the artery non-invasively. Of 30 published implant-related haematoma cases, 70% required intubation or tracheotomy. Airway obstruction resulted either from displacement of the tongue by the haematoma or from its extension into the submandibular space through communicating floor-of-mouth compartments. **Conclusions:** The sublingual artery's variable origin and course challenge the assumption that the anterior mandible is a predictable surgical zone. Preoperative CBCT assessment of lingual foramina and bone dimensions is essential. Its consistent calibre and accessible course may also render it a useful recipient vessel in intraoral free-flap reconstruction.

Keywords: sublingual artery, lingual artery, anterior mandible, lingual foramina

TRIGEMINAL REFLEXES AND ANATOMICAL CLASSIFICATION BASED ON SPECIFIC NUCLEI

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Background: Facial pain, unexplained bradycardia, and failed nerve blocks may all arise from undetected trigeminal reflex dysfunction. These reflexes, organized at the brainstem level, are not mere academic curiosities: they are the neural fingerprints of some of the most critical pathologies in dental and neurological practice. A precise map of their afferent pathways, relay nuclei, and efferent outputs is not optional it is the difference between a correct diagnosis and a preventable complication. **Objective:** This paper aims to classify the main trigeminal reflexes according to the specific nuclei involved, highlighting the anatomical pathway of each reflex arc and its clinical significance. **Material and methods:** Ten clinically relevant trigeminal reflexes were analyzed, each described by receptor, afferent pathway, relay nucleus, efferent nucleus, and effector. The reflexes were grouped into five anatomical categories: trigemino-trigeminal, trigemino-facial, trigemino-parasympathetic, trigemino-vagal, and trigeminocervical/bulbo-respiratory. **Results :** The spinal nucleus of the trigeminal nerve serves as the primary sensory relay hub, involved in the majority of the analyzed reflexes (corneal, conjunctival, glabellar R2, lacrimal, oculocardiac, sneeze, and trigeminocervical). The mesencephalic nucleus of the trigeminal nerve exclusively mediates mandibular proprioception within the jaw-jerk reflex, via direct monosynaptic projection to the pontine trigeminal motor nucleus. The bulbopontine reticular formation functions as a common internuclear network, ensuring bilateral convergence of facial and vagal motor pathways. The corneomandibular reflex was identified as an indicator of severe supranuclear corticobulbar dysfunction. The buccinator reflex involves three sensorimotor plexuses converging at the oral commissure (buccal, infraorbital, and labiomental), with direct relevance to locoregional dental anesthesia techniques. **Conclusions:** The anatomical classification of trigeminal reflexes according to their specific nuclei provides a precise diagnostic framework for localizing brainstem lesions and interpreting reflex changes in both dental and neurological clinical contexts. Knowledge of these circuits has direct practical implications for anesthesia techniques, neurological assessment, and the management of patients with trigeminal pathology.

Keywords: trigeminal reflexes, jaw-jerk reflex, spinal trigeminal nucleus, brainstem

TRIGEMINAL–FACIAL NERVE ANATOMICAL CONNECTIONS AND THEIR CLINICAL VALUE:A COMPREHENSIVE REVIEW

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Background: The trigeminal (CN V) and facial (CN VII) nerves are the primary nerves responsible for facial sensation and movement. While traditionally viewed as separate sensory and motor systems, growing evidence suggests they form an intricate network of peripheral interconnections. Understanding these connections is vital

because facial muscles lack traditional muscle spindles, yet they possess high proprioceptive acuity, likely provided by these "mixed" neural plexuses. **Objective:** This study aims to synthesize existing anatomical, histological, and clinical data regarding the communications between the trigeminal and facial nerves. The goal is to map these connections across different facial regions and evaluate their significance in clinical practices such as surgery, anesthesia, and pathology. **Material and methods:** The review analyzed data from multiple scientific methods, including cadaveric dissections, whole-mount Sihler nerve staining (which makes tissues transparent to visualize nerve paths), immunohistochemistry, and quantitative axonal mapping. The study focused on identifying specific anastomoses in the orbital, zygomatic, buccal, and mandibular regions. **Results :** The research reveals that virtually every terminal branch of the facial nerve receives communicating fibers from at least one division of the trigeminal nerve. Specific findings include: Orbital/Zygomatic Regions: Frequent connections between the lacrimal, supraorbital, and infraorbital nerves (CN V) and the temporal/zygomatic branches (CN VII). Buccal Region: Extensive plexuses between the buccal nerve (CN V) and the buccal branches (CN VII) that coordinate cheek movement and sensation. Mandibular Region: Consistent links between the mental nerve (CN V) and the marginal mandibular branch (CN VII). Histological evidence confirms that these are not just physical crossings but involve a true exchange of nerve fibers, allowing sensory information (proprioception) to travel within motor nerve pathways. **Conclusions:** The trigeminal and facial nerves do not function in isolation; they form a unified sensorimotor system. These findings have major clinical implications: they explain the success of "cross-face" nerve grafts in facial reanimation, highlight potential pathways for the perineural spread of tumors, and explain why local anesthesia in one nerve can sometimes affect the functions of the other. Recognizing these connections is essential for improving outcomes in reconstructive surgery and dental procedures.

Keywords: Trigeminal nerve, Facial nerve, Anastomosis, Proprioception

CLINICAL DENTAL MEDICINE

ACCURACY OF RESULTS OBTAINED WITH MANUAL VS. DIGITAL VS. AI AUTOMATED TRACINGS IN CEPHALOMETRIC ANALYSES

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Background: The use of lateral cephalometric radiographs and its analysis is an important tool for orthodontists due to its ability to aid in treatment planning and diagnosis, growth monitoring and evaluating treatment outcomes. Due to the recent developments in artificial intelligence more clinicians are using it to bypass the time consuming task of analyzing the cephalometrics manually. **Objective:** The aim of this study is to compare the outcome of landmarking methods across several cephalometric analyses based on manual vs. digital vs. AI automated tracings. This study investigates the differences in values of digital and AI automated tracings when compared to manual tracing. **Material and methods:** The Webceph application was selected for its accessibility and user friendliness, as well as the variety of features offered. This study was made on 15 lateral cephalometric radiographs and it was used to analyze a group of 18 to 45 year olds cephalometrics. The cephalometric analyses was conducted using Steiner's analysis (SNA, SNB, ANB), Tweed triangle (FMA, IMPA, FMIA) and Wits appraisal and the results were evaluated using the Bland-Altman plot. **Results :** Digital tracing generally shows a higher reliability with manual tracing when compared to AI automated tracing. It shows low bias, low variability and narrower limits of agreement. In addition, skeletal measurements such as Steiner's analysis and Wits' appraisal show more consistent results with low bias, low variability and acceptable limits of agreement compared to dental measurements involving incisor positioning such as IMPA and FMIA. **Conclusions:** Even though manual tracing remains the golden standard, digital tracing shows a consistency that can be relied upon. Further improvements are needed before AI automated tracings can be used to the same extent as manual tracings, especially when it comes to variable landmarks such as teeth.

Keywords: Cephalometric analysis, Digital tracing, Artificial intelligence, Orthodontics

ARTIFICIAL INTELLIGENCE IN THE ASSESSMENT OF INCIPIENT CARIES: A MODERN EVOLUTION IN CLINICAL PRACTICE

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Background: Detecting incipient carious lesions, particularly those confined to the enamel, remains a significant challenge in restorative dentistry. While conventional methods like visual-tactile examination and bitewing radiography are highly specific, their sensitivity is often limited, leading to the under-diagnosis of early-stage decay. As the profession shifts toward minimally invasive dentistry, there is an urgent need for objective, highly sensitive diagnostic tools capable of identifying demineralization before cavitation occurs. **Objective:** This literature review aims to evaluate the diagnostic performance of Artificial Intelligence (AI), specifically Convolutional Neural Networks (CNNs) in detecting and classifying incipient caries, and to compare these systems against conventional radiographic assessments performed by clinicians. **Material and methods:** A comprehensive literature search covering the period from 2018 to 2026 was conducted using the PubMed, Cochrane Library, and ResearchGate databases. Boolean operators were applied to the following keywords: "Artificial Intelligence," "Incipient Caries," "Deep Learning," and "Radiographic Diagnosis." Inclusion criteria focused on peer-reviewed clinical trials and diagnostic accuracy studies comparing AI-based software with a gold standard (e.g., histological examination or expert consensus). Data regarding sensitivity, specificity, and the Area Under the Curve (AUC) were extracted and synthesized. **Results :** The analysis reveals that AI models achieve significantly higher sensitivity for incipient proximal lesions, ranging from 0.80 to 0.92, compared to 0.24 to 0.42 for clinicians. Specificity remains generally comparable (often exceeding 0.85), yet AI systems demonstrate a superior ability to detect subtle radiographic density changes in the outer third of the enamel nuances frequently missed by practitioners. Longitudinal data from 2025 indicates that AI-assisted diagnosis is associated with a 30% increase in the use of non-invasive remineralization therapies. However, notable variability between models was observed, largely depending on the characteristics of the training datasets. **Conclusions:** AI represents a genuine paradigm shift in clinical practice, offering a reliable "digital second opinion" that helps overcome human fatigue and visual limitations. By significantly improving the detection of early carious lesions, AI supports the transition from reactive "drill and fill" dentistry to a

proactive, preventive model of care. Future developments should prioritize the standardization of training protocols and datasets to minimize false-positive findings in complex clinical situations.

Keywords: Artificial Intelligence, Incipient Caries, Preventive Dentistry, Diagnostic Imaging

BIOFILM CONTROL IN FIXED ORTHODONTIC PATIENTS: AIRFLOW VERSUS STANDARD PROFESSIONAL HYGIENE IN A LONGITUDINAL SPLIT-MOUTH STUDY

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Background: Fixed orthodontic treatment creates favorable conditions for dental biofilm retention, increasing the risk of plaque accumulation and gingival inflammation. In this context, the adjunctive efficacy of the Airflow technique remains insufficiently documented. **Objective:** The objective of this study was to evaluate, longitudinally and comparatively, the efficacy of the Airflow technique versus a standard professional hygiene protocol, using the modified Turesky-Quigley-Hein plaque index (TQHPI) and the Modified Bonded Bracket index (mBB), in patients undergoing bimaxillary fixed orthodontic treatment. **Material and methods:** Eight patients (n = 8) were included in a 12-month prospective study with an intraindividual split-mouth design. Assessments were performed at baseline (T0, pre-bonding) and at 3, 6, 9, and 12 months (T1-T4). Hemiarches were randomly assigned to either an extended protocol (supragingival scaling, professional brushing, and Airflow) or a standard protocol. Dental biofilm was disclosed using a staining agent and quantified using TQHPI (0-5 scale) and mBB (0-3 per site, expressed as a percentage). **Results :** Baseline values were comparable between groups (TQHPI: 1.14 ± 0.95 vs. 1.23 ± 1.07 ; mBB: $15.10\% \pm 13.90\%$ vs. $12.85\% \pm 9.32\%$). Following appliance placement, a marked increase in biofilm accumulation was observed at T1 (TQHPI: 2.86 ± 0.80 vs. 2.52 ± 1.00 ; mBB: $59.90\% \pm 19.29\%$ vs. $52.08\% \pm 24.57\%$), which persisted at elevated levels throughout T2-T3. No statistically significant differences were identified between protocols at any time point ($p > 0.05$). At T4, values were numerically lower in the Airflow group (TQHPI: 2.73 ± 0.47 vs. 3.06 ± 0.39 ; mBB: $48.89\% \pm 29.65\%$ vs. $50.00\% \pm 20.01\%$). **Conclusions:** Fixed orthodontic treatment is associated with a rapid and persistent increase in dental biofilm, regardless of the professional hygiene protocol applied. The Airflow technique did not demonstrate statistical superiority over the standard protocol. In this context, the orthodontic appliance represents the dominant factor influencing biofilm dynamics, while the effectiveness of professional interventions remains limited in the absence of rigorous individual oral hygiene control. The numerical differences observed at 12 months suggest a subtle favorable clinical trend for Airflow, which requires validation in larger cohorts.

Keywords: Airflow; fixed orthodontic appliance; dental plaque; TQHPI; mBB index; split-mouth; professional oral hygiene

COMPARATIVE ANALYSIS OF OCCLUSAL CONTACTS OBTAINED BY INTRAORAL SCANNING AND THE OCCLUSENSE SYSTEM – IN VIVO STUDY

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Background: Occlusal analysis is an important step in oral rehabilitation and uses qualitative and quantitative methods. While qualitative methods are subjective, simple, and use articulating papers, quantitative methods provide objective, reproducible digital data on force distribution and sequence. Digital dentistry has continuously evolved over the past decade, expanding its applications. In prosthodontics, it is mainly used to capture digital impressions of the dental arches, but most intraoral scanners also feature integrated occlusal analysis. The gold standard for occlusal analysis is considered to be the T-scan, but in 2019, a new device, OccluSense, was introduced as a cost-effective, hybrid alternative to the T-Scan™. **Objective:** This study aims to verify the accuracy of occlusal contacts obtained via intraoral scanning and to compare them with those from the OccluSense system using digital image superimposition. **Material and methods:** Five healthy patients with no edentulous spaces, prosthetic reconstructions, or orthodontic appliances were scanned using two intraoral scanners (Medit i700 and Aoaralscan 3) and had occlusal registration performed with OccluSense. For each participant, five registrations were performed on each device. To assess differences between occlusal recordings obtained by scanning, the Medit Design application in the Medit i700 software was used. To compare recordings from the two scanners with those from the OccluSense system, MeshLab was used. **Results :** The results showed

a mean and median deviation of 0.004 and 0.009, respectively, indicating no systematic bias. Root Mean Square (0.14 mm) and standard deviation (0.139) demonstrate the scans' accuracy, and the absolute mean (0.096) indicates that the differences between registrations are within clinically acceptable ranges. Most deviations were within a narrow range from -0.126 to +0.160, and the comparative analysis did not reveal significant differences between scans obtained with different systems. **Conclusions:** Within the limits of the study, the results obtained show that intraoral scanning can be used to evaluate static occlusion, but to obtain additional information related to the distribution of occlusal forces, more advanced systems need to be used.

Keywords: Intraoral scanner, Occlusal contacts, Accuracy

CRANIOFACIAL MEASUREMENTS IN MANDIBULAR LATEROGNATHISM

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Background: Mandibular laterognathia is a form of endognathia, with a prevalence ranging between 3% and 5% in children and adolescents. Facial asymmetry has a multifactorial etiology and a major aesthetic impact, manifested by facial asymmetry visible both at rest and during facial movements (smiling, laughing, and phonation). Untreated functional types can lead to anatomical facial malformations that require surgical treatment.

Objective: The authors aimed to evaluate craniofacial changes on lateral cephalometric radiographs, as well as aspects of facial asymmetry, using anthropometric and radiological measurements performed before and after orthodontic treatment in a group of patients with laterognathism. **Material and methods:** The study was conducted on a sample of 35 patients (20 females and 15 males), aged between 12 and 18 years, presenting facial asymmetry. 11 linear and angular craniofacial parameters and 7 anthropological parameters were evaluated before treatment, one year after the initiation of orthodontic treatment, and at the end of treatment. A somatogram and a telerradiographic cephalogram were performed for each patient. Correlations were established between the planes and angles of the cranial base and the maxillomandibular structures. The patients were treated with functional and fixed orthodontic appliances, depending on age and on the type of laterognathia: functional or anatomical. **Results :** The correlations between craniofacial and anthropological parameters indicate the involvement of growth disorders in facial asymmetry, which also represent a predictive factor for the prognosis of the anomaly. All investigated linear maxillary parameters showed positive, statistically significant correlations with the length of the S-N plane and the S-Ba clivus. Some mandibular parameters - SNB, the Y-axis, and the height of the ascending mandibular ramus (Kdl-Go) - correlate with the sphenoidal angle (NSBa). However, for other parameters, such as the convexity angle (N-A-Pg) and the lower anterior facial height (Nsp-Go), no statistically significant correlations with the sphenoidal/foraminal angle were obtained. **Conclusions:** Craniofacial measurements play a particularly important role in the diagnosis and prognosis of mandibular laterognathia, as well as in the selection of the appropriate therapeutic approach. The length of the clivus (S-Ba) is one of the most important factors controlling the relationship between the cranial base and the relative position of the mandible.

Keywords: Mandibular laterognathia, Craniofacial measurements, Facial asymmetry, Cephalometric analysis

DIMENSIONAL STABILITY OF 3D PRINTED DENTAL MODELS USING DIFFERENT RESINS AND PRINTERS OVER TIME: AN IN VITRO STUDY

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Background: In recent years, three-dimensional (3D) printing has become increasingly used in dentistry for the fabrication of diagnostic and working models. Although this technology offers several advantages, questions remain regarding the dimensional accuracy and stability of printed models over time. Dimensional changes may occur during polymerization and due to the physical properties of the printing materials. **Objective:** This study aimed to evaluate the dimensional stability of dental models produced with two different 3D printers and two types of printing resins over 4 weeks. **Material and methods:** A master model with four metallic spherical reference markers arranged in a trapezoidal configuration at the premolar and molar areas was used as the reference. The exact distances between the markers were known and used as control values. The model was scanned and used to fabricate 20 printed models using two different printers and two types of resin. After printing and post-processing, the models were scanned with a laboratory scanner. The measurements were performed using GOM

Inspect software by determining the distances between the centers of the reference spheres. Measurements were taken immediately after printing, daily during the first week, and then at 2, 3, and 4 weeks. The dimensional differences compared with the reference model were calculated and statistically analyzed. **Results** : Dimensional changes were observed in all printed models over time ($p < 0.05$). Most of the changes occurred shortly after printing, during the first days, while smaller variations were recorded in the later evaluation periods. Differences in dimensional stability were also observed depending on the type of resin and the printer used. **Conclusions**: Within the limitations of this in vitro study, 3D-printed dental models exhibited measurable dimensional changes over time. The results suggest that both the printing material and the type of printer influence the dimensional stability of the models.

Keywords: 3D printing, dental models, dimensional stability, resin materials

EFFECT OF ENVIRONMENTAL TEMPERATURE ON DIGITAL COLOR DETERMINATION OF DENTAL MATERIALS: AN IN VITRO STUDY

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Background: Digital shade-matching devices are increasingly used in restorative dentistry because they provide objective and reproducible color measurements. Although the influence of lighting conditions has been widely investigated, the possible effect of ambient temperature on digital color determination has received little attention. **Objective:** The aim of this study was to evaluate the influence of environmental temperature on the color parameters of different dental materials measured using a spectrophotometer (VITA Easyshade) and a digital colorimeter (PCE-XXM30). **Material and methods:** Measurements were performed on ceramic, resin composite, and acrylic resin denture teeth. Room temperature was monitored throughout the entire experimental procedure, while lighting conditions were kept constant. For each temperature condition, five consecutive measurements were obtained using both devices (spectrophotometer and colorimeter). The CIELAB color coordinates (L^* , a^* , b^*) were recorded and color differences (ΔE) between temperature conditions were calculated. The data were statistically analyzed using GraphPad Prism and applied tests were paired t-tests and two-way ANOVA with a significance level of $\alpha = 0.05$. **Results** : Changes in room temperature led to variations in the measured CIELAB parameters for all tested materials. Ceramic specimens showed the lowest mean ΔE values, indicating greater color stability related to room temperature. In contrast, acrylic resin demonstrated greater variability than ceramic and composite materials. However, most of the observed differences were not statistically significant ($p > 0.05$). **Conclusions**: Within the limitations of this study, small variations in color parameters were observed at different environmental temperatures. These findings suggest that environmental conditions, including temperature, may contribute to variability in digital shade measurements and should be considered when performing color determination.

Keywords: tooth shade, spectrophotometer, colorimeter

KNOWLEDGE LEVELS REGARDING ORAL HYGIENE MEASURES AMONG PRIMARY SCHOOL STUDENTS (GRADES I-IV) IN RURAL AREAS

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Background: The oral health of the paediatric population in rural areas represents a major public health challenge due to socio-economic discrepancies and limited access to dental services. **Objective:** The main objective of this study was to evaluate the oral hygiene habits of primary school children (grades I-IV) in rural environments. **Material and methods:** The study was conducted on a sample of primary school students using an anonymous questionnaire as the research instrument. Parameters such as brushing frequency, toothbrush wear, the use of auxiliary cleaning aids, and the presence of external stimuli during the hygiene ritual were evaluated. **Results** : Data analysis shows that only 30% of children report brushing for at least two minutes. The use of motivational stimuli (music, timers) led to an increase in brushing time for 30% of respondents, compared to the 70% who do not use such methods. Regarding technique, 70% of children predominantly clean the vestibular surfaces. Furthermore, 87% of students use toothbrushes older than 3 months. Regarding assisted oral hygiene, only 3% of children report receiving help, while the remaining 97% are neither supervised nor assisted by their parents. **Conclusions**: The analysis reveals increased attention given to visible areas, while oral dental surfaces are

frequently neglected. Oral hygiene in rural areas are characterized by premature child autonomy during teeth brushing. It was observed that the use of auditory or visual cues (music, timers) can stimulate an increase in brushing time toward the recommended 2-minute threshold.

Keywords: oral hygiene, rural areas, paediatric prevention, brushing technique

MARGINAL FIT OF ZIRCONIA CROWNS USING BOPT: A COMPARISON BETWEEN DIGITAL AND CONVENTIONAL WORKFLOWS – A CASE REPORT

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Background: One of the most discussed topics in dental prosthetics is the position and design of the finishing line in relation to the gingival tissues. In vertical preparation techniques, one of the main difficulties is correctly conveying to the technician information about the subgingival area and the exact position of the restoration margin. In recent years, the vertical preparation technique, especially the BOPT (Biologically Oriented Preparation Technique) proposed by Ignazio Loi, has become increasingly used. It allows remodeling of the gingival tissues through a provisional restoration, without the need for surgical intervention, thereby contributing to a better aesthetic result. **Objective:** This clinical case aimed to compare conventional and digital impressions workflow in the context of the BOPT technique, analyzing the marginal adaptation of zirconia crowns, each method's ability to correctly reproduce the subgingival area, and their impact on the aesthetic result. **Material and methods:** Four maxillary incisors were prepared using the BOPT technique, intending to remodel the gingival tissues and reposition the gingival margin without surgical intervention. After stabilization of the soft tissues, two types of impressions were made: conventional impression, using the one-step biphasic technique with addition silicone (dual viscosity), and digital impression using the intraoral scanner. Eight monolithic zirconia crowns were fabricated in the laboratory: four based on conventional impressions and four based on digital impressions. Marginal adaptation, especially in the subgingival area, was evaluated using the PSI (Prosthetic Score Index). **Results :** Both methods demonstrated clinically appropriate marginal adaptation. The BOPT technique enabled favorable remodeling of the gingival tissues, with modification of the emergence profile and migration of the gingival margin. No significant differences were observed between the two impression types in subgingival area reproduction. **Conclusions:** Both conventional and digital flux can be successfully used in the fabrication of zirconia crowns through BOPT preparations, providing adequate marginal adaptation and stable aesthetic results. While digital flux offers benefits related to efficiency and reproducibility, the conventional method remains a safe and predictable option.

Keywords: BOPT, Vertical Preparation, Digital Workflow, Analogical Workflow, Emergency Profile

ORTHODONTIC-SURGICAL TREATMENT OF TRUE DIASTEMA BASED ON THE TIMING OF THE FRENECTOMY

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Background: Maxillary midline diastema represents a common dento-maxillary anomaly with major implications in both aesthetics and functionality. Etiologically, this anomaly is dominated by a low or hypertrophic labial frenum attachment, or the presence of a thick midline fibrous septum. Although current literature emphasizes the necessity of a frenectomy, controversies still exist regarding the optimal therapeutic sequence: performing the surgical intervention prior to orthodontic treatment versus performing it after closing the space. Current knowledge necessitates a rigorous comparative analysis of these protocols, with a strong emphasis on minimizing complications such as root resorptions and ensuring soft tissue health, alongside proper parallelism of the dental axes. **Objective:** The aim of this study is to evaluate the efficacy and feasibility of diastema therapy by comparatively analyzing the outcomes based on the timing of the frenectomy. **Material and methods:** The study was conducted on a sample of 12 patients (5 males and 7 females) diagnosed with diastema vera, all aged between 10-14 years. They were divided into two distinct study groups based on the timing of the surgical intervention on the frenum: Group A (6 patients) underwent orthodontic therapy followed by frenectomy, while Group B (6 patients) underwent frenectomy followed by orthodontic therapy. The surgical approach utilized was the Z-plasty technique. All patients had a comprehensive orthodontic record: panoramic radiographs to monitor the

degree of root resorption (by measuring root length), as well as intra and extra-oral photographs for the clinical assessment of the soft tissues and the interdental papilla. Additionally, the patients' periodontal health status and dental parameters were also evaluated **Results** : The outcome regarding dental aesthetics and periodontal tissue health were satisfactory in both groups. However, in Group B , where the frenectomy preceded the fixed orthodontic therapy, a slight loss of gingival attachment and mild apical root resorption were observed in two central incisors **Conclusions**: The ideal timing for a frenectomy is after the orthodontic space closure has been achieved. The timing must be correlated with the patient's facial growth pattern, anatomical particularities, as well as the presence of other anomalies, in order to guarantee long term-stability of the outcomes and optimal aesthetics of the soft tissues.

Keywords: frenectomy, midline diastema, orthodontic-surgical approach, true diastema

SINGLE MATERIAL, MULTIPLE CLINICAL INDICATIONS: A SYSTEMATIC REVIEW OF BIODENTINE

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Background: Biodentine represents a relatively recent generation of bioactive calcium silicate-based materials introduced as a dentin substitute, distinguished by its enhanced biological interaction with dental tissues and its expanding range of clinical applications in contemporary dentistry. **Objective:** The aim of this systematic review is to evaluate the clinical performance, success rates, and versatility of Biodentine across its different therapeutic indications in humans, in order to provide an evidence-based foundation for its use in daily clinical practice. **Material and methods:** A systematic literature search was conducted in PubMed, Scopus, Web of Science, and Cochrane Library for studies published up to December 2025. The search strategy used predefined keywords related to "Biodentine" and its clinical applications. Only original clinical studies conducted on human subjects were included, while in vitro studies, animal studies, case reports with limited follow-up, reviews, editorials, and studies without clearly defined clinical outcomes were considered excluding criterias. Two independent reviewers screened titles and abstracts, followed by full-text assessment of potentially eligible articles. Data extracted included study design, sample size, clinical indication, follow-up duration, and reported outcomes. **Results** : The initial database search identified 442 records. After removal of duplicates and screening of titles and abstracts, 96 articles were selected for full-text evaluation. Following application of the inclusion and exclusion criteria, 38 clinical studies involving human subjects were included in the final analysis. The selected studies comprised randomized controlled trials, prospective clinical studies, and retrospective investigations. Biodentine was reported in multiple clinical indications, including vital pulp therapy in primary and permanent teeth, apexification procedures, repair of root perforations, management of internal and external resorptions, retrograde filling in endodontic surgery, and restorative applications as a dentin substitute. Most studies demonstrated favorable clinical and radiographic outcomes, with high success rates in pulp vitality preservation, periapical healing, and sealing performance. Follow-up periods ranged from six months to five years. **Conclusions:** Current clinical evidence supports Biodentine as a versatile bioactive material with multiple therapeutic indications in dentistry. Although reported outcomes are generally favorable, further well-designed long-term clinical trials are required to strengthen the level of evidence and support standardized clinical guidelines.

Keywords: Biodentine, Deep caries, Root resorption

THE ORAL–GUT MICROBIOME AXIS AND ITS IMPLICATIONS FOR SYSTEMIC INFLAMMATION

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Background: The oral microbiome is essential for maintaining local homeostasis, and its dysbiosis is implicated in periodontal disease. Recent studies suggest a link between the oral and gut microbiomes, contributing to systemic inflammation and the development of chronic diseases. **Objective:** To analyze the pathophysiological mechanisms involved in the interaction between the oral and intestinal microbiomes and to assess their clinical relevance for dentistry. **Material and methods:** A narrative review of the scientific literature published in international databases (PubMed, Scopus, Web of Science) was conducted. Review articles, meta-analyses, and

experimental studies published in the last 10 years were included, using keywords such as "oral microbiome," "gut microbiome," "periodontitis," and "systemic inflammation." Relevant studies describing the mechanisms of dysbiosis and systemic impact were selected. **Results :** The literature highlights that oral dysbiosis leads to an increase in pathogenic bacteria and the production of inflammatory mediators. Bacterial translocation and salivary ingestion contribute to changes in the gut microbiome. These processes are associated with the activation of the systemic immune response and elevated levels of inflammatory markers. Furthermore, the involvement of these mechanisms in conditions such as inflammatory bowel disease and metabolic syndrome has been demonstrated. **Conclusions:** The oral-gut microbiome axis represents a key pathophysiological mechanism linking oral and systemic health. Understanding this interaction can contribute to the development of integrated therapeutic strategies in dentistry that have an impact on the prevention of systemic diseases.

Keywords: oral microbiome, gut microbiome, periodontitis, systemic inflammation

PHARMACY

A REVIEW ON MEDICINAL PLANTS USED IN VETERINARY MEDICINE ACROSS THE GLOBE

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Background: It is known that medicinal plants are the backbone of modern medicine, and throughout history they were used to treat illnesses or small injuries involving physical trauma, the veterinary field being often regarded as an expensive last resort for cattle and pets, people from remote areas such as towns and villages, have found an alternative solution by using plants for treating ailments and common diseases in farm or domestic animals. **Objective:** The objective of this review is to bring awareness of undocumented folk medicine and a renewed perspective on veterinary sciences. **Material and methods:** This review is based upon 40 scientific articles documented in different parts of the world, in which farmers and veterinarians were interviewed through different methods about their cattle care practice as well as pet care with the use of medicinal plants found in the natural flora and cultivated in personal gardens. **Results :** It was reported that the most common used plant families were Fabaceae, Euphorbiaceae, Rubiaceae and Asteraceae with applications in post-partum complications, small wounds, cuts and blackleg, a bacterial disease, affecting cattle animals younger than 2 years old, caught by ingesting the spores or wound exposure. **Conclusions:** More in-depth research must be done to confirm the reported uses, and this marks a renewed beginning of using more natural remedies, as other past attempts were made to document the ethnoveterinary use for domestic animals for prophylaxis, curing, and healing common diseases and wounds.

Keywords: Ethnoveterinary medicine, Medicinal plants, Veterinary medicine

ACUTE BEHAVIORAL EFFECTS OF HIGH-DOSE MODAFINIL AND ITS MODULATION BY CANNABIDIOL IN FEMALE WISTAR RATS

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Background: Modafinil, a molecule originally developed for the treatment of narcolepsy, is also prescribed off-label for ADHD. Additionally, it is used off-label as a cognitive enhancer by students during examination periods, owing to its purported ability to increase alertness and improve concentration. **Objective:** The present study investigated the behavioral effects of acute administration (each rat received the dose orally in the morning, between 8 and 12 a.m.) of modafinil, alone and in combination with cannabidiol, in female rats. **Material and methods:** Twenty-four female Wistar rats, 5 months old, were randomly divided into two groups: Modafinil group (n = 12), which received modafinil (100 mg/kg) and Modafinil + CBD group (n = 12), which received modafinil (100 mg/kg) and cannabidiol (10 mg/kg). Behavioral evaluation comprised three tests on separate occasions, with a one-week interval between sessions: Open Field, Y-maze, and Elevated Plus Maze tests. All three tests were conducted twice: once under baseline condition (without administration) and once after the oral drug administration. **Results :** Behavioral testing was employed to assess the potential impact of high doses of modafinil on behavior. Modafinil group displayed increased alertness and signs of hypervigilance. A significance level of $p < 0.05$ was considered significant. **Conclusions:** The findings of the present study suggest that CBD may represent a potential therapeutic agent for mitigating the behavioral side effects associated with modafinil.

Keywords: modafinil, cannabidiol, behavior, female

DEVELOPMENT OF SEMISOLID FORMULATIONS LOADED WITH INDOMETHACIN

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Background: Indomethacin (IND) is a widely used NSAID for pain and inflammation in musculoskeletal conditions. Topical application decreases systemic side effects and offers local benefits. Bigels are biphasic systems containing hydrophilic and lipophilic components offering improved drug stability, dispersion, controlled release, and skin permeability, thereby boosting local anti-inflammatory effects. **Objective:** This study aimed to develop

and carry out a pharmacotechnical analysis of semi-solid bigel formulations containing indomethacin, assessing their potential for topical application. **Material and methods:** The gel systems were prepared by combining a 75% Carbopol hydrogel with a 25% oleogel composed of beeswax and sunflower oil, using either a conventional (BINDM) or an automatic (Unguator®) method (BINDU). Cholesterol was used as the emulsifier. 1% (w/w) IND was added to the fatty phase due to its lipophilicity. Quality was assessed through pharmacotechnical tests (spreadability, consistency and rheological examination), UV-Vis spectrophotometry (IND assay), and HPLC to measure IND released during the Franz-cell diffusion test. **Results :** During preformulation, two bigels were tested: 50:50 and 75:25 hydrogel-oleogel ratios. The 75:25 ratio was preferred for its better skin-sensory effect. Penetrometric results show the formulation method influences system consistency. The automatic method produced a firmer, more compact bigel with slightly lower penetration capacity (5.35 mm) than the one observed for the manually prepared bigel (5.8 mm). Extensometry tests showed favourable spreadability for topical use in both formulations: 1557.1 mm² for BINDM and 1354 mm² for BINDU at the same weight. While BINDM had a softer texture, BINDU was firmer. Rheological analysis reveals pseudoplastic and thixotropic rheograms for both gels, facilitating skin application. The automatic method proved slightly more stable than the conventional method. Linearity and selectivity tests demonstrated excellent results for both analytical methods used in this study. The active ingredient assay met pharmacopeial standards ($\pm 15\%$ of declared amount). Controlled release was observed in both bigels; however, the concentration of active ingredient released after 180 minutes was higher for BINDM than BINDU, a difference attributable to its more compact structure, which slows diffusion. **Conclusions:** The study shows that bigel systems are a modern, effective method for topical delivery of IND. By combining a hydrogel's structure with that of an organogel, this popular anti-inflammatory has been successfully integrated into an innovative pharmaceutical formulation that provides effective delivery and simpler skin application.

Keywords: Indomethacin, semisolid formulations, bigels, analytical evaluation

FORMULATION AND EVALUATION OF DROTAVERINE ORODISPERSIBLE FILMS AS AN ALTERNATIVE FOR NONCOMPLIANT PATIENTS

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Background: Orodispersible films, characterized by their rapid disintegration in the oral cavity, are among the most well-tolerated pharmaceutical dosage forms, offering an effective alternative to conventional tablets, especially for patients suffering from dysphagia or neurological problems. Drotaverine hydrochloride (DRV), a musclotropic antispasmodic, induces smooth muscle relaxation and is often used to treat irritable bowel syndrome, dysmenorrhea, and intestinal, biliary, or ureteral colic. **Objective:** The aim of the present study was to develop orodispersible film formulations based on hydroxypropyl methylcellulose (HPMC E5 and E15) and polyvinylpyrrolidone (PVP)s, with a DRV content of 0.173 mg/cm². **Material and methods:** Using the solvent evaporation technique, four polymeric film formulations were prepared, varying in the type and concentrations of film forming agents: F1 (10 % HPMC E5 and 2 % PVP), F2 (12 % HPMC E5 and 2.4 % PVP), F3 (10 % HPMC E15 and 2 % PVP), and F4 (12 % HPMC E15 and 2.4 % PVP). The orodispersible films were evaluated in terms of uniformity of mass, thickness, folding endurance, disintegration time, DRV content, tensile strength, adhesiveness, and drug release profile. **Results :** The mass of the orodispersible films varied between 2.63 $\pm$ 0.101 mg and 2.93 $\pm$ 0.497 mg, and thickness values between 0.27 $\pm$ 0.022 mm and 0.33 $\pm$ 0.048 mm. Formulations F3 and F4, prepared with HPMC E15, withstood 150-foldings without film cracking, compared to formulations F1 and F2, which failed after 3-8 foldings. All the formulations developed exhibited disintegration times of less than 180 seconds. The DRV content determined from films with a surface area of 1 cm² was within the limits provided by the regulations in force. Tensile strength testing revealed maximum tensile force values ranging from 7.58 N to 37.80 N with elongations of 3.33% (F1), 14.28% (F2), 42.85% (F3), and 63.63% (F4). In the adhesion test, maximum peel forces ranged from 0.078 N (F1) to 0.159 N (F4). The in vitro release study showed the highest DRV release for formulation F1 (172.50 $\pm$ 0.45 μ g/cm²). **Conclusions:** Based on the conducted research, it was demonstrated that DRV can be incorporated into orodispersible films, ensuring the desired therapeutic efficacy for patients. Furthermore, the analyzed results indicate that the type and amount of excipients influence the performance of the orodispersible film formulation.

Keywords: Drotaverine, Orodispersible films, HPMC, PVP

FROM BIOMARKERS TO BEDSIDE: THE ROLE OF MEDICAL AFFAIRS IN BREAST CANCER PRECISION ONCOLOGY

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Background: Precision oncology currently relies on biomarkers and next-generation sequencing tests and requires increasingly personalized, real-time therapeutic decisions. However, its integration into clinical practice is advancing more slowly than scientific progress because it makes patient management more complex. In this context, Medical Affairs, defined here as the function that supports the link between scientific evidence and clinical practice, acts as an interface between science and practice by sharing scientific data with healthcare professionals, including new clinical data, new indications, developments in biomarkers, and the results of studies and real-world data. It also supports understanding of biomarkers, facilitates scientific exchanges between healthcare professionals and research stakeholders, and enables the identification of unmet needs while contributing to the integration of innovations. This role is particularly relevant in breast cancer, which is among the most common cancers in women, with around 2.3 million new cases and 670,000 deaths worldwide in 2022, and in which biomarkers and molecular profiles are playing an increasingly important role, despite inequalities in access and difficulties in implementation. Thus, as oncology becomes more precise and complex, Medical Affairs appears increasingly useful for integrating it into clinical practice. **Objective:** To explore how Medical Affairs may contribute to the integration of precision oncology in breast cancer management. **Material and methods:** A scientific literature analysis was conducted using databases such as PubMed, ScienceDirect, Scopus, and Google Scholar. The analysis focused on several articles published between January 2021 and March 2026. **Results :** A total of 20 references were identified, of which 15 articles were retained for analysis based on their relevance to the topic. The collected data show that Medical Affairs may support the integration of precision oncology into the treatment of breast cancer, not only through scientific communication with healthcare professionals, but also by supporting biomarker-guided therapeutic strategies and identifying unmet needs related to implementation and patient access. In one study, 51% of oncologists reported difficulty interpreting next-generation sequencing results, while 20% reported rarely using them in their therapeutic decisions. In another article, treatment based on molecular results was implemented in 44.4% of patients discussed in a molecular tumor board. Another study showed that among patients who had undergone an NGS test, treatment was adjusted in 22.2% of cases. **Conclusions:** At the core of the analyzed data, Medical Affairs appears to play a role in integrating precision oncology into breast cancer, thereby facilitating the transition from complex molecular knowledge to a more accessible, useful clinical application for patients.

Keywords: Breast Cancer, Medical Affairs, Biomarkers, Precision oncology

IMPACT OF FLUOROQUINOLONES ON PLANT SYSTEMS: EVALUATING PHYTOTOXICITY IN AQUATIC AND TERRESTRIAL SPECIES

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Introduction: The worldwide rise in antibiotic use has become a significant environmental and public health issue. Fluoroquinolones (FQs), the third-largest group of antibiotics, are widely prescribed because of their broad-spectrum effectiveness and low allergenic potential. They target essential enzymes like DNA gyrase and topoisomerase IV, which are vital for DNA unwinding during transcription. However, increasing evidence indicates that FQs are frequently detected in both aquatic and terrestrial environments, including plant systems, where they can produce phytotoxic effects. Their distribution within plant tissues typically follows the pattern root > stem > leaf, showing a tendency to accumulate in roots. The accumulation of fluoroquinolones in plants may contribute to antibiotic resistance in soil microbes, leading to the emergence of multidrug-resistant bacteria and posing a serious risk to human health. **Case Report:** This study aims to evaluate the phytotoxic effects of fluoroquinolones on aquatic and terrestrial plants by analyzing representative species and reviewing the effects of different compounds in the current scientific literature. **Discussions :** The reviewed literature indicates that fluoroquinolones (FQs) are commonly found in soils and aquatic environments due to their persistence and resistance to biodegradation. In aquatic plants, low concentrations stimulated growth, whereas higher concentrations caused oxidative stress,

decreased photosynthetic efficiency, and altered antioxidant responses, as observed in *Gracilariopsis heteroclada*, *Hydrilla verticillata*, *Lemna minor*, and *Lemna gibba*. In terrestrial species, including *Lactuca sativa* and *Brassica parachinensis*, FQs affected germination, root development, and photosynthetic pigments, with phytotoxicity depending on concentration and plant-specific accumulation capacity. **Conclusions:** Fluoroquinolones are persistent environmental contaminants that exert concentration-dependent phytotoxic effects on both aquatic and terrestrial plants. While low concentrations may stimulate growth or activate antioxidant defenses, higher levels cause oxidative stress, impair photosynthesis, inhibit growth, and disrupt metabolic pathways. Beyond direct plant toxicity, FQs contribute to the spread of antibiotic resistance in environmental microbial communities, posing ecological and public health risks. However, some plant species, especially submerged macrophytes, show tolerance and significant remediation potential. Therefore, fluoroquinolones present both an environmental threat and an opportunity for sustainable mitigation strategies, including phytoremediation and improved antibiotic management practices.

Keywords: fluoroquinolones, ciprofloxacin, phytotoxicity, absorption

NOSOCOMIAL INFECTIONS WITH *CLOSTRIDIODES DIFFICILE*: PATHOGENIC MECHANISMS, HOSPITAL RISK FACTORS AND CURRENT THERAPEUTIC IMPLICATIONS

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Background: Nosocomial infections with *Clostridioides difficile* (CD) represent a major health problem in the hospital environment, being the main cause of antibiotic-associated diarrhea and pseudomembranous colitis. It is a Gram-positive, anaerobic, spore-forming bacterium. The virulence of the pathogen is favored by disruption of the intestinal microbiota. It produces the toxins A (enterotoxin) and B (cytotoxin), which are responsible for initiating the inflammatory cascade. **Objective:** The role of this study is to analyze the pathophysiological mechanism of infection with CD, identify the major risk factors associated with hospitalization, and evaluate the current epidemiological profile. The paper synthesizes therapeutic algorithms and methods for prevention documented in recent clinical studies. **Material and methods:** A narrative synthesis of the scientific literature was conducted by querying the PubMed biomedical database, using mainly review articles and clinical studies published between 2020 and 2025. The search included terms such as *Clostridioides difficile*, *nosocomial infection*, *antibiotic-associated diarrhea* and *CD toxins*. The selection of studies was focused on scientific relevance, the actuality of the reported data, and their impact in outlining the pathogenicity, epidemiological, and clinical features of the infection. **Results :** The literature indicates that the use of broad-spectrum antibiotics is the main factor of infection, by disrupting the intestinal microbiota and favoring the proliferation of CD. The virulence of the microorganism is mainly caused by the toxins that induce local cellular lysis, triggering an intense inflammatory response. Clinical manifestations of the infection begin with diarrhea, abdominal cramps, and fever. In the absence of adequate therapeutic management, pseudomembranous colitis and toxic megacolon can occur. Among the frequently identified risk factors are recent antibiotic therapy, long-term hospitalization, advanced age, and the presence of some severe comorbidities. The reviewed studies highlight the fact that the spread of the pathogen is stimulated by the resistance of bacterial spores on surfaces in the hospital environment, contaminated medical devices, and indirect contact through the hands of healthcare professionals. Current treatment includes the use of vancomycin or fidaxomicin and fecal microbiota transplantation (FMT) to restore the intestinal flora in recurrent cases. **Conclusions:** The infection with CD highlights the result of a multifactorial interdependence between the pathogen, the intestinal microbiota, and the specific parameters of the hospital setting. Furthermore, controlling intestinal dysbiosis during antibiotic therapy is essential, and strict hygiene practices among healthcare workers is mandatory.

Keywords: *Clostridioides difficile*, nosocomial transmission, toxin A and B, fecal microbiota transplantation

PERCEPTION OF PATIENTS UNDERGOING NOAC/DOAC TREATMENT ON THE USE OF DIETARY SUPPLEMENTS

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Background: DOAC are widely used in the prevention and treatment of thromboembolic events due to their

predictable pharmacokinetic profile and reduced bleeding risk compared to vitamin K antagonists. However, concomitant use of dietary supplements may influence the safety and efficacy of anticoagulant therapy. Certain products such as Ginkgo biloba, Garlic, or Omega-3 fatty acids may increase the bleeding risk by an additive pharmacodynamic mechanism, increasing the risk of bleeding, while herbs such as St. John's wort (*Hypericum Perforatum*) may reduce the plasma concentration of some direct oral anticoagulants by inducing CYP3A4 enzymes and P-glycoprotein, increasing the thrombotic risk **Objective:** The study aims to assess the level of information of patients undergoing treatment with DOACs, identify patterns of use of dietary supplements and analyze the perception of the risk associated with concomitant administration **Material and methods:** A cross-sectional descriptive observational study is currently being conducted on 100 adult patients treated with dabigatran, rivaroxaban, apixaban, or edoxaban. Data are being collected through an anonymous self-administered questionnaire administered in a community pharmacy. The research instrument investigates socio-demographic characteristics, anticoagulant therapy, the use of dietary supplements, and the level of awareness regarding potential interactions. By addressing this topic, the study aims to highlight the importance of pharmaceutical counseling and therapeutic education in preventing clinically relevant interactions **Results :** Currently, the data collection process is still ongoing, and the results presented represent preliminary observations based on the questionnaires completed so far. Initial analysis suggests that a significant proportion of patients treated with direct oral anticoagulants use concomitant dietary supplements. The most frequently reported are Vitamin D3 and calcium followed by Omega-3 fatty acids; some respondents also mentioned the use of herbal products such as Garlic and Ginkgo biloba that may interact with anticoagulant therapy. Preliminary data also indicates that some patients use supplements without the recommendation of a health professional. The final results of the study will allow a more detailed assessment of these usage patterns **Conclusions:** The use of dietary supplements among patients treated with DOACs is common, and the level of awareness regarding potential risks is insufficient. Strengthening the role of the pharmacist in counseling patients is essential to prevent clinically relevant interactions and optimize the safety of anticoagulant treatment

Keywords: direct oral anticoagulants, dietary supplements, drug interactions, pharmaceutical counseling

PHYTOCHEMICAL COMPOSITION AND ANTIOXIDANT ACTIVITY OF TRIBULUS TERRESTRIS EXTRACTS

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Background: *Tribulus terrestris* (TT) is a plant widely distributed across continents, usually found in arid climates with sandy soils. Compounds found in *Tribulus* extracts such as steroidal saponins, flavonoids, tannins, terpenoids, polyphenol carboxylic acids, and alkaloids have various pharmacological action. The polyphenols and flavonoids contained contribute to the antioxidant and anti-inflammatory properties. The composition of TT extracts depends on various factors such as the origin of the species, extraction method and the organ used for extraction. Supplements that contain TT are said to have numerous health benefits such as reducing elevated blood sugar or improving certain conditions like erectile dysfunction and libido disorders in both males and females. **Objective:** This present project aims to analyze the active compounds found in the aerial parts, fruits and roots of *Tribulus terrestris*. **Material and methods:** Samples of *Tribulus terrestris* collected from Greece were separated and extracted from different organs: aerial parts, fruits and roots. Total polyphenols and flavonoid content were determined using spectrophotometric methods. Total polyphenol content was determined using the Folin-Ciocalteu method, and total flavonoids by the AlCl₃ colorimetric method. The antioxidant capacity was assessed by DPPH (2,2-diphenyl-1-picryl-hydrazyl-hydrate), ABTS (2,2'-azino-bis(3-ethylbenzothiazoline-6-sulfonic acid) and FRAP (FeCl₃·6H₂O solution and FeSO₄·7H₂O solution) methods. **Results :** Quantitative analysis of total polyphenols and flavonoids revealed that the highest concentrations of bioactive compounds were found in the aerial parts (leaves and stems), followed by fruits, with the lowest levels detected in roots. In the DPPH and FRAP assay, extracts from the aerial parts exhibited the strongest antioxidant activity. Furthermore, fruit extracts showed significantly higher antioxidant capacity compared to root extracts ($p < 0.05$). The ABTS assay confirmed the superior antioxidant potential of the aerial parts, while no statistically significant differences were observed between fruits and roots. **Conclusions:** The results indicate that the aerial parts of *Tribulus terrestris* represent the richest source of polyphenols and flavonoids. Also, DPPH, ABTS and FRAP assays confirm the superior activity of the aerial part extracts compared to fruits and roots.

Keywords: *Tribulus terrestris*, total polyphenols, flavonoids, antioxidant activity

POLYMORPHISMS IN GASTRIC CANCER

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Background: Gastric cancer has a poor prognosis, and intratumoral heterogeneity may influence disease progression and biomarker interpretation. Integrating histopathological, molecular, and immunohistochemical data can improve tumour characterisation. **Objective:** To characterise the clinicopathological and molecular profile of a cohort of patients with gastric adenocarcinoma, with a focus on histologic grade, tumour location, microsatellite status, BRAF/KRAS mutations, and the expression of tumour heterogeneity markers (E-cadherin, beta-catenin, Maspin, p53, HER2). **Material and methods:** The study was conducted between April and June 2026. A total of 55 retrospectively analysed cases of gastric cancer investigated in a tertiary centre were included, with available clinical, histological, and immunohistochemical data. Patient age ranged from 47 to 89 years. Recorded variables included sex, tumour location, dimensions, histologic grade, mucinous component, molecular/EMT subtype, MMR markers, and biomarkers of interest. To assess spatial heterogeneity, marker expression was compared between the tumour centre and the invasive front. Inferential statistical analysis is still in progress; this abstract presents only preliminary descriptive results. **Results :** The cohort predominantly included male patients (39/55; 70.9%), with a mean age of 69.1 years. At the last follow-up, 34/55 patients (61.8%) were alive. Histologically, G3 tumours were the most frequent (27/55; 49.1%), followed by G1 (15/55; 27.3%) and G2 (8/55; 14.5%, including one early gastric cancer). The most common tumour location was distal/antral (28/54; 51.9%), followed by proximal/cardia (15/54; 27.8%) and corpus (11/54; 20.4%). A mucinous component was identified in 15/51 cases (29.4%), including two pure mucinous adenocarcinomas. Among tested cases, BRAF wild-type was found in 37/47 (78.7%), and KRAS wild-type in 40/50 (80.0%), with KRAS mutations being rare. Microsatellite status showed a predominance of MSS (39/46; 84.8%), with 6 MSI L cases and one MSI H case. HER2 3+ expression was observed in 5/44 evaluable cases (11.4%). The paired centre/invasive front analysis suggested low heterogeneity for E-cadherin and Maspin, but discordant beta-catenin expression in 3/39 evaluable cases (7.7%). **Conclusions:** These preliminary results describe a profile dominated by older male patients, with frequently poorly differentiated tumours located distally. The predominance of the MSS phenotype and the low frequency of BRAF/KRAS mutations support the usefulness of a multimarker approach in the biological characterisation of gastric cancer. Comparative assessment between the tumour centre and the invasive front may provide relevant information on tumour heterogeneity. Completion of the statistical analysis will allow validation of associations with prognosis.

Keywords: gastric cancer, intratumoral heterogeneity, biomarkers, microsatellite instability.

SELF-MEDICATION WITH ANTIBIOTICS IN ROMANIA: A CROSS-SECTIONAL STUDY

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Background: Self-medication with antibiotics represents a persistent public health concern, contributing to inappropriate antimicrobial use and the acceleration of antimicrobial resistance. In Romania, despite regulatory efforts aimed at restricting access to antibiotics without prescription, recent research indicates ongoing misconceptions and suboptimal behaviours among the population. Understanding how knowledge, attitudes, and sociodemographic factors shape antibiotic-use practices is essential for developing effective educational strategies and informing policies designed to reduce misuse and protect public health. **Objective:** This study investigates the prevalence of antibiotic self-medication among adults in Romania and explores the demographic, cognitive, attitudinal, and behavioural determinants associated with this practice. **Material and methods:** An observational, cross-sectional study was conducted using a validated questionnaire distributed both online (via Google Forms and social media) and in physical format between June 2024 and September 2025. The instrument, developed through a literature review and expert evaluation, included 10 demographic items and 28 specific items. The non-probabilistic sample included 465 participants aged 18 and above. The questionnaire assessed knowledge, attitudes, information sources, and behaviours related to antibiotic use. Statistical analyses (descriptive statistics, χ^2 tests, ANOVA, Mann-Whitney, and Spearman correlations) were performed using Jamovi software and Google Sheets. **Results :** Most respondents were female (73.12%), young adults aged 18-24 years (46.88%), and from urban areas (69.89%). The following results were obtained: 96.10% of respondents reported using antibiotics as

recommended by a physician, and 97.20% stated they obtained antibiotics by prescription. However, 7.70% of respondents acknowledged using antibiotics without a prescription, while 7.10% of respondents used leftover antibiotics from previous treatments. Knowledge about antibiotics was moderate, with persistent misconceptions regarding indications and treatment duration. Education level and age were significantly associated with self-medication: individuals with medium-level education and those aged 18-24 demonstrated a higher tendency toward self-medication ($p < 0.05$). The primary sources of information were physicians (91.60%) and pharmacists (68.20%). More than half of the respondents (54.00%) expressed the need for additional information about antibiotics. **Conclusions:** Although the tendency to self-medicate tend to decrease, antibiotic self-medication remains present in the Romanian population, which may be related to the insufficient knowledge and established habits. The obtained results highlight the importance of educational interventions, proactive counselling by healthcare professionals, and reinforcement of regulatory policies to reduce inappropriate antibiotic use and mitigate antimicrobial resistance.

Keywords: self-medication, antibiotics, antimicrobial resistance, health behaviour

SIMULTANEOUS DETERMINATION OF DAPAGLIFLOZIN AND METFORMIN IN PHARMACEUTICAL FORMULATIONS USING MICELLAR ELECTROKINETIC CHROMATOGRAPHY

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Background: Fixed-dose combinations of antidiabetic agents with complementary mechanisms are widely used in the modern treatment of type 2 diabetes mellitus to improve glycemic control and simplify therapy. One such combination includes dapagliflozin (DAPA), a sodium-glucose cotransporter-2 (SGLT-2) inhibitor, and metformin (MET), a biguanide antidiabetic agent that reduces hepatic glucose production and improves insulin sensitivity. Reliable analytical methods are therefore required for the quality control and accurate dosage verification of these formulations. Capillary electrophoresis (CE) provides an efficient analytical method for the analysis of pharmaceuticals in fixed-dose combinations due to its high separation efficiency, short analysis time, and low consumption of reagents and organic solvents. **Objective:** The aim of this study was to develop and validate a rapid and efficient CE method for the simultaneous determination of DAPA and MET in fixed-dose formulations and to demonstrate its applicability for routine quality control. **Material and methods:** Due to the large differences in polarity between DAPA and MET, conventional capillary zone electrophoresis (CZE) did not provide adequate separation, whereas MEKC using sodium dodecyl sulfate (SDS) micelles enabled effective separation through differential partitioning of the analytes between the micellar and aqueous phases. A MEKC method was developed and optimized using a design-of-experiments (DoE) approach and subsequently validated according to standard analytical parameters. **Results :** The combination of preliminary OFAT (one-factor-at-a-time) screening and multivariate optimization using a Box-Behnken experimental design (BBD) enabled the identification of optimal electrophoretic conditions. Optimal separation was achieved using a 25 mM borax background electrolyte (pH 9.3) containing 38 mM SDS, applied voltage of 28 kV, capillary temperature of 25 °C, hydrodynamic injection 50 mbar/sec and UV detection at 210 nm. Under these conditions, DAPA and MET were baseline separated in less than 7 min, exhibiting good peak symmetry and stable current values. The method was validated in terms of accuracy, linearity, precision (repeatability and intermediate precision), and robustness, demonstrating satisfactory analytical performance for quantitative analysis. Application of the method to commercial pharmaceutical formulations confirmed its suitability for the quantitative determination of DAPA and MET in both single-component and fixed-dose combinations without interference from excipients. **Conclusions:** The optimized MEKC method offers a rapid and environmentally friendly approach for the simultaneous determination of DAPA and MET in fixed-dose formulations for routine pharmaceutical quality control.

Keywords: dapagliflozin, design of experiments, metformin, micellar electrokinetic chromatography

THE CLINICAL AND ECONOMIC BURDEN OF URINARY TRACT INFECTIONS IN HOSPITALIZED PATIENTS: IMPACT ON LENGTH OF STAY AND RESOURCE USE

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Background: Urinary tract infections (UTIs) are among the most prevalent healthcare-associated infections, significantly influencing patient outcomes and resource utilization. In specialized departments, the presence of a UTI can act as a complicating factor that extends the length of stay (LoS) and increases the pharmacological burden, though its economic impact may be perceived differently depending on the care setting. **Objective:** To quantify the impact of UTIs on LoS and different cost types in adult patients hospitalized in various high-complexity medical and surgical departments. **Material and methods:** We conducted a retrospective study on an anonymized database from a Romanian public hospital comprising patient episodes (PE) admitted between 1st of Jan and 31st of Dec 2024. The study included 9,801 adult (>18 y.o.) PE from 11 departments, namely: burns, cardiology, otolaryngology, nephrology, urology, gynecology, infectious diseases, diabetes, HIV/AIDS, general surgery, and orthopedics/traumatology. Of these, 779 patients had or developed a UTI. Subgroup analysis has been undertaken considering the following stratification: general ward (n = 8,833) and ICU (n = 968; 94 with UTI, 874 without UTI) PE. Statistical analysis has been performed using GraphPad Prism, utilizing Mann-Whitney and Kruskal-Wallis tests to compare LoS and drug- and total costs of the cases. **Results :** Patients with UTI admitted to general ward had significantly longer LoS than those without UTI (medians: 6 vs. 5 days for UTI and non-UTI respectively; $p < 0.0001$). In the ICU, the difference in LoS was not statistically significant, likely due to the high baseline clinical complexity and pre-existing comorbidities of critical patients. Regarding costs, medication expenses were significantly higher for PE with UTI (medians: 338 RON vs. 260RON; $p < 0.0001$). However, the total cost per case did not show a statistically significant difference, suggesting that fixed operational costs (ex.: staff, facilities, equipment, etc.) dilute the specific financial impact of increased pharmaceutical expenditure. **Conclusions:** While UTIs do not drastically alter the total cost per PE due to the high costs of specialized hospital departments, they are significant drivers of prolonged hospitalization and increased direct medication spending. Furthermore, the necessity for additional pharmacotherapy increases the risk of adverse drug reactions and complex interactions, reinforcing the importance of rigorous UTI prevention and management protocols.

Keywords: urinary tract infections, length of stay, healthcare costs, patient safety

THE ROLE OF COMMUNITY PHARMACIES AND PUBLIC BEHAVIOR IN PHARMACEUTICAL WASTE MANAGEMENT WITHIN MEDICINES POLICY IN THE CONTEXT OF THE ECOLOGICAL TRANSITION

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Background: Pharmaceutical waste poses a significant challenge to public health and the environment due to its toxic potential, persistence in the environment, and impact on ecosystems. At the European level, the way in which the *Waste Directive* is implemented varies significantly from country to country. Most countries collect expired medicines in pharmacies, while in Romania, starting in 2024, collection will be carried out at hospitals. Understanding how the population perceives and manages pharmaceutical waste is important for developing effective medicines policies. **Objective:** The primary objective of the study was to evaluate the perception and behaviour of the population in Romania regarding the disposal of expired medicines. A secondary objective was the analysis of European models of pharmaceutical waste management. The regulatory frameworks and collection models (community pharmacy versus healthcare facilities) in 19 European countries were analysed. **Material and methods:** A cross-sectional observational study was conducted, based on an online questionnaire, which received 408 responses. The survey assessed participants' knowledge and practices related to pharmaceutical waste disposal. The data were using JASP software (version 0.95.4). The Chi-square (χ^2) test was applied, with p-values and Cramer's V coefficient calculated. In addition, a literature review was carried out (PubMed, Scopus, Web of Science, ScienceDirect) to identify European collection models. Correct disposal was defined as returning medicines to a pharmacy or to an authorised collection point. **Results :** The literature analysis highlighted significant differences in legislation on pharmaceutical waste management at the European level, although in most cases collection is carried out through community pharmacies. In the analysed sample, the type of source of information on pharmaceutical waste was significantly associated with knowledge of the correct method of disposal ($\chi^2 = 71.88$; $p < 0.001$; $V = 0.420$). Furthermore, individuals who received information in pharmacies had a significantly higher probability of correctly disposing of expired medicines ($\chi^2 = 74.81$; $p < 0.001$; $V = 0.428$). **Conclusions:** A key factor in adopting the right behavior regarding the proper disposal of pharmaceutical waste (returning it to the nearest hospital unit, in accordance with Romanian legislation) is the information provided at community pharmacies. Education level and social background were not significantly associated with disposal

practices.

Keywords: pharmaceutical waste, public behavior, sustainability, ecological transition

TOXICOLOGICAL IMPLICATIONS OF DIETARY SUPPLEMENTS, MEDICINAL PLANTS, AND DRUGS USED IN WEIGHT LOSS REGIMENS

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Background: Dietary supplements are widely consumed worldwide, making their safety a priority on the public health agenda. While these products can offer benefits, inappropriate consumption without specialist medical advice can lead to significant health risks. Supplements used for weight loss are often perceived as attractive alternatives to conventional drug therapy due to their perceived low toxicity profile and high accessibility for the general population. **Objective:** This study evaluates respondents' attitudes toward the use of dietary supplements intended for weight loss. The primary objective is to analyze the impact of medicinal plants and supplements on users who resort to self-medication, tracking the correlation between consumer expectations and the actual results obtained from using these products. **Material and methods:** A cross-sectional study was conducted based on a validated questionnaire distributed to the general population. The study was approved by the Ethics Committee, and participation was voluntary and anonymous. Data analysis (descriptive and inferential) was performed to ensure participant anonymity. The methodology focused on collecting data regarding frequency of use, sources of purchase, and the incidence of adverse effects. **Results :** Preliminary results (data collection is ongoing) reveal increased vulnerability among young people, with 82.6% of respondents under the age of 25. Although 69.6% of participants acknowledge that "natural" products may pose risks, only 27.3% read the leaflet before use. Reported purchase sources include pharmacies (45%), health stores (45%), and online platforms (40%); the total percentage exceeds 100% as respondents could select multiple options. An adverse effect incidence of 28.6% was observed (including palpitations, hypertension, and dizziness), highlighting a discrepancy between commercial claims and actual toxicological risks. **Conclusions:** The consumption of herbal dietary supplements for weight loss is steadily increasing in Romania. The results highlight insufficient consumer information and a concerning trend toward self-medication. These findings suggest a need for more rigorous monitoring of these products and more effective consumer education regarding the potential toxicity of plant extracts.

Keywords: dietary supplements, weight loss, toxicological risk, obesity medication

VALORIZATION OF WINERY BY-PRODUCTS: PHYTOCHEMICAL ENHANCEMENT OF GRAPE POMACE EXTRACTS WITH POLYGONUM SP. EXTRACTS FOR BIOACTIVE APPLICATIONS

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Background: Agro-industrial residues generated during wine production, such as grape pomace, skins, and seeds, represent an abundant yet insufficiently exploited source of biologically active compounds. These products are rich in phenolic compounds, widely recognised for their antioxidant capacity and other biological effects. In this context, their phytochemical potential may be further enhanced through enrichment strategies involving plant species such as Polygonum sp, regarded as invasive species in Europe, known for their high polyphenol content. **Objective:** The present study aimed to comparatively characterize the phytochemical profile and to evaluate the in vitro biological activities of grape pomace and Polygonum extracts, and their combined formulations, with particular emphasis on identifying potential synergistic effects and their relevance for health-related and dermato-cosmetic applications. **Material and methods:** Extracts derived from vinification by-products (grape pomace) and from Polygonum sp. were provided by a specialized manufacturer. The study included grape pomace extracts, Polygonum sp. extracts, and combined formulations obtained by blending the two matrices in order to explore potential synergistic effects. Quantitative phytochemical analysis focused on total phenolic content, flavonoids, and anthocyanins, determined using spectrophotometric techniques. The antioxidant capacity of the extracts was assessed using three complementary assays: DPPH radical scavenging, ABTS radical cation decolorization, and ferric reducing antioxidant power (FRAP). In addition, biological activity was further explored by evaluating the inhibition of hyaluronidase activity. **Results :** The phytochemical analysis revealed that both grape pomace and

Polygonum cuspidatum extracts were rich in phenolic compounds, with notable differences in their compositional profiles. The combined formulations exhibited an overall increase in total phenolic content and flavonoid levels compared to individual extracts, suggesting a complementary enrichment effect. All samples demonstrated significant antioxidant activity across DPPH, ABTS, and FRAP assays, with the combined extracts showing significant enhanced radical scavenging capacity and reducing power ($p < 0.05$). Furthermore, the blended formulations displayed improved inhibitory effects on hyaluronidase activity. **Conclusions:** The results highlight the potential of vinification by-products as valuable sources of bioactive compounds and demonstrate that their combination with *Polygonum* extracts can enhance their biological efficacy. The observed improvements in antioxidant activity activities support the development of multifunctional bioactive systems based on agro-industrial residues and invasive species extracts. These findings underline the relevance of such formulations for sustainable applications in health-related and dermato-cosmetic fields.

Keywords: vinification residues, phenolic compounds, antioxidant assays, hyaluronidase inhibition

MILITARY MEDICINE

ATRIAL FIBRILLATION, LEFT VENTRICULAR REMODELING AND RISK OF VENTRICULAR ARRHYTHMIAS IN INTENSIVE CARDIAC CARE UNIT

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Background: Left ventricular (LV) remodeling and atrial fibrillation (AF) frequently accompany ventricular tachycardia (VT) in critically ill cardiac patients, yet their combined impact on ventricular arrhythmia severity and progression to malignant forms such as ventricular fibrillation (VF) in the intensive cardiac care unit (ICCU) remains insufficiently characterized. **Objective:** To investigate the association between LV remodeling, AF, and the severity of VT in patients with ventricular rhythm disturbances. **Material and methods:** We prospectively included 150 consecutive patients admitted to the ICCU with documented ventricular arrhythmias. Patients were divided into two groups according to the presence of AF at admission: Group 1, patients without AF (n = 82), and Group 2, patients with AF (n = 68). In each group, patients were further subdivided according to left ventricular ejection fraction (LVEF) into two categories: LVEF <40% and LVEF ≥40%. For all patients, clinical characteristics, electrocardiographic (ECG) and echocardiographic parameters were recorded. The incidence of non-sustained ventricular tachycardia (nsVT), sustained ventricular tachycardia (sVT) and VF was obtained for each patient. **Results :** Patients with AF had a significantly higher prevalence of advanced heart failure (New York Heart Association [NYHA] III-IV 45% vs. 20%, p<0.01), coronary artery disease (CAD) (70% vs. 50%, p<0.05) and recent acute myocardial infarction (AMI) (35% vs. 15%, p<0.05) compared with those without AF, indicating more advanced underlying disease in AF patients. Mean LVEF was markedly lower in AF patients (38% vs. 48%, p<0.01), consistent with LV remodeling. However, the presence of AF or LVEF <40% were not significantly associated with the incidence of nsVT or sVT (both comparisons p>0.05). In contrast, VF was significantly more frequent in patients with AF and LVEF <40% than in those in sinus rhythm and LVEF ≥40%. (25% vs. 7%, p<0.01), showing that concomitant AF and LVEF <40% confer a substantially higher risk of VF. **Conclusions:** The combination of AF and LVEF <40% identifies a subgroup at markedly higher risk of VF, underscoring the need for intensive monitoring, aggressive management of AF and LV dysfunction, and early optimization of guideline-directed medical therapy to improve hemodynamic stability and potentially reduce life threatening arrhythmic events in this population.

Keywords: Atrial fibrillation, Ventricular tachycardia, Left ventricular remodeling, Ventricular fibrillation

BIOMECHANICAL AND MICROSTRUCTURAL CHARACTERIZATION OF CAROTID ARTERY XENOGRAPTS: IMPLICATIONS FOR TISSUE-ENGINEERED VASCULAR GRAFT DEVELOPMENT

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Background: Multiple xenograft-derived biomaterials have been evaluated as scaffolds for tissue-engineered vascular grafts (TEVGs) in order to reproduce the architecture and biomechanical properties of native vessels. Despite these efforts, no optimal xenograft has yet been identified, underscoring the need for further investigation. **Objective:** The aim of this study is to evaluate the microstructural and biomechanical characteristics of carotid arteries obtained from different animal species (cattle, pigs, and sheep). **Material and methods:** Five tubular specimens were harvested from bovine, porcine, and ovine carotid arteries obtained from a local slaughterhouse. From each specimen, one sample was prepared for histological analysis and another for biomechanical characterization. The specimens were subjected to biomechanical testing until failure using a CellScale BioTester 5000 equipped with two 23 N actuators. Vessel wall thickness was measured using a digital thickness gauge (Mitutoyo 547-500S). **Results :** Regarding xenograft length, the bovine carotid artery (BCA) demonstrated a significantly greater length compared with both the porcine carotid artery (PCA) (p<0.0001) and the ovine carotid artery (OCA) (p<0.0001). A similar pattern was observed for arterial wall thickness, with BCA exhibiting greater thickness than the other xenografts. In terms of biomechanical properties, the PCA showed higher tensile strength (p<0.0001 vs. BCA and p=0.037 vs. OCA) and stiffness (for both p<0.0001) than both BCA and OCA. Microstructural analysis revealed a higher density of collagen fibers in the adventitia of the PCA compared with BCA and OCA. **Conclusions:** Carotid arteries from different animal species exhibit distinct structural and

biomechanical characteristics. The bovine carotid artery showed greater length and wall thickness, while the porcine carotid artery demonstrated superior tensile strength and stiffness, associated with a higher collagen fiber density. These findings highlight the complementary advantages of the xenografts and their potential relevance to the development of tissue-engineered vascular grafts. **Acknowledgements:** this work was supported by the "George Emil Palade" University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș, Research Grant number 170/2/09.01.2024.

Keywords: TEVG, Vascular Surgery, Xenografts, Biomechanical Properties

COFFEE, ALLY OR ENEMY?

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Background: Caffeine is the most popular psychoactive substance consumed worldwide, especially among young adults. In the specific context of military academies, where students face rigorous schedules and significant sleep deprivation, caffeine consumption becomes a critical tool for maintaining cognitive functioning and operational performance, such as simulator flight tasks. **Objective:** The main aspect of this study is to identify patterns of coffee consumption among military students and assess the physiological manifestations. This approach provides insight into their daily routines, motivational factors, academic performance, and, most importantly, the reasons behind their coffee consumption. In addition, the study examines the physiological effects of caffeine, with particular emphasis on its impact on health. Special attention is given to the potential negative effects of coffee consumption on the body, to highlight the possibility of reducing or eliminating it from their daily routine. **Material and methods:** To realize this study, we developed a questionnaire following coffee consumption patterns ("WHO?", "WHAT?", "WHY?", "WHERE?" and "WHEN?") for military students and we received 387 answers. **Results :** The study reveals that, while 62.16% report no noticeable negative effects, a significant minority suffers from cardiovascular issues: 20.81% experience palpitations or rapid heartbeats. Additionally, 17.57% report agitation, restlessness, or headaches. Most students (61.08%) claim their sleep is unaffected, but 26.22% admit to difficulty falling asleep if they drink coffee after 16:00. Also, the majority (78.9%) say coffee does not affect their meals, but 14.6% use coffee to replace breakfast or other meals. This is a concerning dietary trend, as using stimulants to suppress appetite can lead to nutritional deficiencies and reduced physical stamina in a high-activity military setting. **Conclusions:** The study reveals that coffee consumption is a normalized behavioural adaptation among military students, with 75.45% of the 387 respondents identifying as regular consumers. In the scientific literature, caffeine is associated with effects on the cardiovascular system, that is why some of the students report cardiovascular symptoms, such as palpitations or rapid heartbeat. Additionally, caffeine influences the nervous system, the symptoms can be agitation, restlessness or headaches. Otherwise, most respondents reported no noticeable effects and indicated that coffee contributes positively to their daily functioning.

Keywords: military students, coffee, health, risks

COST-EFFECTIVE ALLOCATION OF GLUCOSE MONITORING DEVICES

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Background: Diabetes mellitus involves high global costs and is associated with an increased risk of complications, which requires optimizing glycemic monitoring strategies. Modern technologies, such as CGM which means continuous glucose monitoring and FGM which indicates flash glucose monitoring, provide superior alternatives to traditional methods; however, their use must be adapted according to the cost-effectiveness ratio. **Objective:** The aim of this study is to perform an analysis, based on available data and economic studies, of a cost-effective allocation of CGM and FGM systems in patients with diabetes mellitus. **Material and methods:** This study is based on data from five meta-analyses and published economic models, evaluating clinical indicators such as HbA1c meaning glycated hemoglobin, hypoglycemia and hyperglycemia, as well as economic indicators including annual costs, ICER which indicates incremental cost-effectiveness ratio, and QALY which means quality-adjusted life year. **Results :** Studies show that CGM leads to a reduction in HbA1c of approximately 0.5-0.8% and a significant decrease in hypoglycemic episodes. It is associated with an ICER of 33,000-45,000 euros/QALY,

placing it within the accepted cost-effectiveness threshold in healthcare systems. The annual costs of CGM are estimated at 1,500-3,000 euros. FGM has lower annual costs, estimated at 800-1,000 euros, but demonstrates a more modest clinical effect, with an HbA1c reduction of approximately 0.3-0.5%. However, FGM use may reduce hospitalization costs, contributing to a favorable cost-benefit ratio in certain patient populations. **Conclusions:** The cost-effective allocation of CGM and FGM should be individualized. CGM is superior and economically justified in complex cases, while FGM represents an efficient and accessible alternative for stable patients. This stratified approach optimizes both clinical outcomes and healthcare system costs.

Keywords: CGM, FGM, ICER, QALY

ECHOES OF THE BATTLEFIELD: NEURO-PSYCHOLOGICAL RESTORATION AND THE PARADIGM SHIFT BEYOND OPIOID SEDATION IN THE MANAGEMENT OF PHANTOM LIMB PAIN

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Background: Phantom Limb Pain (PLP) affects up to 80% of amputees, representing not only an artifact of maladaptive neuroplasticity but also a complex interface between neurology and profound psychological trauma. Statistical data reveals that up to 11% of military personnel in theaters of operation suffer amputations, 88% of which are caused by high-energy explosions. Although current guidelines (2024-2026) have marginalized opioid therapy in favor of non-pharmacological methods, PLP remains a significant barrier to the rehabilitation of veterans with polytrauma. **Objective:** This paper provides a review of the diagnostic management framework of PLP within the context of diverse and complex therapeutic approaches. Furthermore, it aims to present an integrative neuro-psychological perspective on PLP, analyzing the involvement of psychological factors such as Post-Traumatic Stress Disorder (PTSD). **Material and methods:** The study utilizes a comparative analysis of current literature, contrasting first-line pharmacological therapy with emerging treatments such as Virtual Reality (VR), Mirror Therapy, Neuromodulation (Transcutaneous Electrical Nerve Stimulation - TENS), preventive surgical interventions (Targeted Muscle Reinnervation - TMR), and Cognitive Behavioral Therapy (CBT). These interventions aim to reverse somatosensory map disorganization and close maladaptive somatosensory neural loops. **Results :** Data indicates an "analgesic failure" in 56% of medically treated cases, where pain remains intolerable and is often associated with adverse effects such as dependency or impaired alertness. In contrast, visual feedback techniques, VR, TMR, TENS, and CBT have demonstrated superior results in PLP reduction, with response rates of up to 67% for TENS and a significantly reduced need for medication (43.8% vs. 84% in control groups). **Conclusions:** Emerging treatment methods provide a solid foundation for their integration as the "gold standard" in PLP therapy, particularly within military healthcare facilities. For service members, amputation carries profound emotional weight due to the nature of the trauma. Therefore, the recovery of military personnel with such polytrauma must be approached as an integrated physical and neuro-psychological process.

Keywords: Phantom Limb Pain,, Targeted Muscle Reinnervation,, Transcutaneous Electrical Nerve Stimulation,, Post-Traumatic Stress Disorder

EPIDEMIOLOGICAL AND DEMOGRAPHIC CHARACTERISTICS OF COLONIC ADENOMAS: A THREE-YEAR RETROSPECTIVE STUDY FROM A ROMANIAN HOSPITAL

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Background: Colonic adenomas are the benign neoplastic lesions of the colonic mucosa, characterized by dysplastic proliferation of the glandular epithelium, representing the primary precursors of colorectal cancer. In Romania, studies indicate that approximately 80-85% of colonic polyps identified via colonoscopy are adenomas. Colorectal cancer remains a leading cause of mortality (10% of the annual oncologic diagnosis), with more than 12000 new cases identified annually, highlighting the importance of screening, early detection and monitoring. **Objective:** This study's objective was to evaluate the epidemiological and demographic characteristics of colonic adenomas diagnosed between January 2023 and December 2025, with a focus on the age, sex, residence and diagnostic approach. **Material and methods:** We conducted a retrospective study including patients with

histological diagnosis of colonic adenomas registered within the Pathology Department of Mures Clinical Country Hospital between 2023 and 2025. A total number of 481 lesions were analysed. Inclusion criteria consisted of a positive diagnosis of colonic adenoma, while extra-colorectal lesions were excluded. **Results** : Male population was predominant, accounting for 302 cases (62,79%), compared to 179 females (37,21%) ($p < 0,0001$). Most of the patients resided in rural areas (66,04%) versus urban areas (33,96%) ($p < 0,0001$). The median age was 68 years (IQR 60-74), with urban patients tending to be slightly older than those from rural areas ($p = 0,0402$). The primary diagnostic procedure in 427 cases (88,77%) was the biopsy, whereas surgical procedures were performed in 54 cases (11,23%) ($p < 0,0001$). The distribution of the intervention type varied over the study period ($p = 0.0034$), with an increase of surgical procedures after 2023. In 2023, 93,44% of the lesions were diagnosed via biopsy, while 6,56% were obtained surgically. By 2025, the proportion of biopsies had decreased to 85,87%, and surgical specimens had risen to 14,13%. **Conclusions**: Our study has confirmed a predominance of male patients and rural residents among those diagnosed with colonic adenomas. The median age of 68 years has indicated that the lesions primarily affected the elderly population. While biopsy remained the main diagnostic approach, the increase in surgical cases after 2023 may reflect evolving clinical management, detection practices, or lesion complexity.

Keywords: colonic adenomas, epidemiological, demographic

FROM CIVIL TO MILITARY – A STUDY ON STUDENT’S ADAPTATION TO MILITARY LIFE

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Background: Young adults often choose to enter the military system by enrolling in military high schools or, at a later stage, in military academies. This decision is typically shaped by a combination of personal motivation, social influence, and perceived career stability. For many, the military represents not only a professional pathway but also a structured environment that promises discipline, identity, and a clear sense of purpose. **Objective:** The main objective of this study is to observe the process of adaptation to the system and identify their motivation and lifestyle changes. **Material and methods:** To realize this study, we developed a questionnaire following integration steps ("WHO?", "WHAT?", "WHY?," "WHERE?" and "WHEN?") for military students, and we received 113 answers. **Results** : The study indicates a balanced distribution of respondents 56,8% subjects from civilian, 43,2% from military high school. Personal motivation appears to be an important factor in choosing the military career, many respondents indicating that the decision was their own (50,5%). A major finding is the relatively rapid integration into the military environment (65,8%), facilitated by colleagues support (54,1%). The first difficulties were associated with adapting to the strict schedule (30,3%) and communicating with superiors (34,9%). However, 43.4% of participants reported that the adaptation process was easier than they had initially expected, and the stress experienced during the first months was largely overcome with the support of family and friends (54%). **Conclusions:** Military students get easily through the adaptation process and are mostly motivated by workplace stability (62,2%), pointing out that their life became more organised (58,2%). They also reported that military life enhanced their self-esteem (39.8%) and reinforced their previously established moral values (40,7%).

Keywords: military student, civil life, adaptation, development

FROM GOLDEN HOUR TO HOSPITAL SURVIVABILITY: A CROSS-CONFLICT STRUCTURED REVIEW OF HOW MODERN WARS RESHAPED MILITARY MEDICINE

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Background: Military medicine has traditionally focused on the rapid stabilization and evacuation of the individual casualty. Recent conflicts suggest that the dominant clinical problem now extends beyond trauma itself to include attacks on health care, degradation of hospital function, disrupted evacuation, and interruption of pharmaceutical supply chains. **Objective:** To compare selected modern conflicts in terms of their impact on trauma-system continuity, hospital survivability, and health-care delivery, and to assess whether the 2026 United States (U.S.)-Israeli-Iranian war shows early patterns concordant with these military-medical shifts. **Material and methods:** A cross-conflict-structured review was conducted using publicly available peer-reviewed studies and official health system reports. Four conflicts were selected a priori as military-medical inflection points: Iraq/Afghanistan,

northwest Syria, Ukraine, and the ongoing U.S.-Israeli-Iranian war. Variables of interest included transport time to definitive care, attacks on health care, hospital service disruption, and continuity of logistics. Quantitative pooling was not performed due to methodological heterogeneity; instead, effect estimates and descriptive metrics were synthesized comparatively. **Results** : In Iraq and Afghanistan, 87.3% of battlefield fatalities occurred before reaching a medical treatment facility; hemorrhage accounted for 90.9% of potentially survivable deaths. Implementation of the Golden Hour policy was associated with a reduction in median transport time from 90 to 43 minutes; the killed-in-action rate declined from 16.0% to 9.9%, and the case fatality rate from 13.7% to 7.6% (both $P < 0.001$). In northwest Syria, attacks on health facilities were associated with significant reductions in outpatient consultations (relative risk [RR] 0.49, 95% confidence interval [CI] 0.43-0.57), trauma consultations (RR 0.62, 95% CI 0.53-0.72), and facility births (RR 0.77, 95% CI 0.66-0.89). In Ukraine, a survey of 74 hospitals found reduced laboratory capacity during the war and documented supply challenges, laboratory kit shortages, and drug-delivery disruptions. Across contemporary conflicts, attacks on health care clustered most often in the first 2 months of conflict or major escalation. Early World Health Organization and wire-service reporting from the ongoing U.S.-Israeli-Iranian war documents attacks on health care, hospital evacuation, and disruption of pharmaceutical and cold-chain routes, consistent with prior patterns. **Conclusions**: Modern conflicts have shifted the central challenge of military medicine from rapid survival of casualties alone to the preservation of the treatment system itself. Hospital protection, continuity of trauma care, logistics resilience, and planning for delayed evacuation now represent core clinical and operational priorities. Early signals from the ongoing U.S.-Israeli-Iranian war appear concordant with this broader trajectory.

Keywords: military medicine, hospital survivability, trauma systems, prolonged field care

FROM SYSTEMIC INFLAMMATION TO MENTAL HEALTH: THE CONVERGENCE OF SOMATIC DISEASES AND PSYCHIATRIC DISORDERS

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Background: The comorbidity between chronic somatic diseases and mental disorders represents a major public health issue, associated with a significant impact on prognosis, quality of life, and healthcare costs. Current evidence suggests that low-grade systemic inflammation constitutes a central biological mechanism mediating the bidirectional interaction between somatic and psychiatric pathology. **Objective**: The paper aims to synthesize recent data regarding the role of systemic inflammation in the etiopathogenesis of mental disorders, its relationship with inflammatory somatic diseases, and the implications for biomarker identification, clinical stratification, and the development of personalized therapeutic interventions. A novel element is the integrative approach to the immune-neuro-metabolic axis and the gut-microbiome-brain axis interaction in shaping inflammatory psychiatric phenotypes. **Material and methods**: A narrative review of the specialized literature indexed in international databases (PubMed, Scopus, Web of Science) was conducted, with a focus on recent clinical studies, meta-analyses, and translational research investigating the connections between inflammation, neurobiology, and mental health. **Results** : The data highlight the existence of psychiatric phenotypes associated with increased inflammatory activation, characterized by elevated levels of pro-inflammatory cytokines, reduced therapeutic response to standard treatments, and frequent associations with metabolic, cardiovascular, or autoimmune pathologies. The mechanisms involved include blood-brain barrier dysfunction, microglial activation, dysregulation of tryptophan metabolism, and the disruption of the gut-microbiome-brain axis. In this context, inflammatory biomarkers are emerging as promising tools for clinical stratification and guiding therapeutic decisions, representing an innovative element in precision psychiatric medicine. **Conclusions**: Systemic inflammation constitutes an essential pathophysiological link between somatic diseases and psychiatric disorders, offering a foundation for early diagnosis, personalized medicine, and the development of integrated therapeutic strategies. The clinical validation of these directions requires longitudinal studies and controlled trials guided by inflammatory biomarkers.

Keywords: systemic inflammation, somato-psychiatric comorbidity, biomarkers, inflammatory depression

HYPERTENSION AND LDL-CHOLESTEROL TARGET IN VERY HIGH-RISK PATIENTS WITH CARDIOVASCULAR DISEASE

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Background: Achieving adequate control of blood pressure and low-density lipoprotein cholesterol (LDL-cholesterol) is a cornerstone of secondary prevention in patients with established cardiovascular disease. Suboptimal blood pressure control may reduce the likelihood of reaching lipid-lowering goals. **Objective:** To determine whether blood pressure control is associated with attainment of the LDL-cholesterol target in patients at very high cardiovascular risk. **Material and methods:** We performed a prospective study including 146 patients hospitalized for acute coronary syndrome who had a documented history of hypertension and were receiving at least two antihypertensive drugs. All participants were statin-naïve and were treated with maximal-dose rosuvastatin for one month. At follow-up, patients were classified according to LDL-cholesterol values: Group 1 comprised 82 patients with LDL-cholesterol <55 mg/dL, and Group 2 comprised 64 patients with LDL-cholesterol ≥55 mg/dL. Blood pressure was measured repeatedly, and the average value was used for analysis. The number of antihypertensive drugs used by each patient was also recorded. **Results :** Age and sex distribution were similar between the two groups (both $p > 0.05$). Patients in Group 2 had significantly higher systolic blood pressure than those in Group 1 (155.4 ± 8.9 mmHg vs. 125.3 ± 9.8 mmHg; $p < 0.001$). Diastolic blood pressure was also higher in Group 2 (98.2 ± 6.5 mmHg vs. 76.8 ± 6.9 mmHg; $p < 0.001$), reflecting poorer blood pressure control. In addition, Group 2 patients were receiving more antihypertensive medications (2.3 ± 0.8 vs. 1.7 ± 0.6 ; $p = 0.002$). Regression analysis demonstrated a strong positive association between blood pressure and LDL-cholesterol levels ($p < 0.001$), while no significant association was observed for diastolic blood pressure. **Conclusions:** In very high-risk cardiovascular patients, inadequate blood pressure control was associated with failure to achieve LDL-cholesterol targets. These findings support the need for integrated and strict management of blood pressure in this population.

Keywords: hypertension, LDL-cholesterol, acute coronary syndrome, rosuvastatin

IMPLICATIONS OF CELL MEMORY IN ORGAN TRANSPLANTS

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Background: Over the years, in the field of organ transplantation, especially in the case of the heart, a change in traits has been observed in recipients, traits that are identical to those of the donor. Thus, some recipients have acquired previously nonexistent aversions, which have led to anxiety and depression in patients. This phenomenon is attributed to cellular memory, based on several mechanisms: storage in the structure of deoxyribonucleic acid, ribonucleic acid, proteins, epigenome, and in the case of the heart, in the intracardiac nervous system and in the form of an electromagnetic field. **Objective:** The objective of this paper is to raise awareness among medical staff to adopt a better attitude towards patients. The purpose is also to mobilize scientists to further explore this concept because by understanding it, new methods of therapy for recipients can be developed. **Material and methods:** The study focuses predominantly on heart transplantation, and the data used comes from the database of the National Cheng Kung University Hospital, NCKUH, from the years 2005 - 2020. The working method was interviews from multiple cases which I took from a study conducted in China. Additionally, I also used other studies carried out on animals (the Aplysia snail and the planarian flatworm). **Results :** Due to a limited number of data, we cannot reach a clear conclusion that information transfer occurred between donor and recipient; however, in most cases, behavioral changes were observed in the recipient post-operation. Conversely, studies conducted on animals clearly show that memory is not stored exclusively at the level of synaptic memory. **Conclusions:** In conclusion, there is a great need to further explore this field in order to clearly determine whether memory is stored strictly at the brain level or not, as it can provide us with a new perspective on how the human body functions and what other therapies we can develop. At the moment, due to the lack of a large number of heart transplant cases and people to participate in studies, we cannot draw a clear conclusion.

Keywords: Exosome, Epigenome, Transplant, Memory

RECLASSIFICATION OF GFR AND KDIGO RISK CATEGORIES AFTER TRANSITION TO CKD-EPI 2021 AND EKFC EQUATIONS

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Background: Chronic kidney disease (CKD) staging is based on estimated glomerular filtration rate (eGFR) and urinary albumin-creatinine ratio (UAC). The introduction of newer creatinine-based equations, including the Chronic Kidney Disease Epidemiology Collaboration 2021 (CKD-EPI 2021) and the European Kidney Function Consortium (EKFC), may lead to variability in eGFR values and patient reclassification across GFR and CKD risk categories.

Objective: The study aimed to evaluate the impact of replacing CKD-EPI 2009 with CKD-EPI 2021 and EKFC equations on the reclassification of adult patients into different GFR and CKD risk categories.

Material and methods: A total of 168 subjects (86 women and 82 men) were included, who had both serum creatinine and UACR measurements performed in the Laboratory of the County Emergency Clinical Hospital of Targu Mureş between January and February 2026. eGFR was calculated using the CKD-EPI 2009, CKD-EPI 2021, and EKFC equations. GFR and CKD risk categories were assigned according to KDIGO 2024 guidelines. Differences between equations were assessed using paired t-test or Wilcoxon test, as appropriate, while agreement in classification was evaluated using Cohen's kappa coefficient. Analyses were performed for the overall cohort and stratified by sex. **Results :** Significant differences between equations were observed ($p < 0.001$), with very good agreement in classification ($\text{kappa} > 0.86$). Switching from CKD-EPI 2009 to CKD-EPI 2021 reclassified 14.88% of patients to a milder stage (19.76% women, 9.76% men). Transition to EKFC reclassified 14.29% to a more advanced stage (18.60% women, 9.76% men). **Conclusions:** Choice of eGFR equation may lead influence GFR and CKD risk classification, with a more pronounced impact in women, and potential implications for clinical management.

Keywords: Chronic kidney disease, serum creatinine, creatinine-albumin ratio. eGFR, risk stratification

RETHINKING PREVENTION: FROM KNOWLEDGE TO UTILISATION

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Background: In Romania, the high rate of the preventable mortality is the result of the low investments in primary care, which is below the European average. Prevention and screening are not well promoted by the Government, therefore the screening rates for the most important avoidable mortality causes such as breast and colorectal cancers are the lowest in the European Union. **Objective:** The objective of this study is to analyse the preventive behaviour and its correlation with the demographic data and with the results of other studies too.

Material and methods: The transversal study included a questionnaire administered to a sample of 258 respondents. We collected demographic data of the respondents and data about awareness of the prevention methods and screening campaigns, the attendance at routine check-ups and sources of medical information. Statistical analysis was performed. **Results :** A majority of people are familiar with the terms of prophylaxis, but half of them are following regular check-ups. Theoretic knowledge exceeds the use of prevention methods in both age groups (19-39 y.o. and 40+). The education level is a significant predictor of knowledge of the oncological and gynecological screening ($p < 0.05$), but it doesn't guarantee adherence to these. The highest rate of utilisation is observed at the prevention of cardiovascular diseases (more than 80%). A low rate is represented by the screening of breast, prostate and colorectal cancers. Media and social circle exceeds medical specialists as medical information sources **Conclusions:** The absence of a national strategy to promote prevention caused the appearance of the so-called opportunistic screening. Also, the low utilisation reflects the challenges of a system where the primary medical assistance fails to guide efficiently the patients to adopt a preventive behaviour.

Keywords: prevention, primary medical assistance, preventable mortality, screening campaigns

THE IMPACT OF TYPE 2 DIABETES ON THE LONG-TERM PERFORMANCE OF THE ARTERIO-VEIN FISTULA

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Background: The arteriovenous fistula (AVF) is the primary method of vascular access (VA) for hemodialysis (HD), with significantly fewer complications and superior survival compared to central venous catheters (CVC). However, the AVF dysfunction still remains a major clinical problem with significant impact on morbidity, medical costs, and life quality of the patients with end-stage kidney disease (ESKD). **Objective:** The aim of this study is to investigate the impact of type II diabetes (T2D) on the long-term performance of AVFs, using real clinical data from patients undergoing HD. **Material and methods:** This retrospective observational study enrolled patients admitted to the Vascular Surgery Department for AVF creation. Patients with prior VA or incomplete data in the hospital electronic database were excluded. Postoperative assessment was performed through direct contact with nephrologists at the dialysis centers. The primary endpoint was AVF failure, defined as the inability to use the AVF for HD. **Results :** In the present study, 298 patients were included, with a mean age of 61.59 ± 14.32 years, of whom 176 were male. Regarding the type of AVF created, 146 patients underwent radio-cephalic AVF (RC-AVF), 113 underwent brachio-cephalic AVF (BC-AVF), and 39 underwent brachio-basilic AVF (BB-AVF). Patients were followed postoperatively for a mean period of 2.27 ± 1.53 years, during which 92 patients (30.9%) developed AVF failure. In univariate analysis, RC-AVF (HR:1.91, $p=0.003$) and initiation of HD using a CVC (HR:2.53, $p<0.001$) were associated with an increased risk of long-term AVF failure. In addition, patients with T2D showed poorer long-term AVF outcomes (HR:1.92, $p=0.002$), both in the overall cohort and in the RC-AVF and BC-AVF subgroups. **Conclusions:** Patients with T2D presented a poorer long-term AVF performance and a higher risk of AVF failure. RC-AVF and initiation of HD using a CVC were also identified as risk factors for long-term dysfunction, suggesting the need for careful vascular access planning in diabetic patients. **Acknowledgment:** This work was supported by the George Emil Palade University of Medicine, Pharmacy, Science and Technology of Tîrgu Mureș, Romania, with research grant number 170/3/09.01.2024.

Keywords: arteriovenous fistula, diabetes, vascular access, vascular surgery

FUNDAMENTAL SCIENCES - PHARMACY

DESIGN AND SYNTHESIS OF AN AZO-FUNCTIONALIZED 1,3,4-OXADIAZOLE

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Background: Azo-oxadiazole derivatives constitute a highly promising class of compounds that merge the strong luminescent properties and wide applicability of oxadiazoles with the dynamic photoswitching behavior of azo groups. While oxadiazoles are well-established fluorophores in optoelectronic applications, azo moieties introduce photoisomerization, allowing precise spatiotemporal control over physico-chemical properties. This feature is particularly valuable for applications in photopharmacology, optical sensing, and advanced functional materials. Despite their significant potential, azo-oxadiazoles remain relatively underexplored, mainly due to synthetic challenges. Nevertheless, their dual functionality makes them attractive candidates for next-generation optoelectronic and sensing technologies. **Objective:** The present work targets the synthesis and characterization of an azo-1,3,4-oxadiazole derivative via a six-step pathway. **Material and methods:** Synthesis of the target compound commenced with the diazotization of 2,6-difluoroaniline, followed by reduction with SnCl_2 to yield the corresponding hydrazine. This intermediate was subsequently acylated with an alkyl chloroformate to produce a semicarbazide derivative, which underwent substitution with hydrazine hydrate. The resulting compound was then coupled with benzoyl chloride, followed by cyclodehydration using POCl_3 to form the oxadiazole ring. Finally, oxidation with MnO_2 enabled the formation of the azo functionality. Both the final compound and intermediates were characterized using physicochemical methods and NMR spectroscopy. **Results :** The target compound was successfully synthesized in high yields after purification. Structural characterization confirmed the formation of the desired azo-oxadiazole derivative. **Conclusions:** The proposed synthetic strategy offers an efficient route for the preparation of azo-oxadiazole derivatives. Future studies will focus on expanding this class of compounds and further exploring their photochemical properties.

Keywords: 1,3,4-Oxadiazole, azo group, multistep synthesis, functional materials

ENANTIOSEPARATION OF NONSTEROIDAL ANTI-INFLAMMATORY DRUGS BY HPLC USING POLYSACCHARIDE-BASED CHIRAL SELECTORS

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Background: Nonsteroidal anti-inflammatory (NSAID) drugs are among the most widely used medications and play a major role in the treatment of pain, inflammation, and fever. Chirality is an important aspect of this therapeutic class, since NSAIDs generally contain a chiral centre. Polysaccharide-derived stationary phases, based on cellulose or amylose, are the most widely used for enantiomeric separations because they provide good chiral recognition for a broad range of organic compounds. **Objective:** Since most polysaccharide-based chiral separations are typically performed under normal-phase conditions, the present study aims to develop an alternative reversed-phase HPLC (RP-HPLC) method capable of achieving efficient enantiomeric separation of ibuprofen, ketoprofen, and carprofen, both individually and within a single analytical run. **Material and methods:** Standard solutions of ketoprofen, ibuprofen, and carprofen were analyzed using an Agilent 1100 HPLC system equipped with chiral columns (150 × 4.6 mm: Lux® Amylose-1, Lux® Amylose-2, Lux® Cellulose-3; and 250 × 4.6 mm: Lux® Cellulose-1, Lux® Cellulose-2, and Lux® Cellulose-3), all packed with 5 μm particles and used as stationary phases. Detection was performed by UV at 220 nm, a common wavelength suitable for all investigated analytes. Various mobile phase compositions were evaluated, including the use of different organic modifiers such as formic acid, acetic acid, and trifluoroacetic acid. **Results :** The study was conducted by systematically evaluating different chiral columns and mobile phase compositions to identify optimal conditions for both individual and simultaneous enantiomeric separation of the three compounds. The polarity differences between ketoprofen and the other two analytes posed a challenge for achieving a simultaneous enantioseparation under identical conditions. Using a Lux® Amylose-1 (5 μm) column and a mobile phase consisting of 55% water and 45% acetonitrile, both acidified with 0.1% formic acid, at a flow rate of 1 mL/min and 25 °C, efficient enantiomeric separation of carprofen and ibuprofen was achieved within 15 min. However, under these conditions, ketoprofen did not exhibit enantiomeric resolution. Subsequently, the Lux® Amylose-2 (5 μm) column proved effective for the separation of ketoprofen enantiomers. In addition, the Lux® Cellulose-3 (5 μm) column demonstrated the ability to simultaneously resolve the enantiomers of both ibuprofen ($t_{\text{R}1}=8.62$ min, $t_{\text{R}2}=9.12$ min) and carprofen ($t_{\text{R}1}=13.30$ min).

min, $t_{R2}=14.15$ min) using a mobile phase composed of 60% water and 40% acetonitrile, each containing 0.1% formic acid. **Conclusions:** Polysaccharide-based chiral selectors, such as amylose and cellulose derivatives, proved effective for the enantioseparation of the investigated compounds under reversed-phase HPLC conditions, enabling the use of mobile phases with reduced environmental impact.

Keywords: Reversed-phase HPLC, NSAIDs, Polysaccharide-based stationary phases, Chiral separations

FLUORESCENCE BASED REAL-TIME MONITORING OF AZIDE-ALKYNE CYCLOADDITION REACTION

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Background:

Cu(I)-Catalysed Azide-Alkyne Cycloaddition (CuAAC) is a modular and bio-orthogonal approach that is being adopted for the efficient synthesis of organic and bioorganic compounds. It leads to the selective formation of 1,4-disubstituted 1,2,3-triazole units connecting readily accessible building blocks via a stable and biocompatible linkage. The vast array of the bioconjugation applications of click chemistry has been attributed to its fast reaction kinetics, quantitative yields, minimal byproducts, and high chemospecificity and regioselectivity. **Objective:** Herein we report the kinetic study of CuAAC reactions between copper chelating azides and fluorogenic coumarin alkynes. These model CuAAC reactions are aimed for valuable insight of live-cell imaging and targeted molecular labelling applications. **Material and methods:** The reaction was first performed in a laboratory setting to obtain the cycloaddition product. Reactants and product were characterized by UV-Vis and fluorescence spectroscopy across multiple concentrations. Kinetic experiments involved azide-coumarin click reaction catalysed by Cu(II)/ascorbate, with fluorescence emission recorded until plateau. Pre- and post-reaction spectra confirmed product formation. **Results :** The product exhibited markedly higher fluorescence intensity and distinct spectral features compared to reactants. Kinetic traces showed a consistent rise to plateau profile across concentrations, enabling clear identification of reaction completion. Spectral overlays validated the formation of new emissive species. **Conclusions:** The developed protocol provides a fast, sensitive approach for monitoring fluorogenic bioorthogonal reactions. Fluorescence enhancements from the coumarin product enable robust kinetic quantification and support broader application in real time reaction tracking.

Keywords: Fluorescence Spectroscopy, Click-Chemistry, CuAAC, Copper Chelating Azides

SYNTHESIS OF NOVEL N-ACYLHYDRAZONE-BASED MACROCYCLES AND INVESTIGATION OF CATION HOSTING ABILITY

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Background: N-acylhydrazones are versatile molecules due to the reversibility of the hydrazone bond, multiple coordinating sites and the possibility to form hydrogen bonds. These characteristics lead to development of many applications like ligand for coordination compounds , synthesis of 2,5-disubstituted-1,3,4-oxadiazoles , photoswitching molecules , macrocycles , dynamic polymers (dynamers) or covalent organic frameworks (COFs) . **Objective:** The aim of this study is to develop a library of substituted dialdehydes and dihydrazides as building blocks for novel N-acylhydrazones based macrocycles. **Material and methods:** Starting from commercially available reactants we performed synthesis various multifunctionalised dialdehydes and dihydrazides, which were further used in preparation of N-acylhydrazones macrocycles. We used NMR and HRMS as monitoring and investigation techniques both for structural characterisation of the novel compounds and the interaction of the resulted macrocycles with potential guests. **Results :** We have recently described synthesis of novel [2 + 2] and [3 + 3] N-acylhydrazone-based macrocycles using substituted dialdehydes and dihydrazides. The macrocycles were assigned triangular and rectangular shapes. The dimer macrocycle was further assayed for hosting ability using various ions and small molecules. The most intriguing results were obtained using tetra-n-butyl ammonium fluoride (TBAF) as studied by NMR and HRMS. Encouraged by these results, we further used other novel dialdehydes and dihydrazides as precursors for N-acylhydrazone-based macrocycles. We similarly investigated their capacity to host ions or small molecules and we present herein our most recent results. **Conclusions:** We have successfully

obtained novel N-acylhydrazones based macrocycles, as monitored by NMR and MS spectroscopy. The ability to host small molecules or ions was also studied.

Keywords: N-acylhydrazone, macrocycles, hosting, versatile molecules

POSTERS - DENTAL MEDICINE

APPLICATION OF BIDENTINE AS A RETROGRADE FILLING MATERIAL IN ENDODONTIC SURGERY: MANAGEMENT OF A COMPLEX ENDODONTIC LESION – CASE REPORT

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Introduction: The management of complex endodontic lesions remains a significant clinical challenge, particularly in cases involving failed previous treatments, anatomical variations, and persistent apical pathology. Bioactive materials such as Biodentine have gained increasing interest due to their ability to promote periapical healing and bone regeneration. **Case Report:** A 48-year-old female patient showed up with a history of multiple failed endodontic treatments on teeth 2.1 and 2.2, associated with persistent apical pathology. Clinical and radiographic examination revealed a 90° mesial rotation and severe palatal root dilaceration, contributing to case complexity. Tooth 2.1 also exhibited radiographic signs of chronic apical periodontitis and the presence of a metallic post and core. Endodontic retreatment was performed on both teeth. The metallic post was removed from tooth 2.1, and canal preparation was carried out using the WaveOne reciprocating system (Dentsply Sirona). Obturation was achieved by cold lateral condensation with gutta-percha and AH Plus sealer. Postoperative radiographic evaluation revealed extrusion of filling material beyond the apex in tooth 2.2, while an adequate obturation was observed in tooth 2.1. Three days after retreatment, the patient experienced two consecutive episodes of acute exacerbation of apical periodontitis affecting the lateral incisor. Following resolution of symptoms under systemic antibiotic therapy, surgical intervention was indicated. Apical resection and cystectomy were performed on tooth 2.2, followed by retrograde filling with Biodentine XP. At the 10-day follow-up, a coronal fracture of tooth 2.2 was identified. Consequently, both teeth were restored using glass fiber posts and rehabilitated with metal-ceramic crowns. **Discussions :** The favorable outcome supports existing evidence that calcium silicate-based materials, such as Biodentine, exhibit excellent sealing properties and bioactivity, promoting periapical healing even in complex anatomical situations. **Conclusions:** Biodentine represents an effective retrograde filling material in the surgical management of complex endodontic lesions. Teeth with severe root dilacerations require advanced therapeutic strategies and careful material selection. Biodentine contributes to predictable periapical healing and bone regeneration under challenging anatomical conditions. **Funding:** This project was funded by the University of Medicine, Pharmacy, Science and Technology "George Emil Palade" of Târgu Mureş at the Internal Competition for Scientific Research Grants, contract no. 853/14/22.01.2026.

Keywords: Biodentine, Bone regeneration, Complex endodontic treatment

CAVERNOUS SINUS THROMBOSIS SECONDARY TO ODONTOGENIC INFECTION WITH PARVIMONAS MICRA: A CASE REPORT

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Introduction: Parvimonas micra is a gram-positive anaerobic organism that constitutes part of the normal oral microbiota and is commonly associated with chronic periodontitis. Although systemic infections caused by this bacterium are rarely reported, they may occur and can be severe. Hereby we present an unusual case of retrograde venous spread leading to cavernous sinus thrombosis. **Case Report:** A 23-year-old male patient, known to have chronic sinusitis, presented himself to the neurology department with severe cephalgia, nausea and vomiting. On admission, he exhibited chemosis, exophthalmos and right palpebral ptosis, along with impaired ocular abduction and adduction. Dental examination revealed multiple superinfected carious processes. Paraclinical investigations showed marked leukocytosis, along with elevated C-reactive protein, fibrinogen and procalcitonin levels, all indicative of sepsis. Additionally, early elevation in D-dimer levels and slight thrombocytosis provided the first evidence of thrombus formation. The suspicion of a thrombus was confirmed by cerebral CT and CT angiography, which demonstrated lack of opacification in the cavernous sinus and ophthalmic veins. The association of acute pansinusitis, intracranial hypertension and reduced motility of the right eye suggested an intermittent oculomotor and abducens nerve paresis, consistent with cavernous sinus thrombosis. Endoscopic evaluation revealed obstruction of the left middle meatus with purulent discharge, after which surgical drainage was performed, yielding microbiological analysis that identified Parvimonas micra in combination with Cutibacterium acnes as the causative agents. The patient was referred to the clinic of Oral and Maxillofacial surgery, where root remnants of teeth 2.5 and 2.6 were extracted. During hospitalization, broad-spectrum antibiotic

therapy (Metronidazole and Meropenem), anticoagulant (Clexane) and corticosteroid therapy (Dexamethasone) were administered. **Discussions** : The patient was discharged after mentioned multidisciplinary treatment with marked clinco-radiographic improvement that occurred after two weeks of hospitalization, Parvimonas micra being a bacteria that is susceptible to most antibiotics. The continuation of the anticoagulant treatment as well as with Clindamycin and eubiotic was prescribed. Anticoagulation and targeted antibiotic therapy played a crucial role in preventing complications and promoting recovery. **Conclusions**: Although Parvimonas micra has a low virulence and does not spread as aggressively as aerob bacteria do, it may lead to severe intracranial complications under certain conditions. This rare case highlights that even harmless odontogenic infections can lead to life-threatening complications through venous spread, especially in a background of chronic sinusitis. Early treatment of any carious process is essential to prevent commensal bacteria from progressing into deeper tissues.

Keywords: cavernous sinus thrombosis, parvimonas micra, pansinusitis

CLEANABILITY LIMITATIONS IN HYBRID RESTORATIONS: A CASE OF SURGICAL AND PROSTHETIC PLANNING FAILURE

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Introduction: The All-on-X technique is a gold standard for full-arch rehabilitation, but its success hinges on more than just osseointegration. While surgical guides and prosthetically driven placement are vital for positioning, they aren't the only factors. Choosing the wrong materials or ignoring hygiene access during the design phase-specifically failing to anticipate how a patient will maintain the site-can tank the biological prognosis and lead to severe peri-implant complications. **Case Report:** A 45-year-old female patient presented for routine professional hygiene, four years after receiving a mandibular All-on-4 hybrid restoration. Clinical examination immediately showed massive calculus buildup, particularly on the lingual aspect. The deposits tracked around the multi-unit abutments (MUAs) and migrated deep beneath the composite gingival mask. The root of the problem was a lack of prosthodontic foresight during surgery; no surgical guide had been used. To bridge the resulting axial discrepancies, the lab had fabricated a complex titanium thimble framework with cemented metal-ceramic crowns and a heavily overextended composite mask. Most critically, the mucosal surface of the bridge was concave-a classic "food trap" that was impossible for the patient to debride. Professional scaling was attempted, but the prosthesis could not be removed for a thorough cleaning without destroying the restoration. Even without baseline radiographs, the clinical picture-defined by chronic, localized plaque retention-suggests a high risk for mucositis and subsequent peri-implantitis. **Discussions** : While angulated screw channels (ASC) or MUA optimization can sometimes salvage poorly aligned implants, the only predictable solution here is a total prosthetic redesign. **Conclusions:** This case is a reminder that bad planning and poor material choices lead to "fixed" problems. A concave intaglio surface and overextended margins aren't just design flaws-they are biological violations. In implant prosthodontics, cleanability isn't a luxury or a secondary feature; it is a fundamental requirement for long-term survival.

Keywords: Cleanability, Hybrid Restoration, All-on-4, Failure

DISTINGUISHING TRUE FROM PSEUDO-ABSENT STYLOID PROCESS: A CASE-PROMPTED CRITICAL MINI-REVIEW

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Introduction: The styloid process (SP) of the temporal bone exhibits considerable morphological variability, yet the distinction between true absence and pseudo-absence remains poorly defined. True absent SP denotes aplasia of both the tympanohyal and stylohyal segments, whereas pseudo-absent SP indicates a hypomineralised tympanohyal concealed beneath the vaginal process of the tympanic plate. Previous studies using CT, panoramic radiography, and dry skull analysis have frequently conflated these variants, with some authors misidentifying the inferiorly projecting vaginal process as a duplicate or short SP. Because CBCT routinely captures the skull base in dentomaxillofacial practice, recognising this diagnostic pitfall is clinically relevant for accurate reporting and for avoiding overestimation of SP aplasia prevalence. **Case Report:** CBCT imaging data were obtained from a 39-year-old female during routine dental examination. DICOM datasets were analysed using Horos for 3D volume

rendering and multiplanar reconstruction. On 3D renderings, the SPs appeared bilaterally absent inferior to the tympanic plates. However, multiplanar analysis revealed low-density tympanohyal segments with cortical shells and trabecular patterns deep to each tympanic plate. The tympanohyal segments measured 10.5 mm bilaterally, failing to extend beyond the extensively developed tympanic plates (15.5 mm), and displayed anterior sagittal angulation of 34° on the left and 26.5° on the right. Both stylohyal segments were absent. The combination of poor mineralisation and anatomical concealment by the vaginal processes rendered these structures invisible on standard 3D review. **Discussions** : Critical appraisal of the literature reveals that imaging constraints and inconsistent terminology have led to recurrent misclassification. Studies using panoramic radiography defined absence as non-visualisation without developmental confirmation. Others misidentified the vaginal process or elongated tympanic spines as duplicate styloid origins. Standard morphometric approaches that begin measurements where the SP exits the tympanic plate inherently bypass tympanohyal evaluation, making it impossible to distinguish true from pseudo-absence. Dissection and dry-skull studies have confirmed that the SP may be present but concealed by the vaginal process. Our case represents the first CBCT-documented bilateral pseudo-absent SP and only the third reported evidence of this morphology, following dry-skull observations. **Conclusions**: Pseudo-absent SP, caused by a hypomineralised tympanohyal concealed within the vaginal process sheath, must be distinguished from true aplasia. Previous studies have likely overestimated true absence prevalence. Targeted multiplanar evaluation deep to the tympanic plate using appropriate CT/CBCT windowing is essential for accurate diagnosis. Consistent terminology will improve epidemiological accuracy and understanding of stylohyoid complex development.

Keywords: tympanohyal, stylohyoid complex, CBCT, vaginal process

RIGHT TRANSVERSE SINUS APLASIA IDENTIFIED ON THREE-DIMENSIONAL CT ANGIOGRAPHY: AN ARCHIVAL IMAGING CASE REPORT

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Introduction: The transverse sinuses (TS) are paired dural venous channels with significant anatomical variability. TS hypoplasia or aplasia is a well-documented variant, with prevalence rates of 20-39%. The right TS is dominant in approximately 61% of individuals; therefore, right-sided aplasia is less common than left-sided variants. Its clinical relevance lies in the potential misinterpretation as cerebral venous sinus thrombosis (CVST), which may prompt unnecessary anticoagulation. This report describes a right TS aplasia identified on an archival three-dimensional (3D) computed tomography angiography (CTA) reconstruction and discusses imaging features distinguishing this variant from venous occlusion. **Case Report:** During retrospective review of archival CTA studies, a case of right TS aplasia was identified. No patient demographic or clinical information was available. CTA demonstrated complete absence of opacification of the right TS. The bony groove corresponding to the right TS was absent on bone window reconstruction, consistent with congenital aplasia rather than acquired thrombotic occlusion. The left transverse and sigmoid sinuses were dominant and patent, with no stenosis or filling defects. The superior sagittal sinus drained predominantly into the left TS. No parenchymal abnormalities were identified. **Discussions** : TS asymmetry is a common neuroimaging finding. Distinguishing congenital aplasia from CVST is clinically critical. In aplasia, the bony groove is typically absent or, as in this case, shallow and rudimentary, reflecting developmental etiology. In CVST, an intraluminal filling defect is seen within a normally formed groove, often with the "empty delta sign." The "sigmoid notch sign" on non-contrast CT has been proposed as an additional differentiating tool: a shallow or absent notch at the transverse-sigmoid junction suggests congenital atresia. The faintly visible yet underdeveloped groove observed here supports partial embryological regression. Misdiagnosis of such variants as thrombosis may lead to inappropriate anticoagulation with associated bleeding risks. **Conclusions:** Right TS aplasia is an uncommon anatomical variant that can mimic CVST. A shallow or rudimentary bony groove on CT, rather than a normally developed groove with a filling defect, supports the diagnosis of congenital aplasia. Radiologists and clinicians should be aware of this variant to avoid diagnostic errors. This archival case reinforces the value of evaluating osseous landmarks when interpreting venous imaging studies.

Keywords: Transverse sinus aplasia, CT angiography, anatomical variant

THE TREATMENT OF ECTOPIC CANINES: A CASE REPORT

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Introduction: Ectopic canines are teeth erupting displaced from their normal position on the arch. This is one of the most common reasons for consultation in an orthodontic office. This condition is met in 1 to 2% of the population. Canines have the longest path of eruption of all teeth and can be interrupted by multiple factors: genetic or environmental. A careful screening from the age of 8 years old is mandatory. This case presents a less common ectopic position (twice as present palatally) with other orthodontic discrepancies and the difficulties of conservative treatment. **Case Report:** The patient is a 13-year-old male with a skeletal class I and an angle classification of class II division 2, on the molars and canines, characterized by maxillary compression, a deep bite, and crowding on both the upper and lower arches. His chief complaint was a buccally erupted ectopic maxillary left canine. First, the expansion of the upper arch was made with a fixed palatal expander for 8 months. It was activated twice per day and continued until the palatal cusps of the upper molars connected with the buccal cusps of the lower molars. Later, the teeth were moved using a fixed orthodontic appliance, MBT slot 0.22 brackets. A rectangular stainless steel wire with an active open coil was placed between teeth 2.2 and 2.4, combined with class 2 elastics. A piggyback technique was applied with an elastic between 2.3, 3.4, and 3.5. Uncontrolled tipping was present on the canine. Once on the arch, a positive torque was applied to correct the root position. To finish, bends were added to the wire to correct the occlusion. A retainer was finally applied. **Discussions :** In this situation, usually two main kinds of treatment exist: extractive and non-extractive. The extractive treatment was mostly used in the past, and is easier and faster by the extraction of the first premolars. Nowadays, this treatment is less used, only in cases of a very severe lack of space. Non-extractive treatments present a lot of possibilities to allow the best occlusion and aesthetics. Reaching this diagnosis required a combination of dental examination, cephalometric analysis, and biomechanical knowledges. **Conclusions:** The treatment was successful in aligning the maxillary canines on the upper arch and resolving the other discrepancies. Malocclusion and crowding are hard to treat without extraction. Besides aesthetics, the treatment also involves occlusion balance and protection of the neighboring teeth.

Keywords: Ectopic canines, Palatal expander, Orthodontic treatment

TRANSVERSE INFRAHYOID ANASTOMOTIC VEIN BETWEEN THE INTERNAL JUGULAR VEIN AND THE CONTRALATERAL BRACHIOCEPHALIC VEIN

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Introduction: The superficial venous system of the neck includes the external jugular vein (EJV) and anterior jugular vein (AJV), both of which exhibit considerable anatomical variability. Reported AJV variants include unilateral presence, duplication, and diverse drainage patterns. However, complete bilateral absence of the AJV has not been previously documented. This report aims to describe a previously unreported anatomical variant of the anterior cervical venous system identified on computed tomography angiography (CTA), involving bilateral absence of the AJVs and the presence of a compensatory large-calibre transverse vessel. Its surgical and clinical relevance is also discussed. **Case Report:** A 72-year-old Caucasian female was evaluated in a surgical department and underwent CTA following intravenous administration of iodine-based contrast via the brachial vein. Imaging was performed using a 32-slice CT scanner (0.6 mm collimation, 0.75 mm reconstruction, 50% overlap). Multiplanar maximum intensity projection and three-dimensional volume rendering reconstructions were obtained. Image analysis and case documentation were performed using Horos (iOS). The bilateral IJVs and EJVs were present in normal anatomical positions; however, the AJVs were absent bilaterally. A transverse infrahyoid anastomotic vein (IAV), measuring 4.68 mm in calibre, was identified 0.5 cm below the hyoid bone. It connected the left IJV (at the upper third of C6) to the right brachiocephalic vein (at the middle third of T1). Additional tributaries included the median thyroid vein draining into the IAV. On the right, the facial vein crossed the submandibular gland and drained into the EJV. On the left, it contributed to the common facial vein, which drained into the IAV. **Discussions :** This report describes the first documented case of complete bilateral agenesis of the anterior jugular veins, associated with the formation of a single large transverse infrahyoid anastomotic vein

serving as the primary venous drainage pathway of the anterior cervical region. The observed configuration, connecting the left internal jugular vein to the right brachiocephalic vein with asymmetric terminations, suggests adaptive haemodynamic remodelling of the cervical venous system. Given its size and close anatomical relationship to the thyroid gland and infrahyoid structures, this variant has important implications for thyroid surgery, laryngeal procedures, central venous catheterization, and surgical planning of cervical approaches.

Conclusions: This case highlights a previously unreported variation of the anterior cervical venous system characterized by bilateral absence of the AJVs and compensatory transverse venous drainage. Preoperative ultrasonography or computed tomography angiography is strongly recommended when atypical superficial venous anatomy is suspected.

Keywords: anatomic variation, jugular vein, facial vein

UNEXPECTED VARIATION OF A SURGICAL LANDMARK: BILATERAL DEEP STERNOCLEIDOMASTOID WITH PAROTID DISPLACEMENT AND ALTERED VENOUS ANATOMY

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Introduction: The sternocleidomastoid muscle (SCM) is classically described as having four parts: sternomastoid, sternooccipital, cleidomastoid, and cleidooccipital. Supernumerary heads occur in approximately 20-30% of individuals, yet the topographical consequences of a distinct deep sternomastoid (DSM) part on adjacent neurovascular and glandular structures have never been comprehensively documented. The retromandibular vein (RMV) is a critical surgical landmark during parotidectomy, mandibular osteotomies, and facial reconstructive procedures; its displacement carries significant hemorrhagic risk. **Case Report:** A 54-year-old male patient underwent routine angioCT (32-slice Siemens CT; 0.6 mm collimation; 0.75 mm reconstruction). Retrospective multiplanar and three-dimensional analysis revealed bilateral DSM parts of the SCM filling both retromandibular fossae. The mandibular ramus penetrated between the superficial and DSM parts bilaterally, forming superiorly opened angles of 71.5° (right) and 76.0° (left) between the SCM and masseter. Both parotid glands were extruded laterally beyond the mandibular ramus. Bilateral lateral loops of the external carotid arteries were identified. The anterior branches of the RMV coursed over the masseter muscles, converging with the facial veins, a previously undescribed pattern. The left internal jugular vein was compressed between the posterior belly of the digastric muscle and the transverse process of the atlas. A double left risorius muscle with distinct masseteric and parotid origins was also noted. **Discussions :** When a DSM part of the SCM is present, it displaces all retromandibular fossa contents: parotid gland, external carotid artery, and RMV. The RMV coursing over the masseter falls outside previously published classification systems, with direct implications for transmasseteric approaches, sagittal split ramus osteotomy, angle reduction, and parotidectomy, where a laterally displaced RMV is encountered at the start of dissection. **Conclusions:** The DSM part of the SCM produces a cascade of topographical changes affecting the parotid gland, RMV, external carotid artery, digastric muscle, and risorius muscle. Preoperative imaging recognition of this variant is essential to avoid vascular and neural injury during standard head and neck procedures.

Keywords: Sternocleidomastoid muscle, retromandibular fossa, retromandibular vein, external carotid artery

POSTERS - PHARMACY

CLINICAL IMPLICATIONS OF HERB-DRUG INTERACTIONS: CHALLENGES AND STRATEGIES

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Background: Over 40% of patients under chronic treatment use herbal products as food supplements concomitantly, often without professional guidance or speciality guidance. Although most of these associations are considered safe, there are individual cases where herb-drug interactions can be clinically relevant. **Objective:** This study aimed to underline the existing data published in the scientific literature regarding the clinically relevant interactions between herbal drugs and pharmacotherapy. **Material and methods:** Major international databases (PubMed, Scopus, ScienceDirect), were searched for articles published between 2015 and 2025 using keywords such as „herb-drug interactions”, „clinical relevance”, „CYP450 modulation” and „patient safety”. The inclusion criteria covered relevant clinical studies, systematic reviews, and case reports. **Results :** Bioactive constituents from herbal drugs can lead to pharmacokinetic and pharmacodynamic interactions when associated with drugs. Scientific data analysis revealed that there are at least 15 clinically relevant interactions. The most frequently reported interactions are pharmacokinetic in nature, involving alterations in drug absorption (herbal drugs with a high mucilage or tannin content), distribution (some flavonoids) and metabolism (extracts from *Hyperici herba*), but also pharmacodynamic interactions have been observed, potentially compromising therapeutic control. Patients receiving anticoagulant, immunosuppressants, antiretroviral agents, anticancer drugs, antiepileptics, antidiabetics, digoxin, etc. are among the most exposed to clinically significant herb-drug interactions. Clinically significant interactions most often occur with drugs that have a narrow therapeutic index, where even minor pharmacokinetic changes may lead to toxicity or therapeutic failure. Risk factors include polypharmacy, advanced or extreme age, hepatic and renal dysfunction, along with the duration and timing of herbal product administration relative to prescribed medications. **Conclusions:** From a clinical pharmacy perspective, identifying and monitoring these interactions are essential to prevent adverse reactions and to optimize individualized pharmacotherapy through active collaboration between pharmacist, physician and patient. This work was funded by UEFISCDI under Contract No. 42PCBROMD/2025, European and International Cooperation Program, Complex Bilateral Projects with the Republic of Moldova.

Keywords: natural compounds, herb-drug interactions, polypharmacy

EVALUATION OF DIET QUALITY AND SUBJECTIVE PERCEPTION IN THE INTEGRATED MANAGEMENT OF ONCOLOGY PATIENTS

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Background: The integrated management of the oncology patient requires a reconfiguration of nutritional strategies: the transition from the simple provision of caloric needs to a qualitative approach, centered on the provision of essential macronutrients and micronutrients, personalized for each patient. In practice, patients with an unbalanced dietary pattern are often observed, dominated by ultra-processed products, with a low nutritional density and high caloric density, to the detriment of a balanced diet based on nutritious foods. A key direction in current oncology research is the exploration of the diet-microbiome-cancer axis. Emerging evidence highlights the crucial role of gut microbiota in carcinogenesis, tumor progression, and therapeutic response. Dietary patterns like the Mediterranean diets support anti-inflammatory processes, intestinal barrier integrity, and host immune function. **Objective:** The objective of this study is to evaluate the adherence of oncology patients to a balanced and nutritious dietary pattern, such as the Mediterranean diet, analyzing the consumption frequency of specific foods, the subjective perception of patients regarding their own diet, as well as the limiting socio-economic barriers. **Material and methods:** An analytical observational clinical study was conducted during the period 01.01.2026 - 16.03.2026, on a group of adult oncology patients, undergoing treatment or in remission, having the cognitive capacity to understand and complete the evaluation instruments. Data were collected through a complex questionnaire, distributed in a hybrid format, both in the hospital and in the online environment, which integrated standardized instruments (MEDAS score, food frequency questionnaire), alongside socio-demographic, economic and clinical parameters. **Results :** Data analysis highlights that the actual adherence is below the optimal level, as a significant proportion of patients overestimate the quality of their diet, although it is dominated by ultra processed

and low nutrient foods. Furthermore, the level of education, monthly income, and environment of residence act as determining factors that restrict access to high quality nutrition, amplifying the financial vulnerability of patients.

Conclusions: The nutrition of the oncology patient must be based on foods with high nutrient density, not just on ensuring quantitative requirements. Nutritional counseling requires an integrated approach that covers both the lack of nutritional education and socio economic aspects, to facilitate a real and sustainable adherence to the Mediterranean diet.

Keywords: oncology patient, Mediterranean diet, food, nutritional density

POSTERS - MILITARY MEDICINE

A RARE CASE OF CEREBRAL INFARCTION IN THE TERRITORY OF THE ARTERY OF PERCHERON

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Introduction: The Artery of Percheron (AOP) is a rare anatomical variant where a single arterial trunk arises as an asymmetric origin from the P1 segment of one posterior cerebral artery to supply the paramedian thalami bilaterally. AOP occlusion typically results in bilateral thalamic infarction. This case is significant due to the extreme rarity of this anatomic variant and the major diagnostic challenges it poses in acute stroke settings. **Case Report:** A 60-year-old female with type 2 diabetes, grade II hypertension, and paroxysmal atrial fibrillation (without anticoagulant or antiplatelet therapy) presented with a sudden onset of altered consciousness on the day of admission. The emergency neurological examination revealed anisocoria (right pupil larger than left), bilaterally diminished gag reflexes, flaccid tetraparesis (Medical Research Council [MRC] grade 2/5), bilateral Babinski sign, a Glasgow Coma Scale (GCS) score of 7, and a National Institutes of Health Stroke Scale (NIHSS) score of 23. A native cranial Computed Tomography (CT) scan did not show acute intracranial lesions, but CT angiography revealed a fine filling defect in the P1 segment of the left posterior cerebral artery. Intravenous thrombolysis with alteplase was initiated 3 hours and 45 minutes after symptom onset. Subsequent serial CTs and brain Magnetic Resonance Imaging (MRI) confirmed vascular lesions in the bilateral thalami, left superior cerebellum, and the tail of the left caudate nucleus. The patient's evolution was progressively favorable; she regained consciousness but exhibited residual signs at discharge: bilateral blepharoptosis, bilateral anterior internuclear ophthalmoplegia, vertical gaze limitation, flaccid tetraparesis (right 4/5 MRC, left 4+/5 MRC), temporal disorientation, and major neurocognitive deterioration. **Discussions :** Bilateral thalamic infarcts resulting from AOP occlusion represent a unique and severe vascular pathology described in the literature. Consistent with classic clinical descriptions, this patient rapidly developed altered mental status, followed by complex neuro-ophthalmological deficits and major cognitive impairment. The decision to administer intravenous thrombolysis based on subtle CT angiographic findings, despite a normal native CT, highlights crucial implications for acute management. **Conclusions:** We presented a rare case of cerebral infarction in the vertebrobasilar territory involving the Artery of Percheron. The key learning point is that clinicians must maintain a high index of suspicion for this specific variant in patients presenting with sudden coma and bilateral neurological signs. Documenting such cases contributes to medical knowledge by validating early angiographic screening and rapid reperfusion strategies in atypical stroke presentations.

Keywords: Artery of Percheron, Cerebral Infarction, Thalamus, Stroke

ACUTE ABDOMINAL PAIN AS THE INITIAL SYMPTOM OF ACUTE LYMPHOBLASTIC LEUKEMIA IN AN ADOLESCENT

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Introduction: Leukemia is a malignant hematological neoplasm characterized by the uncontrolled clonal proliferation of blood cell precursors within the bone marrow. In Acute Lymphoblastic Leukemia (ALL), this transformation affects the lymphoid lineage, leading to the rapid accumulation of immature lymphoblasts. This expansion disrupts normal hematopoiesis, resulting in bone marrow failure and neoplastic infiltration of extramedullary organs, which accounts for atypical clinical presentations such as acute abdominal pain. **Case Report:** We present the case of a 16-year-old male who presented to the emergency department at Gheorgheni Municipal Hospital with diffuse abdominal pain that had persisted for one week. Laboratory investigations revealed biochemical alterations characteristic of marked azotemia, with a severely elevated serum uric acid level of 17.61 mg/dL. Other findings included mild transaminase elevations (GGT 72 U/L, AST 119 U/L, ALT 42 U/L) and extreme hyperleukocytosis (WBC count: 406,120/µL). Abdominal ultrasonography demonstrated hepatosplenomegaly and a significant amount of free fluid in the perivesical space and the Pouch of Douglas. The patient was transferred to the Pediatric Clinic of the Emergency County Clinical Hospital (SCJU) Târgu Mureş. An extensive diagnostic workup confirmed the severe hyperleukocytosis and concomitant thrombocytopenia. The peripheral blood smear revealed 87% lymphoblasts. Bone marrow aspiration showed 89% lymphoblasts, and immunophenotyping

confirmed the diagnosis of T-cell Acute Lymphoblastic Leukemia. **Discussions** : Clinical management in leukemia requires a rigorous balance between cytoreductive therapy and intensive supportive care to mitigate iatrogenic risks and manage metabolic emergencies. Treatment was initiated according to the ALL-BFM-2009 Induction protocol (Protocol IA), utilizing high-dose Prednisone (60 mg/m²/day, administered in divided doses) for its direct lympholytic effect to control clonal proliferation. To counteract the systemic impact of this intensive corticosteroid regimen, the protocol mandates gastric protection and prophylactic antibiotic therapy to prevent severe opportunistic infections, given the patient's severely immunocompromised status. **Conclusions**: In conclusion, this case demonstrates that acute abdominal pain can be a severe and atypical presenting symptom of ALL in adolescents. The presence of marked azotemia and hyperuricemia at onset highlights the metabolic complexity of the disease. Rapid recognition of these manifestations, followed by integrated therapeutic management that combines the control of malignant proliferation with rigorous metabolic and prophylactic support, is vital for preventing life-threatening complications and improving clinical prognosis.

Keywords: leukemia, lymphoblasts, abdominal pain, adolescent

ACUTE ESOPHAGEAL NECROSIS FOLLOWING RECTOSIGMOID RESECTION: A RARE POSTOPERATIVE ENTITY

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Introduction: Acute esophageal necrosis (AEN) is a rare clinical entity triggered by a combination of low-flow states, chemical injury from gastric reflux, and a breakdown of the esophagus's natural protection, typically seen in malnourished or debilitated patients. **Case Report:** We present the case of a 71-year-old woman diagnosed with infiltrative rectal adenocarcinoma with mesorectal lymphadenopathy. With a prior history of neoadjuvant therapy and protective colostomy, the patient presented with grade I anemia and thrombocytopenia due to myelosuppression, in addition to chronic ischemic heart disease, hypertension, and a small hiatal hernia. Following a rectosigmoid resection with terminal colostomy, adhesiolysis, and parastomal hernia repair, the patient was admitted to the Intensive Care Unit (ICU) for close clinical surveillance and continuous monitoring of vital functions. On the 4th postoperative day in the ICU, a gastroenterology consultation was requested following an episode of hematemesis (approximately 500 ml). An upper gastrointestinal endoscopy revealed extensive fibrin deposits throughout the lower two-thirds of the esophagus. Following irrigation, wide areas of black-colored mucosa were identified, confirming the diagnosis of Acute Esophageal Necrosis (AEN), also known as "black esophagus". The endoscopic evaluation also identified a large axial hiatal hernia containing a voluminous adherent clot, alongside digested blood residues within the gastric cavity. The duodenum showed no signs of active bleeding or mucosal injury, highlighting the segmental nature of the ischemic insult. Management included complete oral intake restriction (NPO), aggressive acid suppression with intravenous proton pump inhibitors (PPIs), and mucosal protection with sucralfate. To meet the patient's metabolic demands during the recovery phase, total parenteral nutrition (Kabiven) was administered. **Discussions** : According to the literature, the prevalence of AEN in endoscopy series has ranged from 0.01 to 0.28 percent of cases. It predominantly affects elderly men who present with multiple comorbidities such as diabetes mellitus, chronic alcoholism, and cardiovascular disease. In contrast, our case involves an elderly female whose primary risk factors were not metabolic or toxic but rather oncological and surgical. **Conclusions:** This case illustrates that Acute Esophageal Necrosis can be triggered by postoperative stress in vulnerable patients, even when neoadjuvant chemoradiotherapy is localized and distant from the esophagus. Prompt endoscopic diagnosis and the early initiation of aggressive conservative management are crucial to ensure mucosal recovery and to prevent complications such as esophageal perforation.

Keywords: black esophagus, neoadjuvant therapy, endoscopy

ACUTE FULMINANT HEPATITIS WITH HEPATITIS B VIRUS AND CYTOMEGALOVIRUS IN AN IMMUNOCOMPROMISED PATIENT

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Introduction: Acute fulminant hepatitis is defined by massive hepatocyte necrosis and rapid hepatic functional

decline. In immunocompromised patients, the prognosis of acute hepatitis of viral etiology is reserved due to uncontrolled replication. This case study analyzes the challenges of monitoring and treatment in intensive care in this fragile context. **Case Report:** We present the case of a 49-year-old female patient undergoing immunomodulatory treatment for multiple sclerosis and retrobulbar optic neuritis, admitted to intensive care with marked sclero-tegumentary jaundice and altered general condition, and paraclinical findings of severe hepatic cytolysis syndrome (Alanine Aminotransferase 4637 U/L, Aspartate Aminotransferase 4815 U/L), hyperbilirubinemia (Bilirubin Total 13.8 mg/dl), and coagulation dysfunction (International Normalized Ratio 2.36, platelets 107,000/uL). Abdominal Computed Tomography scan revealed a liver with a non-homogeneous structure, large amounts of ascites (perihepatically, perisplenically) and bilateral pleurisy, confirming the diagnosis of acute liver dysfunction. Virological tests confirmed massive Hepatitis B Virus replication and active Cytomegalovirus markers, which is why antiviral treatment with entecavir was initiated. Despite initial improvement in hepatic cytolysis syndrome, the outcome was unfavorable, with worsening cholestasis syndrome (Bilirubin Total 21 mg/dL) and liver dysfunction. The patient underwent three plasmapheresis sessions and two continuous hemodiafiltration sessions. Subsequently, the clinical and paraclinical evolution was favorable. **Discussions :** The particularity of the case lies in the management of acute liver failure of mixed viral etiology, Hepatitis B Virus and Cytomegalovirus, in an immunocompromised patient. Imaging was essential in objectifying complications: massive ascites and bilateral pleural effusions. Intensive care management required a multidisciplinary effort, with extracorporeal purification procedures used as a therapeutic "bridge." **Conclusions:** Fulminant hepatitis in immunocompromised patients requires an integrated approach. Early recognition of liver failure, despite apparent improvement in transaminases, was essential for the therapeutic decision.

Keywords: Acute fulminant hepatitis, Immunocompromised patient, Viral coinfection, Extracorporeal purification

ACUTE KIDNEY INJURY SECONDARY TO RHABDOMYOLYSIS IN A PATIENT WITH FAMILIAL MEDITERRANEAN FEVER: A CASE STUDY

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Introduction: Familial Mediterranean Fever (FMF) is a hereditary autoinflammatory condition defined by recurring bouts of fever and serositis. While clinicians primarily monitor for AA amyloidosis as a renal complication, acute kidney injury (AKI) can occasionally be triggered by rhabdomyolysis during intense flares. This case is significant because it highlights a less common, reversible cause of renal impairment in FMF that can be easily overlooked if creatine kinase (CK) levels are not prioritized during a systemic inflammatory episode. **Case Report:** A 26-year-old male with a history of FMF presented with a high fever of 38.5°C, nausea, vomiting, diarrhea and debilitating back and flank pain; all symptoms occurred after intense physical activity. Physical assessment revealed significant muscle tenderness and abdominal guarding. Initial diagnostic workup showed an elevated C-reactive protein (1.89 mg/dL) and a rise in serum creatinine to 1.67 mg/dL from a baseline of 0.87 mg/dL. The critical finding was a markedly elevated CK level of 4319 IU/L, confirming AKI secondary to rhabdomyolysis. The patient was managed conservatively with aggressive intravenous hydration at 250 mL/h. Within five days, the CK levels plummeted to 321 IU/L, and his renal function fully recovered with a creatinine of 0.85 mg/dL. **Discussions :** The clinical course of this patient emphasizes that severe inflammatory flares can induce significant muscle breakdown, directly impacting renal function. The rapid rise in creatinine in the absence of pre-existing renal disease underscores the importance of the "crush-like" pathology of rhabdomyolysis in FMF patients. This implies that for FMF patients presenting with severe myalgia, early screening of CK and aggressive fluid resuscitation are vital to prevent the progression to permanent tubular damage. **Conclusions:** This case illustrates that significant rhabdomyolysis can complicate FMF flares, leading to acute renal failure. The primary learning point is the necessity of early CK monitoring when patients present with intense muscle pain, especially when it is associated with FMF. This report contributes to medical knowledge by emphasizing that prompt, intensive hydration is the cornerstone of management, often leading to a complete reversal of AKI without the need for more invasive interventions.

Keywords: Familial Mediterranean Fever, Rhabdomyolysis, Acute Kidney Injury, Creatine Kinase

ANOTHER FACE OF TUBERCULOSIS

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Introduction: Tuberculosis (TB) is a highly contagious disease that mostly affects the lungs and represents a worldwide challenge in both diagnosis and treatment. The situation becomes more difficult when the patient has comorbidities, such as type 2 diabetes mellitus, which increases susceptibility to infections, especially TB, and may alter its clinical and radiological presentation, sometimes mimicking other pulmonary conditions such as lung abscesses superinfected with anaerobic bacteria. Differentiating between pulmonary abscess and tuberculosis is essential to allow the patient to receive the correct treatment without delay. **Case Report:** We present the case of a 52-year-old patient who was initially admitted to the Diabetology Department for symptoms of hyperglycemia, where insulin-requiring type 2 diabetes mellitus (T2DM) was diagnosed *de novo*. Because of symptoms such as night sweats, dry cough, fatigue and weight loss, imaging investigations were performed. The patient was then transferred to the Pneumology Department, being suspected of a pulmonary abscess. Thoracic computed tomography revealed a giant cavitary lesion with a thick wall located in the right upper lobe, along with bilateral infiltrations and satellite lesions. Two other small cavities were identified in the left upper and lower lobes, along with minimal pleural effusion. No horizontal air-fluid level, which is specific for abscesses with anaerobic superinfection, was observed. Additional investigations, including sputum analysis and molecular testing using the GeneXpert technique, confirmed pulmonary tuberculosis. **Discussions :** Pulmonary tuberculosis may present with cavitary lesions that mimic lung abscesses, especially in patients with comorbidities such as T2DM. In contrast to lung abscesses, which are usually unilateral and associated with air-fluid levels, TB is more frequently characterized by bilateral involvement and satellite lesions. Although a thick-walled cavity is typically characteristic of abscesses, it may also be present in mature tuberculous lesions, as observed in our case. The absence of an air-fluid level and the presence of multiple bilateral lesions supported the diagnosis of TB. T2DM increases susceptibility to TB and may alter its clinical and radiological presentation, leading to potential diagnostic delays. **Conclusions:** This case highlights the need to include TB in the differential diagnosis of cavitary lung lesions, particularly in diabetic patients, as it may mimic lung abscess both clinically and radiologically. It also underlines the importance of early molecular testing for rapid diagnosis and appropriate management.

Keywords: pulmonary tuberculosis, diabetes mellitus type 2, cavitary lung lesion, GeneXpert technique

AXIAL HYPOTONIA IN A FORMER PRETERM INFANT: WHEN TETHERED CORD SUSPICION MEETS DEVELOPMENTAL REALITY

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Introduction: Motor delay in former preterm infants often raises concern for central nervous system pathology, especially when imaging suggests possible structural anomalies. Differentiating benign axial hypotonia from conditions such as tethered cord or intrathecal lipoma is critical for prognosis and management. **Case Report:** We present the case of a male infant born at 35 weeks gestation (birth weight 1880 g) via cesarean section for maternal hypertension and was evaluated at 13 months for persistent motor delay. Early neonatal course included physiological jaundice and low discharge weight (2000 g). Head control was achieved at 4-5 months, rolling and pivoting appeared at 9 months, independent sitting remained absent at the time of reevaluation. Neurological examination revealed global hypotonia, predominantly axial and at the shoulder and pelvic girdles, with marked ligamentous hyperlaxity. Active movements were present and symmetric in all limbs, deep tendon reflexes were preserved or difficult to elicit in lower limbs but without pathological reflexes. Protective extension was present bilaterally, while stepping reflex was absent. In sitting, dorsolumbar kyphosis and mild right lumbar deviation were noted. Cognitive and language development were within broader normal limits (Denver: gross motor -8 months; fine motor 12 months; language 12-14 months; social 9-10 months). Spinal ultrasound showed a normally positioned conus at Lumbar vertebra 1 but limited cord mobility and a small hyperechogenic formation suggestive of possible lipoma. Neurosurgical consultation raised suspicion of spina bifida occulta and recommended magnetic resonance imaging (MRI) surveillance. However, absence of sphincter dysfunction, symmetrical hypotonia, and

lack of upper motor neuron signs argued against active tethered cord syndrome. Management included intensive physiotherapy, Vojta therapy, sensory-motor stimulation (Nirvana), and omega-3 supplementation (fish oil 5 ml/day for 6 months). The child demonstrated progressive gains, including improved quadruped stability, crawling initiation, enhanced antigravity control, and increased environmental exploration. **Discussions** : This case highlights the diagnostic challenge posed by imaging findings suggestive of spinal anomalies in a hypotonic preterm infant. Clinical symmetry, preserved cognition, absence of sphincter disturbances, and steady improvement under therapy strongly support a central, non-progressive hypotonic syndrome rather than clinically significant tethered cord. Prematurity, low birth weight, and possible nutritional factors may have contributed to delayed axial maturation. **Conclusions**: In preterm infants with axial hypotonia and delayed motor milestones, clinical evolution under targeted rehabilitation remains a decisive diagnostic tool. Imaging abnormalities must be interpreted cautiously and correlated with neurological findings.

Keywords: Hypotonia, Spinal cord, Premature

BEYOND INFLAMMATION : DUAL ENTEROCOCCUS FAECALIS AND ENTEROBACTER SPP. INFECTION IN HIDRADENITIS SUPPURATIVA

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Introduction: Hidradenitis Suppurativa (HS), also known as "Acne Inversa", is a chronic inflammatory skin disease, originating from the pilosebaceous unit. It manifests through follicular occlusion, formation of sinus tracts and fistulas, and recurrent subcutaneous nodules. Because of this, patients with HS are more susceptible to secondary bacterial infections. These lumps are often associated with pain and emotional distress, including frustration, unease, and depression. The presence of these intertriginous lesions may also favor the development of superficial infections such as erythrasma, caused by excessive proliferation of *Corynebacterium minutissimum*.

Case Report: This is the case of a 52-year-old female known with type II obesity and depression, who presented to the Dermatology and Venereology Department of Targu Mures County Clinical Hospital at the end of 2025 with recurrent painful subcutaneous nodules present since 2019, associated with foul-smelling discharge. Bacteriological examination confirmed infection with *Enterococcus Faecalis* (rich colony), and the patient received antibiotic treatment with amoxicillin-clavulanic acid for 7 days with local treatment (fusidic acid+betamethasone, local antiseptic). One month later, she returned with intense erythema, edema, and pruritus of the pre-existent HS axillary and cervical lesions. A new culture revealed *Enterobacter* spp., with no significant laboratory systemic changes. Wood's lamp examination suggested superinfection with *Corynebacterium minutissimum*, with coral-red fluorescent erythrasma lesions in the intertriginous areas. As the HS lesions were inactive, no systemic antibiotic was required, only local therapy with fusidic acid and zinc oxide-based protective cream was recommended.

Discussions : HS is a known inflammatory pathology characterized by rupture of the hair follicle with release of keratin and bacteria into the surrounding corium, creating a favorable site for bacterial colonization. Recurrent colonization and infection play an important role in the disease progression, as they can occur through the tracts formed during evolution. The debris in the dermis stimulates the secretion of pro-inflammatory cytokines such as tumor necrosis factor-alpha (TNF- α), interleukin (IL)-1 β , IL-6, and IL-17, which maintain the chronic inflammatory process. **Conclusions**: HS is a disease that greatly impacts a patient's daily life, often allowing pathogens to easily enter the body through the tracts and nodules formed. It's not only inflammation, it also is shame and anxiety.

Keywords: Acne Inversa, Bacteria, Dual Infection, Hidradenitis Suppurativa

BEYOND LDL-C: THE ROLE OF LIPOPROTEIN (A) IN THE RESIDUAL RISK OF RECURRENT MYOCARDIAL INFARCTION

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Introduction: Myocardial infarction (MI) is caused by the reduction or complete disruption of blood flow to a portion of the myocardium. MI may be "silent" and go undetected, or it can be a catastrophic event leading to hemodynamic deterioration and sudden death. Coronary events in young patients are relatively rare and are typically associated with genetic and metabolic risk factors such as smoking, obesity, hypertension, dyslipidemia,

and diabetes mellitus. Early atherosclerosis and coronary thrombosis are significantly influenced by Lipoprotein (a) [Lp(a)], which serves as an independent risk factor for acute myocardial infarction and cardiovascular complications. **Case Report:** We present the case of a 43-year-old patient with no known cardiovascular risk factors or prior pathologies, who presented with a clinical picture dominated by constrictive precordial pain radiating to the left upper limb and dyspnea, with onset four hours prior to admission. Laboratory findings indicated elevated levels of high-sensitivity cardiac troponin I (hs-cTnI) and N-terminal pro-B-type natriuretic peptide (NT-proBNP), while the electrocardiogram (ECG) showed ST-segment elevation and symmetrical T-wave inversion in leads V1-V2. Myocardial ischemia in the anterior territory was confirmed, although ventricular kinetics remained initially unaffected. Coronary angiography revealed a lesion in the left anterior descending artery, with no other associated lesions; a drug-eluting stent was successfully implanted. The clinical course was marked by a second ischemic episode five months later, characterized by a recurrence of the initial symptoms. Imaging evaluation at this stage revealed an extension of the contractile deficit involving the lateral-posterior wall. Repeat angiography demonstrated that the previously implanted stent was patent; however, an acute thrombotic occlusion was identified in the right coronary artery, requiring primary stenting to restore the vascular lumen. Despite intensification of statin therapy and administration of a proprotein convertase subtilisin/kexin type 9 (PCSK9) inhibitor, the recurrence prompted evaluation of lipoprotein(a) levels, which were found to be significantly elevated. **Discussions :** A notable aspect of this case is that the patient developed a recurrent ischemic episode despite high treatment compliance and adherence to guideline-directed medical therapy. Given the patient's young age and the early recurrence of ischemia, Lp(a) was identified as the primary driver of residual risk. **Conclusions:** In young patients, elevated Lipoprotein (a) is a significant risk factor for premature atherosclerosis and recurrent coronary events. Early evaluation of Lp(a) is vital to optimize therapeutic management and prevent further cardiovascular complications.

Keywords: Lipoprotein (a), Myocardial infarction, Coronary angiography, Residual risk

BEYOND THE BIOMARKERS: A CASE OF CHRONIC THROMBOEMBOLIC PULMONARY HYPERTENSION MASKED BY NORMAL NATRIURETIC PEPTIDE AND PRESERVED VENTRICULAR FUNCTION

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Introduction: Chronic thromboembolic pulmonary hypertension (CTEPH) is a serious and potentially curable form of pulmonary hypertension caused by persistent obstruction of pulmonary arteries due to unresolved thromboemboli. Although pulmonary embolism is common, only a small proportion of patients develop CTEPH. Early diagnosis is challenging because symptoms, including progressive exertional dyspnea, are subtle and non-specific, frequently resulting in misdiagnosis in older adults with multiple comorbidities. **Case Report:** A 78-year-old woman with deep vein thrombosis and prior pulmonary embolism presented with worsening exertional and paroxysmal nocturnal dyspnea. Her medical history included hypertension and diabetes mellitus and she was receiving anticoagulation therapy. On admission, vital signs and B-type natriuretic peptide were normal. Transthoracic echocardiography revealed preserved left ventricular systolic function and an elevated pulmonary artery systolic pressure of 47 mmHg, consistent with pulmonary hypertension. Pulmonary computed tomography angiography revealed chronic emboli within the bilateral segmental pulmonary arteries, dilation of intraparenchymal arterial branches, and mosaic perfusion patterns. Right heart catheterization confirmed precapillary pulmonary hypertension with a mean pulmonary artery pressure of 30 mmHg, pulmonary vascular resistance of 6 Wood units, and cardiac output of 5.1 L/min. Vasoreactivity testing was negative. Coronary angiography showed moderate non-obstructive coronary artery disease. The patient was diagnosed with World Health Organization Group 4 pulmonary hypertension and discharged in stable condition for multidisciplinary outpatient follow-up. **Discussions :** This case highlights how normal B-type natriuretic peptide levels, preserved right ventricular function and coexisting coronary artery disease contributed to diagnostic delay. It underscores the need for a comprehensive clinical approach using multimodal imaging and invasive hemodynamic assessment to distinguish CTEPH from other causes of dyspnea in elderly patients. **Conclusions:** Persistent dyspnea after pulmonary embolism warrants systematic evaluation for chronic thromboembolic disease. This case emphasizes maintaining a high clinical suspicion and the need for a structured diagnostic approach to avoid missed diagnoses of this treatable condition.

Keywords: pulmonary embolism, BNP levels, mosaic perfusion

BEYOND THE PRIMARY TUMOR: PERITONEAL CARCINOMATOSIS FROM RIGHT-SIDED COLON ADENOCARCINOMA-A CASE REPORT

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Introduction: Colorectal cancer (CRC) is a malignancy that develops from polyps of the colon's inner layer. It is the third cause of cancer-related death worldwide. Approximately 15-20% of cases are inherited or linked to genetic syndromes (Lynch syndrome). The early symptoms are melena and abdominal discomfort. This malignant tumor most commonly spread to the liver and lungs, while only approximately 10% of patients develop peritoneal metastases, also referred to as peritoneal carcinomatosis. **Case Report:** We herein report a case of a 73-year-old male patient who was admitted to the County Emergency Clinical Hospital from Bistrita on a scheduled basis with a presumptive diagnosis of ascending colon tumor. The patient presented with nonspecific symptoms, including abdominal discomfort and altered bowel habits. No significant hereditary risk factors were reported. Preoperative evaluation suggested a tumor of the ascending colon. Surgical intervention was performed, and two biopsy specimens were obtained: one from the parietal peritoneum and one from the ascending colon. Macroscopic examination of the first specimen revealed an irregular tissue fragment measuring 15×10×6 mm, with elastic consistency and whitish-gray appearance, corresponding to fibroadipose connective tissue. A circumferential ulcerovegetative tumor measuring 50×30 mm with a thickness of 12 mm was identified in the ascending colon, infiltrating adjacent structures. Additional whitish nodules were observed on the ileal serosa, along with a fistulized area in the peritumoral adipose tissue. Histopathological examination confirmed the diagnosis of a moderately differentiated (G2) adenocarcinoma with glandular and micropapillary architecture, composed of atypical cells with abnormal nuclear features. Tumor involvement of the peritoneum confirmed peritoneal carcinomatosis. The patient underwent right hemicolectomy. Given the presence of peritoneal metastasis, further oncological management, including consideration for systemic chemotherapy and HIPEC, was indicated. **Discussions :** Peritoneal carcinomatosis at initial diagnosis of colorectal cancer is relatively uncommon, occurring in approximately 10% of cases. The presence of a micropapillary component is recognized as a marker of aggressive behavior, being associated with increased risk of metastasis and poor prognosis. The case emphasizes the need for careful intraoperative evaluation and accurate pathological assessment for detecting peritoneal involvement. Early detection through screening, like fecal occult blood testing or colonoscopy remain essential for improving prognosis and expanding therapeutic options, while advanced cases require complex management, including consideration of HIPEC (Hyperthermic Intraperitoneal Chemotherapy). **Conclusions:** The most effective method of preventing CRC is screening average-risk individuals. Although, the mortality is high because the patients have no typical manifestations in early-stages. In cases of peritoneal metastasis as this one, HIPEC can increase changes of survival by more than 4-5 years.

Keywords: CRC, peritoneal carcinomatosis, HIPEC, Lynch Syndrome

CARING FOR MILITARY PERSONNEL WITH POSTTRAUMATIC STRESS DISORDER

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Introduction: Post-traumatic stress disorder (PTSD) is a complex condition affecting military personnel involved in combat as a response to intense traumatic events. It can occur regardless of age, culture, or gender and manifests through the development of pathological behaviors during the process of reintegration into daily life: mood disorders, suicidal tendencies, addictions, sleep and eating disorders, and changes in perception, leading to difficulties in relating to others, reduced ability to work, and consequently, a reduced quality of life. Thus, it is important to understand this disorder and its impact on mental and physical health. Patients attempt to cope either by numbing their suffering through the development of addictions-such as alcohol and drug abuse-or by trying to control their interactions with their environment (avoidant behavior and outbursts of anger). **Case Report:** This case summary describes a 48-year-old former Romanian soldier, a veteran of the war zones in Afghanistan and Iraq, who presented at the Tîrgu Mureş psychiatric clinic with a depressive disorder, sleep disturbances, and impaired concentration, which have persisted for several years since his return from active duty. The patient

underwent psychiatric and psychological evaluation. Current and previous medical records were reviewed. The patient reported difficulties reintegrating into civilian life, , depressed mood irritability, emotional numbness, and frequent combat-related flashbacks and nightmares along with unstable employment and strained relationships. He disclosed a previous suicide attempt, alcohol and nicotine dependence used to cope with intrusive thoughts and insomnia contributing to isolation and hopelessness. **Discussions** : This case highlights the long-term psychological impact of exposure to trauma in war zones. The patient's symptoms-agitation, sleep disturbances, flashbacks, emotional numbness, and social difficulties-are consistent with chronic PTSD complicated by depression, substance use, and impaired reintegration. Management required a multidisciplinary approach-pharmacological treatment with selective serotonin reuptake inhibitors (sertraline and paroxetine), trauma-focused therapy, and counseling for alcohol dependence- cognitive behavioral therapy (CBT) and contingency management (CM). **Conclusions:** This case illustrates the importance of early identification and ongoing support for veterans, which can prevent chronic mental health complications and improve overall functioning. The care protocol for military personnel with PTSD includes: treatment for the affective disorders, for substance abuse and alcohol use, psychotherapy such as cognitive-behavioral therapy, exposure therapy, education and information for the affected family.

Keywords: PTSD, Reintegration, Addiction, War

COLLAGEN DISEASES WITH SIGNIFICANT RESPIRATORY INVOLVEMENT

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Introduction: Pulmonary involvement in collagen diseases is frequent and contributes to morbidity. Usually respiratory involvement includes interstitial fibrosis and sometime pleural efusion. Respiratory involvement can be predominant or precede the symptoms of systemic disease. **Case Report:** A representative case is the following patient: female, 66-year-old, non-smoker, with exposure to chemical substances and coronavirus disease 2019 (COVID-19), and known with Sjögren's syndrome. She was hospitalised in the Pulmonology clinic with dyspnea, asthenia, and wheezing. On admission, thoracic computed tomography (CT) showed honeycomb fibrosis, bronchiectasis, and emphysema. Furthermore, the patient had positive immunological markers, including Sjögren's-syndrome-related antigen A (SS-A), Sjögren's-syndrome-related antigen B (SS-B), Ro52 (52 kDa Ro/SSA antigen), antinuclear antibodies (ANA), and rheumatoid factor. Additionally, plethysmography revealed a decrease in diffusing capacity of the lungs for carbon monoxide (DLCO 63%) and total lung capacity (TLC 68%), as well as a decrease in arterial oxygen saturation (SaO₂) during the effort test. Consequently, a multidisciplinary treatment was initiated, consisting of systemic corticosteroids, antiplatelet agents, B vitamins, inhaled corticosteroids, bronchodilators, and respiratory rehabilitation. Subsequently, Nintedanib (antifibrotic) was introduced, resulting in a favorable outcome. **Discussions** : In patients with connective tissue diseases, pulmonary involvement is an important factor that can significantly affect prognosis and treatment decisions. In this context, conditions such as interstitial lung disease, bronchiectasis, and emphysema may occur together, as a result of autoimmune mechanisms as well as environmental or infectious factors. Furthermore, respiratory symptoms may appear before or may be more prominent than systemic manifestations, which can delay diagnosis and treatment. Therefore, early detection through imaging, pulmonary function tests, and immunological investigations is essential. In addition, a multidisciplinary approach involving pulmonologists, rheumatologists, and radiologists is important for establishing an accurate diagnosis and choosing the most appropriate treatment. Notably, antifibrotic therapy, such as Nintedanib, has become an important option in patients with progressive fibrosing interstitial lung disease associated with collagen diseases, helping to slow disease progression and improve clinical outcomes. **Conclusions:** Based on these findings, it can be said that connective tissue diseases should be carefully evaluated for possible pulmonary involvement. Moreover, because these conditions and their complications can be complex, a multidisciplinary approach is needed to achieve an accurate diagnosis, choose the most appropriate treatment, and improve patient outcomes.

Keywords: Collagen diseases,, pulmonary,, connective tissue diseases

COMBINED REALIGNMENT AND SOFT-TISSUE RECONSTRUCTION FOR RECURRENT PATELLAR INSTABILITY IN A SKELETALLY IMMATURE PATIENT

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Introduction: Recurrent patellar dislocation in pediatric athletes frequently results from soft-tissue laxity and bony malalignment, including valgus deformity. Treating skeletally immature patients presents challenges because surgery must stabilize the patellofemoral joint by correcting alignment while preserving open epiphyseal plates.

Case Report: We present to you the case of an 11-year-old volleyball player who experienced five patellar dislocations within one year. Clinical and radiological assessments, including orthoradiographic standing X-rays and computed tomography, confirmed a significant left knee valgus deformity with open physes. The patient underwent a lateral opening-wedge distal femoral varus osteotomy to correct the mechanical axis, stabilized with a locking plate. Concurrently, a rectus sleeve medial patellofemoral ligament (MPFL) reconstruction was performed to improve patellar tracking and protect the tibial tubercle apophysis. Intraoperative fluoroscopy confirmed mechanical axis correction and stable patellar tracking. The pediatric locking plate provided stable fixation while preserving the femoral growth plate. Postoperative imaging demonstrated correction of the valgus angle, shifting the mechanical axis deviation from lateral to neutral. Initial follow-up revealed no further subluxations.

Discussions : Managing pediatric athletes with high physical demands requires addressing the mechanical bowstring effect caused by bony misalignment. The primary objective was to correct the valgus axis to reduce lateral patellar tension. The surgical technique was adapted to the patient's age. A specialized locking plate was used for stable fixation while avoiding the femoral growth plate. The "rectus sleeve" method for MPFL reconstruction was chosen instead of conventional tibial tubercle osteotomy. This realigned the extensor mechanism and preserved the tibial apophysis's growth potential. This combined approach of bone realignment and soft-tissue reinforcement offers a robust mechanical solution that substantially decreases recurrence risk.

Conclusions: Correcting the valgus deformity is essential for lasting stability in pediatric patellar instability. Combining distal femoral osteotomy with soft-tissue "sleeve" realignment provides a growth-plate-sparing treatment. This approach restores joint function and enables young athletes to return to sports with a properly aligned knee and reduced risk of dislocations.

Keywords: Patellar Instability, Genu Valgum, Skeletally Immature, Distal Femoral Osteotomy

COMPLEX SURGICAL MANAGEMENT OF ABDOMINAL POLYTRAUMA WITH MULTIPLE INTESTINAL INJURIES AND PARENCHYMAL ORGAN LESIONS

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Introduction: Polytrauma is defined as a condition with multiple life-threatening injuries and can be a common cause of death and disability. The commonest cause is road traffic accidents. Abdominal injuries are common in such scenarios and constitute 20-30% of injuries with a varied degree of illness depending upon the nature and extent of solid organ and vascular injuries. Acute ethanol intoxication is a very common associated finding in trauma patients, which increases the level of clinical uncertainty in trauma assessment, thus leading to a delay in diagnosis. Management of severe abdominal polytrauma with complex intestinal and solid organ injuries is a common and very challenging clinical scenario in the field of trauma surgery. **Case Report:** A 35-year-old man without significant past medical disease was admitted following a road traffic accident under ethanol influence. Clinical findings pointed toward an acute abdomen and hemodynamic instability. Imaging demonstrated blood and air in the abdominal cavity in addition to liver lacerations. Emergency exploratory laparotomy confirmed that massive hemoperitoneum caused hemorrhagic shock. Furthermore, there was also jejunal perforation, mesenteric avulsion of the terminal ileum, and deserosalization of the cecum and ascending colon along with a lower pole splenic laceration. Surgical management was carried out in the form of hepatic and splenic hemostasis, resection of devitalised bowel segments, and restoration of digestive continuity plus two end-to-end anastomoses (jejunum-jejunum and ileoileal). Injuries to the cecum and colon with damage to the serosal layer were sutured without the

need for segmental colectomy. Extensive peritoneal lavage and multi-site drainage (subhepatic, interhepatophrenic, Douglas pouch, and perisplenic spaces) were done. Close follow-up yielded good postoperative diagnosis. **Discussions :** The management of polytrauma patients with multiple gut injuries remains controversial, especially about the safety of primary anastomoses in hemorrhagic shock. The risk of leakage and septic complications is significantly enhanced by dual anastomoses and colonic serosal injury. However, primary reconstruction may safely be performed on hemodynamically stable patients with adequate tissue perfusion to avoid stoma-related morbidity. Ethanol intoxication is another risk factor that can delay diagnosis and change the physiological response to injury. It is vital to perform a careful assessment intraoperatively and observationally to prevent life-threatening conditions. **Conclusions:** Complex abdominal polytrauma with combined intestinal and parenchymal injuries requires prompt surgical intervention and individualized decision-making. Primary anastomosis may be safely performed in selected patients, despite multiple lesions, when physiological conditions permit. Early diagnosis and aggressive management remain critical for survival, particularly in the presence of ethanol intoxication.

Keywords: abdominal trauma, intestinal anastomosis, jejunal perforation, mesenteric avulsion

CUTANEOUS METASTASIS OF CLEAR CELL RENAL CARCINOMA AS THE INITIAL PRESENTATION OF AN OCCULT MALIGNANCY – CASE REPORT

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Introduction: Renal cell carcinoma (RCC) is the most prevalent renal malignancy, originating from the proximal tubular epithelium. It ranks among the most aggressive urological tumors, accounting for approximately 3% of all adult malignancies. ccRCC is characterized by an unpredictable clinical course and a high metastatic potential. While it frequently disseminates to the lungs or bones, cutaneous metastases are rare, primarily affecting the head and neck, especially the face and scalp. Notably, a scalp lesion may represent the "sentinel lesion" for an otherwise occult underlying pathology. **Case Report:** We present the case of a 71-year-old male patient who presented to the Plastic Surgery Department with an exophytic tumor located on the scalp. The lesion was surgically excised and submitted for histopathological examination. Gross examination revealed an excision specimen featuring a multinodular, solid-architecture formation within the subcutis, which was demarcated and not extended to the resection margins. Conventional Hematoxylin-Eosin staining identified a proliferation of medium-sized tumoral cells in the mid and deep dermis. These cells exhibited predominantly clear cytoplasm, round nuclei, and prominent nucleoli, arranged in nests or cords delineated by fine, congested vascular septa. The adjacent stroma showed areas of hemorrhage interspersed among numerous blood vessels. The immunohistochemical profile demonstrated strong positivity for PAX8 (MRQ-50) and CD10. The correlation of macroscopic findings with microscopic features and the immunohistochemical profile is highly suggestive of a metastatic clear cell renal cell carcinoma (ccRCC). **Discussions :** Cutaneous metastases of renal cell carcinoma are uncommon and usually represent a late-stage manifestation with a poor prognosis. In contrast to the existing literature, where this type of metastasis typically appears after the diagnosis of the primary crcc, in this case the scalp lesion was the first manifestation of the underlying ccRCC. The primary objective of this case presentation is to emphasize the critical role of immunohistochemistry and a meticulous architectural analysis in diagnosing these tumors, given the wide spectrum of primary and secondary neoplasms that can manifest on the scalp. **Conclusions:** This case underscores the affinity of ccRCC for highly vascularized anatomical sites and highlights the diagnostic challenges posed by its atypical clinical presentation.

Keywords: ccRCC, PAX8, scalp lesion, CD10

DIABETIC PERIPHERAL NEUROPATHY AND LOWER LIMB AMPUTATION: A CASE-BASED ANALYSIS OF DIAGNOSTIC GAPS AND PODIATRIC SOLUTIONS

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Introduction: Diabetic peripheral neuropathy, or DPN, is a frequent complication of diabetes mellitus, defined here as DM, and contributes to the development of foot ulceration through loss of protective sensation. European

guidance from the International Working Group on the Diabetic Foot and the European Society for Vascular Surgery identifies neuropathy, alongside peripheral arterial disease and infection, as a central component in the pathway leading to lower limb amputation. **Case Report:** This case summary presents the case of a 64-year-old male with a 20-year history of Type 2 DM who presented with a non-healing, Wagner Grade 3 plantar ulcer. Despite aggressive wound care and antibiotic therapy, the patient developed osteomyelitis. The synergistic effect of DPN-induced sensory loss and Peripheral artery disease-related ischemia resulted in poor localized healing. Due to extensive tissue necrosis and failed revascularization, a transtibial amputation was required. **Discussions :** This case highlights a broader systemic crisis: in Romania, over 50% of amputations are performed on patients with diabetes. High amputation rates are driven by late diagnosis, a lack of standardized neuropathy screening, and limited access to specialized podiatric care. Beyond early diagnosis, the integration of podiatrists into multidisciplinary care teams is a fundamental necessity. Effective management-encompassing comprehensive examination, prevention, and curative treatment-is essential to reducing the national burden of diabetes-related amputations and improving patient quality of life. **Conclusions:** This case illustrates that, beyond early diagnosis, the integration of specialized podiatric care is vital to halting the progression of diabetic foot complications. Incorporating podiatrists into a multidisciplinary team is a necessity for effective management. By providing expertise in comprehensive examination, preventative screening, and curative treatment, podiatrists play a definitive role in reducing the burden of diabetes-related amputations and improving long-term patient outcomes.

Keywords: multidisciplinary care team, transtibial amputation, podiatry, PAD

DISSEMINATED HERPES ZOSTER IN AN IMMUNOCOMPETENT PATIENT

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Introduction: Herpes zoster is a viral infection caused by reactivation of the varicella zoster virus (VZV), typically presenting with a unilateral vesicular eruption limited to a single dermatome. The disease is generally more severe and extensive in elderly or immunosuppressed individuals. In immunocompetent patients, involvement is usually localized. We present a case of herpes zoster with trigeminal nerve distribution involving the face and scalp, accompanied by ocular involvement, in a patient without known immunodeficiency. **Case Report:** A 61-year-old female with no known comorbidities presented with burning and stinging sensations initially localized to the left cheek. Within a short period, similar symptoms developed in the left upper eyelid, accompanied by ocular burning, tearing, and pain exacerbated by eye movements. The patient reported a history of herpes zoster affecting the left thoracic region approximately 30 years earlier. Bullous lesions subsequently appeared and were observed to involve the face and scalp in a distribution consistent with the trigeminal nerve. Based on clinical and dermatological findings, a diagnosis of herpes zoster was established. Due to ocular symptoms, the patient was evaluated by ophthalmology and diagnosed with herpes zoster ophthalmicus. Oral valacyclovir was initiated at a dose of 1000 mg three times daily for seven days. Supportive therapy was provided for pain control. Approximately 10 days after treatment initiation, the lesions had crusted and regressed significantly. However, persistent neuropathic pain developed, consistent with postherpetic neuralgia, and oral pregabalin 75 mg twice daily was prescribed. **Discussions :** Herpes zoster commonly involves a single dermatome. However, atypical presentations may occur even in immunocompetent individuals. Trigeminal nerve involvement affecting the face and scalp, particularly when accompanied by ocular manifestations, is clinically significant due to the risk of vision-related complications. In this case, the absence of known immunosuppression despite extensive trigeminal distribution represents an uncommon presentation. Herpes zoster ophthalmicus warrants prompt ophthalmologic evaluation to prevent potential complications such as keratitis, uveitis, and vision loss. Early initiation of antiviral therapy is associated with faster lesion resolution and reduced complication rates. In this patient, timely administration of valacyclovir resulted in marked clinical improvement. Nevertheless, postherpetic neuralgia developed, which remains one of the most frequent complications of herpes zoster. **Conclusions:** Herpes zoster may present with atypical and extensive trigeminal involvement even in immunocompetent patients. Ocular symptoms require urgent ophthalmologic assessment. Early antiviral therapy and appropriate pain management are essential to improve outcomes and minimize complications.

Keywords: Herpes zoster ophthalmicus, Postherpetic neuralgia, Immunocompetent patient, Valacyclovir

DOUBLE-ROW SUTURE ANCHOR FIXATION IN DISPLACED GREATER TUBEROSITY FRACTURE: CASE REPORT

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Introduction: Greater tuberosity fractures account for 15-20% of proximal humerus fractures and directly affect rotator cuff function. Fragment displacement can alter shoulder biomechanics and cause subacromial impingement. Surgical fixation is recommended in displaced cases to restore anatomy and preserve rotator cuff efficiency, with suture anchor fixation representing a less invasive alternative to locking plate fixation in isolated fractures. **Case Report:** A 32-year-old male was admitted in our department with left shoulder pain and impairment of movement, occurred after a fall from standing height. Clinical examination revealed painful mobility, bone crepitation and swelling of left shoulder, without neuro-vascular lesions. X-Ray exams confirmed the diagnose of left greater tubercle displaced fracture. Taking in consideration the age of the patient and the ability to full short-term recovery, surgical treatment was indicated. Open reduction and internal fixation using two suture anchors was performed through a transdeltoid approach under fluoroscopic control. Postoperatively, the patient had good wound healing and preserved passive range of motion. The shoulder was immobilized in an anti-rotation shoulder orthosis, followed by progressive rehabilitation. **Discussions :** The greater tuberosity plays an important role in shoulder stability and movement by anchoring the rotator cuff tendons. Even small displacements (≥ 5 mm) can disturb normal shoulder biomechanics and lead to functional impairment. Suture anchor fixation offers several advantages, including minimal hardware prominence, preservation of bone stock, and improved restoration of the tendons footprint. The double-row configuration allows better compression and may improve biomechanical stability, especially in smaller fracture fragments. However, this technique also has limitations. It depends on good tendon and bone quality, and there is a risk of anchor pull-out in osteoporotic bone. Compared to suture anchors, locking plates may provide more rigid fixation in large or multi-fragmentary fractures but are associated with more extensive soft tissue dissection and possible hardware-related complications. **Conclusions:** Suture anchor fixation is an effective and less invasive option for displaced isolated greater tuberosity fractures, particularly in young patients with good bone quality. Proper technique and anatomical restoration are essential for preserving rotator cuff function and achieving good clinical outcomes.

Keywords: greater tuberosity fracture, rotator cuff, suture anchor fixation, knotless anchor

EXTENSIVE ATYPICAL SPLANCHNIC VENOUS THROMBOSIS WITH PERSISTENT SYSTEMIC INFLAMMATION AND UNCLEAR PROTHROMBOTIC SUBSTRATE – A DIAGNOSTIC CHALLENGE

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Introduction: Splanchnic venous thrombosis is uncommon and often reflects an underlying systemic prothrombotic condition. Identifying the etiology is essential, as it directly influences anticoagulation strategy and long-term prognosis. **Case Report:** We report the case of a 50-year-old hypertensive male, heavy chronic smoker who suffered a blunt abdominal trauma, complaining of two episodes of severe, spontaneously remitting, upper abdominal pain. One month later, an abdominal ultrasonography revealed extensive thrombosis of the portal, splenic and superior mesenteric veins. Given the atypical thrombotic distribution, an expanded etiological evaluation was initiated. Contrast-enhanced CT confirmed extensive splanchnic thrombosis and splenic infarction (50%), while also showing an early portal cavernoma, weak hepatic perfusion, ascites, along with pleural left effusion and mixt pneumonic/atelectatic appearance, indicating systemic involvement. After multidisciplinary evaluation, surgical management was excluded. The clinical course was marked by a persistent infectious-inflammatory syndrome (leukocytosis 14800/ul, CRP 138-83 mg/l). An association with cyclic, unexplained febrile episodes, despite broad-spectrum antibiotic therapy and absence of a clearly documented infectious focus, led to comprehensive workups for a suspicion of an underlying systemic prothrombotic cause. Immunological testing (antinuclear antibody, anti-cardiolipin IgM, beta 2 glycoprotein1, Ig G, IgM) was within normal limits, paroxysmal

nocturnal hemoglobinuria was excluded and screening for occult malignancy has been negative to date. Thrombophilia testing (V Leiden Factor, prothrombin gene mutation, MTHFR polymorphism) remains in progress and is pivotal for therapeutic planning: a confirmed inherited or acquired thrombophilia would lead to lifelong anticoagulation, whereas negative results would support a limited 3-6 month course. Additionally, imaging identified a celiac trunk subocclusion, suggestive of Dunbar syndrome, representing an anatomical and hemodynamic particularity, that may have contributed to altered hepatic perfusion and cholestatic features (Alkaline Phosphatase 134 u/l, Gamma-Glutamyl Transferase 93 U/ml). **Discussions** : Atypical site thrombosis would require exclusion of inherited and acquired thrombophilia, hematologic disorders such as paroxysmal nocturnal hemoglobinuria, occult malignancy, and chronic inflammatory conditions. Persistent inflammatory syndrome and cyclic fever in the absence of confirmed infection further complicate both short and long-term management decisions. **Conclusions**: With negative initial malignancy and immunologic screening, this case highlights the diagnostic and therapeutic challenges of atypical splanchnic vein thrombosis accompanied by persistent inflammatory activity. Ongoing etiologic clarification is essential for defining long-term anticoagulation strategy.

Keywords: atypical site thrombosis, persistent inflammatory syndrome, splanchnic vein thrombosis, thrombophilia

EXTENSIVE UROSEPSIS BEYOND THE KIDNEYS: RENAL VEIN THROMBOSIS WITH SYSTEMIC COMPLICATIONS - CASE REPORT

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Introduction: Although frequent and generally have a favorable outcome under appropriate treatment, urinary tract infections (UTIs) can progress to severe sepsis, involving multiorgan damage. The persistence of the infectious syndrome can favor the appearance of thrombotic complications. In this context, early diagnosis and prompt treatment are essential for prognosis. Renal vein thrombosis is a rare but severe complication of urosepsis, frequently underdiagnosed and associated with an unfavorable prognosis. **Case Report**: A 48-year-old patient with a history of recurrent urinary tract infections presents with generally altered condition, fever, dehydration and tachycardia. On clinical examination, there was a bilaterally-present basal vesicular murmur, no rales, positive Giordano sign, meteorized abdomen, spontaneous pain and palpation in the right flank and suprapubic flank and cloudy urine. Laboratory investigations revealed increased C-reactive protein (310.63 mg/L) and neutrophilia (93.4%), suggestive of a severe bacterial infection. Serum creatinine was elevated (1.34 mg/dL) and glomerular filtration rate decreased (47 mL/min), indicating acute renal impairment. Abdominopelvic Computed Tomography (CT) examination revealed acute right pyelonephritis, bilateral renal microlithiasis, minimal pulmonary condensation, and fine blades of fluid at the pleural and pericardial level. Urine culture was positive for multisensitive *Klebsiella pneumoniae*, initiating broad-spectrum antibiotic treatment, combined with low molecular weight heparin. During hospitalization, the patient's evolution was complicated by the appearance of a right renal vein thrombosis, confirmed by a CT scan. **Discussions** : Sepsis with Gram-negative germs, such as *Klebsiella pneumoniae*, is frequently associated with severe evolution and increased risk of systemic complications. Acute renal failure secondary to sepsis may be reversible if treatment is initiated early, but the occurrence of thrombotic complications significantly worsens the prognosis. Sepsis-induced coagulopathy is a central mechanism in the development of thrombosis, ranging from impaired microcirculation to involvement of large vessels. The association between acute pyelonephritis, acute renal failure and renal vein thrombosis, together with systemic determinations, suggests a severe evolution to multiple organ dysfunction. Early identification of thrombotic complications, through the prompt use of imaging investigations, as well as careful monitoring of renal function and coagulation status, are essential for optimizing management and improving prognosis. **Conclusions**: UTIs can unpredictably progress to severe sepsis, complicated with thrombotic events and multiple organ dysfunction syndrome. This case highlights the importance of early recognition of thrombotic complications, and prompt treatment. The relationship between infection, coagulopathy and severe systemic involvement underscores the need for a prompt diagnostic and therapeutic approach.

Keywords: urosepsis, *Klebsiella pneumoniae*, renal vein thrombosis, coagulopathy

FROM CUSHING'S SYNDROME TO OSTEOGENESIS IMPERFECTA. A CASE OF A 20-YEAR-OLD FEMALE PATIENT WITH A FEMORAL NECK FRACTURE

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Introduction: Femoral neck fracture in young patients are typically the result of highenergy trauma. However, a bilateral fracture following a minor fall should immediately raise concerns regarding bone quality. Osteogenesis Imperfecta is a rare genetic disorder characterized by extreme bone fragility due to type 1 collagen mutations, turning standard orthopedic management into a significant therapeutic challenge. **Case Report:** We report the case of a 20-year-old female who presented to the Emergency Department after a second low-energy fall, with severe bilateral hip pain and inability to walk. Following her initial fall, she had been diagnosed with bilateral femoral neck fracture and managed conservatively with functional treatment. On admission, physical examination revealed abdominal striae and a rounded face, raising suspicion of Cushing's syndrome. Given the fracture pattern, the left femoral neck fracture was treated surgically with internal fixation using three cannulated compression screws, while the right side was initially managed conservatively. Despite initial pain relief, follow-up demonstrated progressive complications, including varus deformity, hardware displacement, and limb shortening. Computed tomography at 28 weeks confirmed nonunion. Further investigations, including genetic testing, established the diagnosis of Osteogenesis Imperfecta. Due to failed fixation and poor bone quality, the therapeutic strategy was revised, and total hip arthroplasty was recommended for the left hip. **Discussions :** Management of femoral neck fracture in patients with Osteogenesis Imperfecta remains challenging due to poor bone quality and high rates of fixation failure, as also reported in the literature. While internal fixation is often attempted in young patients, it is associated with an increased risk of nonunion and mechanical failure in Osteogenesis Imperfecta. Early recognition of underlying metabolic or genetic bone disorders is essential to guide appropriate treatment. In such cases, arthroplasty may represent a more reliable option when fixation fails. This case highlights the importance of correlating clinical findings with atypical fracture patterns and emphasizes the need for a multidisciplinary approach involving orthopedics, endocrinology, and genetics. **Conclusions:** Bilateral femoral neck fracture after low-energy trauma in young patients should prompt evaluation for underlying bone disorders such as Osteogenesis Imperfecta. Early diagnosis can significantly influence management decisions. Treatment strategies must be individualized, and in cases of failed fixation, arthroplasty may provide better functional outcomes.

Keywords: Bilateral femoral neck fracture, Osteogenesis Imperfecta, Arthroplasty, Bilateral hip pain

FROM FLARE TO REMISSION: SUCCESSFUL BIOLOGIC THERAPY IN MODERATE-TO-SEVERE LEFT-SIDED ULCERATIVE COLITIS

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Introduction: Ulcerative colitis is a chronic inflammatory bowel disease characterized by continuous inflammation of the colonic mucosa, typically presenting with bloody diarrhea and abdominal pain. Moderate-to-severe forms may have a significant impact on quality of life and often require early therapeutic escalation, including biologic agents, to achieve sustained remission and prevent complications. **Case Report:** To present a case of moderate-to-severe left-sided ulcerative colitis and to highlight the role of biologic therapy in achieving clinical, endoscopic, and histological remission. **Discussions :** Following biologic therapy, the patient demonstrated rapid clinical improvement, with normalization of bowel habits and resolution of rectal bleeding. At 3-month follow-up, complete clinical, endoscopic, and histological remission was achieved, with normalization of inflammatory markers. **Conclusions:** This case underscores the importance of timely therapeutic escalation in moderate-to-severe ulcerative colitis. Infliximab proved highly effective in inducing remission after inadequate response to conventional therapy. Early use of biologic therapy may improve outcomes and reduce disease-related complications.

Keywords: ulcerative colitis, infliximab, mucosal healing, inflammatory bowel disease

FROM ULTRASOUND TO COMPUTED TOMOGRAPHY: IMAGING PATTERNS OF MASSIVE HEPATIC NECROSIS IN HEPATITIS B VIRUS-CYTOMEGALOVIRUS CO- INFECTION

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Introduction: Acute fulminant hepatitis is characterized by massive hepatocyte necrosis and rapidly progressive liver failure. While Hepatitis B Virus is a frequent etiology, co-infection with Cytomegalovirus in an apparently immunocompetent patient can accelerate parenchymal destruction. In this clinical setting, imaging is a cornerstone for assessing liver viability and extrahepatic complications. **Case Report:** A 49-year-old female was admitted with severe jaundice, altered mental status, and a sudden decline in liver synthetic function. The clinical diagnosis was acute fulminant hepatitis due to Hepatitis B and Cytomegalovirus co-infection. Initial ultrasound revealed a significantly shrunken liver ("small liver syndrome") and marked, stratified gallbladder wall edema (9 millimeters). Contrast-enhanced Computed Tomography confirmed hepatic volumetric reduction and diffuse hypodense areas alternating with islands of remaining parenchyma. A non-contrast brain Computed Tomography revealed subtle sulcal effacement, indicating early-stage cerebral edema. Management focused on intensive medical stabilization, including intravenous antiviral therapy with Entecavir and Ganciclovir, aggressive correction of coagulopathy, and osmotic therapy for cerebral edema. The patient remained under strict radio-clinical surveillance to monitor the potential for spontaneous hepatic regeneration versus progressive multi-organ failure.

Discussions : The pathogenic interaction between Hepatitis B and Cytomegalovirus triggered an aggressive inflammatory cascade. Literature identifies Cytomegalovirus as an immunomodulatory co-factor that enhances T-cell mediated necrosis, explaining the rapid progression observed. The radiological finding of "small liver syndrome" is the macroscopic expression of this massive necrosis; clinical studies correlate a reduction in liver volume below 700 cubic centimeters with a survival rate of less than twenty percent under conservative management. Furthermore, the stratified gallbladder wall edema exceeding 7 millimeters serves as a vital indirect sign. This appearance, documented in similar fulminant cases, reflects the acute onset of portal hypertension and a profound drop in oncotic pressure. Unlike standard hepatitis where the liver is often enlarged, the volumetric collapse seen here is a specific predictor of irreversible failure. Finally, the brain Computed Tomography findings align with documented patterns of metabolic encephalopathy; the subtle loss of sulcal definition represents early cytotoxic cerebral edema, a primary cause of mortality in twenty-five percent of fulminant cases. By identifying these changes early, imaging allowed for the timely initiation of neuroprotective therapy. **Conclusions:** In the context of Hepatitis B Virus-Cytomegalovirus co-infection, progression toward massive necrosis is rapid, requiring close radio-clinical correlation. From a case management perspective, imaging markers such as "small liver syndrome" and perivesicular edema were critical prognostic indicators, fundamental in guiding urgent therapeutic decisions and evaluating the need for liver transplantation.

Keywords: Massive hepatocyte necrosis, Small liver syndrome, Hepatitis B Virus, Acute portal hypertension

GASTRIC DILATATION OF UNCERTAIN ETIOLOGY - A CASE REPORT

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Introduction: Acute gastric dilatation is a rare but potentially life-threatening condition characterized by massive enlargement of the stomach due either to mechanical obstruction or to severe gastric dysmotility without an identifiable obstructive lesion. Delay in diagnosis may result in ischemia, necrosis, perforation, sepsis, and death. Establishing etiology may be difficult, especially in patients with inconclusive imaging and no clear intraoperative cause. **Case Report:** A 45-year-old woman was admitted in March 2026 with signs of acute surgical abdomen. On admission, she was cachectic, weighing 33 kg. Initial imaging studies were inconclusive. Emergency exploratory laparotomy revealed a massively dilated stomach extending into the pelvis, without any identifiable intraluminal or extraluminal mechanical cause of obstruction. Postoperatively, the patient developed persistent signs of delayed gastric emptying, requiring a second exploratory laparotomy. As no clear macroscopic cause was identified, a gastrointestinal diversion procedure was performed. At the time of abstract submission, the case remained under investigation, and no definitive etiologic diagnosis had yet been established. **Discussions :**

Published reports describe acute gastric dilatation as an uncommon surgical emergency that may be associated with gastric outlet obstruction, postoperative states, eating disorders, diabetic gastroparesis, or idiopathic gastric motility disorders. Current guidelines define gastroparesis as delayed gastric emptying in the absence of mechanical obstruction. Compared with the existing literature, the present case is notable for the extreme degree of gastric enlargement, extension to the pelvis, profound cachexia, repeated negative surgical exploration for mechanical obstruction, and persistent postoperative delayed gastric emptying. These findings support consideration of a severe gastric motility disorder, including idiopathic gastroparesis, after exclusion of structural causes. **Conclusions:** This case highlights the diagnostic and therapeutic challenge of massive gastric dilatation of uncertain etiology. In line with the literature, prompt recognition and intervention are essential, but definitive etiologic clarification may require postoperative functional evaluation in addition to imaging and surgical exploration.

Keywords: acute gastric dilatation, gastric dysmotility, acute abdomen, case report

HHV8-DRIVEN NODULAR KAPOSI SARCOMA IN AN ATYPICAL MENTON LOCATION

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Introduction: Kaposi sarcoma is a vascular neoplasm associated with human herpesvirus-8 (HHV-8) infection, characterized by a variable clinical course and a morphological expression dependent on the stage of the lesion. The nodular variant represents the tumoral phase, with evident cellular proliferation and local infiltrative potential. It occurs most frequently in the setting of patient immunodeficiency, with a common localization at the level of the lower limbs. **Case Report:** We hereby present the case of a 63-year-old male patient who presented for excision of a nodular lesion located at the level of the mental region. The macroscopic examination revealed an elliptical skin flap measuring 9 × 9 mm, containing a nodular tumoral formation, gray in color, elevated, measuring 8 × 7 mm and 7 mm in height. **At** the level of the dermis, a tumoral proliferation with nodular architecture is identified. The tumor is composed of vascular structures with formation of small- to medium-sized vascular lumina filled with erythrocytes, along with a proliferation of uniform spindle cells arranged in intersecting fascicles or forming pseudo-vascular spaces. Hemorrhagic extravasations are also observed. Peri- and intratumorally, a chronic inflammatory infiltrate is present. The tumor shows mitotic activity, with 18 mitoses per 10 high-power fields (HPF). The depth of tumor invasion is 3 mm. Immunohistochemical analysis revealed strong positivity for HHV-8, Cluster of Differentiation 31 (CD31), and D2-40 clone immunostaining. The Ki-67 marker proliferation index is approximately 20-25%. The morphological features and immunohistochemical profile confirm the diagnosis of nodular Kaposi sarcoma. **Discussions:** The mentonian localization of Kaposi sarcoma represents a rare presentation, with the potential to delay diagnosis due to its nonspecific clinical appearance and atypical topography. The increased mitotic activity and Ki-67 index suggest a heightened proliferative behavior, with implications for local recurrence risk. Confirmation of HHV-8 infection is essential for diagnosis, while the facial location requires careful surgical planning to achieve adequate safety margins. **Conclusions:** Nodular Kaposi sarcoma may present as an isolated cutaneous lesion, with local infiltrative potential. Histological examination and immunohistochemical confirmation are essential for establishing the diagnosis and ensuring appropriate management.

Keywords: Vascular sarcoma, HHV-8 infection, Nodular architecture, Increased mitotic activity

HYPEREOSINOPHILIC SYNDROME WITH CARDIAC AND GASTROINTESTINAL INVOLVEMENT

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Introduction: Hypereosinophilic syndrome (HES) is a heterogeneous group of disorders characterized by persistent eosinophilia and organ damage caused by eosinophilic tissue infiltration. Diagnosis requires careful exclusion of primary and secondary causes of eosinophilia, as numerous infectious, allergic, autoimmune, and hematologic conditions. A systematic diagnostic strategy is therefore essential to determine the etiology, identify organ involvement, and guide appropriate therapy. **Case Report:** We report the case of a 43-year-old male patient admitted for abdominal pain, fatigue, and weight loss. Laboratory investigations revealed leukocytosis with marked

eosinophilia representing approximately 30% of the leukocyte differential. Because of the significant eosinophilia, an extensive diagnostic work-up was initiated to identify possible primary, clonal, or secondary causes of hypereosinophilia and to evaluate potential organ involvement. The diagnostic evaluation included investigation of infectious causes, particularly parasitic infections, through repeated stool examinations and serologic testing. Positive results were obtained for *Toxocara canis* and *Giardia lamblia*. Allergic and atopic etiologies were assessed by measuring total immunoglobulin E levels and detailed allergic history, without evidence of asthma, allergic rhinitis, or atopic dermatitis. Drug exposure was carefully reviewed to exclude drug-induced hypersensitivity reactions with no relevant associations identified. Autoimmune diseases and vasculitides were evaluated using antinuclear antibodies and anti-neutrophil cytoplasmic antibodies testing, both negative. Hematologic investigations including peripheral blood smear, bone marrow examination, and cytogenetic testing showed no evidence of eosinophilic leukemia or other hematologic malignancies. Fecal calprotectin levels remained elevated. Upper and lower digestive endoscopy were macroscopically normal, however histopathology demonstrated marked eosinophilic infiltration of gastric and colonic mucosa, confirming gastrointestinal involvement. Echocardiography revealed findings suggestive of myocardial infiltrative involvement compatible with eosinophilic cardiomyopathy. Imaging performed to exclude solid malignancies was negative. Initial therapy with albendazole and metronidazole produced no significant improvement. Systemic corticosteroids, azathioprine, and antihistamines were subsequently initiated, leading to clinical improvement and progressive reduction of eosinophil counts to approximately 5%. The clinical course was favorable but fluctuating, requiring careful follow-up during corticosteroid tapering. **Discussions** : Hypereosinophilic syndrome remains a diagnostic challenge because of its diverse etiologies and variable organ involvement. Careful exclusion of secondary causes and systematic evaluation of cardiac and gastrointestinal damage are essential. Corticosteroids remain first-line therapy, but steroid- dependent or refractory disease may require targeted biological therapy, particularly interleukin-5 agents such as mepolizumab. **Conclusions**: Early diagnosis and multidisciplinary management are crucial to prevent irreversible organ damage and improve long-term prognosis in patients with hypereosinophilic syndrome in complex systemic disease.

Keywords: hypereosinophilic syndrom, gastrointestinal involvement, eosinophilic cardiomyopathy

IBRUTINIB AS SALVAGE THERAPY: OVERCOMING STEROID-REFRACTORY AIHA AND PNEUMOCYSTIS PNEUMONIA IN MARGINAL ZONE LYMPHOMA

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Introduction: Marginal Zone Lymphoma (MZL) is a slow-growing B-cell cancer often linked to secondary autoimmune events. Autoimmune Hemolytic Anemia (AIHA) frequently complicates MZL, making its management crucial when patients experience severe infections while undergoing immunosuppressive treatment. **Case Report:** A 73-year-old woman presented with persistent back pain and elevated lymphocyte levels. Diagnostic assessments, such as flow cytometry and bone marrow biopsy, confirmed MZL with involvement of the bone marrow. Following initial Rituximab treatment, the patient experienced steroid-refractory AIHA. The clinical progression was complicated by a hemolytic crisis presenting with a hemoglobin level of 6.0 g/dL following sudden steroid withdrawal. As a result, *Pneumocystis jirovecii* pneumonia (PCP) developed, possibly because of extended steroid usage and lymphopenia. Treatment was successful despite the occurrence of electrolyte imbalances and renal impairment resulting from trimethoprim-sulfamethoxazole (TMP-SMZ). The patient was subsequently switched to Ibrutinib for targeted treatment of refractory AIHA. **Discussions** : This situation demonstrates the intricate difficulties involved in handling lymphoproliferative disorders. Treatments for lymphoma and AIHA, such as steroids and Rituximab, heighten vulnerability to PCP. Management became even more challenging due to steroid intolerance and negative reactions to conventional antibiotics. Considering these difficulties, switching to Ibrutinib is a developing approach for cytopenias refractory to standard immunosuppression. **Conclusions:** This case highlights the importance of monitoring for opportunistic infections in MZL patients undergoing high-dose steroid treatment. In spite of challenges such as renal dysfunction and resistant hemolysis, a collaborative strategy utilizing specific Bruton tyrosine kinase (BTK) inhibitors enabled clinical stabilization and successful discharge.

Keywords: Ibrutinib, Marginal Zone Lymphoma, *Pneumocystis jirovecii* Pneumonia

IMAGING FEATURES IN CEREBRAL AMYLOID ANGIOPATHY

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Introduction: Cerebral amyloid angiopathy represents a cerebrovascular pathology due to the accumulation of β -amyloid at the level of the leptomeninges and cerebral blood vessels. The accumulation of amyloid leads to fragilization of blood vessels, which may result in microhemorrhages and lobar hemorrhages. This pathology is common, similarly to Alzheimer's disease - an amyloid deposition disorder at the cerebral level - in elderly people over 60 years of age. **Case Report:** A 65-year-old man, with a history of transient ischemic attack, type II diabetes mellitus, grade III essential hypertension and multiple other comorbidities, reported decreased muscle strength in the left upper limb, with sudden onset approximately 2 days prior to hospital admission on December 10th, 2025, initially presenting to the Emergency Room in Sighișoara, and subsequently to the Emergency Department - SMURD Târgu Mureș. During hospitalization, a cranial Computer Tomograph (CT) scan was performed, revealing an acute right parietal subcortical hematoma measuring 18×18×20 mm, suggestive of spontaneous hemorrhage. A brain Magnetic Resonance Imaging (MRI) was recommended after 2 months. The investigation identified multiple magnetic susceptibility artifacts located in the supratentorial bihemispheric and infratentorial parenchyma, infra- and supra-centimetric, measuring up to 13 mm on the long axis (right parietal), where they were associated with hemosiderin stigmata displaying a subacute-chronic appearance. Additionally, atrophic changes with enlargement of fluid spaces and grade III Fazekas microangiopathy were detected, indicating severe microangiopathy, as well as bilateral chronic mastoiditis, with no other pathological findings. Based on the MRI results and the patient's clinical and historical data, the main diagnosis is Cerebral Amyloid Angiopathy. **Discussions :** Although the clinical history and imaging findings are suggestive of cerebral amyloid angiopathy, the diagnosis is not definitive. Definitive diagnosis requires direct tissue examination or hematoma evacuation with identification of β -amyloid via biopsy. Treatment of this condition consists of symptom management, prevention of cerebral hemorrhages, avoidance of neuroexcitants and blood pressure control. **Conclusions:** This case highlights the importance of clinical history and imaging findings in raising suspicion for cerebral amyloid angiopathy in older patients with spontaneous lobar hemorrhage. Although definitive diagnosis requires histopathological examination, early recognition of clinical and imaging features enables appropriate management to reduce the risk of recurrent intracerebral hemorrhage.

Keywords: Cerebral Amyloid Angiopathy, Magnetic Resonance Imaging (MRI), Elderly patient, Hemorrhage

LEUCOCYTOCLASTIC VASCULITIS IN SARS-COV-2 INFECTION: A CASE REPORT AND REVIEW OF LITERATURE

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Introduction: Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) primarily affects the respiratory system, but its extra-respiratory manifestations pose significant health risks. While cardiovascular, gastrointestinal, and renal complications are frequent, isolated dermatologic and neurologic involvements remain scarce. This case is significant because it presents a rare concurrent manifestation of post-infectious leucocytoclastic vasculitis alongside autonomic and peripheral nervous system disorders. **Case Report:** A 20-year-old female, unvaccinated against SARS-CoV-2, presented with a generalized rash, left facial hyperhidrosis, sinus tachycardia (100-120 beats/minute), and lower limb sensory disturbances. One month prior, she experienced an undocumented respiratory intercurrent (cough and fever) treated with non-steroidal anti-inflammatory drugs. One week later, a rash emerged on her lower limbs, spreading to her trunk, upper limbs, and face, followed by neurological symptoms two weeks later. Neurological examination revealed superficial lower limb hypoesthesia. Reverse Transcription Polymerase Chain Reaction (RT-PCR) for SARS-CoV-2 was negative, but Immunoglobulin G (IgG) antibodies were markedly elevated (5484.4 AU/ml; normal 0-50 AU/ml). Autoimmune and infectious screening panels were negative. Abnormal findings included elevated Erythrocyte Sedimentation Rate (ESR) (51mm/h), positive C-Reactive Protein (CRP), and subnephrotic proteinuria (2749 mg/24h). Cutaneous biopsy showed superficial perivascular neutrophilic infiltration with nuclear fragmentation and extravasated erythrocytes,

confirming leucocytoclastic vasculitis. The established diagnoses were secondary post-SARS-CoV-2 leucocytoclastic vasculitis, peripheral neuropathy, and autonomic nervous system dysfunction. She received intravenous methylprednisolone (up to 250 mg/day) followed by oral corticosteroids, resulting in full remission of the neurological and autonomic signs and significant dermatological improvement. **Discussions** : Existing literature documents isolated cases of cutaneous vasculitis or peripheral neuropathies linked to SARS-CoV-2. However, their simultaneous occurrence combined with autonomic dysfunction and proteinuria is exceptional. The delayed onset suggests a post-infectious hyperimmune state. The prompt and favorable response to corticosteroid therapy underscores the immune-mediated pathogenesis of these multi-systemic lesions. This implies that late-onset symptoms in post-COVID patients should prompt comprehensive autoimmune and neurological evaluations. **Conclusions**: This case highlights a rare sequela of SARS-CoV-2 infection involving concurrent leucocytoclastic vasculitis, peripheral neuropathy, and autonomic dysfunction. The key learning point is the importance of considering previous, even undocumented, SARS-CoV-2 infections in patients presenting with acute multi-systemic immune-mediated syndromes. Documenting such cases contributes to medical knowledge by expanding the clinical spectrum of delayed viral complications and validating targeted immunosuppressive management.

Keywords: Leucocytoclastic Vasculitis, Peripheral Nervous System Diseases, Autonomic Nervous System, SARS-CoV-2

LOW-GRADE MYXOID LIPOSARCOMA OF THE THIGH: A CASE REPORT

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Introduction: Considered a relatively rare tumor of adipose tissue, low-grade myxoid liposarcoma is a subtype of soft tissue sarcoma originating from adipocytes. Clinically, it presents as a deep-seated, slowly enlarging mass that is initially asymptomatic. It most commonly affects young and middle-aged adults, with a predilection for the lower extremities, particularly the thigh. **Case Report:** We hereby report the case of a 20-year-old female patient who was admitted to the Department of Plastic Surgery at the County Emergency Clinical Hospital in Bistrița. She accused a subcutaneous mass located on the medial aspect of the left thigh, associated with local discomfort. Complete surgical excision with clear margins was performed. Multiple tissue fragments were sent to the Pathology Department for histopathological evaluation. Microscopically, the tumor exhibited a lobular architecture composed of an abundant myxoid matrix with a delicate network pattern and Alcian blue-positive mucinous areas, imparting a "pulmonary edema-like" appearance. The neoplastic cells were small, monomorphic, and oval-shaped, with delicate, vesicular nuclei. Mature adipocytes and lipoblasts with vacuolated cytoplasm and eccentrically placed hyperchromatic nuclei were also identified. The vascular component consisted of a prominent plexiform network of thin, branching capillaries displaying a characteristic "chicken-wire" pattern. Areas of abundant hemorrhagic extravasation were observed. No necrosis was identified. Mitotic activity was low, with fewer than 1 mitosis per 10 high-power fields (HPF). Immunohistochemical analysis revealed strong positivity for vimentin in tumor cells and negativity for MDM2. CD34 positivity was confined to vascular structures, while S100 showed focal positivity in lipoblasts. The Ki-67 proliferation index was low (<5%). The diagnosis of a low-grade myxoid liposarcoma was established. **Discussions** : The patient's age and tumor location were consistent with the typical profile of myxoid liposarcoma. Characteristic histopathological features enabled a confident diagnosis. The absence of necrosis, low mitotic rate, and low Ki-67 index supported a low-grade lesion with favorable behavior. Negative MDM2 expression was essential in excluding other liposarcoma subtypes in the differential diagnosis. Complete excision with negative margins is essential, and long-term follow-up remains necessary due to the risk of recurrence or metastasis. **Conclusions:** Early diagnosis is essential to enable timely adjuvant therapy, aiming to reduce the risk of local recurrence or metastasis. Low-grade myxoid liposarcoma generally carries a favorable prognosis, with high survival rates, particularly when complete surgical excision with negative margins is achieved. Nevertheless, long-term follow-up remains essential.

Keywords: Thigh, Adipocytes, Liposarcoma, Myxoid matrix

MENINGITIS WITH NEGATIVE BLOOD CULTURES: DIAGNOSTIC CHALLENGES AND THE ROLE OF COMPUTED TOMOGRAPHY (CT) IMAGING - CASE REPORT

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Introduction: Central nervous system infections are associated with a high mortality rate and frequently need intensive care. Over 50% of patients have altered mental status and need orotracheal intubation. Acute bacterial meningitis is a medical emergency that requires prompt diagnosis and initiation of antimicrobial treatment. The diagnosis is outlined by certain symptoms (altered mental status, seizures, cranial nerve damage), paraclinical (2 blood culture, cerebrospinal fluid/CSF tests) and Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) imaging. **Case Report:** A 60 year-old patient, with a personal pathological history of neoplasm at the base level of the tongue, with radiotherapy completed 7 days before the onset of symptoms. He presents to the hospital with a tonic crisis in the right hemibody. The first paraclinical data show inflammatory syndrome with increased C-reactive protein, neutrophilia and leukocytosis; The CSF culture revealed the increased number of proteins (2554 mg/L) and with Polimorfonuclear leukocytes (79%), highly suggestive of acute bacterial meningitis. The patient had several sets of blood cultures taken, with negative results. Despite this, cranial imaging revealed changes suggestive of meningeal inflammation, supporting the diagnosis. Due to the discrepancy between imaging results and negative blood cultures, the exact pathological agent of meningitis couldn't be established with certainty, requiring broad-spectrum antibiotic treatment. **Discussions :** The diagnosis of bacterial meningitis is difficult when standard diagnostic tests have negative results. False negatives in blood culture and cerebrospinal fluid culture can have various causes such as low bacterial load, viral or atypical infections. Thus, imaging methods such as CT or MRI can show indirect signs of meningeal inflammation or complications associated with it. In the patient's case, the first CT examination revealed bilaterally fronto-parietal subcortical hypodense areas with extension in the corpus callosum selenium, causing a slight imprint of the posterior lateral ventricles, excluding the possibility of a stroke. In the 24-hour re-evaluation CT scan, a slight deviation of the midline to the right by 2-3 mm was observed. MRI was performed to complete the imaging data that included changes such as cerebral edema in the right frontal-parieto-occipital lobes and left fronto-temporo-parieto-occipital lobes, shifting the occipital horn of the lateral ventricles 0.3 cm to the right. **Conclusions:** The diagnosis and management of central nervous system infections should be carried out promptly through an integrated diagnostic approach, combining clinical symptomatology, imaging investigations and laboratory tests, in order to reduce the risk of neurological complications and mortality

Keywords: negative blood cultures, nonspecific meningitis, cerebrospinal fluid culture

MERKEL CELL CARCINOMA: CASE REPORT

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Introduction: Merkel cell carcinoma (MCC) is a rare and aggressive neuroendocrine skin cancer that most often appears in sun-exposed areas in elderly patients or in immunosuppressed individuals, with the average age at diagnosis ranging between 60 and 80 years. It usually involves the head and neck region and has a poor prognosis. **Case Report:** We hereby report the case of a 56-year-old female patient who presented to the "Hipocrat 2000" medical center from Bucharest after noticing an unusual subcutaneous nodular lesion located on the left buttock. A surgical intervention was performed, which revealed a 35×20 mm elliptical cutaneous flap. On cut section, multiple nodular structures were observed, with no other visible skin alterations. The specimen was sent for further histopathological investigation. The examinations revealed a skin fragment covered by keratinized stratified squamous epithelium with a microscopically normal appearance. At the level of the deep dermis and hypodermis, multiple tumoral structures were identified. These structures displayed a solid architecture composed of sheets of monomorphic small to medium sized cells with hyperchromatic, centrally located nuclei and fine granular, dispersed chromatin, exhibiting the characteristic "salt and pepper" appearance. Multiple fibrous septa were observed among the neoplastic cells, subdividing the tumor into nodules. The stroma showed an abundant polymorphous inflammatory infiltrate (non-brisk type), areas of necrosis, and hematic extravasation. Immunohistochemically, the tumor cells showed intense and diffuse positivity for chromogranin A and

synaptophysin. Cytokeratin 20 (CK20) demonstrated intense and diffuse positivity with a characteristic paranuclear dot-like staining pattern. The diagnosis of MCC was established based on the typical histological features and the characteristic CK20 paranuclear dot-like staining pattern. **Discussions** : This case is noteworthy due to the unusual localization of the tumor on the buttock, a site rarely associated with MCC, and the patient's relatively young age. The clinically nonspecific presentation as a subcutaneous nodular lesion without overlying skin changes, further increases the risk of misdiagnosis. These findings emphasize the need to include MCC in the differential diagnosis of atypical subcutaneous lesions, even in uncommon anatomical sites. **Conclusions**: This type of skin cancer represents less than 1% of all skin malignancies. Approximately 20% of patients with this pathology have a history of ultraviolet radiation exposure, while in about 80% of cases the main etiological factor is Merkel cell polyomavirus (MCPyV). Treatment most often involves surgical excision of the tumor, frequently combined with immunotherapy. However, new therapeutic strategies are currently being investigated.

Keywords: Immunotherapy, Merkel cell carcinoma, Skin, Polyomavirus

MICROSUGICAL MANAGEMENT OF RUPTURED PERICALLOSAL ANEURYSM IN THE SETTING OF SEVERAL IPSILATERAL CAROTID STENOSIS

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Introduction: Aneurysms of the distal anterior cerebral artery (DACA), specifically pericallosal artery are rare but associated with a higher risk of rupture due to their distal location and small diameter of the vessel, which typically presents with subarachnoid hemorrhage. The impressive significance of this case is due to the coexistence of a ruptured segment aneurysm and severe ipsilateral internal carotid artery stenosis, and the management is complicated because of the local hemodynamics alteration caused by the ipsilateral stenosis, which modifies the pressure and the wall shear stress. **Case Report:** After being found unconscious, a 63-year-old male with a history of chronic alcohol consumption was transported to the emergency department. The patient presented with a Glasgow Coma Scale score of 14, alcoholic breath and acute disorientation upon neurological examination at admission, the initial Computed Tomography (CT) scan revealing bilateral fronto-parietal subarachnoid hemorrhage. Cerebral angiography identified a 7x3x3.5 mm saccular aneurysm at the A2 segment of the left anterior cerebral artery with a 2mm neck and additionally a severe stenosis (80-90%) at the origin of the left internal carotid artery. A small aneurysm at the right middle cerebral artery was also noted but considered hemodynamically insignificant. The patient underwent a left frontal craniotomy with an interhemispheric approach for clipping the ruptured aneurysm via microsurgery. Postoperative, CT confirmed the successful exclusion of the aneurysm and progressive resorption of the subarachnoid hemorrhage, the only complication being acute psychomotor agitation and confusion, managed with psychiatric treatment. **Discussions** : Pericallosal aneurysms are unique surgical challenges due to the deep and narrow interhemispheric location, which increases the risk of premature rupture during dissection. According to the literature, DACA aneurysms tend to be smaller at the time of the rupture and the coexistence of severe carotid stenosis and the aneurysm of the right middle cerebral artery is also frequently reported. This case management was complicated by the ipsilateral carotid stenosis, increasing the hemodynamic instability, and by the postoperative delirium, mostly exacerbated by chronic alcohol use, which required a multidisciplinary approach for preventing secondary injury and supporting recovery. **Conclusions:** Microsurgical clipping is an effective treatment used for ruptured pericallosal aneurysms. Despite being rare clinical entities, the necessity of a preoperative assessment to identify pathologies such as carotid stenosis is highlighted, considering the significant impact can have. Also, it is essential that the early surgical intervention should be combined with multidisciplinary management of the further neuropsychiatric complications to favorize the outcomes.

Keywords: pericallosal aneurysm, subarachnoid hemorrhage, carotid stenosis, microsurgical clipping

OPPORTUNISTIC FUNGAL INFECTIONS: LATE COMPLICATION IN PATIENTS WITH IMMUNOSUPPRESSION – CASE PRESENTATION

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Introduction: Invasive fungal infections are a major cause of mortality in immunocompromised patients, especially in those who have undergone an organ transplant. Zygomycosis is an opportunistic infection, rare but aggressive, characterized by rapid dissemination and a high rate of mortality. Early diagnosis is difficult due to non-specific clinical manifestations, which frequently leads to delays in the establishment of appropriate antifungal therapy.

Case Report: A 47-year-old patient with significant pathological history: heart transplantation for non-ischemic dilated cardiomyopathy two years ago and iatrogenic diabetes mellitus insulin-necessity, is admitted to an internal medicine clinic/cardiology department with the following symptoms: dyspnea on low or medium exertion, dry cough, weight loss, skin nodules, chills, muscle pain. Post-heart transplant status with therapy immunosuppressive measures of the patient, together with the symptoms of sepsis of unknown cause required first-line administration of broad-spectrum antibiotics and antivirals associated with symptomatic medication until the targeted diagnosis of the cause. The patient's condition worsens during hospitalization, without finding the infectious etiology, with the occurrence of death after 14 days. **Discussions :** During macroscopic examination of the autopsy, multiple subcutaneous nodules with diameters of 1-2 cm, arranged randomly over the entire surface of the body were found. During the internal exam, multiple abscesses in different organs: heart, right lung, pancreas and kidneys were identified. At the cerebral level, the leptomeninges had hyperemic and opaque areas, slightly thickened. Samples of tissue fragments were taken for microscopic examination, which properly highlight nodular areas in the skin and abscessed areas of the said organs, the abscesses contained fungal colonies, with the morphology of Zygomycetes. Due to the pathological history: post-transplant status with immunosuppressive therapy, and of the etiology established at the necrotic examination, the patient's death was established to have been caused by acute cardiovascular insufficiency in the context of multiple organ dysfunction syndrome (MODS), the etiology being extensive infection with Zygomycetes. **Conclusions:** This case indicates the importance of considering invasive fungal infections in immunocompromised patients with severe sepsis that has an unidentified starting point. Quick diagnosis methods and prompt administration of antifungal therapy are essential for improving the prognosis of patients at high risk.

Keywords: Heart transplantation, Leptomeningitis, Disseminated fungal infection, Zygomycosis

OSTEOPOROSIS - A COMPLEX DISEASE WITH MULTIDIMENSIONAL IMPACT

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Introduction: Osteoporosis is a chronic disease with potentially disabling consequences, characterized by decreased bone density and an increased risk of fractures. Associated complications, particularly osteoporotic fractures, can have a major impact on quality of life, increasing morbidity and prolonging recovery time. **Case Report:** We present the case of a 70-year-old patient, known to have osteoporosis and hypertension, was the victim of a road accident (bus passenger). Clinically, she presented with acute thoracolumbar, cervical pain and limited mobility. Imaging revealed a somatic fracture L3 (type A4) with spinal canal stenosis (50%), multiple rib fractures (III-VII right, C4-C10 left), sternal fracture and D5-D8 spinous process fracture. The diagnosis also included posttraumatic mixed neurotic disorder. The treatment was conservative: immobilization in a Philadelphia-type dorso-lumbo-sacral corset, physiotherapy, physiotherapy (TECAR, magnetotherapy) and pharmacological support (analgesics, anxiolytics). The evolution was favorable, requiring 50-52 days of medical care for functional recovery, given by forensic medicine. Imaging investigations revealed multiple fractures of the right lateral costal arches C4-C10, a comminuted fracture of the L3 vertebral body with protrusion into the spinal canal, as well as fractures of the spinous processes D5-D8. The post-traumatic course was complicated by a non-union L3 fracture with spinal canal stenosis confirmed by Computerized Tomography (CT), requiring the use of a thoracolumbosacral orthosis (Boston brace) and psychiatric supportive therapy. According to the medico-legal certificate, the patient required 65-67 days of medical care. **Discussions :** According to the literature, L3 type A4 fractures in geriatric patients present a major risk of instability and neurological deficit. CT diagnosis is crucial for the evaluation of canal stenosis, and conservative management with orthosis and intensive physiotherapy represents a viable alternative to surgery, ensuring bone consolidation and safe functional recovery. **Conclusions:** A minor traumatic event can lead to severe consequences in patients with osteoporosis, significantly affecting quality of life. The impact is both physical and psychological, with potentially permanent sequelae and a risk of neurological deterioration due to spinal canal stenosis.

Keywords: Osteoporosis, Fracture, Injuries

PLATE FIXATION IN PROXIMAL HUMERUS FRACTURE-DISLOCATION USING THE PHILOS SYSTEM: SURGICAL INDICATIONS AND IMPLANT-BASED DECISION

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Introduction: Proximal humerus fractures-dislocations at the surgical neck are complicated injuries that severely compromise shoulder stability and function. In elderly patients, poor bone quality increases the risk of fixation failure. Surgical management includes osteosynthesis with a locked plate, hemiarthroplasty, or reverse shoulder arthroplasty, with the choice based on the type of fracture, bone stock, and patient-specific factors. Careful selection of the prosthesis implant and technique is essential to ensure stable fixation and preserve joint function.

Case Report: A 69-year-old patient presented after a fall from the same level with a fracture-dislocation of the left proximal humerus involving the surgical neck. Imaging investigations confirmed the displacement of the fragments and loss of joint congruence. The patient was hemodynamically stable, but had cardiovascular involvement. Following preoperative analysis, the procedure was performed under general anesthesia. The standard deltopectoral approach allowed exposure of the fracture site, with careful protection of the neurovascular structures. Thus, anatomical reduction of the humeral head was achieved, with particular attention paid to restoring the medial cortical support and aligning the tuberosities. Definitive fixation was achieved with a PHILOS plate. This was positioned laterally, distal to the greater tuberosity, to avoid subacromial impact. The locking screws were inserted in divergent and convergent trajectories to ensure angular stability of the humeral head. The distal cortical screws ensured diaphyseal fixation. Fluoroscopic control confirmed adequate reduction, implant positioning, and correct screw length. The surgery was completed in layers, and the limb was immobilized in a Dessault bandage. Postoperative management included analgesics, antibiotic prophylaxis, thromboprophylaxis, and early distal mobilization. The postoperative course was favorable, characterized by stable hemodynamic parameters, pain relief, and satisfactory wound healing at discharge.

Discussions : In cases of proximal humerus fracture-dislocations, arthroplasty is considered when anatomical reconstruction is not feasible, especially in cases of severe comminution, head-splitting fractures, or compromised vascularization. In this case, the preservation of reconstructable anatomy and acceptable bone stock supported the choice of locked plate fixation. The PHILOS system provides angular stability, thus reducing dependence on bone mineral density and allowing controlled restoration of alignment while maintaining the native joint. Precise plate positioning and restoration of medial support are critical to prevent varus collapse and screw migration. **Conclusions:** When anatomical reduction is achievable, PHILOS plate fixation is a reliable alternative to arthroplasty for proximal humerus fracture-dislocations. Appropriate implant selection and meticulous surgical technique are essential pillars for mechanical stability and functional preservation.

Keywords: Proximal humerus fracture, PHILOS plate, Arthroplasty indication, Angular stability

PRIMARY DEFINITIVE INTRAMEDULLARY OSTEOSYNTHESIS IN BILATERAL OPEN TIBIAL FRACTURES: SURGICAL REASONING IN HIGH-ENERGY TRAUMAS OF THE LOWER LIMB

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Introduction: Bilateral open tibial shaft fractures are a critical surgical challenge, characterized by severe soft tissue compromise and a high risk of infection. The management of these injuries often sparks debate between temporary external fixation and early definitive stabilization. Thus, in elderly patients, this decision is nuanced, as physiological stress must be balanced with the benefits of immediate stability. This case illustrates the success of primary definitive fixation in a high-energy bilateral trauma. **Case Report:** An 84-year-old patient presented following a traffic accident with bilateral open tibial fractures. The initial assessment identified a left proximal tibial fracture (Gustilo-Anderson type I) and a more severe fracture of the right tibia in the middle-distal third (Gustilo-Anderson type III B), with a significant skin defect. Although the patient was elderly, he remained hemodynamically

stable upon admission, which allowed for emergency surgery. Under spinal anesthesia, abundant irrigation and thorough debridement were performed, excising all devitalized tissue until viable margins were obtained. Given the systemic stability, primary definitive fixation was chosen instead of temporary external stabilization. Both tibias were fixed using the Stryker T2 intramedullary rod system, through sequential reaming, restoring alignment and rotational control. Management of the type III B defect on the right side required a multidisciplinary approach. After initial stabilization, the plastic surgery team took over the management of the extensive skin deficiency. The patient underwent several staged reconstruction procedures, including specialized skin grafting, to achieve definitive wound closure. Postoperatively, the right limb was protected in a femoral-podal cast. Recovery was supported by broad-spectrum antibiotic therapy, anticoagulants, and intensive monitoring of wound healing. It should be noted that at the three-month follow-up, the patient had progressed to assisted mobilization with a walking frame, showing significant functional improvement. **Discussions** : Primary intramedullary osteosynthesis in bilateral open fractures is feasible when local and systemic conditions are optimal. Radical debridement remains the cornerstone of success, preventing deep infection while the rod provides the necessary mechanical stability. In this case, early internal fixation provided a stable "scaffold" that facilitated the complex skin grafts subsequently performed by plastic surgeons-a crucial synergy for limb salvage in type III B injuries. **Conclusions**: Early radical debridement combined with primary internal fixation can effectively manage bilateral open tibial fractures, thus reducing the burden of staged orthopedic interventions. However, success in type III B injuries depends heavily on coordinated plastic surgery intervention to resolve the lack of integument and ensure durable soft tissue coverage.

Keywords: Bilateral open tibial fracture, Gustilo-Anderson III B, Skin graft

PRIMARY LOWER LIMB AMPUTATION AS A DAMAGE CONTROL MEASURE IN SEVERE TRAUMA

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Introduction: Complex trauma represents a major challenge today and is most often the result of vehicle-related accidents or battlefield injuries. In such situations, the application of damage control surgery (DCS) principles allows life-saving procedures to be prioritized, while definitive treatments are deferred until the patient is stabilized. DCS consists of rapid and essential surgical interventions, such as hemorrhage control, hemostatic laparotomy, or emergency amputation, indicated in hemodynamically unstable patients. The effectiveness of DCS is supported by an epidemiological study from the TraumaRegister DGU (2024), which shows that out of approximately 32,500 severely injured patients, 422 underwent lower limb amputation, with a 1.9% higher survival rate within the first 24 hours compared with patients who did not undergo amputation. **Case Report:** A representative case is that of an 81-year-old female patient involved in a railway accident, who sustained severe polytrauma: traumatic brain and craniofacial injury, traumatic near-amputation of the right forefoot, blunt thoracic trauma, and multiple fractures. Initially, medically induced coma (Glasgow Coma Scale 3) was initiated to facilitate ventilation, followed by drainage of a left hemothorax. From an orthopedic standpoint, the main procedure was an emergency amputation at the mid-shaft level of the right leg, associated with immobilization of the left upper limb using a Brace-Abduction-Plaster(B-AB-P) arm-thorax cast with shoulder supports. After one week and multiple surgical interventions, the patient remained admitted to the intensive care unit, showing signs of slow recovery. **Discussions** : Short, effective procedures are preferred in critical situations, as attempts at complex reconstruction in an unstable patient can increase mortality. Furthermore, the decision to amputate must be made taking into account the severity of local injuries (crush injury, prolonged ischemia, contamination), as well as the patient's overall condition. In this regard, Mangled Extremity Severity Score-type scores can be helpful, but they do not replace clinical judgment. **Conclusions:** Primary amputation represents an essential DCS option in patients with severe and multiple traumatic injuries. In the context of severe polytrauma, primary amputation should be seen as a life-saving intervention, integrated into the principles of damage control surgery. In situations of hemodynamic instability, rapid hemorrhage control becomes a priority. Also, reducing the operative time is essential, complex reconstructive interventions being contraindicated in the acute phase.

Keywords: Limb Amputation, damage control surgery, orthopedic

PROLONGED TEMOZOLOMIDE-INDUCED HEMATOLOGIC TOXICITY: A POTENTIAL DRUG-SUPPLEMENT INTERACTION WITH ARTEMISIA ABSINTHIUM (WORMWOOD) INFUSION

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Introduction: This presentation highlights significant risks from self-administering herbal remedies during standard chemotherapy. Although patients often perceive natural supplements as harmless, their bioactive compounds can alter chemotherapeutic metabolism. This may exacerbate the known pharmacotoxicological profile of these substances, resulting in high-grade or unusually prolonged toxicities. **Case Report:** A 49-year-old female was diagnosed with a large (76x61x47 mm) right temporo-parieto-occipital brain mass. The lesion was cystic and macronodular, showing significant surrounding swelling and internal bleeding. A near-total surgical removal was performed using a microscope and a neuronavigation system. Pathology tests confirmed a Grade 4 mutant astrocytoma (positive for markers SOX10 ; negative for desmin, , chromogranin). A postoperative magnetic resonance imaging with contrast showed a 37x25 mm piece of the tumor remaining. Consequently, the medical team recommended adjuvant therapy; the patient received radiation (60Gy total over 30 fractions) alongside the chemotherapy drug temozolomide (75 mg/m²). Seven days after finishing treatment, the patient developed severe pancytopenia. Her care was further complicated by a severe allergy to the antibiotic vancomycin, which caused a red face and breathing trouble, requiring a switch to linezolid and meropenem. Despite daily shots to boost blood cells and many blood transfusions, her levels reached a critical low: 4,000 thrombocytes/mm³, 1,230 white blood cells/mm³, and 8.5 g/dL hemoglobin. A bone marrow test was performed and showed no underlying disease. After one month, her blood levels finally began to improve. This unusually long and resistant period of low blood counts was later linked to information from the patient's history: she had been drinking wormwood tea every day at home while taking her chemotherapy. It is hypothesized that the bioactive compounds in the wormwood interfered with how her liver processed the temozolomide, significantly increasing its toxic effects on her body. **Discussions :** Until the patient admitted to using wormwood tea, the severity and duration of her aplasia could not be explained by temozolomide alone. Normal bone marrow tests, combined with the unusually slow recovery, suggested that other factors were involved. Although it seemed harmless, the wormwood infusion interfered with how the body processed temozolomide, leading to much more severe toxic effects than expected. **Conclusions:** This case shows that standard oncological protocols can become life-threatening due to herbal self-medication. Identifying wormwood use was essential to avoid diagnostic and therapeutic errors. Oncologists must rigorously monitor supplements which, though appearing harmless, can alter chemotherapy metabolism and trigger severe adverse effects through significant drug-supplement interactions.

Keywords: Wormwood, Temozolomide, Pancytopenia, Pharmacotoxicity

PROPHYLACTIC COMPLEX LEFT MAIN BIFURCATION PCI USING THE KISSING BALLOON TECHNIQUE IN AN ACTIVE ELDERLY PATIENT WITH SEVERE AORTIC STENOSIS

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Introduction: Severe aortic stenosis (AS) frequently coexists with coronary artery disease. Optimizing the coronary status prior to valve intervention is a crucial preventative step to minimize peri-interventional risks. This report discusses the utility of a prophylactic complex percutaneous coronary intervention (PCI) for a left main (LM) bifurcation lesion to safely prepare for an upcoming valve procedure. **Case Report:** We present the case of a highly active 75-year-old male weighing 95 kg, diagnosed with severe AS, who underwent diagnostic coronary angiography, which revealed a codominant system. A distal 50% stenosis was identified in the LM (Medina 1-0-1), anatomically continuing into an ostial 50% stenosis on the left circumflex artery (LCx). The left anterior descending artery (LAD) presented a 20-30% ostial plaque. Using a right femoral approach with a 7 French (F) Extra Back-Up (EBU) 3.5 guiding catheter, two guidewires were advanced distally into the LAD and LCx. After predilating the LCx ostium, a simultaneous "kissing balloons" technique was performed at the LM-LAD-LCx bifurcation using NC 3.5 x 12 mm and NC 4.0 x 15 mm balloons. A drug-eluting stent was deployed in the LM-LCx. Following postdilatation, a

final Proximal Optimization Technique (POT) was executed using an NC 5.0 x 8 mm balloon. The angiographic result was excellent, demonstrating TIMI III flow without residual stenosis. **Discussions** : Although stenting could theoretically have been performed without it, the Medina 1-0-1 configuration dictated a rigorous procedural approach. The simultaneous kissing balloons technique was strategically employed as a medically sound "safety net." This prevented atheromatous plaque shift towards the LAD ostium and provided maximum support and stability during the procedure. Properly addressing this specific bifurcation anatomy is essential to prevent immediate local complications. **Conclusions**: A meticulous approach to a Medina 1-0-1 bifurcation lesion using procedural protection strategies, such as kissing balloons and POT, can be safe and highly effective. This successful prophylactic intervention optimized the patient's coronary status, reducing the risks for his future valve procedure and allowing him to maintain his active lifestyle.

Keywords: Aortic Stenosis, Kissing Balloons, Plaque Shift, Left Main PCI

PSEUDOARTHROSIS OF THE DISTAL FEMORAL DIAPHYSIS AND MECHANICAL COMPLICATIONS OF THE DOUBLE PLATE IN AN 84-YEAR-OLD FEMALE PATIENT

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Introduction: Pseudoarthrosis, or the lack of bone healing after a fracture, is one of the most difficult complications in orthopedics. In elderly patients, the success of the intervention is challenged by poor bone quality (osteoporosis), associated diseases such as hypertension or obesity, but also by the presence of previous implants that have failed. Our main goal in such cases is to restore the patient's ability to walk and get rid of chronic pain. **Case Report:** We present the case of an 84-year-old patient with a complex orthopedic history: a total hip replacement fitted in 2022 and a femur fracture operated on in the same year. The patient came to the hospital complaining of severe pain in her thigh and total inability to walk. On clinical examination, we observed obvious swelling in the right thigh, marked pain on palpation, and almost complete stiffness of the knee. X-rays confirmed that the previous surgery had failed-the two-plate fixation had failed, and the bone had not healed, resulting in pseudarthrosis. Surgery was performed to remove the old plates and screws, and a new fixation was performed using a special plate with locked screws, which provides much greater stability. To help the bone heal, we filled the remaining defect with artificial bone graft (calcium phosphate), thus avoiding another incision to harvest bone from the patient. Postoperatively, the patient's condition was good, her pain decreased, and she has already started light knee movement exercises. **Discussions** : What makes this case special is the difficulty of repairing an already fragile femur, located between a hip prosthesis and an almost blocked knee. We chose to use a single lateral support plate and artificial graft to provide the bone with the "ammunition" it needed to heal, without further traumatizing the patient's body. Recovery began immediately after surgery with light physical therapy exercises, which were essential to prevent muscle loss and restore the patient's independence. **Conclusions:** Successful treatment of pseudoarthrosis in older people depends on very stable fixation and protection of existing prostheses. The use of modern fixation techniques together with bone replacements allows for rapid recovery, which for an 84-year-old patient means a huge improvement in quality of life.

Keywords: Pseudoarthrosis, Synthetic bone graft, Hip prosthesis, Femur

RECOGNIZING DE WINTER SYNDROME: AN IMPORTANT STEMI EQUIVALENT IN ACUTE CORONARY OCCLUSION

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Introduction: Rapid recognition of acute coronary artery occlusion is essential for initiating timely reperfusion therapy and preventing extensive myocardial damage. Although ST-segment elevation on electrocardiography (ECG) is the classic marker of acute transmural myocardial infarction, several atypical ECG patterns may indicate a similar high-risk condition. One such pattern is De Winter syndrome, a rare STEMI equivalent typically associated with proximal occlusion of the left anterior descending artery (LAD). Because it does not fulfill the

classical criteria for ST-segment elevation myocardial infarction (STEMI), this pattern may be overlooked, potentially delaying life-saving treatment. Awareness of STEMI equivalents is therefore crucial when evaluating patients presenting with acute chest pain. **Case Report:** We report the case of a 54-year-old male who presented to the emergency department with severe chest pain of sudden onset that began approximately two hours before admission and was accompanied by diaphoresis and anxiety. His medical history was notable for obesity (BMI 31 kg/m²) and a sedentary lifestyle, without previous cardiovascular evaluation. At presentation, the patient was hemodynamically stable. The initial 12-lead ECG showed sinus rhythm with prominent symmetrical T waves in the precordial leads (V2-V6) associated with upsloping ST-segment depression at the J point and additional ST depression in the inferior leads. These findings were consistent with the De Winter ECG pattern. Transthoracic echocardiography revealed left ventricular systolic dysfunction with regional wall motion abnormalities involving the anterior wall, interventricular septum, and apex, with an estimated ejection fraction of approximately 30%. Considering the clinical presentation and ECG findings suggestive of acute coronary occlusion, the patient was treated as a STEMI equivalent and referred for emergency coronary angiography. The procedure revealed complete occlusion of the proximal LAD. Primary percutaneous coronary intervention (PCI) with thrombus aspiration and drug-eluting stent implantation successfully restored coronary flow. The patient had a favorable clinical evolution, with improvement of left ventricular systolic function to an ejection fraction of 40% at discharge. **Discussions :** De Winter syndrome is an uncommon ECG presentation associated with acute LAD occlusion and represents a STEMI equivalent requiring urgent reperfusion therapy. Because the characteristic ECG pattern lacks ST-segment elevation, it may be misinterpreted as non-ST elevation myocardial infarction. **Conclusions:** This case highlights the importance of recognizing De Winter syndrome as a STEMI equivalent in patients presenting with acute chest pain. Early identification of this ECG pattern should prompt urgent coronary reperfusion in order to limit myocardial damage and improve clinical prognosis.

Keywords: De Winter syndrome, acute coronary syndrome, STEMI equivalent, electrocardiography

RECURRENT ISCHEMIC STROKES AS THE FIRST MANIFESTATION OF AN UNDIAGNOSED LEFT ATRIAL MYXOMA: A CASE REPORT

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Introduction: Cardiac myxoma is the most prevalent benign cardiac tumor, most frequently located in the left atrium. Despite its benign histology, it may cause severe complications due to intracardiac obstruction or systemic embolization. Neurological symptoms, particularly ischemic stroke, may represent the initial clinical presentation in some patients. Early recognition is essential, as prompt surgical excision is curative. **Case Report:** We present the case of a 65-year-old female patient who was admitted with neurological symptoms suggestive of recurrent ischemic stroke. The patient had a history of a previous right sylvian territory stroke and presented with left-sided hemiparesis predominantly affecting the upper limb. During the diagnostic workup, a cardiologic evaluation was performed to identify a potential embolic source. Transthoracic echocardiography revealed a large intracardiac mass in the left atrium measuring approximately 60 × 25 mm, attached to the interatrial septum and protruding toward the mitral valve during diastole, causing transmitral obstruction. Biventricular systolic function was preserved: left ventricular ejection fraction (LVEF): approximately 60%). Given the high embolic risk and obstructive nature of the lesion, the patient underwent minimally invasive surgical excision. The procedure was performed through a right mini-thoracotomy (~7 cm) in the second intercostal space, under cardiopulmonary bypass with cardioplegic arrest. The tumor was completely resected from the interatrial septum, and intraoperative findings confirmed a left atrial myxoma. The postoperative course was favorable, with preserved ventricular function and no residual intracardiac mass on follow-up echocardiography. **Discussions :** Recurrent ischemic strokes require careful evaluation for potential embolic sources, including rare cardiac tumors. Atrial myxomas may lead to cerebral embolism through tumor fragmentation or thrombus formation on their surface, and neurological events may represent the first manifestation of the disease. Echocardiography is crucial for identifying the cardiac source of embolism and establishing the diagnosis. Once detected, prompt surgical excision is required to prevent further embolic complications. Minimally invasive surgical approaches represent a safe and effective alternative to conventional sternotomy, being associated with reduced surgical trauma, faster postoperative recovery, and favorable clinical outcomes. **Conclusions:** This case emphasizes the importance of investigating cardiac sources in patients with recurrent ischemic strokes. Early diagnosis of atrial myxoma allows timely surgical treatment. Minimally invasive excision offers effective tumor removal with favorable postoperative recovery.

Keywords: Atrial myxoma, Ischemic stroke, Cardiac tumor

ROBOTIC HELLER ESOPHAGOCARDIOMYOTOMY FOR PEDIATRIC ACHALASIA: A CASE REPORT

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Introduction: Achalasia of the cardia is a rare esophageal motility disorder in the pediatric population, characterized by impaired relaxation of the lower esophageal sphincter and progressive esophageal dilatation. Surgical myotomy remains the definitive treatment in advanced cases. The introduction of robotic-assisted surgery has expanded minimally invasive options, offering improved visualization and precision. Reports describing robotic management of achalasia in pediatric patients remain limited, making this case clinically relevant. **Case Report:** We present the case of a 14-year-old patient diagnosed with cardia achalasia for over two years, presenting with severe dysphagia, cachexia, and megaesophagus, with absolute indication for surgical treatment. A robotic approach was selected using the Da Vinci X system with four robotic arms. A Heller esophagocardiomyotomy was performed, followed by a posterior 270° Toupet fundoplication to prevent gastroesophageal reflux and maintain separation of the myotomy edges. The procedure was carried out under general anesthesia, with a total operative time of 90 minutes, including 45 minutes of robotic console time. Postoperative evolution was favorable, with early recovery, restoration of digestive transit, and hospital discharge at 48 hours. **Discussions :** Minimally invasive surgery represents the current standard in achalasia management, aiming to relieve functional obstruction while minimizing surgical trauma. Robotic assistance enhances dexterity, three-dimensional visualization, and precision during delicate esophageal dissection, which may be particularly advantageous in pediatric patients. Compared with conventional approaches, robotic surgery may facilitate faster recovery and reduced postoperative discomfort while maintaining surgical accuracy. The addition of Toupet fundoplication plays an important role in preventing postoperative gastroesophageal reflux after disruption of the lower esophageal sphincter. **Conclusions:** Robotic Heller esophagocardiomyotomy appears to be a safe and effective minimally invasive option for selected pediatric patients with achalasia. This method enables careful surgery, less damage to surrounding tissues, and quicker recovery after surgery, highlighting the growing use of robotic surgery for children's esophagus and stomach issues.

Keywords: Pediatric achalasia, Heller myotomy, Toupet fundoplication, Minimally invasive surgery

RUPTURED INTERNAL ILIAC ARTERY ANEURYSM PRESENTING WITH HEMORRHAGIC SHOCK: A RARE AND LIFE-THREATENING VASCULAR EMERGENCY

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Introduction: Internal iliac artery aneurysms are rare vascular pathologies, often asymptomatic until rupture. Their rupture represents a life-threatening surgical emergency, associated with mortality rates exceeding 90%. Due to their deep pelvic location and nonspecific clinical presentation, early diagnosis remains challenging. This case highlights the importance of rapid recognition and prompt surgical intervention in a hemodynamically unstable patient. **Case Report:** We present the case of a 69-year-old male admitted to the Emergency Department with sudden-onset severe abdominal pain radiating posteriorly, accompanied by altered general condition. On examination, the patient was hemodynamically unstable (blood pressure 82/68 mmHg, heart rate 124 bpm), raising suspicion of acute internal hemorrhage. Emergency abdominopelvic angio-computed tomography revealed a ruptured right internal iliac artery aneurysm measuring approximately 5.2 × 4.6 × 4.8 cm, associated with a giant retroperitoneal hematoma. Given the hemodynamic instability, an open surgical approach was preferred. Emergency surgery was performed under general anesthesia. Exploratory midline laparotomy confirmed a retroperitoneal hematoma with active bleeding from the ruptured aneurysm. Surgical management included dissection and isolation of the right common iliac artery and ureter, evacuation of the hematoma, and ligation of the right internal iliac artery at its origin. The aneurysmal sac was opened, and collateral vessels were individually sutured. Hemostasis was achieved, followed by drainage and closure. Postoperatively, the patient required intensive care support with hydroelectrolytic rebalancing, anticoagulation, antibiotic, and analgesic therapy. The

evolution was favorable, with hemodynamic stabilization, restoration of bowel function, and no postoperative complications. The patient was discharged on postoperative day six. **Discussions** : Isolated internal iliac artery aneurysms account for less than 0.5% of all intra-abdominal aneurysms, making this presentation particularly uncommon. Rupture is associated with high mortality due to delayed diagnosis and rapid hemodynamic deterioration. Clinical presentation is often nonspecific, mimicking other causes of acute abdomen. Imaging, particularly angio-computed tomography, plays a crucial role in diagnosis. In hemodynamically unstable patients, open surgical repair remains the gold standard, allowing direct vascular control and effective hemorrhage management. **Conclusions**: This case underscores the importance of rapid diagnosis and immediate surgical intervention in ruptured internal iliac artery aneurysms. Despite the severity of hemorrhagic shock, timely surgical management can be lifesaving. The case contributes to the limited literature on this rare vascular emergency.

Keywords: Ruptured internal iliac artery aneurysm, Hemorrhagic shock, Retroperitoneal hematoma, Emergency surgery

SCAPULAR HYDATID CYST: A RARE EXTRAVERTEBRAL BONE INVOLVEMENT

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Introduction: Cystic echinococcosis, caused by *Echinococcus* species, primarily involves the liver and lungs. Bone involvement is rare and often presents with nonspecific findings, most commonly affecting the vertebrae. Scapular localization is extremely uncommon and may mimic other skeletal lesions, delaying diagnosis. We report a rare case of scapular hydatid cyst and highlight its consideration in atypical bone masses. **Case Report:** A 27-year-old Turkish female with a history of polycystic ovary syndrome and insulin resistance presented with a progressively enlarging, painful, non-mobile mass over the left scapula, first noticed seven months prior. She reported owning a cat for nine years. Physical examination revealed a palpable swelling over the left scapula without erythema, discharge, or local warmth. No additional systemic abnormalities were identified. Superficial tissue ultrasonography demonstrated a well-circumscribed, septated cystic lesion measuring 37 × 21 mm, located approximately 1 cm beneath the skin in the medial left scapular region. Magnetic resonance imaging (MRI) confirmed a 30 × 25 mm cystic structure within the left scapula. Surgical consultation was obtained for excisional biopsy. With a preliminary diagnosis of hydatid cyst, serum *Echinococcus* immunoglobulin G (IgG) testing and thoracic and abdominal computed tomography (CT) were requested to evaluate for additional organ involvement. Pathological examination of the excisional biopsy was consistent with hydatid cyst, and *Echinococcus* IgG was positive. Thoracic and abdominal imaging revealed no additional cystic lesions. Oral albendazole 400 mg twice daily was initiated. The patient remains under clinical follow-up. **Discussions** : Osseous hydatid disease is a rare complication of *Echinococcus* infection. Due to the slow growth of parasitic cysts within bone tissue, lesions may remain asymptomatic for prolonged periods, often leading to delayed diagnosis at advanced stages. Unlike hepatic hydatid cysts, which are classified using the World Health Organization Informal Working Group on Echinococcosis (WHO-IWGE) and Gharbi systems, no standardized classification exists for bone involvement. Scapular localization is extremely rare and may radiologically resemble primary bone tumors, metastases, or other cystic skeletal lesions. Therefore, hydatid disease should be included in the differential diagnosis of atypical bone masses, particularly in endemic regions. Early recognition combined with surgical management and antiparasitic therapy is essential to prevent local progression and recurrence. **Conclusions:** Scapular hydatid cyst is an exceptionally rare presentation of osseous echinococcosis. In endemic areas, hydatid disease must be considered in the evaluation of unusual bone lesions. Combined surgical and medical therapy remains the cornerstone of management.

Keywords: Cystic echinococcosis, Hydatid cyst, Bone involvement, Albendazole

SEVERE ARDS COMPLICATED BY PNEUMOMEDIASTINUM AND BILATERAL PYOPNEUMOTHORAX IN THE SETTING OF ABDOMINAL SEPSIS

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Introduction: Acute respiratory failure represents a critical clinical condition, often triggered by a severe underlying

insult like a respiratory infection. When a localized infection overwhelms the body's defense mechanisms, it may trigger a systemic inflammatory response, progressing to sepsis and Acute Respiratory Distress Syndrome (ARDS). **Case Report:** A 62-year-old patient presented to the Emergency Department (UPU-SMURD) with acute respiratory failure secondary to a severe pulmonary infection, which rapidly progressed to Acute Respiratory Distress Syndrome (ARDS). During the clinical course, the patient developed *Clostridioides difficile* colitis and septic shock, leading to major abdominal complications including intestinal obstruction, bowel ischemia, and generalized peritonitis. These complications required urgent surgical intervention, consisting of multiple laparotomies and colostomy formation. Subsequently, respiratory status deteriorated further with the development of bilateral pneumothorax, pneumomediastinum, and extensive subcutaneous emphysema. Thoracocentesis with pleural fluid cultures identified the presence of extensively drug-resistant *Acinetobacter baumannii*, a multidrug-resistant pathogen that significantly aggravated the septic state. Despite exhaustive medical treatment and intensive care support, the patient condition progressed to irreversible multisystem organ failure (MSOF), refractory shock and death. **Discussions :** The surgical procedures - emergency laparotomy, sigmoid colon resection, colostomy formation and bilateral chest tube placement - were essential for attempting source control, which is the cornerstone of sepsis management. Despite advanced ventilatory support and targeted antibiotic therapy, the evolution of sepsis into a refractory state was fueled by the "double hit" of pneumonia and peritonitis. The presence of *Acinetobacter baumannii* further complicated management, highlighting the high mortality associated with hospital-acquired infections in critically ill patients with impaired immune barriers. **Conclusions:** This case highlights the extreme lethality of dual-source sepsis, in which a primary respiratory infection is compounded by secondary abdominal pathology. Despite exhaustive surgical and intensive care efforts, the synergy of severe ARDS, refractory metabolic acidosis, and multiple organ dysfunction led to a terminal state of physiological collapse.

Keywords: ARDS, Pneumothorax, Sepsis, MSOF

SEVERE HYPOANABOLIC SYNDROME IN ELDERLY PATIENTS WITH POLYPATHOLOGY: THE IMPACT OF LIVER ABSCESES IN A CARDIO-METABOLIC CONTEXT -CASE REPORT

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Introduction: Hypoanabolic syndrome is a metabolic condition characterized by an imbalance between anabolic and catabolic processes, frequently encountered in elderly patients with polypathology. In this context, acute infections, such as liver abscesses, can trigger a systemic inflammatory response that aggravates pre-existing metabolic dysfunctions. The association of cardiovascular and metabolic comorbidities significantly increases the risk of severe evolution. **Case Report:** A 79-year-old patient with a history of grade II hypertension with very high cardiovascular risk, New York Heart Association (NYHA) class II heart failure, type 2 diabetes mellitus treated with oral antidiabetics, chronic kidney disease, megaloblastic anemia and benign prostatic hypertrophy, presents with loss of appetite, asthenia, fatigue, dysuria, pollakiuria and weight loss, with a progressive onset of approximately 3 weeks, associated with fever upon hospitalization. Biological investigations revealed inflammatory syndrome (↑C-Reactive Protein, leukocytosis), abdominal ultrasound revealed multiple formations suggestive of liver abscesses, later confirmed by abdomino-pelvic Computed Tomography examination. The patient received antibiotic treatment (cephalosporins, followed by carbapenems), anticoagulants, beta-blockers, antipyretics, metabolic and nutritional support. Under treatment, the evolution was favorable, with remission of fever, improvement of general symptoms and decrease of inflammatory markers. The patient required careful clinical and biological monitoring, in the context of multiple comorbidities. **Discussions :** The interaction between cardiovascular, metabolic and renal pathologies has contributed to the profound alteration of energy and protein homeostasis. Diabetes increased susceptibility to infection and favored protein catabolism, while chronic kidney disease contributed to the accumulation of toxic metabolites and electrolyte imbalances. Liver abscesses were the triggering factor of the systemic inflammatory response, amplifying the catabolic status. In addition, heart failure limited tissue perfusion, affecting the ability to adapt to infectious stress. This case highlights the need for an integrated, multidisciplinary approach in the management of elderly patients with severe infections and polypathology. These mechanisms reflect a complex pattern of interaction between inflammation, metabolic dysfunction and comorbidities, commonly found in geriatric patients. **Conclusions:** The present case highlights the role of acute infection, represented by liver abscesses, in triggering a severe hypoanabolic imbalance in the elderly patient with polypathology. The

interaction between diabetes, chronic kidney disease and cardiovascular pathology causes a complex metabolic imbalance, with a major impact on the prognosis. The management of these patients requires a multidisciplinary and individualized approach.

Keywords: liver abscesses, hypoanabolic syndrome, comorbidities, multidisciplinary management

SEVERE PEDIATRIC INFLAMMATORY BOWEL DISEASE WITH REFRACTORY COURSE AND RECLASSIFICATION FROM ULCERATIVE COLITIS TO FISTULIZING CROHN'S DISEASE

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Introduction: Pediatric inflammatory bowel disease (IBD) is a heterogeneous entity characterized by a chronic course with alternating periods of activity and remission. Differentiation between ulcerative colitis and Crohn's disease can be challenging at onset, particularly in extensive forms. Fecal biomarkers, such as calprotectin (843.6 µg/g), accurately reflect intestinal inflammatory activity and disease severity. **Case Report:** We present the case of a 15 years old female patient with disease onset at the age of 10, characterized by muco-bloody diarrhea (10-15 stools/24 h), fever, and biological inflammatory syndrome. An initial infectious etiology (*Campylobacter*) was identified; however, persistence of symptoms prompted further investigations. Colonoscopy revealed diffuse inflammatory lesions (hyperemia, edema, mucosal friability, aphthous ulcers), and histopathological examination confirmed chronic active non-granulomatous colitis, with architectural distortion and mixed inflammatory infiltrate. The Pediatric Ulcerative Colitis Activity Index reached 65, indicating severe disease activity. The clinical course was marked by frequent relapses, severe iron deficiency anemia (Hemoglobin 8.8 g/dL, serum iron 23 µg/dL), and persistent inflammatory syndrome (C reactive protein up to 19 mg/dL). Under treatment with mesalazine, corticosteroids, and azathioprine, biologic therapy with infliximab was initiated and subsequently optimized (10 mg/kg every 4 weeks), without achieving remission, in the context of secondary loss of response due to anti-drug antibody formation. Vedolizumab therapy also failed to achieve sustained disease control, with the disease becoming steroid-dependent and subsequently steroid-refractory. Given the severe and refractory disease course, total colectomy with ileostomy was performed, followed by restoration of bowel continuity through ileal pouch-anal anastomosis (J-pouch). The postoperative course was complicated by rectal bleeding and suspected pouchitis. Magnetic resonance enterography identified an intrasphincteric fistula, and subsequent histopathological findings suggested Crohn's disease, leading to diagnostic reclassification. Therapy with adalimumab was initiated (induction regimen 160/80/40 mg), followed by 40 mg every two weeks; however, subtherapeutic drug levels (5.9 µg/mL) were associated with persistent symptoms and recent weight loss. The patient is currently receiving combination therapy with adalimumab and methotrexate. **Discussions :** This case highlights the complexity of differential diagnosis in pediatric IBD and the need for dynamic reassessment of disease phenotype. Secondary loss of response to anti-tumor necrosis factor (anti-TNF) therapy, refractory disease course, and the development of fistulizing complications support the diagnosis of Crohn's disease. **Conclusions:** The severe and refractory course, the need for surgical intervention, and subsequent reclassification to Crohn's disease emphasize the challenges in managing pediatric IBD. Careful monitoring and early therapeutic optimization are essential to improve long-term outcomes.

Keywords: Crohn's disease, Pediatric, Reclassification

SEVERE UPPER GASTROINTESTINAL BLEEDING DUE TO RUPTURED ESOPHAGEAL VARICES ASSOCIATED WITH COMPLICATED ALCOHOL WITHDRAWAL SYNDROME

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Introduction: Upper gastrointestinal bleeding caused by rupture of esophageal varices represents one of the most severe complications of portal hypertension and is associated with significant mortality, requiring rapid multidisciplinary intervention. Proper management includes immediate hemodynamic stabilization, initiation of pharmacological therapy and endoscopic control of bleeding. **Case Report:** We present the case of a 41-year-old male patient admitted to the emergency department for massive hematemesis and melena with rapidly developing

hemodynamic instability. On admission, the patient was psychomotor agitated, pale, jaundiced, hypotensive and tachycardic, with clear signs of hypovolemia, hepatomegaly, splenomegaly and large-volume ascites. Laboratory investigations revealed acute post-hemorrhagic anemia, severe jaundice, cytolytic syndrome, thrombocytopenia and coagulation dysfunction. Viral hepatitis, autoimmune liver diseases and hepatic storage disorders were excluded. Abdominal ultrasound showed a cirrhotic liver without focal lesions, a patent spleno-portal axis and significant ascites. **Discussions** : In the emergency department the resuscitation protocol was immediately initiated, including administration of intravenous fluids and transfusion of packed red blood cells. The patient was continuously hemodynamically monitored. Pharmacological therapy specific for variceal bleeding was started, including vasoactive agents to reduce portal pressure, proton-pump inhibitors and antibiotic prophylaxis. After initial stabilization, emergency upper gastrointestinal endoscopy was performed. Endoscopic examination revealed grade III esophageal varices with an active spurting bleeding point. Endoscopic variceal band ligation was performed, achieving rapid hemostasis and effective control of bleeding. The clinical course was subsequently complicated by the development of severe alcohol withdrawal syndrome, manifested by marked psychomotor agitation and recurrent generalized seizures. Cranial computed tomography revealed only moderate cortical atrophy. Due to neurological deterioration and aspiration risk, the patient required orotracheal intubation and mechanical ventilation. Specific treatment for severe alcohol withdrawal was initiated, including sedation and close monitoring. During the subsequent evolution no further episodes of gastrointestinal bleeding occurred. Hemodynamic parameters progressively stabilized and hepatic and renal function showed significant improvement. **Conclusions**: This case highlights the complexity of managing acute variceal bleeding in patients with alcoholic liver disease, where severe alcohol withdrawal may further complicate the clinical course. Early hemodynamic stabilization and prompt endoscopic treatment are essential for bleeding control, while adequate management of alcohol withdrawal syndrome, including advanced life support, are crucial for improving prognosis in such complex clinical situations.

Keywords: esophageal varices, portal hypertension, alcohol withdrawal syndrome, endoscopic variceal ligation

STREPTOCOCCAL TOXIC SHOCK SYNDROME IN A PEDIATRIC PATIENT: A THERAPEUTIC CHALLENGE IN THE INTENSIVE CARE UNIT

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Introduction: Invasive Group A Streptococcal (GAS) infections represent a significant cause of morbidity and mortality in children, particularly due to the severe complications they can induce. While GAS is commonly associated with pharyngeal or cutaneous manifestations, it can, in rare instances, precipitate toxic shock syndrome, characterized by arterial hypotension, multi-organ failure, and a potentially fatal outcome. **Case Report:** An 11-year-old female patient with no significant past medical history presented with fever, cough, headache, and abdominal pain. The initial diagnosis was scarlet fever, and the patient received oral cefuroxime at home after refusing hospitalization. Two days later, she developed petechiae and progressive deterioration of her general condition, leading to her transfer in critical condition to the Pediatric Intensive Care Unit (PICU) with septic shock. The clinical course was marked by severe hemodynamic instability requiring vasopressor support, Acute Respiratory Distress Syndrome (ARDS) necessitating mechanical ventilation, and progressive multi-organ failure. Blood cultures confirmed the presence of an invasive Group A Streptococcal (GAS) infection. Despite aggressive therapy, including broad-spectrum antibiotics (meropenem, vancomycin, clindamycin), intravenous immunoglobulins, corticosteroid therapy, renal replacement therapy, and multiple surgical interventions, fasciotomies followed by bilateral thigh amputation, the patient developed severe rhabdomyolysis, disseminated intravascular coagulation (DIC), and suspected acquired hemophilia. She suffered multiple cardio-respiratory arrests and, despite repeated resuscitations and advanced life support measures, she succumbed to septic shock and multi-organ failure. **Discussions** : The progression of this case highlights the extreme aggressiveness of Group A Streptococcus (GAS), where an initial clinical form of scarlet fever rapidly evolved into Streptococcal Toxic Shock Syndrome (STSS), refractory to supportive therapies. Ultimately, this clinical course underscores the critical importance of the early therapeutic window, as the transition from oral antibiotic therapy to an aggressive intravenous regimen was hindered by the patient's delayed presentation in a state of refractory shock. **Conclusions:** This case highlights the fulminant evolution of invasive GAS infections and the critical importance of early diagnosis. The rapid progression to STSS, accompanied by severe ischemic complications, reflects the extreme aggressiveness of the disease. Effective management necessitates prompt multidisciplinary intervention and sustained intensive care support.

Keywords: Streptococcus, Septicemia, Pediatrics, Multi-organ failure

SUBTROCHANTERIC FEMUR FRACTURES: SHORT-TO-LONG INTRAMEDULLARY NAIL CONVERSION IN AN OSTEOPOROTIC PATIENT – A CASE REPORT

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Introduction: Intramedullary nails (IMNs) represent the preferred fixation method for many proximal femoral fractures due to their load-sharing biomechanics, minimally invasive insertion, and ability to permit early mobilization. Nail length selection (short versus long) is guided by fracture morphology, distal extension, bone quality, and patient-specific factors. **Case Report:** We report the case of a 80-year-old osteoporotic female that was previously diagnosed with a left subtrochanteric femur fracture and surgically treated outside our facility. The patient was admitted in our department accusing atraumatic left hip pain and impairment of movement, encountered during the recovery process. X-ray examinations showed a secondary displaced subtrochanteric femur fracture after primary surgery (closed reduction and internal fixation with a short intramedullary Gamma nail) with implant degradation, requiring reintervention. The surgical procedure covered the extraction of the degraded osteosynthesis material, open reduction and internal fixation (ORIF) of the fracture through a long Gamma nail (380/11mm) secured dynamically distally. The post-operative course was uneventful, and the patient was discharged on day 4 after surgery. **Discussions :** Short-to-long intramedullary conversion is a revision procedure, often necessary due to peri-implant fractures or nonunion, which involves replacing a previously inserted short Gamma nail (typically 180mm) with a longer Gamma nail (often 240mm-480mm) to span the entire femur. Short nails offer reduced operative time and blood loss, while long nails extend further along the diaphysis, increasing stress distribution and potentially decreasing the risk of peri-implant fracture. Although most studies show little to no difference in reintervention and mortality rates in both types of devices, osteoporotic bone further compromises implant stability, increasing the risk of fixation failure. **Conclusions:** Although some stable fracture patterns may heal well with short nails, the biomechanical demands and fragility profile typical of osteoporotic subtrochanteric fractures usually lead to favoring a long IMN to optimize stability and reduce reoperation risk.

Keywords: intramedullary nails, subtrochanterian fracture, osteoporosis

SURGICAL DECISION IN LOWER LIP SQUAMOUS CELL CARCINOMA: FUNCTION-PRESERVING RECONSTRUCTION USING THE KARAPANDZIC FLAP IN AN ELDERLY PATIENT

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Introduction: Lower lip squamous cell carcinoma (SCC) represents a high-risk subtype of cutaneous malignancy, characterized by increased rates of local invasion and metastatic potential compared to other cutaneous pathologies. Standard management requires wide local excision with histologically negative margins. Therefore, oncological resection must be balanced with preserving oral competence and minimization of perioperative risk. Reconstructive strategies play a pivotal role in restoring sphincteric function, articulation, and alimentation. **Case Report:** We present the case of a 76 years old woman with an ulcerated lower lip SCC and several other health problems, such as type II diabetes, chronic heart disease, heart failure (NYHA II), permanent atrial fibrillation, asthma, and depressive disorder. Surgical treatment included oncopathological resection with intraoperative histopathological examination, which ensured clear margins through re-excision of the deep and lateral margins. Final histopathological results confirmed a moderately differentiated (G2) keratinizing squamous cell carcinoma with striated muscle infiltration, without lymphovascular or perineural invasion, and with negative margins. Reconstruction of the defect in the lower lip was performed using bilateral Karapandzic flaps, preserving the neurovascular supply to the orbicularis oris muscle and maintaining oral sphincter function. Postoperative care included antimicrobial prophylaxis, anticoagulation, and multimodal analgesia. Recovery proceeded without incident, with viable flaps, no local complications, and satisfactory functional outcomes, with preserved oral continence. **Discussions :** Managing lower lip SCC in high-risk patients requires an individualized,

multidisciplinary approach that integrates oncologic and reconstructive principles. The Karapandzic flap is a reliable reconstructive option that preserves neuromuscular continuity and enables functional restoration. In patients with multimorbidity, it is mandatory to minimize operative trauma while guaranteeing oncologic clearance. Intraoperative margin assessment considerably diminishes the risk of local recurrence. **Conclusions:** In elderly patients with multimorbidity, successful management of lower lip SCC depends on combining radical oncologic excision with function-preserving reconstruction. The Karapandzic flap provides reliable structural and functional outcomes, making it a preferred reconstructive option in complex cases.

Keywords: lower lip squamous cell carcinoma, Karapandzic flap, oncologic surgery, multimorbidity

SURGICAL MANAGEMENT OF A VOLUMINOUS VULVAR HEMATOMA FOLLOWING NON-OBSTETRIC BLUNT TRAUMA SECONDARY TO HETERO-AGGRESSION

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Introduction: Vulvar trauma represents a gynecological emergency that requires rapid assessment to prevent long-term complications such as infection, tissue necrosis, or chronic pain. While vulvar hematomas are more commonly associated with obstetric events, non-obstetric traumatic cases in young patients-often resulting from direct impact or blunt force-frequently necessitate surgical intervention for evacuation and hemostasis. **Case Report:** We present the case of an 18-year-old female patient who presented to the emergency department complaining of intense pain and significant swelling of the right vulvar region following hetero-aggression. Clinical examination revealed a large right vulvar hematoma accompanied by cardinal signs of inflammation (erythema, localized hyperthermia, and edema) and a mucosal laceration. The patient underwent surgical intervention under spinal anesthesia; the procedure involved an incision through the existing laceration and the evacuation of a 3x3 cm hematic collection. Following the restoration of anatomical planes, a drain was placed deep within the wound to prevent serosanguinous accumulation and recurrence. Postoperative management included prophylactic antibiotics, analgesics, anti-inflammatory therapy, and fluid resuscitation. The patient showed a favorable recovery and was discharged shortly after. **Discussions :** The present case highlights the management of a significant vulvar hematoma resulting from non-obstetric blunt trauma. While most vulvar hematomas (approximately 80%) are associated with childbirth, traumatic injuries in non-pregnant patients-often due to accidents or, as in this case, hetero-aggression-require a high index of suspicion for associated internal injuries. In this patient, the decision for surgical intervention was based on the size of the collection (3x3 cm) and the presence of an active mucosal laceration. Small, stable hematomas (typically under 4 cm without expansion) can often be managed conservatively with ice packs, pressure dressings, and analgesics. However, the presence of cardinal signs of inflammation and intense pain in our patient necessitated immediate evacuation and hemostasis to prevent secondary infection or the formation of an abscess. The use of a deep drain proved effective in preventing recurrence, a common complication in highly vascularized areas like the vulva. **Conclusions:** Surgical treatment of a traumatic vulvar hematoma-through incision, evacuation, and effective drainage-is essential to prevent secondary complications such as abscess formation or chronic fibrosis. In cases of blunt hetero-aggression, a prompt clinical response combined with comprehensive postoperative care, including analgesia (Novocain 500 mg COMP; Defebryl 500 mg CPR) and appropriate antibiotic therapy, ensures rapid recovery and restores the patient's quality of life. This case emphasizes that early surgical intervention remains the most effective strategy for managing extensive non-obstetric vulvar trauma.

Keywords: Vulvar hematoma, Hetero-aggression, Non-obstetric trauma, Blunt force injury

SURGICAL MANAGEMENT OF ULCERATED AURICULAR BASAL CELL CARCINOMA IN THE CONTEXT OF CUTANEOUS FIELD CANCERIZATION: A CASE REPORT

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Introduction: Basal cell carcinoma (BCC) mostly affects the head and neck. Auricular BCCs present unique surgical challenges due to the complex topographical anatomy, thin overlying dermis, and a high proclivity for subclinical extension. The concurrent presentation of BCC and actinic keratosis is a prime indicator of cutaneous field cancerization secondary to chronic ultraviolet exposure, necessitating comprehensive regional management

rather than focal treatment alone. **Case Report:** A 77-year-old male with severe cardiovascular comorbidities presented with cutaneous lesions on the left hemiface and auricle. Under general anesthesia, three circumscribed excisions were performed, including deep re-excision of the auricular cartilage, in order to ensure that clear margins were achieved and that every atypical proliferation was examined. Histopathology of the second auricular lesion revealed an ulcerated nodular BCC exhibiting basal cell proliferation of different shapes and sizes, high mitotic activity, peripheral palisading, and artefactual stromal retraction. It reached a 2.4 mm invasion depth, at the level of the reticular dermis, without lymphovascular or perineural invasion. Surgical margins were clear (0.9 mm deep, 2 mm lateral/medial), and the third sample containing the excised marginal cartilage revealed no signs of invasion. The hemifacial lesion was confirmed as actinic keratosis, featuring disordered keratinocyte architecture and mixed ortho-parakeratotic hyperkeratosis. Maturation disturbances remained confined to the basal third, leaving the basement membrane intact. The patient had an uneventful recovery and optimal aesthetic and structural preservation of the auricle was achieved. **Discussions :** Auricular BCCs are classified as high-risk lesions located in the facial H-zone, where standard 3-4 mm excision margins often face strict anatomical constraints. In this case, despite the 2.4 mm vertical invasion and macroscopic ulceration, the auricular cartilage served as an effective anatomical barrier. Securing a clear deep margin is critical, as its involvement carries a significantly higher recurrence risk compared to lateral margin involvement. Additionally, the bordering actinic keratosis indicates significant neoplastic risk. Addressing the entire cancerized field is essential to lower the danger of de novo invasive carcinomas in the adjacent photodamaged skin. Finally, the patient's extensive underlying health conditions required careful multidisciplinary perioperative management, a common necessity in geriatric dermatologic surgery. **Conclusions:** Precise deep margin control and complete surgical excision remain highly effective for ulcerated auricular BCCs. As supported by current oncological literature, achieving histopathologically clear margins, alongside cartilage assessment when clinically indicated, is the gold standard to prevent local recurrence and minimize the need for complex reconstructive procedures in high-risk anatomical zones.

Keywords: Basal Cell Carcinoma, Auricular Reconstruction, Deep Margin Assessment, Actinic Keratosis

THE IMPACT OF HYPERINFLATION IN DAILY LIFE

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Introduction: Chronic obstructive pulmonary disease (COPD) is composed of two lesions, chronic bronchitis and emphysema. In patients with emphysema predominant forms, there is a loss of elastic recoil, air trapping and progressive lung hyperinflation due to irreversible destruction of the alveolar walls. In advanced stages, this process causes severe dyspnea and reduce functional capacity, making it more than just an obstructive disorder.

Case Report: We present the case of a patient with severe COPD Global Initiative for Chronic Obstructive Lung Disease stage IV, group E, a 57-year-old chronic smoker (60 pack-years), who was admitted to the Pneumology Department, accusing symptoms such as initially dry cough that later became productive, the patient eliminating white to brownish sputum over the last month, severe dyspnea at very minimal efforts and limitation of daily activities, alongside inappetence and weight loss. Respiratory function tests were performed. Spirometry revealed severe obstruction (forced expiratory volume in one second(FEV1) 36% and FEV1/forced vital capacity(FVC) 45%), indicating an obstructive disorder. Body plethysmography showed residual volume(RV) 204%, total lung capacity 110%. Impulse oscillometry revealed increased resistance at 5Hz(R5 146%) and almost normal resistance at 20Hz(R20 83%), the difference between R5 and R20 highlighting the affection of the small airways. Thoracic computed tomography underlined emphysema changes, anterior subpleural fine reticulations in the inferior half of the right upper lobe and middle lobe. **Discussions :** In this case, the main role is played by emphysema, and the severity of the symptoms is not related only to the obstructive component of COPD, but mainly to hyperinflation. In this patient, airflow obstruction alone does not explain the severity of shortness of breath, as reflected by the increased RV level, indicating severe air trapping and lung overexpansion. This mechanism reduces diaphragmatic efficiency, increases the work of breathing, and promotes early dyspnea, even during minimal daily efforts. Oscillometric findings show significant small airway involvement, contributing to dynamic hyperinflation as the key mechanism. These functional and structural changes lead to exercise intolerance, physical deconditioning and weight loss, all contributing to a lower quality of life. **Conclusions:** In severe emphysematous COPD, hyperinflation represents a central mechanism associated with dyspnea and functional limitation. The patient becomes dependent on another person to be able to do minimal daily activities, which is unpleasant for both sides. Is necessary to preform respiratory tests to provide information and to apply an

appropriate treatment that can help the patient to do daily activities by themselves.

Keywords: hyperinflation, chronic obstructive pulmonary disease, dyspnea, emphysema

THE ROLE OF DEEP FEMORAL ARTERY ENDARTERECTOMY IN CONTEMPORARY LOWER LIMB SALVAGE

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Introduction: Peripheral arterial disease (PAD) is characterized by impaired perfusion of distal tissues due to atherosclerotic plaque formation in the arterial system. In the lower limb, the femoropopliteal segment represents the most frequently affected anatomical site. Depending on the extent and distribution of atherosclerotic disease, several surgical revascularization techniques may be employed. The profunda femoris artery (PFA), a major branch of the femoral artery, primarily supplies the skin and muscles of the medial thigh as well as the proximal femur, and plays an important role in providing collateral circulation to the lower limb. **Case Report:** We report the case of a 60-year-old male patient admitted to the Vascular Surgery Department with chronic occlusion of the common femoral artery (CFA), PFA, and superficial femoral artery (SFA), associated with ulceration and digital necrosis. Due to the long extent of the occlusion, endovascular revascularization was not considered feasible. Therefore, surgical treatment consisting of CFA and PFA endarterectomy followed by patch angioplasty was performed. Because the PFA occlusion was extensive, the arteriotomy was extended into the PFA, requiring an atypically shaped patch extending from the CFA to the PFA. The postoperative evolution was favorable, and the patient was discharged on postoperative day five with anticoagulant and antiplatelet therapy. The digital ulcers were managed with regular debridement and daily dressings until complete healing. At the 6-month follow-up, the ulcers had fully healed, a palpable pulse was present at the CFA level, and the patient reported no further complaints. **Discussions :** PFA endarterectomy remains a valuable surgical option in selected patients with complex femoral occlusive disease when endovascular treatment is not feasible. In this case, restoration of flow through the profunda femoris artery provided sufficient collateral perfusion to allow ulcer healing and limb salvage. **Conclusions:** PFA endarterectomy can represent an effective revascularization strategy for lower limb salvage in patients with extensive femoral artery occlusions. Careful patient selection and adequate surgical reconstruction may achieve favorable clinical outcomes and promote tissue healing.

Keywords: PAD, PFA, Endarterectomy, Vascular surgery, Open surgery

THE ROLE OF THE R-ON-T PHENOMENON IN ELECTRICAL STORM AND MANAGEMENT THROUGH OVERDRIVE PACING - CASE REPORT

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Introduction: The R-on-T phenomenon is represented by a ventricular extrasystole synchronized with the T wave of the preceding cardiac cycle. This phenomenon can be triggered during the vulnerable period (relative repolarization), being often encountered in a context of myocardial ischemia or a long QT syndrome. Electrical storm represents a major emergency, which can be defined as at least 3 episodes of sustained ventricular arrhythmias within 24 hours. The pathology is rare among the general population, yet it has a 10-20% higher frequency in individuals with severe cardiac conditions and is associated with increased mortality. The critical triggering mechanism is often the R-on-T phenomenon, resulting in ventricular tachycardia. **Case Report:** Patient XY, 71 years old, with a history of aortocoronary bypass, was brought to the Emergency Department - SMURD Târgu-Mureș after a cardiorespiratory arrest, which was successfully resuscitated after approximately 50 minutes. The rhythms identified were pulseless electrical activity (PEA), pulseless ventricular tachycardia, and ventricular fibrillation (VF). Post-resuscitation, the clinical examination revealed an electrical pattern of third-degree atrioventricular block. The particularity was discovered through imaging: although transthoracic echocardiography showed the heart contracting at a frequency of approximately 40/min, on ECG the R wave of the AV block rhythm synchronized with the T wave, triggering the "R-on-T" phenomenon. This generated an electrical storm (ventricular tachycardia with pulse) refractory to cardioversion. The diagnosis was based on identifying the pathologies: severe bradycardia favored ventricular ectopy, which through the R-on-T phenomenon triggered the tachycardia. In the emergency department, the decision was made to initiate temporary external pacing in overdrive at 110 impulses

per minute. The decision was taken in order to eliminate the ventricular tachycardia by stimulating at a high frequency, electronically suppressing the ectopic focus from further depolarizing. **Discussions** : This strategy keeps the depolarizing cells in the refractory period, shortening the R-R interval, eliminating the period during which an ectopic focus can reach a threshold potential to initiate an arrhythmia. By temporarily stopping the electrical storm, transfer to the cardiology department is made possible for definitive treatment. **Conclusions**: The interaction between the R-on-T phenomenon and third-degree atrioventricular block represents a risk factor for electrical storm. High-frequency overdrive pacing is a life saving intervention in emergency settings, superior to repeated cardioversion, for temporary arrhythmia control and for ensuring a therapeutic window for definitive treatment.

Keywords: R-on-T, Electrical storm, External pacing in overdrive

THROMBOTIC COMPLICATIONS IN JAK2-POSITIVE POLYCYTHEMIA VERA: PERSISTENT HYPERCOAGULABILITY IN A MYELOPROLIFERATIVE DISEASE AGGRAVATED BY THERAPEUTIC NONADHERENCE

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Introduction: Polycythemia vera, a JAK2-driven myeloproliferative neoplasm characterized by autonomous erythroid expansion frequently accompanied by leukocytosis and thrombocytosis conferring a sustained prothrombotic state. In uncontrolled disease, severe thrombocytosis and persistent hypercoagulability may lead to catastrophic arterial and venous events. Enteromesenteric infarction represents a rare but life-threatening complication. **Case Report:** We report the case of a 42-year-old male with JAK2-positive polycythemia vera, classified as high thrombotic risk, with documented long-standing noncompliance and absence of cytoreductive treatment despite multiple prior thrombotic events. Laboratory findings revealed extreme thrombocytosis (1,456,000/ μ L), marked leukocytosis (1.75x103/ μ L), elevated inflammatory markers (CRP 86.7 mg/L), anemia, and mild hyperkalemia, consistent with severe systemic inflammation and uncontrolled myeloproliferative disease. His history included splenectomy for splenic infarction, recurrent acute myocardial infarctions requiring percutaneous coronary intervention, chronic ischemic cardiomyopathy with reduced ejection fraction, and recent enteromesenteric infarction necessitating emergency segmental enterectomy for generalized peritonitis. The patient was admitted in critical condition with acute respiratory failure and septic shock of pulmonary origin. Imaging revealed bilateral bronchopneumonia with pleural involvement, while further evaluation identified extensive venous thrombosis involving the inferior vena cava and bilateral iliac veins, confirming severe systemic hypercoagulability. During hospitalization, he required invasive mechanical ventilation on two occasions, vasopressor support, and prolonged intensive care monitoring. Microbiological investigations documented multidrug-resistant pathogens, including *Acinetobacter baumannii* XDR and vancomycin-resistant *Enterococcus faecium*, complicating the clinical course. Continuous anticoagulation was initiated for extensive venous thrombosis, and cytoreductive therapy with hydroxyurea was started in the context of extreme thrombocytosis. The management required a multidisciplinary approach involving internal medicine, hematology, cardiology, vascular surgery, general surgery, and infectious diseases. Despite transient clinical stabilization under multidisciplinary intensive care management, the clinical course was ultimately unfavorable. Progressive cardiorespiratory deterioration in the setting of septic syndrome and advanced cardiovascular disease led to fatal outcome, highlighting the cumulative impact of uncontrolled myeloproliferative disease, persistent hypercoagulability, and therapeutic nonadherence. **Discussions** : This case illustrates the dramatic thrombotic burden associated with uncontrolled polycythemia vera and severe thrombocytosis. Persistent hypercoagulability led to recurrent arterial and venous events, including enteromesenteric infarction and extensive central venous thrombosis. Therapeutic noncompliance played a pivotal role in disease progression and the accumulation of life-threatening complications. **Conclusions:** Uncontrolled polycythemia vera with severe thrombocytosis may result in catastrophic thrombotic events. Early cytoreductive therapy, appropriate anticoagulation and strict long-term treatment adherence are essential to reduce morbidity and mortality.

Keywords: Enteromesenteric infarction, Hypercoagulability, Polycythemia vera, Therapeutic noncompliance

TONSILLAR LARGE B-CELL LYMPHOMA MIMICKING A PERITONSILLAR ABSCESS: A CASE REPORT WITH DIAGNOSTIC AND PROGNOSTIC IMPLICATIONS

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Introduction: Tonsillar lymphoma in children is a rare but clinically significant condition that can resemble conventional acute tonsillitis. Similar clinical manifestations, such as dysphagia, odynophagia, fever and tonsillar hypertrophy can lead to delays in establishing the correct diagnosis. Recognizing atypical signs and unusual progression during antibiotic treatment is essential for guiding further investigations and promptly initiating appropriate therapy. **Case Report:** A 15-year-old male presented with a four-week history of progressive dysphagia and odynophagia secondary to enlargement of the right palatine tonsil, which was asymmetrical and associated with right mandibular adenopathy. He was hospitalized with a clinical diagnosis of a parapharyngeal abscess, but there were no signs of regression following antibiotic treatment. Laboratory findings showed no significant abnormalities except for a 39% increase in white blood cells (WBC). Native and contrast-enhanced cervical Magnetic Resonance Imaging (MRI) revealed enlargement of the right palatine tonsil without extension into adjacent structures and right superior jugular lymphadenopathy. Based on these findings, extraction of the tonsil was recommended. Histopathological examination confirmed a lymphoproliferative process involving mature B cells. Histological appearance and immunophenotype of the tumor cells were consistent with IRF4-rearranged large B-cell lymphoma (where IRF signifies Interferon Regulatory Factor). **Discussions :** Large B-cell lymphoma with IRF4 rearrangement is a distinct type of pediatric non-Hodgkin lymphoma, recognized for its unique clinical and pathological features and favorable prognosis. It predominantly affects children and adolescents, frequently involving the head and neck region, particularly the Waldeyer ring. It often presents as a rapidly enlarging tonsillar mass that is refractory to antibiotic therapy, which may lead to initial misdiagnosis as an infectious process. From a histopathological and immunophenotypic perspective, this tumor can mimic other subtypes of aggressive lymphomas, which is why identifying the IRF4 gene translocation is essential for accurate diagnosis. **Conclusions:** The importance of recognizing this entity stems from its therapeutic and prognostic implications, as patients with confirmed IRF4 rearrangements generally have a favorable course and respond well to risk-adapted therapies, thereby avoiding excessively aggressive treatment regimens.

Keywords: lymphoma, tonsillar neoplasm, pediatric, IRF4 rearrangement

UNCOMPLICATED DUODENAL ULCER ASSOCIATED WITH HELICOBACTER PYLORI INFECTION

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Introduction: Duodenal ulcer is a common manifestation of peptic ulcer disease and is strongly associated with *Helicobacter pylori* infection and lifestyle risk factors such as smoking. Although advances in diagnostic and therapeutic strategies have reduced the incidence of complications, peptic ulcer disease remains clinically significant due to potential outcomes including upper gastrointestinal bleeding, perforation, and pyloric stenosis. Early recognition and appropriate eradication therapy are essential for effective management. We present a case of uncomplicated duodenal ulcer associated with *H. pylori* infection, highlighting the role of clinical assessment and endoscopic diagnosis. **Case Report:** A 40-year-old male patient, an engineer and chronic smoker (approximately 20 cigarettes per day), presented with epigastric pain for approximately 2-3 weeks. The pain had a burning character and was associated with "hunger pain," typically occurring 2-3 hours after meals and occasionally during the night. The patient also reported episodes of retrosternal burning (pyrosis). Family history revealed that his father had undergone surgery for a perforated duodenal ulcer. Physical examination revealed localized epigastric tenderness, particularly at the duodenal point, while examination of other systems was normal. Laboratory and hematological tests were within normal limits. Upper gastrointestinal endoscopy showed a normal esophagus and cardia, gastric hypersecretion, and erythematous antral mucosa suggestive of gastritis. The pylorus appeared edematous. At the level of the duodenal bulb, an oval ulcerative lesion measuring approximately 1 × 0.8 cm was

identified on the anterior wall, with congestive and edematous margins covered by fibrin deposits. The second portion of the duodenum was normal. Gastric biopsy confirmed *Helicobacter pylori* infection. The patient was diagnosed with anterior bulbar duodenal ulcer associated with antral gastritis and bulbitis. Treatment consisted of triple eradication therapy with esomeprazole, amoxicillin, and levofloxacin for 10 days, followed by proton pump inhibitor therapy and lifestyle modifications including smoking cessation. **Discussions** : Risk factors such as smoking and family history may further contribute to ulcer development and recurrence. Upper gastrointestinal endoscopy remains the gold standard for diagnosis, allowing direct visualization of the lesion and confirmation of infection through biopsy. **Conclusions**: This case emphasizes the importance of recognizing the typical clinical presentation of duodenal ulcer and confirming the diagnosis through endoscopic evaluation. Eradication of *Helicobacter pylori* combined with lifestyle modification is essential for ulcer healing and prevention of recurrence.

Keywords: duodenal ulcer, *Helicobacter pylori*, peptic ulcer disease, endoscopy

UNDER THE MASK OF ANTIBIOTIC THERAPY: CULTURE-NEGATIVE INFECTIVE ENDOCARDITIS AND ACUTE SEVERE MITRAL REGURGITATION – A CASE REPORT

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Introduction: Infective endocarditis is a pathology associated with high morbidity and mortality, requiring management within a multidisciplinary team. When initial echocardiography fails to detect vegetations and blood cultures remain negative, diagnosis becomes challenging, potentially leading to severe complications such as chordal rupture and acute valvular insufficiency. **Case Report:** We report a 72-year-old male with a complex cardiovascular history: hypertension, persistent atrial fibrillation recently converted to sinus rhythm with amiodarone, chronic coronary syndrome, and a 2017 coronary stent. The patient presented to the emergency department complaining of severe dyspnea, orthopnea, fatigue at minimal exertion, constrictive chest pain radiating to the epigastrium, and recent syncopal episodes. Upon admission, he exhibited hypotension and low-grade fever. Physical examination revealed pallor, bilateral leg edema, pulmonary crackles, and an apical pansystolic murmur radiating toward the base of the heart. Laboratory findings showed mild leukocytosis (10600/uL) with neutrophilia and significantly elevated N-terminal pro-brain natriuretic peptide (3147 pg/ml), without myocardial cytolysis dynamics. Despite repeated blood cultures collected under empirical antibiotic treatment, results remained negative. Diagnostic confirmation was achieved via echocardiography, revealing severe mitral regurgitation caused by posterior mitral valve chordal rupture and an attached vegetation. Given digestive symptoms (profound inappetence, nausea) and a slight bilirubin elevation, gastroenterological consultation, supported by abdominal ultrasound, thoraco-abdominal-pelvic Computer Tomography, and Magnetic Resonance Cholangiopancreatography, revealed a distended gallbladder with biliary sludge (1/5 of volume), chronic cholecystitis, and dilation of the common and intrahepatic bile ducts. In the absence of a history of recent invasive medical or dental interventions, and after systematically ruling out other potential portals of entry, recent cholangitis was identified as the likely source of endocarditis. **Discussions** : This case highlights the management difficulties in infective endocarditis when microbiological diagnosis is absent. The therapeutic strategy was decided through close collaboration within the "Endocarditis Team," comprising the cardiologist, microbiologist, and infectious disease specialist (who tailored antibiotic therapy based on corroborated data), alongside the radiologist and cardiovascular surgeon. A pivotal contribution came from the gastroenterologist, who raised suspicion of recent cholangitis as the source of infection, possibly involving Gram-negative bacteria. Treatment success relied on two pillars: adequate antibiotic therapy, despite the culture-negative profile, and prompt surgical intervention to replace the valve with a biological prosthesis, preventing further hemodynamic deterioration. **Conclusions:** The diagnosis of culture-negative infective endocarditis remains a challenge, requiring a multidisciplinary approach to limit the severity of complications.

Keywords: Infective endocarditis, Endocarditis Team, Chordal rupture, Antibiotic therapy

UNDERESTIMATED SEVERITY OF MINOR FALL TRAUMAS IN THE ELDERLY - A CASE REPORT

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Introduction: Trauma in patients over 65 is a major global cause of mortality, with falls responsible for about 75% of cases. Common conditions like sarcopenia, frailty, and osteoporosis worsen outcomes even after minor injuries. Low-energy trauma accounts for most cervical spine injuries in the elderly, and up to 16% of thoracic trauma cases lead to complications. These patients are also twice as likely to be undertriaged, worsening the prognostics.

Case Report: A 72-year-old patient presented to the Emergency Department, 17 hours after falling into a ~2 m ditch, complaining of right lumbar pain, right facial trauma, mild neck stiffness, and right wrist pain. There was no loss of consciousness; vital signs were stable and the neurological exam was normal. Physical examination revealed a right periorbital hematoma with frontal abrasions, cervical tenderness with limited motion, right posterior thoracic crepitus with subcutaneous emphysema, and limited movement of the right wrist. Cervical immobilization was initiated, blood tests were obtained, the patient was moved outside of the triage zone, alas a high suspicion of cervical lesions and pneumothorax being raised. Cranio-cervico-thoracic computer tomography showed fractures of the right anterior and left posterior arches of C1, fractures of the right first and fifth ribs, right lower lobe pulmonary contusions, and a right apico-basal pneumothorax with subcutaneous emphysema. Wrist X-ray demonstrated a distal radius epiphyseal fracture. The patient was evaluated by neurosurgery (with maintained cervical immobilization) and admitted to general surgery, where a chest drain was placed, with a favorable prognosis. **Discussions :** This case underlines the importance of a rigorous anamnesis and consult based on the injury mechanism and location. Literature consistently shows that in patients above 65 years which suffer low energy trauma, approximately 30-50% present life-threatening injuries, with mortality rates up to 20%. Furthermore approximately 30% of elderly traumas are hemodynamically stable while having clinically significant injuries, such as c-spine (2-5%) and rib fractures with underlying pneumothorax (1-5%). Undertriage is a major concern, being encountered in about 25-50% due to the deceptive benign presentation and standard triage protocols, which mostly take into consideration the vital parameters, not age related physiology or anamnestic data. **Conclusions:** This case stands out because the patient was initially considered low-risk, with stable vitals and no neurological deficits after a moderate fall. However, further evaluation revealed a rare combination of injuries-C1 fractures, right rib fractures (1st and 5th), pulmonary contusion, and pneumothorax-known to be associated with significantly increased morbidity and mortality.

Keywords: Trauma, Elderly patients, Fracture, Pnemuthorax

UNUSUAL PRESENTATION OF A SOLITARY EXOPHYTIC PLANTAR CUTANEOUS/SOFT TISSUE MASS MIMICKING LEDDERHOSE DISEASE: A CASE REPORT

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Introduction: Soft tissue masses in the plantar region are relatively uncommon and may create a diagnostic dilemma in clinical practice, particularly in young adults, due to a wide spectrum of benign and malignant entities that can affect the plantar region. Plantar fibromatosis, or Ledderhose disease, is a rare condition of the plantar aponeurosis characterized by slow-growing multiple fibrous nodules. Ledderhose disease must be differentiated from other soft tissue tumors, including superficial fibromas, lipomas or malignant lesions, which may mimic its clinical appearance but require different management. **Case Report:** We report a 35-year-old female patient electively admitted to the Plastic Surgery Department for the excision of a cutaneous and soft tissue tumor on the right plantar region. The procedure was performed under general anesthesia: incision over the lesion, followed by dissection and exploration. The lesion was completely excised, and the specimen was sent for histopathological examination. Lavage and hemostasis were performed at the excision site, followed by primary skin closure, bandage application and postoperative immobilization. Treatment included antibiotics, analgesics, gastric protection and anticoagulation during the immobilization. The local and general postoperative evolution was favorable, and the recommendations were to change the bandage every 2-3 days, avoid local trauma and return

for suture removal. **Discussions** : This case raises a diagnostic dilemma between a simple cutaneous and soft tissue plantar tumor and plantar fibromatosis, due to overlapping clinical features. Several aspects help differentiate it from classic Ledderhose disease: a solitary, prominent, exophytic cutaneous nodule, whereas Ledderhose typically presents subcutaneous nodules, often multiple and bilateral within the plantar aponeurosis; the patient's age at the lower end of the typical range; and primary surgical management via excision, in contrast to the initial conservative approach recommended for plantar fibromatosis. **Conclusions**: Plantar soft tissue masses are uncommon and require a multidisciplinary approach due to their clinical mimicry and functional implications. This case underscores the importance of including Ledderhose disease in the differential diagnosis, while highlighting that surgical excision is necessary for both symptomatic relief and histopathological confirmation. Definitive diagnosis and appropriate management rely on histopathological examination

Keywords: Ledderhose, Exophytic plantar lesion, Mimicry, Excision

MEDICINAL CHEMISTRY

DETERMINATION OF KYNURENIC ACID IN HONEY

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Background: Kynurenic acid is a biologically active metabolite of tryptophan with antioxidant and potential neuroprotective properties. It is naturally present in various foods, including chestnut honey, where it contributes to the overall bioactive profile. **Objective:** The objective of this study was to develop and apply an analytical method for the determination of kynurenic acid in honey using HPLC-UV. **Material and methods:** The chromatographic conditions were: a C18 HPLC column (150x4.6 mm, 3 µm), a phosphoric acid 15 mM - acetonitrile mobile phase (90:10, V:V), a flow rate of 1 mL/min, column temperature of 25°C, and UV detection at 332 nm. The standards of kynurenic acid were prepared in aqueous solutions. Four honey commercial samples, three chestnut and one acacia products, were analysed in duplicate after dissolving in distilled water and filtered prior to analysis. A volume of 50 µL was injected. **Results :** The method was developed considering the influence of mobile phase composition and extraction conditions on the separation and detection of kynurenic acid. Under the proposed conditions, a clear and well-defined peak corresponding to kynurenic acid was obtained in 10 minutes analysis time. The method showed good linearity over an appropriate concentration range with $r > 0.999$. In the chestnut honey samples, the concentration ranged from 100 to 700 µg/g, comparable to values reported in the literature (50-1000 µg/g). In acacia honey, no kynurenic acid was detected. **Conclusions:** The study proposes a reliable HPLC-UV method for the determination of kynurenic acid in chestnut honey. The quantities of kynurenic acid in chestnut honey samples were variable, but according to literature data. This method can be successfully used for quality control and evaluation of kynurenic acid in chestnut honey.

Keywords: HPLC, Kynurenic acid, Chestnut honey

SYNTHESIS OF SOME INTERMEDIATES OF A NEW PHOTOSWITCHABLE MOLECULE

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Background: One of the most highlighted branches of chemistry with applications in advanced materials is photopharmacology, which deals with photoswitchable molecules that undergo conformational changes in the presence of light. The mechanism of action is based on transitions between stable and metastable electronic states. Azobenzene is one of the first photoswitchable molecules employed in photochemistry, in which an azo bond, upon UV excitation, can switch between cis and trans configurations. It presents various biochemical applications - integration of photoactive moieties inside the hydrophobic region as lipid bilayer control, Protein Targeting Chimeras (PROTACs), which can mark a protein of interest, followed by its degradation, and advanced material applications such as solar energy storage. **Objective:** This study aims to synthesize intermediates of a photoswitchable cycle controlled by irradiation of an azo bond that can change the compound's conformation at the spiro-pyran ring within the cycle, allowing its constant back-and-forth switching between the stable and metastable states. **Material and methods:** Starting from commercially available reagents, the components required to synthesize the cycle were obtained. 3-Aminophenol and 4-aminophenol were converted to diazonium salts at low temperatures, followed by a coupling reaction with phenol. The corresponding 3,4'-dihydroxyazobenzene and 4,4'-dihydroxyazobenzene were obtained in moderate yields. 3-Aminophenol had undergone a coupling reaction with itself in the presence of sodium molybdate dihydrate and sodium perborate in acetic acid, synthesizing 3,3'-dihydroxyazobenzene. The "arms" consist of diethylene glycol ditosylate and triethyleneglycol ditosylate, which have been obtained from ethylene glycols through a protection reaction with 4-toluenesulfonyl chloride. The spiro compound was obtained by acetalization of pentaerythritol with 3-hydroxybenzaldehyde in DMSO/toluene using methanesulfonic/4-toluenesulfonic acids as catalysts. **Results :** A successful attempt for acetalization using a mixture of organic acids (7,5% mol/mol) in toluene was made, whereas another run with methanesulfonic acid alone showed little to no product via TLC (n-pentane: ethyl acetate = 2:1). 3,3'-Dihydroxyazobenzene has been prepared in moderate yield by a diazotation/coupling cascade via a one-step reaction starting from a hydroxy-amine derivative, bypassing strict temperature control. The acetalization proved to be the bottleneck, as the reaction seemed futile in benzene, toluene, and dimethylformamide, all in the presence of dimethyl sulfoxide. Therefore, said intermediates have been synthesized and analyzed using IR and ¹H NMR spectroscopy. **Conclusions:** Adopting methods described in literature, 6 compounds were synthesized and fully analyzed. The

next step is to assemble all the compounds in a photoswitchable cycle and test their properties.

Keywords: Azobenzene, Photoisomerization, Spirans

MEDICAL COSMETICS AND TECHNOLOGY OF COSMETIC PRODUCTS

DEVELOPMENT AND ANALYSIS OF SULFATE-BASED AND SULFATE-FREE SHAMPOO BASE FORMULATIONS FOR SEBORRHEIC DERMATITIS

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Background: Recent clinical studies indicate that seborrheic dermatitis is among the most prevalent scalp conditions globally. Despite its high incidence, haircare product options remain limited, as many commercially available shampoos lack the balanced formulation necessary to ensure both efficacy and user compliance. Sulfate-free systems are characterized by their non-irritant cleansing profiles, which are essential for maintaining scalp integrity. **Objective:** This study focuses on the development of both sulfate-based and sulfate-free shampoo base formulations in preparation for active substance incorporation. **Material and methods:** A total of eight shampoo formulations were developed, four sulfate-based (DTSF1, 2; HTSF1, 2) and four sulfate-free (LDTF1, 2; LDHTF1, 2) using Sodium Laureth Sulfate, Lauryl Glucoside, Decyl Glucoside, Cocoglucoside as tensides. In each group, the primary and secondary surfactant ratios were systematically varied, directly impacting the formulation properties. For additional benefits, salicylic acid, betaine, and rosemary water were used in equal quantities. The shampoos were evaluated in terms of pH, viscosity, cleansing capacity, degree of foaming, and foam stability.

Results : The pH adjustment was required for all formulations, except HTSF1 and HTSF2, and was performed using a citric acid solution. The obtained values ranged between 4.91 ± 0.021 (HTSF2) and 6.26 ± 0.020 (LDHTF2). The rheological evaluation showed that LDTF1, LDHTF2, DTSF1, 2 and HTSF1 presented a pseudoplastic flow, while pseudoplastic thixotropy was recorded for LDTF2 and LDHTF1. Due to its liquid nature, HTSF1 displayed almost Newtonian behaviour. In comparison, sulfate-based shampoos presented a better cleansing capacity, which was observed on hair strand determinations. Regarding foaming capacity, DTSF1 highlighted the best result (135 ml). It was observed that when the foam registered a higher initial volume, it was less stable over time (DTSF, LDHTF). **Conclusions:** The findings highlight the successful development of both sulfate-based and sulfate-free formulations as shampoo bases. According to the data acquired, DTSF and LDHTF demonstrated the most favorable performance profiles, establishing them as suitable candidates for subsequent incorporation of active ingredients.

Keywords: seborrheic dermatitis, shampoo base, sulfate-free, tensides

DEVELOPMENT AND PHARMACOTECHNICAL EVALUATION OF NOVEL ANTI-AGING CREAM FORMULATIONS WITH SODIUM HYALURONATE

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Background: The efficacy of an anti-aging product is influenced by the stability of its dispersed system and the manufacturing process. Sodium hyaluronate (HA), when incorporated into skincare formulations, helps maintain moisture, reduce fine wrinkles, and improve skin texture. **Objective:** Our research focused on the development and evaluation of novel anti-aging cream formulations containing 2% HA, in which the proportion of ingredients in the fatty phase was varied. Technological parameters were analyzed in relation to the influence of the manufacturing method, as the creams were prepared both manually and using an automated process. **Material and methods:** Two different oil-in-water compositions were obtained, coded according to the preparation method: AGH1MM, AGH1AM, AGH2MM, and AGH2AM. In all formulations, the fatty phase consisted of stearic acid, Simmondsia Chinensis seed oil, methyl glucose sesquisteate, olive wax, Cetareth-20, and tocopherol, while HA was dissolved in the aqueous phase. The evaluation protocol included macroscopic and microscopic analysis, pH determination, spreadability testing, and assessment of rheological and texture properties. **Results :** The obtained results did not reveal significant differences in technological parameters caused by the slightly different ratio of the fatty phase components; however, the preparation method had a notable impact on the evaluation of the results. Microscopic analysis showed a more uniform dispersion of HA in the formulations prepared using the automated method. The pH value ranged from 7.5 to 8. Creams prepared automatically exhibited improved spreadability, with the spreading area of 2206.18 mm² for AGH1AM and 2375.82 mm² for AGH2AM. Rheological profile analysis indicated pseudoplastic behavior in all formulations, with viscosity decreasing under shear forces: from 56.5 to 12.5 cP for AGH1MM and from 71.5 to 5.02 cP for AGH1AM, respectively from 154.4 to 5.02 cP for AGH2MM and from 150.06 to 0.9 cP for AGH2AM. Adhesiveness values were lower for manually prepared creams: -391 g for

AGH1MM and -430.8 g for AGH2MM, while consistency analysis indicated lower penetration forces for the automated samples: 22.3 g for AGH1AM and 32.4 g for AGH2AM. **Conclusions:** The results demonstrated that the preparation method influences the pharmacotechnical properties of the developed anti-aging creams. Utilizing an automated preparation method can improve the uniformity of active ingredient dispersion and enhance technological characteristics. The data suggest a more homogeneous texture and potentially more favorable sensory properties for cutaneous application.

Keywords: anti-aging cream formulations, preparation method, rheological properties, sodium hyaluronate

THE INFLUENCE OF EMULSIFIER CONCENTRATION ON THE TEXTURAL PROPERTIES OF HYDRATING CREAM FORMULATIONS

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Background: Maintaining the integrity of the skin barrier is essential for protection against environmental factors, such as pollution and UV radiation, with optimal hydration being a critical parameter in preventing premature aging and various dermatological conditions. **Objective:** This study aims to develop hydrating cream formulations, using panthenol, low-molecular-weight hyaluronic acid and ceramide as active ingredients. **Material and methods:** The research explored the influence of emulsifier ratios (2%, 4%, and 6% glyceryl stearate) on the texture characteristics of three oil-in-water formulations (CH2, CH4, and CH6). Each formulation was evaluated in terms of pH, viscosity, consistency, texture, and spreadability. **Results :** The pH assessment showed that all formulations were compatible with the physiological skin pH. The rheological analysis described a plastic thixotropic behaviour for each formulation. The spreadability assay demonstrated that CH2 possesses a greater spreading area (3316.62 mm²) compared to CH6 (2640.74 mm²), indicating superior ease of application. In terms of hardness, CH6 has a more compact structure (36.7 g) compared to CH4 (32.6 g) and CH2 (19.8 g), demonstrating that as the emulsifier ratio decreased, the formulations became softer. Furthermore, adhesion force evaluations indicated that CH6 showed higher adhesiveness (-16.1 g), compared to the other formulations when applied to the skin. CH4 exhibited superior cohesion (1.118), indicating a more balanced internal organization and an enhanced ability to maintain structural integrity under mechanical stress. While CH6 displayed the highest firmness, it possesses the lowest cohesiveness (0.946), suggesting a more rigid structure. **Conclusions:** The data showed that the CH4 formulation, containing 4% glyceryl stearate, demonstrated the most balanced profile, combining structural stability and optimal cohesion, with favourable textural properties for topical application. The intermediate emulsifier concentration provides the ideal compromise between the ease of application of CH2 and the structural firmness of CH6.

Keywords: oil-in-water formulation, hyaluronic acid, texture analysis, emulsifier

DENTAL TECHNOLOGY

BEYOND CONVENTIONAL DENTURES: AESTHETIC INDIVIDUALIZATION USING MODERN COMPOSITE TECHNIQUES

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Introduction: The customization of complete dentures represents a modern approach in dental practice, aiming to reproduce natural aesthetic characteristics by adapting prosthetic components to the patient's morphological and physiognomic features. This study aims to evaluate the role of the dental technician in enhancing the aesthetic outcome of complete dentures through material selection, fabrication techniques, and individualized prosthetic customization. **Case Report:** A complete denture was fabricated using thermobaropolymerizable acrylic resin for the prosthetic base and a composite tooth set for improved aesthetics. Customization of the gingival area was achieved by applying a combination of packable and flowable light-cured composite resins on the vestibular surface. Laboratory techniques were used to reproduce the morphological and chromatic characteristics of natural gingival tissues. **Discussions :** The application of light-cured composite resins resulted in a significant improvement in the aesthetic appearance and morphology of the prosthesis. The final prosthetic work demonstrated a natural aspect, closely resembling the anatomical features of the oral cavity. Additionally, improved integration into the patient's facial profile and increased patient acceptance were observed. **Conclusions:** Aesthetic customization of complete dentures significantly enhances the natural appearance and overall integration of the prosthesis. The use of light-cured composite techniques allows for improved morphological and chromatic accuracy, contributing to superior aesthetic outcomes.

Keywords: aesthetic customization, complete denture, light-cured composite, prosthetic aesthetics

BPS DENTURES: STABILITY REDEFINED

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Introduction: The fabrication of complete removable dentures has evolved significantly, overcoming traditional limitations related to instability and discomfort. Modern prosthetic systems improve denture retention and reduce dependence on adhesives. The Biofunctional Prosthetic System (BPS) is a contemporary approach that integrates precise clinical and laboratory protocols to achieve superior functional, aesthetic, and phonetic outcomes. **Case Report:** A completely edentulous patient presented for prosthetic rehabilitation. Treatment followed the BPS protocol, consisting of clinical and laboratory phases. At the initial visit, anatomical data were recorded, and preliminary alginate impressions of both arches were taken. Intermaxillary relationships were registered using a Centric Tray. In the laboratory, casts were mounted in an articulator and custom trays were fabricated. During the second clinical stage, functional impressions were obtained. The laboratory workflow included teeth arrangement, wax-up of denture bases, flasking and boil-out, characterization, injection processing, finishing, and polishing. The dentures were inserted and adjusted to ensure optimal fit, stability, and function. **Discussions :** The BPS protocol provides a standardized and reproducible workflow, leading to improved clinical outcomes. Accurate functional impressions and precise jaw relation records enhance the adaptation of the denture base to the mucosa, promoting suction and stability. Compared to conventional methods, BPS offers better control over laboratory processing and improved material performance. Although complete dentures cannot fully replicate natural dentition, this approach allows effective restoration of masticatory function, phonetics, and facial aesthetics. Successful outcomes depend on strict adherence to the protocol and close collaboration between clinician and technician. **Conclusions:** The Biofunctional Prosthetic System is a reliable method for complete denture fabrication. It ensures improved retention, stability, and patient comfort, while delivering satisfactory functional and aesthetic results. Proper execution of all clinical and laboratory steps is essential for long-term success.

Keywords: BPS, Centric Tray, complete denture, stability

CHOOSING BETWEEN THE CLASIC MADE VENEERS AND THE ONES MADE WITH CAD-CAM

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Background: Since their introduction veneers have become a viable treatment based on esthetics , longevity , biocompatibility and strength to restore appearance and the function of the teeth .With the technology constantly advancing , new techniques and materials have been introduced in dentistry . Both ,clinics and dental laboratories, have to choose which path they will follow to achieve the treatment plan therefore they have to be analysed separately . **Objective:** The purpose of this study is to emphasise these differences to facilitate better decision-making . **Material and methods:** A comprehensive literature search was conducted using electronic databases (PubMed and Google Scholar) to obtain a conclusion. **Results :** Analysing the methods used nowadays the data indicate that there are two main methods used for the fabrication of veneers .The classic method relies on convectional impressions , stone model fabrications ,wax-up ,and layering porcelain by hand. This technique allows the technician to apply their knowledge by reproducing the tooth's natural morphology, texture and translucency. Studies have shown that feldspathic veneers exhibited better marginal adaptation compared to CAD-CAM veneers. All those steps are time consuming and the accuracy depends on the manual skill and experience the technician has, therefore the veneers might present imperfections. CAD/CAM is becoming more advanced therefore has become mostly used. Includes an intraoral scan, CAD design and CAM milling. It allows the clinician to have the restoration delivered in a single appointment, to incorporate high accuracy, efficiency and needs less chair time. The communication between clinics-laboratories has improved significantly and reports very low percentage of failure. However, the advanced tools that are needed may not be accessible to all clinics or laboratories since they present very high costs and the restorations may lack the unique details that can be adapted only by hand . The materials vary depending on the chosen method. The clasic method uses mostly porcelain ,resins or composite. While CAD-CAM ceramics such as disilicate lithium ,zirconia and resins . In comparison, CAD-CAM veneers have displayed higher fracture rezistance and that have better adaptation, improved esthetics which increased restoration longevity. **Conclusions:** Both methods present similarities but also differences that must be taken into consideration. In order to maximize the acuracy and the chances of patien's satisfaction the technicians could combine both methods. With CAD-CAM digital acuracy , efficiency and clasic method enchancing manual details the restoration will have higher chances of satisfaction.

Keywords: Veneers, CAD-CAM, restorations

GENERAL NURSING - BISTRIȚA

ANALYSIS OF RISK FACTORS IN GASTROINTESTINAL HEMORRHAGE: CORRELATIONS BETWEEN HEMODYNAMIC STATUS AND CLINICAL OUTCOMES

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Background: Gastrointestinal hemorrhage is a frequent and potentially life-threatening medical emergency, associated with significant morbidity and mortality. Hemodynamic status at presentation is a critical determinant of disease severity and a strong predictor of clinical outcomes. **Objective:** To investigate the relationship between hemodynamic status and patient outcomes in gastrointestinal hemorrhage, aiming to identify high-risk patients and inform management strategies. **Material and methods:** A retrospective analysis was conducted on 151 patients admitted between 01.01.2024 and 31.12.2025 with gastrointestinal hemorrhage. Patients were classified as hemodynamically stable (n=114) or hemodynamically unstable (n=37). Hemodynamic instability was defined as the need for vasopressor therapy and/or intravenous fluid resuscitation. Clinical outcomes were assessed based on mortality and length of hospital stay. **Results :** Hemodynamically unstable patients demonstrated markedly worse outcomes. All observed deaths (14/37) occurred in the unstable group, while no deaths were recorded among stable patients. Additionally, unstable patients had longer hospitalizations (1-28 days) compared to stable patients (1-17 days), reflecting more severe disease and the need for intensive therapeutic interventions. These findings underscore the prognostic significance of early hemodynamic assessment. **Conclusions:** Hemodynamic instability is a powerful adverse prognostic factor in gastrointestinal hemorrhage, strongly associated with higher mortality and prolonged hospitalization. Early identification and prompt, targeted management of unstable patients are essential to improve outcomes and reduce complications. Recognizing hemodynamic risk factors can guide clinicians in prioritizing resources and interventions for those most at risk.

Keywords: gastrointestinal hemorrhage, hemodynamic instability, risk factors, prognosis

CARE OF THE PATIENT WITH A SUBCLAVIAN ARTERY STENT

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Background: Subclavian artery stenosis is a vascular condition with significant clinical impact, most commonly caused by atherosclerosis and more frequently affecting the left side. Due to its anatomical origin directly from the aortic arch, the left subclavian artery is more exposed to hemodynamic stress, which favors the development of atherosclerotic lesions. Endovascular treatment, including balloon angioplasty and stent implantation, has emerged as a minimally invasive alternative to open surgical repair, offering reduced procedural risk, shorter hospital stay, and faster recovery. **Objective:** The aim of this paper is to evaluate the effectiveness of endovascular treatment in subclavian artery stenosis and to analyze the contribution of nursing interventions to postprocedural outcomes. The assessment is based on both clinical and functional indicators, with a focus on recovery, complication prevention, and patient autonomy. **Material and methods:** We present the case of a 67-year-old female patient diagnosed with approximately 80% stenosis of the left subclavian artery. The patient underwent endovascular treatment consisting of balloon angioplasty followed by stent placement. The effectiveness of the intervention was evaluated through clinical parameters such as the remission of ischemic symptoms, reduction of interbrachial blood pressure differences, and maintenance of postprocedural vascular patency. The role of nursing care was assessed by monitoring potential complications, time to mobilization, adherence to treatment, and the level of patient independence. The nursing care plan was developed according to the Virginia Henderson model, ensuring a structured and individualized approach. **Results :** Postprocedural evaluation showed complete remission of ischemic symptoms in the affected upper limb and a significant decrease in the blood pressure difference between the two arms. No major complications were recorded during hospitalization. The patient achieved early mobilization within the first 24 hours and demonstrated good compliance with medical and nursing recommendations. Nursing interventions contributed significantly to the prevention of local complications such as hematoma and infection, ensured accurate monitoring of hemodynamic status, and supported the improvement of self-care abilities by the time of discharge. **Conclusions:** Endovascular treatment of subclavian artery stenosis proved to be effective in this case, as evidenced by improved clinical outcomes and the absence of complications. Well-structured and patient-centered nursing interventions played a crucial role in optimizing recovery, minimizing postprocedural risks, and enhancing functional independence. These findings highlight the importance of integrating nursing care into

the multidisciplinary management of vascular patients to achieve optimal clinical results.

Keywords: subclavian artery stenosis, endovascular treatment, nursing plan

EARLY DETECTION AND IMMEDIATE INTERVENTION IN ACUTE MYOCARDIAL INFARCTION: THE EMERGENCY MEDICINE PERSPECTIVE – STUDY PROTOCOL

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Background: Acute coronary syndrome (ACS) constitutes a leading cause of cardiovascular morbidity and mortality globally. Rapid identification and timely intervention in acute myocardial infarction (AMI) are crucial to reduce mortality and prevent serious complications. The prehospital phase and Emergency Department (ED) are critical for initiating appropriate therapies-including thrombolysis and primary percutaneous coronary intervention (PPCI) as salvage treatments-and organizing transfers to centers with PPCI capabilities. A regional study at "Spitalul Clinic Județean de Urgență Bistrița" will evaluate current practices in early detection and intervention for AMI patients. **Objective:** To evaluate and improve the efficacy of early detection and immediate intervention, including thrombolysis and primary percutaneous coronary intervention (PPCI), in patients presenting with acute myocardial infarction at "Spitalul Clinic Județean de Urgență Bistrița". The study aims to analyze current prehospital and emergency department protocols, assess adherence to international guidelines, and identify opportunities to enhance patient outcomes through optimized rapid management strategies. **Material and methods:** This prospective observational study will be conducted over 12 months at Spitalul Clinic Județean de Urgență Bistrița. Data will be collected on timing and performance of 12-lead electrocardiograms (ECG) within 10 minutes of first medical contact, oxygen therapy administration, analgesic use, antiplatelet and anticoagulant treatments, thrombolysis administration when PPCI is delayed, and patient transfer intervals. The study will also assess adherence to established guidelines and organizational efficiency of transfers to PPCI-capable centers. **Results :** Expected Outcomes: The study is expected to highlight the importance of rapid ECG acquisition in identifying ST-elevation myocardial infarction (STEMI) and facilitating timely reperfusion therapy through thrombolysis or PPCI when indicated. Appropriate oxygen administration is anticipated to be limited to patients with oxygen saturation below 94%, avoiding potential harm from hyperoxia. Analgesic strategies are expected to reflect cautious opioid use due to possible interactions with oral antiplatelet agents. Adherence to dual antiplatelet therapy (aspirin and a P2Y12 inhibitor) will be evaluated in relation to ischemic and bleeding risk. The study will also assess whether patient transfers meet recommended time targets for PPCI (≤ 90 minutes), and whether fibrinolytic therapy is appropriately used when delays exceed guideline recommendations. **Conclusions:** This study aims to evaluate whether coordinated early management-including thrombolysis and timely PPCI-initiated in prehospital care and continued in the ED can improve outcomes in AMI patients. The findings are expected to provide insight into current practices and identify opportunities to optimize emergency cardiac care in regional settings.

Keywords: Oxygen therapy, analgesia, antiplatelet therapy, thrombolysis

EARLY DETECTION OF DIABETIC FOOT ULCERATION SIGNIFICANTLY REDUCES COSTS - THE NURSE'S ROLE

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Background: This paper highlights the vital role of the nurse, an indispensable member of the medical team, who, through applying a few rapid and cost-effective techniques, both, educates the patient and its family, and also assists in the early detection of diabetic foot lesions. By implementing targeted interventions, the nurse helps reduce the incidence of severe complications, such as infections, ischemia and amputations, while also decreasing the number and duration of hospitalizations. All these together, lead to both direct and indirect drop of medical costs. The target group includes nurses from the following departments: Family Medicine, Diabetology, General Surgery, Vascular Surgery, Neurology, and Orthopedics. **Objective:** In this qualified care plan designed for nurses there can be found basic tools and simple techniques such as : systematic screening, patient education, quick triage protocols, rapid and practical interventions, and the use of performance indicators. **Material and methods:** The suggested materials and methods are: an easy to use checklist, an administrative protocol proposition and a two-steps nurse training course, all designed to be affordable, easy, quick to learn and apply and most of all,

efficient and time saving in the long run. **Results** : Highly trained and specialized nurses that will ease the doctor's tasks, will help in the early detection of complications, thus improving the patient's life quality and have an overall major impact in the streamline of medical economy. **Conclusions**: Right now in Romania there is a real need of specialized personnel in the nurse's sector who's training does not imply high costs but once achieved will have a major impact.

Keywords: diabetic foot, nurse's role, early detection

EFFECTIVENESS OF ENDOSCOPIC INTERVENTIONS ACCORDING TO THE MODE OF HOSPITAL PRESENTATION

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Background: Gastrointestinal bleeding is a common reason for presentation to emergency services and is associated with increased rates of morbidity and mortality. Gastrointestinal bleeding is classified into upper gastrointestinal bleeding and lower gastrointestinal bleeding, each characterized by distinct etiologies and therapeutic strategies. Digestive endoscopy is considered the gold standard for both the diagnosis and treatment of these conditions, allowing the application of therapeutic methods such as adrenaline injection, clip placement, and thermocoagulation. The severity of bleeding depends on a number of factors, including the patient's comorbidities. However, the effectiveness of endoscopic interventions may vary depending on the mode of admission, an aspect that requires further evaluation. **Objective:** To evaluate the effectiveness of endoscopic interventional methods according to the severity of gastrointestinal bleeding. **Material and methods:** This study is a retrospective observational one, including 151 patients diagnosed with gastrointestinal bleeding between January 2024 and October 2025. Patients were diagnosed based on clinical manifestations, laboratory test changes, and endoscopic confirmation. The following were analyzed according to the mode of admission: demographic characteristics, associated conditions, biological parameters, treatment, endoscopic interventions, and their outcomes. **Results** : Of the 151 patients, 135 were admitted through emergency services and 16 through scheduled admission, with a mean age of 67 years in both groups. Males predominated in the emergency group (66%), while the scheduled group had an equal male-to-female ratio (50%). The average hospital stay was 5 days for emergency patients and 3 days for scheduled admissions. Peptic ulcer disease was common in both groups (70% vs. 75%), and cardiovascular diseases were more frequent in emergency patients (64% vs. 44%). Proton pump inhibitors were administered to 97% of emergency and 93% of scheduled patients. Hemostatic agents, including Adrenostazin (77% vs. 81.2%) and Etamsilat (76.2% vs. 81.2%), were used frequently. Mean hemoglobin levels (≈ 8 g/dL) and INR (1.84 vs. 1.24) suggested mild hematologic instability in emergency patients. Endoscopic interventions varied: clip placement and adrenaline injection were more frequent in emergency patients, whereas thermocoagulation was more commonly applied in scheduled admissions. The most frequent lesions were ulcers, observed in 53.3% of emergency patients and 62.5% of scheduled patients. **Conclusions:** Endoscopic interventions play an essential role in the diagnosis and management of gastrointestinal bleeding. Electively admitted patients show a higher frequency of organic digestive lesions, and we observed that clip placement, adrenaline injection, and thermocoagulation were performed more frequently in emergency settings, as they require rapid control of bleeding.

Keywords: gastrointestinal bleeding, endoscopy, emergency, hemoglobin

EVALUATION AND MANAGEMENT OF GASTROINTESTINAL HEMORRHAGES IN PATIENTS WITH LIVER DISEASE IN THE INTENSIVE CARE UNIT

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Background: Gastrointestinal bleeding represents a major medical emergency in patients with liver disease, frequently associated with portal hypertension and an increased risk of mortality. In the intensive care setting, this complication acquires particular severity due to its frequent association with organ failure and multiple comorbidities. **Objective:** The aim of the study was to evaluate the clinical, biological, and outcome characteristics of patients with gastrointestinal bleeding admitted to the intensive care unit, with a focus on its association with pre-existing liver disease. **Material and methods:** This is a retrospective observational study conducted on a cohort

of 200 patients, of whom 54 presented with gastrointestinal bleeding. Demographic characteristics, underlying liver conditions, clinical evolution, and transfusion requirements were analyzed. **Results** : The results showed a 27% prevalence of gastrointestinal bleeding in the studied population, with liver cirrhosis being the most common associated condition. Patient outcomes were severe, characterized by a high rate of multiple organ failure and a mortality exceeding 50%. Most patients required transfusion support, reflecting the severity of the bleeding episodes. **Conclusions**: The conclusions highlight that gastrointestinal bleeding in patients with liver disease is a severe complication with a poor prognosis, requiring prompt, multidisciplinary, and individualized management according to case severity.

Keywords: gastrointestinal bleeding, liver cirrhosis, portal hypertension, intensive care

EVALUATION OF ADVERSE EFFECTS, QUALITY OF LIFE, AND INFECTIOUS COMPLICATIONS IN PATIENTS WITH BLADDER TUMORS UNDERGOING INTRAVESICAL BCG INSTILLATIONS — A PROSPECTIVE OBSERVATIONAL STUDY

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Background: The standard adjuvant treatment for patients with intermediate- or high-risk non-muscle-invasive bladder cancer (NMIBC) consists of intravesical instillations with Bacillus Calmette-Guérin (BCG). However, this treatment is frequently limited by local adverse effects, infection-related complications, and a significant reduction in quality of life (QoL). **Objective:** This study aims to evaluate adverse outcomes, quality of life levels, and infectious complications in patients receiving intravesical BCG instillations, as well as to identify clinical factors associated with the development of severe toxicity or treatment discontinuation. **Material and methods:** This is a prospective observational study conducted in the Oncology Department of the Emergency Clinical Hospital Bistrița, including patients with bladder tumors treated according to the standard BCG protocol. An anonymous questionnaire consisting of 28 questions was developed for this purpose. Various parameters were analyzed, including QoL scores (EORTC QLQ-C30 and QLQ-NMIBC24), lower urinary tract symptoms, and the frequency of microbiologically confirmed urinary tract infections. **Results** : Preliminary findings suggest a slight decrease in QoL scores at 3 months, along with a notable incidence of urinary tract infections and a proportion of treatment discontinuations attributable to adverse effects. **Conclusions:** This study provides important insights that may help reduce infectious complications, treatment-related discomfort, and improve the overall management of BCG therapy.

Keywords: BCG, intravesical instillations, QoL, infectious complications

EVALUATION OF THE MAIN RISK FACTORS ASSOCIATED WITH THE MODERATE/SEVERE PROGRESSION OF MEASLES VIRUS INFECTION

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Background: Measles is a highly contagious acute infectious disease that remains a major global public health concern, despite the availability of a safe and effective vaccine. In recent years, declining vaccination coverage and increasing vaccine hesitancy have contributed to the re-emergence of outbreaks, including in Romania. Children are the most vulnerable population, especially those unvaccinated or incompletely vaccinated, in whom the disease may progress to moderate or severe forms, frequently complicated by pneumonia, encephalitis, or other systemic complications. Identifying risk factors associated with disease severity is essential for optimizing clinical management and reducing morbidity. **Objective:** The aim of this study was to evaluate risk factors associated with moderate and severe measles in pediatric patients and to analyze the relationship between vaccination status, complications, and duration of hospitalization. **Material and methods:** A retrospective descriptive study included 60 pediatric patients aged 1-17 years hospitalized with measles in an infectious diseases department. The epidemiological trend between 2022 and 2025 showed a significant increase in incidence (2022: 0 cases; 2023: 3 cases; 2024: 557 cases; 2025: 201 cases), totaling 761 reported cases, of which 77.92% required hospitalization. Among hospitalized pediatric patients (hospital stay 5-12 days), 224 (37.77%) presented moderate/severe forms, and 49 had risk factors for severe progression. One 9-month-old infant required transfer to a higher-level care unit, and no deaths were recorded. Data collected included demographic

characteristics, vaccination status, medical history, clinical manifestations, complications, and hospitalization duration, covering both uncomplicated and complicated cases, particularly those associated with pneumonia.

Results : Eighty-five percent of patients ($p=0.15$) with moderate/severe disease were unvaccinated or incompletely vaccinated. Identified risk factors included young age (10%), low vaccination coverage ($<20\%$), comorbidities-especially immunodeficiencies and acute and chronic diseases: anemic syndromes, oncological conditions, post-surgical convalescent states (40%)-delayed presentation to medical care (40%), and unfavorable socio-economic conditions (70%). Respiratory complications, mainly pneumonia, were the most frequent severe manifestations and were associated with longer hospitalization. A direct correlation was observed between the number of risk factors and disease severity. **Conclusions:** Measles remains a vaccine-preventable disease but continues to cause severe illness in unvaccinated children. Vaccination is the main protective factor against complications. Early identification of high-risk patients enables appropriate management and reduces morbidity. Strengthening immunization programs and improving health education are essential for controlling outbreaks.

Keywords: measles, children, risk factors, vaccination

FEBRILE SEIZURES – ASSOCIATED PATHOLOGIES AND THE ROLE OF PARENTAL EDUCATION IN THEIR MANAGEMENT

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Background: Febrile seizures affect approximately 2-4% of children under the age of 5 years. They typically occur in the setting of fever (temperature $>38^{\circ}\text{C}$), in the absence of central nervous system infection or acute neurological insult. Although generally considered benign and self-limiting, febrile seizures represent a highly distressing experience for caregivers. Their peak incidence between 3 months and 5 years of age is attributed to the increased susceptibility of the immature brain to elevated temperatures. **Objective:** This study aimed to identify the pathologies associated with febrile seizures and to evaluate parental knowledge, with the purpose of improving the management of future episodes through targeted education. **Material and methods:** A retrospective study was conducted between April 1st, 2025 and April 1st, 2026, based on data extracted from the medical records of patients admitted to the Pediatric Department of the Emergency Clinical Hospital, Bistrita. In addition, a questionnaire was administered to mothers hospitalized with their children in the same department in order to assess parental knowledge and attitudes. **Results :** A total of 55 patients were admitted with a diagnosis of febrile seizures during the study period. The majority of cases were associated with respiratory tract infections, particularly acute rhinopharyngitis (68%), while the remaining patients had no identifiable associated pathology. Children under the age of 3 years were the most affected group (71%). Seizure duration ranged from 1 to 4 minutes on average, with spontaneous resolution in most cases. Despite this, caregivers perceived the episodes as prolonged and severe. Regarding the questionnaire findings (75). 47.4% of respondents believed that febrile seizures occur only at temperatures above 40°C , and 40.5% reported not having received adequate information on seizure management from healthcare professionals. Notably, 85.1% recognized the importance of seeking medical evaluation following such episodes. **Conclusions:** The findings demonstrate a significant association between febrile seizures and respiratory infections, likely mediated by fever. Furthermore, the results highlight important gaps in parental knowledge, alongside a strong interest in receiving additional information (86.7%), underscoring the need for improved caregiver education.

Keywords: febrile seizures, parental education, pediatric population

IMMEDIATE NEONATAL CARE PROCEDURES IN THE DELIVERY ROOM

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Background: Immediate neonatal care is essential for ensuring the optimal adaptation of the newborn to extrauterine life and for reducing the risk of early neonatal morbidity and mortality. The correct and standardized application of interventions in the first minutes after birth plays a crucial role in preventing complications.

Objective: This study aims to analyze, describe, and evaluate neonatal care practices performed in the delivery room, as well as to highlight the need for continuous professional training of the medical staff involved. **Material and methods:** A prospective study was conducted using a structured questionnaire applied to a sample of 32

neonatal nurses working in the delivery room. The target population consisted of medical staff from the Neonatology Department of the County Emergency Clinical Hospital Bistrița, involved in newborn care. Data were collected anonymously. The inclusion criteria comprised nurses experience in neonatal resuscitation and immediate newborn care after birth. **Results :** The analysis of data collected from the 32 nurses shows that most respondents are aged 35-50 years (46.88%), have post-secondary education (65.63%), and present a balanced distribution of professional experience (<5 years and >20 years, each 37.5%). Participation in neonatal resuscitation courses is 71.88%, while the frequency of simulations varies, being mainly conducted semiannually (43.75%) or annually (34.38%). The delivery room equipment is considered adequate by the majority (84.38%). Basic practices, such as umbilical cord clamping and thermoregulation, are properly applied; however, Apgar score assessment decreases at 10 minutes (65.62%). Skin-to-skin contact is insufficiently implemented, and the "golden hour" concept is not applied in more than half of the cases (56.25%). Approximately 70% of respondents know the correct ventilation technique, and 87.5% know the correct compression ratio. The main difficulties are related to staff shortages, collaboration, and training, while 78.13% consider practical exercises the most effective method for improvement. **Conclusions:** The findings emphasize the importance of correct and standardized neonatal care practices, as well as the necessity of continuous professional training. The implementation of regular training programs and simulation-based resuscitation exercises can significantly improve the quality of care and increase newborn safety in the delivery room.

Keywords: neonatal care., newborn, neonatal resuscitation, professional training

IMPACT OF COMORBIDITIES AND MANAGEMENT STRATEGIES IN GASTRODUODENAL ULCERS

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Background: Worldwide, gastroduodenal ulcer (GDU) is a condition associated with a significant risk of complications. Given that cardiovascular diseases (CVD) are among the most common comorbidities, and dyslipidemia represents a major risk factor for their development, evaluating the relationship between these conditions and the clinical course of GDU is of particular interest. **Objective:** The primary aim of this study was to assess whether these associated conditions influence the clinical course of patients by highlighting ulcer characteristics according to the presence of comorbidities. **Material and methods:** This retrospective observational clinical study included 151 patients diagnosed with GDU, hospitalized between January 2020 and September 2025. Demographic data, comorbidities, clinical manifestations at admission, endoscopic findings, pharmacological treatments, relevant laboratory parameters, and length of hospital stay were collected and analyzed. **Results :** The study population was predominantly elderly, with a mean age of 65.04 ± 13.17 years, and a higher proportion of male patients (62.25%). CVD were present in 50.33% of patients, while dyslipidemia was identified in 46.36%. Gastrointestinal bleeding occurred in 65.57% of cases. Patients with dyslipidemia showed a significantly higher frequency of gastrointestinal bleeding ($p=0.036$), compared to those with CVD ($p=0.47$) or those using nonsteroidal anti-inflammatory drugs ($p=0.57$). At discharge, 96.69% of patients were recommended to continue treatment with proton pump inhibitors. **Conclusions:** In the present study, a significant association was observed between dyslipidemia and gastrointestinal bleeding, whereas CVD and the use of nonsteroidal anti-inflammatory drugs did not significantly influence patient outcomes. These findings highlight the need for a differentiated evaluation of comorbidities in the therapeutic management of GDU.

Keywords: gastroduodenal ulcer, cardiovascular diseases, dyslipidemia, gastrointestinal bleeding

IMPACT OF INFECTIONS ON CLINICAL OUTCOMES IN PATIENTS WITH CHRONIC LIVER DISEASE ADMITTED TO THE INTENSIVE CARE UNIT

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Background: Infections represent a major complication in patients with chronic liver disease admitted to the Intensive Care Unit (ICU), being strongly associated with clinical deterioration, development of multiple organ failure, and increased mortality. Inflammatory biomarkers such as C-reactive protein (CRP) and procalcitonin

(PCT) are essential tools for early detection and prognostic assessment. **Objective:** To assess the impact of infections on clinical outcomes, multiple organ failure (MSOF), and mortality in patients with chronic liver disease admitted to the ICU. **Material and methods:** A retrospective study was conducted on 200 adult patients admitted to the ICU between 2024 and 2025. Patients were stratified according to infection type (respiratory, urinary, nosocomial, and wound infections). CRP and PCT levels were analyzed at admission, during ICU stay, and at 48-72 hours after admission. Clinical outcomes, MSOF occurrence, and length of hospitalization were evaluated. Statistical analysis included descriptive and comparative methods, with significance considered at $p < 0.05$. **Results :** Respiratory infections were the most frequent (32%), followed by urinary (23.5%), nosocomial (9%), and wound infections (1%). Mortality was highest in patients with respiratory infections (67.19%), followed by urinary (34%) and nosocomial infections (27.8%) ($p < 0.05$). Notably, wound infections showed a mortality rate of 100%, although based on a limited number of cases. MSOF occurred most frequently in nosocomial infections (55.56%), followed by respiratory (46.88%) and urinary infections (12.8%), indicating a strong association between infection severity and organ dysfunction. Patients with unfavorable outcomes showed persistently elevated CRP and PCT levels from admission to 48-72 hours, while decreasing trends were observed in survivors, supporting their prognostic value. Additionally, infections were associated with prolonged ICU stay. **Conclusions:** Infections have a major negative impact on the evolution of patients with chronic liver disease in the ICU, being associated with increased risk of MSOF, prolonged hospitalization, and higher mortality. Early identification of infections and dynamic monitoring of inflammatory biomarkers are critical for improving prognosis and optimizing therapeutic management.

Keywords: Chronic liver disease, infections, Intensive Care Unit, multiple organ failure

INTRAVENOUS THROMBOLYSIS IN ISCHEMIC STROKE PATIENTS IN THE EMERGENCY DEPARTMENT

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Background: Ischemic stroke is an acute medical emergency where rapid intervention critically influences patient prognosis. Intravenous thrombolysis administered within the therapeutic window significantly improves chances of neurological recovery and reduces mortality. The Emergency Department (ED) plays a pivotal role in rapid patient evaluation, diagnosis confirmation, and timely thrombolytic therapy initiation. **Objective:** The case study focuses on the management of a patient with the ischemic stroke in the Emergency Department, emphasizing the rapid recognition of symptoms and initial assessment, as well as imaging confirmation. It also analyzes the eligibility criteria for thrombolysis, the administration of treatment with Alteplase, and the monitoring of the patient's evolution and post-thrombolysis complications. **Material and methods:** This study aims to analyze the role of medical staff in the ED in managing ischemic stroke patients at the Spitalul Clinic Județean de Urgență Bistrița. From patient admission to thrombolysis administration, emphasis is placed on rapid neurological assessment using standardized scales, prompt imaging to exclude intracranial hemorrhage, and strict adherence to thrombolysis eligibility criteria. The process includes stabilization of vital signs, continuous monitoring, necessary laboratory analyses, preparation and administration of thrombolytic agents, and close supervision immediately after treatment. **Results :** Rapid neurological evaluation and diagnostic imaging are expected to enable timely initiation of intravenous thrombolysis. Continuous monitoring during and post-therapy aims to detect and promptly manage complications. Strict protocol adherence is anticipated to improve safety and efficacy of treatment, enhancing neurological outcomes and reducing mortality rates in acute ischemic stroke patients. **Conclusions:** Timely and coordinated care within the Emergency Department ensures effective thrombolysis and substantially contributes to patient neurological recovery. Medical personnel have a crucial role in early assessment, initiation of thrombolytic treatment, complication prevention, and long-term functional restoration of ischemic stroke patients.

Keywords: Ischemic stroke, intravenous thrombolysis, neurological assessment, acute management

IRON DEFICIENCY ANEMIA – RISK FACTORS, PROPHYLAXIS, AND COMPLICATIONS IN THE 0-3 AGE GROUP

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Background: Iron deficiency anemia is defined as a decrease in hemoglobin concentration of more than two

standard deviations below the mean for the patient's age and sex. This condition results from insufficient iron intake, impaired absorption, or chronic blood loss. It affects approximately 1.2 billion people globally and vulnerable groups include children under the age of 5, women of reproductive age, and pregnant women. **Objective:** Because children grow so rapidly during their first few years, their body enter a delicate and fragile period that depends on the presence of essential resources, one of these being iron. This paper signals the importance of understanding the link between risk factors, prophylaxis, and the complications of this deficiency in children aged between 0 and 3 years. **Material and methods:** To collect the data necessary for this paper, I distributed a 16-item questionnaire to parents. It included information relevant to the topic of interest, such as diet, the timing of food diversification, tea and cow's milk consumption, and the presence of recurrent infections. **Results :** The analysis of the responses highlights that 17.39% of the children have an official diagnosis of anemia; however, a considerably higher percentage (48.91%) have already undergone iron treatment, which suggests a high incidence of iron storage deficiencies. At the same time, a clear need to improve preventive measures is evident, given that 58.89% of parents did not implement anemia prophylaxis. From a nutritional point of view, certain habits that can hinder iron absorption persist, such as tea consumption (44.57%) or the introduction of cow's milk before the age of one (11.11%). Although most parents respect the optimal diversification window at 6 months, the study emphasizes a significant desire for learning: 97.83% of the respondents consider nutrition courses useful, confirming that health education is the most sought-after solution for the healthy development of the little ones. **Conclusions:** Analyzing the obtained results we can deduce that iron deficiency anemia remains a warning signal. Adequate information for parents constitutes an essential factor that contributes to the effective implementation of prophylaxis and early screening.

Keywords: Iron deficiency anemia, Nutritional habits, Prophylaxis, Infants and toddlers

MANAGEMENT OF ACUTE RENAL FAILURE IN PATIENTS WITH CHRONIC LIVER DISEASE IN THE INTENSIVE CARE UNIT

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Background: Acute kidney injury represents a frequent and severe complication in patients with chronic liver disease, especially in the context of intensive care unit admission. The relationship between liver dysfunction and renal impairment is complex and involves hemodynamic and inflammatory mechanisms that lead to reduced renal perfusion and rapid deterioration of kidney function. **Objective:** The aim of this study is to evaluate the management of acute kidney injury in patients with chronic liver disease admitted to the intensive care unit, and to assess its impact on clinical outcomes and mortality. **Material and methods:** This study is an observational, retrospective, descriptive, and analytical study conducted on a group of 200 patients diagnosed with chronic liver disease and admitted to the intensive care unit. Among them, 94 patients developed acute kidney injury. Data were collected retrospectively from medical records and hospital information systems and were subsequently organized into an electronic database. The analyzed variables included demographic data (age, sex), primary diagnosis at admission, comorbidities, complications during hospitalization, need for renal replacement therapy, and clinical outcomes. **Results :** Out of the 200 patients included in the study, 94 (47%) developed acute kidney injury. A slight predominance of male patients was observed. The most common associated conditions were cardiac and pulmonary decompensations. Frequently observed complications included multiple organ dysfunction syndrome (MODS), acute liver failure, and hemorrhagic events. Renal replacement therapy was required in approximately 25% of patients with acute kidney injury. Mortality was high among patients with acute kidney injury and was significantly higher in those who required dialysis. The study was conducted in accordance with ethical principles, and all patient data were anonymized and used exclusively for scientific purposes. **Conclusions:** Acute kidney injury represents a frequent and severe complication in patients with chronic liver disease admitted to the intensive care unit, being associated with a high mortality rate. The results of this study highlight that the need for renal replacement therapy reflects advanced disease severity and a poor prognosis. Early identification of acute kidney injury and prompt initiation of appropriate therapeutic measures, along with careful patient monitoring, may contribute to improved clinical outcomes. The management of these patients requires a multidisciplinary approach and active involvement of both medical and nursing teams.

Keywords: Acute kidney injury, chronic liver disease, intensive care unit, renal replacement therapy

MANAGEMENT OF CONGENITAL HEART MALFORMATIONS

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Background: This paper aims to present the stabilization of a 5-day-old newborn in preparation for transfer to a specialized clinic. Congenital heart defects are structural abnormalities developed in utero that can endanger the life of the newborn, being associated with increased mortality and morbidity. The patient was suspected of aortic coarctation, a malformation characterized by narrowing of the aorta at the level of the aortic isthmus, affecting systemic blood flow. **Objective:** The aim of this study is to highlight the importance of early diagnosis and therapeutic management in stabilizing a newborn with suspected aortic coarctation, in order to enable safe transfer to a specialized center. **Material and methods:** This paper is based on a case study of a critically ill newborn, intubated and mechanically ventilated. Evaluation included monitoring of heart rate, oxygen saturation, blood pressure (pre- and post-ductal), urine output, and laboratory investigations (arterial blood gas analysis, biochemical parameters). Management included respiratory support (SIMV), correction of metabolic acidosis, inotropic support, antibiotic therapy, anticonvulsant treatment, and administration of prostaglandin E1. **Results :** At admission, the patient presented in a severe general condition, with significant metabolic acidosis (pH=7.168, HCO₃=7.2 mmol/L, lactate=21.16 mmol/L), multiple organ failure, thrombocytopenia, and suspected disseminated intravascular coagulation. Clinically, seizure episodes were observed, requiring anticonvulsant therapy. A significant blood pressure difference between upper and lower limbs (64/34 mmHg vs 50/24 mmHg) suggested aortic coarctation. Echocardiography was not performed in the referring unit, being carried out only after transfer to a pediatric cardiology center. Treatment with prostaglandin E1 (0.01 mcg/kg/min), ventilatory support, and complex intensive care management was initiated. The patient's evolution allowed relative stabilization of vital functions and safe transfer. **Conclusions:** Early diagnosis and prompt management of aortic coarctation are essential for newborn survival. Administration of prostaglandin E1 and stabilization in intensive care enable safe transfer to specialized centers. This case highlights the importance of early recognition of clinical signs, including neurological and systemic complications, as well as the need for timely echocardiographic evaluation.

Keywords: aortic coarctation, malformation, newborn, seizures

OBESITY AS A RISK FACTOR FOR THE SEVERITY OF COVID-19 IN PEDIATRIC PATIENTS: A RETROSPECTIVE STUDY

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Background: Pediatric obesity is one of the most significant risk factors for severe COVID-19 in children, through mechanisms involving chronic inflammation, immune dysfunction, and respiratory impairment. The COVID-19 pandemic also worsened the global prevalence of obesity due to sedentary behavior and behavioral changes induced by lockdown measures. **Objective:** To evaluate the influence of obesity on the clinical and biological severity of SARS-CoV-2 infection in pediatric patients hospitalized at the Bistrița-Nasaud County Emergency Clinical Hospital, by comparing inflammatory markers, clinical outcomes, and length of hospital stay between obese and normal-weight patients. **Material and methods:** A retrospective study including 104 pediatric patients diagnosed with COVID-19, divided into two equal groups: Group 1 - obese patients (n=52) and Group 2 - normal-weight patients (n=52). Clinical, anthropometric, and laboratory data were analyzed: age, weight, height, oxygen saturation at admission, CRP, ferritin, leukocytes, lymphocytes, neutrophils, platelets, procalcitonin, blood glucose, and length of hospital stay, along with clinical disease form, COVID-19 pneumonia incidence, oxygen therapy requirement, and administered treatments. Statistical analysis was performed using jamovi (v2.6) with parametric and non-parametric tests (Student's t-test, Mann-Whitney U, Chi-square, Fisher's exact test), Spearman correlations, binary logistic regression, and multiple linear regression (p<0.05). **Results :** Obese patients showed significantly higher CRP values (mean 12.4 vs. 5.38 mg/L; p=0.037) and ferritin (mean 152 vs. 118 ng/mL), as well as a significantly longer hospital stay compared to the normal-weight group (mean 5.19 vs. 3.81 days; p<0.001). Moderate clinical disease predominated in the obese group (73.1% vs. 15.4%; p<0.001), while mild disease predominated in normal-weight patients (84.6%). COVID-19 pneumonia incidence was significantly higher in obese patients (57.7% vs. 26.9%; p=0.001), as was oxygen therapy requirement (34.6% vs. 7.7%; p<0.001). Binary logistic

regression confirmed obesity as an independent risk factor for COVID-19 pneumonia (log odds: -1.309; $p=0.002$) and oxygen therapy need (log odds: -1.849; $p=0.002$). Multiple linear regression identified ferritin ($\beta=0.005$; $p=0.002$) and group membership ($\beta=-1.089$; $p=0.011$) as independent predictors of hospital stay length ($R^2=0.203$; $F=4.99$; $p<0.001$). Spearman correlations revealed a significant positive correlation between CRP and length of stay ($\rho=0.244$; $p=0.012$) and a negative correlation between oxygen saturation at admission and CRP ($\rho=-0.369$; $p<0.001$). **Conclusions:** Obesity is an independent risk factor for severe COVID-19 in pediatric patients, associated with more severe clinical forms, higher pneumonia incidence, greater oxygen therapy requirement, and longer hospitalization. Ferritin and obesity group membership are independent predictors of length of hospital stay. Early identification of obese children and careful monitoring of inflammatory markers are essential for appropriate management of SARS-CoV-2 infection in the pediatric population.

Keywords: pediatric obesity, COVID-19, obesity, inflammatory markers

PARENTS' ATTITUDE AND VACCINATION PREVALENCE IN BISTRIȚA-NĂSĂUD COUNTY

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Background: Vaccination is an essential method of preventing infectious diseases among the population, especially pediatric ones. In recent years, a decrease in vaccination coverage has been observed, influenced by parental attitudes. **Objective:** The purpose of the study is to analyze the relationship between parents' perceptions and vaccination prevalence in Bistrița-Năsăud County. **Material and methods:** The conducted study is observational, descriptive, cross-sectional, based on the application of a questionnaire consisting of 19 questions and formulated with the help of "Google Forms", addressed to parents. The data collected from this questionnaire were compiled in an Excel spreadsheet that represented the statistical basis for this study. **Results :** The resulting statistics show that of the children of the respondents, 87,7% ($n=186$) are vaccinated and the remaining 12,2% ($n=26$) are unvaccinated. Parents who chose to vaccinate their children did so for protection 88,6% ($n=165$), on the advice of their family doctor 5,4% ($n=10$) and due to social habit 3,6% ($n=7$). Those who refused, cited fear of adverse reactions 34,6% ($n=9$), lack of sufficient information about vaccines 26,9% ($n=7$) or lack trust in vaccination 23% ($n=6$). Regarding knowledge of the content of the national vaccination scheme, 42,9% ($n=91$) of respondents stated that they have very good information, 36,3% ($n=77$) know partially, and 11,8% ($n=25$) admit that they have heard, but without knowing the details, respectively 9% ($n=19$) do not know the details. Regarding sources of information about the national vaccination scheme, parents responded 86,8% ($n=184$) that the family doctor is the main source of information, followed by the internet 35,8% ($n=76$) and other sources. The statistics show that 93,9% ($n=199$) of parents interviewed consider vaccination useful, while 6,1% ($n=13$) disagree. The main reasons for parents' concerns regarding the national vaccination scheme are: adverse reactions 66,9% ($n=142$), lack of trust in medical personnel 13,6% ($n=29$) and lack of information 11,3% ($n=24$). Another relevant aspect is that 69,8% ($n=148$) of parents believe that uncertainty about vaccination would be diminished if medical personnel provided clearer and more precise information, and 19,8% ($n=42$) do not have a clear opinion in this regard. **Conclusions:** The results of the study show a generally favorable attitude of the parents towards vaccination. The need to intensify health education and effective communication between medical personnel and parents is highlighted, in order to increase vaccination coverage and protect the health of the pediatric population.

Keywords: vaccination, children, attitude, national vaccination scheme

PROGNOSTIC ANALYSIS OF PATIENTS WITH LIVER CIRRHOSIS. COMPARATIVE STUDY

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Background: Liver cirrhosis (LC) represents a major public health concern and the final stage of many chronic liver diseases. Alcohol consumption and viral hepatitis infections are the most common etiologies of (LC). **Objective:** This study aims to analyze prognostic factors in patients with (LC) and to compare the clinical outcomes between patients with alcoholic etiology and those with viral etiology. **Material and methods:** This retrospective observational study included 198 adult patients diagnosed with (LC) between August 2022 and August 2025. Patients were classified according to (LC) etiology into two groups: alcoholic and viral. Demographic, clinical, and laboratory characteristics, complications, mode of admission, length of hospital stay, and mortality

were analyzed. **Results** : Our study demonstrated the predominance of alcoholic (LC) in the analyzed cohort (79.3%). Most patients were admitted through the emergency department (87.4%), with symptoms more frequently observed in the alcoholic etiology group, including ascites (66.87%). The mean length of hospital stay was relatively similar between the two analyzed groups (6.74 days), while the mortality rate was slightly higher in the viral etiology group (6.3%). The mean values of INR, sodium (Na), and potassium (K) were comparable between groups, whereas serum creatinine levels (1.36 mg/dL) were higher in the viral group, suggesting more pronounced renal impairment. **Conclusions**: The results of this study emphasize the importance of evaluating prognostic factors in patients with (LC). Early detection of complications and careful monitoring of clinical and laboratory parameters may contribute to improving patient prognosis.

Keywords: liver cirrhosis, viral etiology, alcoholic etiology, prognostic factors

QUALIFIED NURSING CARE PLAN FOR A PATIENT WITH COMMON ILIAC ARTERY PSEUDOANEURYSM

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Background: A pseudoaneurysm of the common iliac artery represents a localized hematoma outside the arterial wall, caused by an incomplete rupture, often post-procedural but well-contained by surrounding tissues. Unlike true aneurysms involving all three arterial wall layers and dilatation of the entire vessel, pseudoaneurysms involve arterial wall injury with extravasation of blood, confined by adventitia or adjacent tissues. Main causes include infections, vascular trauma, surgical or endovascular interventions, and accidental arterial punctures. The common iliac arteries branch from the terminal abdominal aorta, supplying oxygenated blood to the pelvis and lower limbs. Due to the risk of rupture leading to massive hemorrhage and life-threatening complications, rapid diagnosis via imaging (Doppler, CT-Angiography) and prompt surgical or endovascular treatment are essential. Early recognition and monitoring by nursing staff are crucial to prevent fatal outcomes and to educate patient on alarm symptoms. **Objective:** Ischemia monitoring and hemodynamic stability; verification of surgical technique, healing and care of the incision site for good functional integration; relapse prevention and long-term patient supervision. **Material and methods:** This study presents the nursing care plan applied to a 67-year-old man patient admitted to the Vascular Surgery Department at the County Emergency Clinical Hospital Tîrgu Mureș with a diagnosis of left common iliac artery pseudoaneurysms confirmed by Angio-CT. The care plan was structured according to Virginia Henderson's model addressing 14 fundamental human needs. Specific nursing interventions included continuous monitoring of peripheral perfusion sign („6P”), wound care, patient education about signs of complications, and coordination with the interdisciplinary team. Medication management and preparation for diagnostic and therapeutic procedures were also highlighted. **Results** : The patient underwent successful surgical repair of the pseudoaneurysms with a synthetic graft. Postoperative recovery was closely monitored with no incidence of major complications such as hemorrhage, graft thrombosis, or infection. Nursing care focusing on early mobilization, wound surveillance, vital signs, and patient education contributed to clinical stabilization and progressive functional recovery. Coordination between nursing, surgical, laboratory, and rehabilitation teams ensured adherence to best practice guidelines and timely interventions. **Conclusions:** Pseudoaneurysms of the common iliac artery is rare but serious vascular emergency requiring vigilant and qualified nursing care throughout hospitalization. Implementing a care plan based on Virginia Henderson's model ensures comprehensive management of patient needs, prevents complications, and support surgical outcomes. Patient education and interdisciplinary collaboration are key to sustained recovery post-discharge.

Keywords: Pseudoaneurysm, common iliac artery, nursing care plan, vascular surgery

THE IMPACT OF ANTICOAGULANT THERAPY ON GASTRODUODENAL ULCER DISEASE

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Background: Utilizarea frecventă a terapiei anticoagulante, în contextul prevalenței crescânde a ulcerului gastroduodenal, necesită o atenție deosebită asupra riscului de sângerare gastrointestinală. Identificarea factorilor de risc și implementarea unei monitorizări adecvate sunt esențiale pentru prevenirea complicațiilor. **Objective:**

Evaluarea impactului terapiei anticoagulante asupra evoluției ulcerului gastroduodenal, cu accent pe probabilitatea complicațiilor hemoragice gastrointestinale și identificarea factorilor de risc asociați. **Material and methods:** Acest studiu observațional retrospectiv a inclus 151 de pacienți adulți diagnosticați cu ulcer gastroduodenal, internați între ianuarie 2020 și septembrie 2025. Datele au fost colectate din dosarele medicale electronice și au inclus parametrii de laborator, durata spitalizării, terapia anticoagulantă și complicațiile ulterioare. **Results :** Nivelurile hemoglobinei au fost alterate la 90,7% dintre pacienți, iar sângerările gastrointestinale au fost prezente în 65,5% din cazuri, urmate de anemie în 62,2%, cu o durată medie de spitalizare de 6,4 zile. Dintre pacienți, 47,6% au primit terapie anticoagulantă, iar sângerările gastrointestinale au apărut la 69,4% dintre aceștia. Cea mai frecvent utilizată clasă de anticoagulante a fost cea a agenților antiplachetari (17,2%), Aspenter fiind cel mai frecvent utilizat (12,5%). Aceasta a fost urmată de anticoagulantele orale directe (DOAC) cu 15,2% și antagoniștii vitaminei K cu 14,5%, predominant Trombostop (9,2%). Analiza datelor a arătat că 20,5% dintre pacienți au fost supuși unei endoscopii de urmărire, 96,02% au primit tratament cu inhibitori ai pompei de protoni, iar comorbiditățile cardiovasculare au fost prezente în 56,2% din cazuri. Principalii factori de risc identificați au fost terapia anticoagulantă (39,08% pentru ulcerele gastrice și 35,9% pentru ulcerele duodenale) și factorii toxici, împreună cu factorii de stil de viață (80,4% în ulcerele gastrice și 73,4% în ulcerele duodenale). **Conclusions:** Terapia anticoagulantă contribuie la apariția complicațiilor în boala ulceroasă, în special a hemoragiilor gastrointestinale, necesitând astfel o monitorizare atentă și o abordare individualizată în contextul factorilor de risc asociați, cum ar fi stilul de viață.

Keywords: gastroduodenal ulcer, anticoagulant therapy, gastrointestinal bleeding, risk factors

THE IMPACT OF SEVERE COMPLICATIONS ON LENGTH OF HOSPITAL STAY AND SURVIVAL IN PATIENTS WITH LIVER CIRRHOSIS

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Background: Liver cirrhosis represents a major public health concern both nationally and globally. The episodes of acute decompensation, characteristic of the progressive stage of the disease, require emergency medical care and significantly impact patient prognosis. **Objective:** The present study aims to evaluate the impact of severe complications of decompensated liver cirrhosis (variceal hemorrhage, hepatic encephalopathy, spontaneous bacterial peritonitis, and hepatorenal syndrome) on patient survival and length of stay (LOS), emphasizing the predictive value of laboratory markers. **Material and methods:** This retrospective observational study included a cohort of 205 adult patients admitted with a diagnosis of liver cirrhosis between August 2023 and August 2025 to the Internal Medicine Department of the Bistrița County Clinical Emergency Hospital. Demographic, etiological, biological, and clinical parameters were analyzed, comparing the survivor group with the deceased group. **Results :** Alcoholic etiology was predominant (79.5%), reflecting the regional epidemiological profile. The in-hospital mortality rate was 6.34%. Deceased patients exhibited significantly higher INR values (mean 2.56) and total bilirubin levels (mean 11.44 mg/dL) compared to survivors. The co-occurrence of spontaneous bacterial peritonitis and hepatorenal syndrome was identified as the complication with the highest fatal risk (mortality rate of 33%) and the longest mean length of stay (15 days). Furthermore, it was observed that patients with alcoholic etiology required longer hospitalizations compared to those with viral etiology (8.1 vs. 5.6 days). **Conclusions:** The results confirm that the primary predictor of mortality is severe hepatic impairment, reflected by critical INR and bilirubin values. Proactive monitoring by the nursing staff for the early identification of infectious and renal complications is vital for optimizing prognosis and patient safety.

Keywords: liver cirrhosis, alcoholic etiology, bilirubin, INR

LAW

CHILDREN WHO KILL: FROM CHILD SOLDIERS TO JUVENILE OFFENDERS – THE LIMITS OF RESPONSIBILITY AND COMPASSION IN CONTEMPORARY CRIMINAL LAW

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Background: Sociology shows there is something deeply unsettling in the idea of a child who kills, mostly because it disturbs a belief people hold almost instinctively: that childhood exists outside of full moral responsibility. On a judicial level, however, this issue is regarded differently, as the child who kills is seen, in many cases, as a victim shaped by coercion and survival. **Objective:** This paper seeks to explore the thin line where victimhood ends and responsibility begins in cases of extreme juvenile violence, and whether punishment retains meaning when children may not fully understand the moral and legal weight of their actions. **Material and methods:** This study relies on comparative methods, with an analysis focused on legal doctrine, criminological perspectives, and psychological insight, drawing on literature concerning child soldiers, juvenile offenders, and cognitive development. Rather than isolating these fields, the paper analyses them comparatively as different interpretations of the same phenomenon, highlighting various, sometimes opposite interpretations of the issue in the broader field of social sciences. It also aims to analyse the importance of punishment in the reeducation of those children, while focusing on the counter-effects of detention at a social level. **Results :** The inquiry reveals that sociology, psychology and judicial bodies offer different interpretations of juvenile criminality: a sociological perspective, situating the minor within structural influences such as environment, marginalization, and exposure to violence; a psychological perspective, emphasizing developmental immaturity, limited impulse control, and incomplete moral reasoning; and a legal perspective, framing the minor through responsibility, focusing on the act and its consequences within a normative system. Equally, research shows that responsibility in minors cannot be fixed or absolute. A child may act with intention, yet remain distant from the full meaning of the act. Premeditation appears, but does not necessarily imply moral understanding. As a result, a degree of conflict arises between psychology and law, as psychologists warn that punishment risks losing its grounding, shifting from a response to responsibility into control, while the judicial system appears willing to harshen punishment to diminish juvenile crime. **Conclusions:** Neither fully victim nor fully author, the child who kills exists in a space similar to the one imagined by Schrödinger. The legal response that ignores the psychological implications of this phenomenon risks becoming too harsh, while a response grounded exclusively in the psychological dimension may overlook the normative demands of the legal system, becoming insufficient and blind to a phenomenon capable of deeply destabilising it.

Keywords: Juvenile responsibility,, Child soldiers,, Moral agency,, Punishment perception.

LOWERING THE AGE OF CRIMINAL RESPONSIBILITY TO 13: A SOCIAL NECESSITY OR A STEP BACKWARD IN CHILD PROTECTION?

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Background: In an era of rapid change, juvenile delinquency is an increasingly common phenomenon, influenced by a number of factors: access to the internet, the social and family environment, and the peer groups with which minors associate. Romanian criminal law stipulates that minors under the age of 14 are not criminally liable, and those between the ages of 14 and 16 are liable only if it is proven that they had the capacity to discern right from wrong at the time the offense was committed. The legislature as mandated the application of educational measures, both custodial and non-custodial, aimed at combating juvenile delinquency and enabling the minor to reintegrate into society. **Objective:** The main objective of this study is to analyze the appropriateness of lowering the age of criminal responsibility to 13 years in Romanian criminal law and to evaluate whether this measure represents a social necessity or a regression in child protection, taking into account legal, psychological and international regulatory perspectives. **Material and methods:** The paper is based on a comparative legal analysis on the national and international legislation, and also specialized literature in criminal law and psychology, focusing on the Romanian Criminal Code and European legal models. **Results :** The analysis highlights two opposing perspectives: On the one hand, the arguments in favor suggest that lowering the age of criminal responsibility would serve as a social safety measure, which would deter juvenile offenders from committing further crime.. A comparative analysis of other legal systems in Europe shows that regardless of the age threshold for criminal responsibility, there is one essential condition that will always be taken into account: discernment, which is

established through a medical evaluation. On the other hand, a psycho-legal analysis reveals that although 13-year-olds may exhibit premature maturity, this is merely superficial, as they are not aware of the unlawful nature of the acts they commit nor of their consequences. In accordance with national and international regulations, all decisions concerning minors must be made in compliance with the fundamental principles that guarantee their protection, without labeling them in a way that marginalizes them. **Conclusions:** Lowering the age of criminal responsibility could be acceptable only if the educational character of legal measures and the individual assessment of discernment are maintained, ensuring social protection and respect for international juvenile justice.

Keywords: Criminal liability, Minors, Capacity to discern, Child protection

THE APPLICATION OF THE ADVERSARIAL PRINCIPLE IN JUDICIAL PRACTICE

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Background: The adversarial principle, regulated under Article 14 of the Civil Procedure Code, entails that any aspect related to the dispute must be brought to the attention of the parties, and that procedural acts and documentary evidence must be communicated to them, so as to enable them to express their views on matters of law and fact under consideration. The application of this principle is essential to the legality of the proceedings, given its nature as a matter of public order. **Objective:** The purpose of this paper is to highlight the importance of the application of the adversarial principle in judicial proceedings, as well as the sanctions imposed in cases where this principle has not been applied at all or has been applied improperly. **Material and methods:** By analyzing the legal doctrine we can see the importance of applying the adversarial principle in judicial proceedings. Furthermore, an examination of case law reveals that Romanian courts have delivered decisions reinforcing the significance of this principle. For instance, in Decision no. 2468/2001 of the Bucharest Court of Appeal, the court held that the ruling had been based on circumstances that had not been brought to the attention of the parties, and consequently annulled the decision for breach of the adversarial principle. An analysis of the jurisprudence of the European Court of Human Rights also demonstrates that informing the parties of procedural acts is essential, the Court having set aside certain decisions in cases such as *Asnar v. France* and *Beer v. Austria*. **Results :** By analyzing case law, it can be observed that there are also inconsistent practices regarding the application of the adversarial principle within the courts, both in appellate proceedings and in the practice of the European Court of Human Rights. It may be noted that the Court has also issued decisions rejecting applications in which applicants invoked a breach of this principle, most often on the grounds that they could have become aware of the documents in the case file through simple inspection of the file. **Conclusions:** Following the analysis conducted, it can be observed that, despite the existence of decisions rejecting claims regarding the breach of the adversarial principle, courts most often uphold such claims, thereby emphasizing the importance of the principle and, through their rulings, effectively requiring its application by all courts in all cases.

Keywords: Adversarial principle, Courts, Judicial

THE LEGAL NATURE OF SUCCESSIONAL DIGITAL ASSETS: THE NECESSITY OF RECOGNIZING THE "DIGITAL FIDUCIARY" IN CIVIL LAW

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Background: Technological evolution in the field of law gives rise to a series of legal challenges, one of which manifests in the area of digital asset inheritance. The notions of patrimony and inheritance are transforming under the influence of digitalization, encompassing digital assets such as cryptocurrencies, NFTs, or monetized social media accounts. Moreover, following the same reasoning, our memories are no longer kept in physical albums, but are stored on the accounts and devices, that each of us owns. Consequently we are currently living the era where the solid principles of inheritance law, rooted in Roman law, no longer adapt to current legal issues that require mathematical codes to safeguard millions of dollars. **Objective:** The central objective of the research pertains to the analysis of the legal nature of digital assets from the perspective of inheritance transmission, as well as demonstrating the necessity of recognizing new concepts such as digital "family memories" or the "digital fiduciary." Also, the paper aims to compare the Universal Succession Principle with what may be considered "lex digitalis". **Material and methods:** The research employs various scientific research methods, including the

comparative method for analyzing the legal meaning and regulations of the concept of digital assets across various jurisdictions, such as European Union as well as the US and examining how this concept is interpreted and applied in Romania, the critical and teleological methods for synthesizing the analysis of relevant case law in defining the concept of digital assets, such as Canada's QuadrigaCX case, the Facebook case that was heard by the German Federal Court of Justice and the Cryptopia case from New Zealand. **Results** : Against the backdrop of these transformations legislative intervention is necessary by incorporating mandatory clauses into digital service contracts that major companies must comply with, allowing heirs access to the deceased's photographs and documents, and equating digital photos with the concept of "assets constituting family memories" in accordance with Articles 1141 and 1142 of the Romanian Civil Code. **Conclusions**: The absence of prompt regulation risks not only the freezing of funds trapped in the blockchain but also the disappearance of an individual's digital history and the emotional heritage of future generations.

Keywords: digital assets, inheritance, universal succession, the right to privacy

THE ROLE OF LAW IN THE DEVELOPMENT OF SOCIETY: DEEPPFAKE AS AN AUTONOMOUS FORM OF CRIME

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Background: As history has evolved over time, many fields of life have developed and undergone changes, including technology. Although on one hand it is a long-awaited improvement, it has also managed to create issues never seen before in history. Technology has helped enormously in the way people can go about their daily lives, but it has also introduced a new form of entertainment, in part due to social media and digital content. At first glance, the entertainment aspect seems harmless, but the problem arises when this online recreation goes from simple relaxation to a social threat, through the phenomenon of deepfakes. Deepfake is a digital manipulation of a video, audio, or image, created by artificial intelligence or other specialized programs. These manipulations are fundamentally different from traditional disinformation, being convincing, easy to multiply, and increasingly accessible, and even the suspicion that they are generated by artificial intelligence can raise doubts. Although at the time of the emergence of this visual and audio manipulation, everything was used for entertainment purposes, there are individuals who managed to use this means to commit malicious acts against humanity. **Objective:** In order to respond to the evolution of technology, Romanian legislation must be adapted in accordance with the digital changes taking place, in order to prevent the risks generated by abusive use, and, in the event of violation of these provisions, sanctions proportional to the gravity of the act committed. Although there are currently other crimes that could be classified as deepfakes, such as blackmail, invasion of privacy, or computer forgery, they fail to encompass the entire phenomenon. Beyond the difficulties of legally framing these facts, deepfakes generate a multidimensional impact, affecting fundamental social rights and values, such as personal dignity and public order, and can seriously harm image and privacy when used for pornographic purposes. Although regulating deepfakes as an autonomous crime has become a popular topic in Romania since 2023 through the adoption of a bill in the Senate, at this time, there is still no law that delimits deepfakes as an autonomous crime. **Material and methods:** - **Results** : - **Conclusions:** Thus, the need to regulate deepfakes as an autonomous crime is supported, given the seriousness of the impact on the person. Through the internet, such content can remain accessible indefinitely, considerably amplifying the harm caused.

Keywords: Deepfake, Regulation, Autonomy, Autonomous crime

HUMANITIES

"EMOTION AS A DRIVER OF VIRALITY AND CANCEL CULTURE REACTIONS ON SOCIAL MEDIA: AN ANALYSIS OF COLLECTIVE MOBILIZATION MECHANISMS IN THE ROMANIAN DIGITAL SPACE"

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Background: The motor of my thesis began running last year, after following the Romanian media closely and attempting to understand how and why mass reactions and a growing cancel culture were able to make or break a movement or a person's image. **Objective:** Its objective is to highlight the significance of emotion in the process of creating a public reaction that leads to a mass opinion on a topic. I am attempting to prove that emotion is the leading aspect of communication, both in real life and on social media or in any form of public media. The topic is also meant to prove that through emotion, people tend to be influenced in inhabiting opinions and beliefs that are not their own, but rather of the masses, transforming themselves accidentally in members of a media cult or group through which they become part of cancel culture. **Material and methods:** The research is meant to be focused on american and british works that debate and analyse the very beginning of cancel culture, of mass manipulation through emotion, and that study the way our brain tries to socially belong by supporting others beliefs. Works such as "Cancel Culture. A critical Analysis" by Eve Ng, "The Cancel Culture Panic" by Adrian Daub or "The Nature and origins of Mass Opinion" by John Zaller, are introducing me to concepts that will further add depth to my study and provide both a solid foundation and a different perspective to the main themes I am highlighting in my thesis. **Results :** I will attempt to prove that reactions can be transferred from a human to another, and that emotion accelerates that process. I also aim to outline how easy and simple it is to be a part of cancel culture, even if one becomes part of it accidentally, and that after all, every human gets cancelled for their actions, and can furthermore cancel others. Through the case study on Romanian mass reactions that erupted in 2025 both from a political and a social standpoint, the work will reinforce and prove the concepts presented in the theory based chapters. **Conclusions:** The thesis will hopefully bring a different view on cancel culture and mass opinions, as these topics have been heavily present in media in the past years. I intend to picture cancel culture as more than a social media based term, and actually study its causes, effects and nuances.

Keywords: emotion, cancel culture, opinion, virality

ACTIVE LEARNING STRATEGIES FOR THE DEVELOPMENT OF READING SKILLS IN PRIMARY SCHOOL

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Background: Active learning strategies play an important role in the formation and development of reading skills in primary school children and also stimulate their active participation in the instructional-educational process. The development of reading skills in young schoolchildren is a fundamental objective, without which children would not be able to understand and use information from different texts for their own benefit. The purpose of this paper is to highlight the importance of active learning strategies and their impact on the progress of young schoolchildren. **Objective:** Moreover, the objective of the research is to examine how interactive methods contribute positively to both the process of learning reading competence and the understanding and processing of a literary text. The paper is based on the hypothesis that the use of active teaching strategies as essential tools in the teaching process for reading implies more active participation by students and faster assimilation of new information. **Material and methods:** The methodological approach is based on mixed research methods, such as observation and classroom intervention, aimed at demonstrating that the introduction of interactive learning methods is beneficial and essential in the process of learning reading skills, as well as in the formation of interest in reading in the child. **Results :** The paper is based on the hypothesis that the use of active teaching strategies as essential tools in the teaching process for reading implies more active participation by students and faster assimilation of new information. **Conclusions:** The methodological approach is based on mixed research methods, such as observation and classroom intervention, aimed at demonstrating that the introduction of interactive learning methods is beneficial and essential in the process of learning reading skills, as well as in the formation of interest in reading in the child.

Keywords: active learning, learning strategies, active participation, reading skills

AESTHETIC CATEGORIES IN BIZZARE PAGES. URMUZ AND THE ROMANIAN LITERARY AVANT-GARDE.

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Background: *Avant-gardism has been and remains one of the most debated movements in Romanian literature; numerous critics and literary theorists, such as Marin Mincu, Nicolae Balotă, Geo Bogza, Gabriela Duda, and many others, have addressed this topic to define and redefine it, to attribute the characteristics of this movement to certain authors, and to determine the orientations and techniques through which it operates.* **Objective:** *This work is based precisely on this desire to define the boundaries of the avant-garde movement, the point from which it originated, and the horizons within which it developed. Furthermore, the work also focuses on one of the most distinguished adherents of the avant-garde: Urmuz, the one who surprised, the one who adapted, the one who created an imaginary world devoid of any meaning, transforming gravity into playfulness.* **Material and methods:** *At the same time, in terms of methodology and materials, the study draws on theoretical and critical writings dedicated to the avant-garde movement, as well as on an analysis of the universe, language, and compositional method of Urmuz's universe, by correlating these sources and integrating the perspectives of various literary critics.* **Results :** *The result achieved lies both in an understanding of the socio-historical context - historical context that gave rise to the avant-garde movement and its theoretical methods, as well as an analysis of how Urmuz wrote and created, leaving behind several significant texts intended to provoke, entertain, and demonstrate his importance within the avant-garde movement.* **Conclusions:** *Finally, avant-gardism must be analyzed through the lens of the sociocultural context that gave rise to it as a reaction to the rigidity of the era. At the same time, Urmuz proves to be a key figure in the Romanian literary avant-garde, his work characterized by originality, experimentation, absurdity, and playfulness, all of which shape an innovative vision of his literature. He was and will remain a fundamental figure for defining and understanding the avant-garde movement.*

Keywords: Urmuz, avant-garde, absurd

ANALYSIS OF SHEIN'S DIGITAL COMMUNICATION STRATEGIES AND VISUAL NARRATIVES

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Background: This study examines the digital communication strategies of the ultra-fast-fashion brand SHEIN on TikTok during its 2025 Black Friday campaign, an annual peak period for sales and promotions. By leveraging platform algorithms, SHEIN transforms fleeting trends into consumer opportunities, fostering visual engagement among young audiences. **Objective:** The core objective is to analyze how the brand tailors its content strategies to boost user interaction and convert user interest into purchasing decisions. In a digital environment characterized by rapid information consumption, this study aims to investigate how visual narratives are utilized to persuade consumers to make purchases, capitalizing on limited-time offers and time pressure. **Material and methods:** Employing a mixed-methods approach, the research integrates qualitative and quantitative content analysis of 87 videos from SHEIN's official TikTok account (November 1-30, 2025), examined chronologically to trace escalating campaign dynamics. Drawing on Uses and Gratifications Theory (UGT), it evaluates how content fulfills consumer needs while dissecting strategies that blend user-generated content (UGC) and brand-produced content (PGC) with visual framing and narrative techniques-linked to engagement metrics like views, likes, comments, and shares. **Results :** Findings reveal SHEIN's fusion of informational and entertaining content, leveraging dynamic visuals (e.g., rapid cuts) to accelerate product salience and shift passive viewing to purchase intent. **Conclusions:** The study's conclusions highlight that SHEIN uses the TikTok format as an effective digital sales platform, tailoring its content to attract customers. The use of visual narratives breaks down the barriers between entertainment and advertising, fostering seamless transitions to repeat buying behavior.

Keywords: SHEIN, TikTok, communication strategies, visual narratives

ARTISTIC DECORATION AS AN INSTRUMENT OF POWER MAINTENANCE DURING THE COMMUNIST PERIOD: CASE STUDY TÂRGU MUREȘ, 1970-1989

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Background: The initial stage of communism in Romania (1947-1989) marked profound social, economic and cultural transformation. The process of Stalinization imposed Soviet ideological values through architecture, urban planning and visual arts. During the 1970-1989 period, under Nicolae Ceaușescu's leadership Romania experienced an intensification of the cult of personality and monumental aesthetic aimed at legitimizing political power. Within this framework decorative art became a powerful tool of symbolic propaganda and ideological education instrumental in constructing and sustaining the communist regime's authority. **Objective:** This research aims to investigate how decorative art functioned as an instrument for maintaining communist power in Târgu Mureș between 1970 and 1989. It examines the mechanisms through which public decorations served political legitimacy, ideological mobilization and social homogenization, while also reflecting the city's multiethnic context.

Material and methods: A qualitative and interpretative research design is applied, combining historical and visual architectural analysis. The study relies on archival documentation, urban studies and direct examination of artistic and architectural works. The case study approach enables the exploration of the interplay between artistic expression and ideological control, providing a localized understanding of the border phenomenon of socialist visual propaganda. **Results :** Results (in progress): preliminary findings suggest that public art in Târgu Mureș reflected both the ideological imperatives of socialist realism and local adaptations shaped by the city's cultural diversity. Buildings such as National Theatre, the Youth House and hotels Transilvania and Continental integrate decorative and monumental elements designed to convey permanence, unity and progress, consistent with socialist narratives. These visual symbols contributed of the creation of homogenized urban identity aligned with the political power's vision. **Conclusions:** Conclusions (to be developed): the ongoing research stage will further define the artistic, ideological and cultural implication of decorative art in late socialist in Romania, analyzing how urban space shaped collective memory and power perception, this study highlights the enduring role of visual propaganda as both historical testimony and cultural legacy, contributing to correct debates about the preservation and interpretation of the communist heritage in post-socialist societies.

Keywords: decorative art, socialist realism, propaganda, Târgu Mureș

BETWEEN AUTHENTICITY AND MANIPULATION: THE ETHICS OF VISUAL REPRESENTATION IN EMERGING MEDIA

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Background: The paper investigates how the ethical norms of the visual representation are reconfigured in emerging media, in a ecosystem dominated by short videos, AR filters, fast editing and AI generated or augmented content. The research problem starts with the tension between the promise of "the authenticity" of the platforms and the current visual manipulation, decontextualization and attention exploitation practices. **Objective:** The study follows to answer to three questions: What kind of representation (stereotypes, objectifications, victimizations, idealizations) appears often in the viral visual content? To what extent are the minimal standards of consent, protection of the private life and minor protection respected? How the editing, filters and synthetic materials transparency manifests? **Material and methods:** The paper combines a content analysis on a sample of 120 AI generated Instagram posts and a qualitative-interpretative analysis (semiotics/visual rhetoric) of the representative cases, integrating a ethical image risk grid. **Results :** The results include a typology of ethical risks (from the invasion of the intimacy to manipulation), descriptive corelations between transparency/dialogue and public reactions (comments/shares), and even operational recommendations for responsible visual practices (consent, contextualization, rules for minors), aligned with the relevant norms. **Conclusions:** The students' skills must be adapted to the digital era. The students must have storytelling and crisis communication abilities through visual. Also, they must be aware about the reputation and responsibility that they have towards the public. In the context of the digital era, there are three directions which can be followed: the extension on the other platforms (YouTube Shorts, TikTok), the making of longitudinal analysis and the making of interviews with creators/moderators.

Keywords: visual ethics, emerging media, consent, transparency

BETWEEN TRANSYLVANIAN RURALISM AND EXISTENTIAL UNIVERSAL IN PAVEL DAN'S NOVELLAS

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Background: The present presents a detailed analysis of the novellas of Pavel Dan, "the prosaist of the Transylvanian Plain", who introduces us to his rural universe set against the backdrop of the interwar crisis. The traditional village becomes the stage on which the destinies of various characters unfold, different in character similar in their condition as survivors in a community dominated by selfishness and opportunistic relationships. The novelist draws on the place where he grew up and uses characters inspired by the villagers, whose customs specific to the time are reflected in his writings. The beauty of the village is further enriched by the wealth of myth and tradition in the characters' lives. **Objective:** The present paper highlights the dramatic effects of universal themes reflected within the Transylvanian rural community at the end of the interwar period. **Material and methods:** Using a thematic, psychoanalytic and sociological hermeneutic approach, supplemented by a comparative analysis, the shared dramas of the Transylvanian Plain are subjected to rigorous examination, while simultaneously highlighting the relevance of Pavel Dan's work within the context of interwar Romanian literature. **Results :** The contrast between essence and appearance is revealed through characters who outwardly conform to social norms, yet inwardly struggle with deep existential conflicts and hidden moral tensions. **Conclusions:** Thus, themes such as the exploration of existential dramas in the context of Transylvanian rural life, the tragic realism experienced by the characters, and cultural anthropology are captured in the novellas "Urcan Bătrânul", "Zborul de la cuib", "Ursita" and "Uliana".

Keywords: Pavel Dan, rural community, cultural anthropology, existential drama

COSMIC HORROR AND COSMIC BLISS: A BRIEF COMPARATIVE ANALYSIS OF THE WORKS OF LOVECRAFTIAN WRITERS

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Background: While most horror genres focus on the external threats of humanity or the projection of phobias from the depths of the human mind into reality, there is one genre that stands out at the end of the 19th century and the beginning of the 20th century - cosmic horror. Widely used nowadays in filmmaking and video games, cosmic horror emerged in written form from the sensitive mind of Howards Philips Lovecraft, the father of this unusual storytelling genre. Unlike other horror genres, Lovecraftian horror focuses on "the terrifying vast and mysterious universe" (7) (as Fritz Leiber mentioned in "A Literary Copernicus," an essay collected by Darrell Schweitzer in his book titled *Discovering H. P. Lovecraft*), as well as the fragility of the human psyche and the utter pointlessness of humanity as a whole. Cosmic bliss, the other face of the same coin, deals with the futility of salvation, the beauty of surrendering to the threat, and the birth of meaning in death. These two facets will be further explained in the paper, in connection to the birth of this genre of horror, the authors that pioneered it with short stories and novellas, foundational concepts and themes. **Objective:** The main purpose of this paper is to outline the key differences and similarities between cosmic horror and cosmic bliss, to explain and compare literary techniques, and to demonstrate the great importance that the genre had in modern and contemporary (American) literature, as well as in world-wide media - particularly in the works of the greatest Lovecraftian writers Howards Phillips Lovecraft, Clark Smith Ashton, and Robert W. Chambers. **Material and methods:** Close reading and textual analysis, consultation of literary criticism sources, the comparison of theoretical concepts, and the examination of online materials (video-essays). **Results :** An outline of fundamental information on cosmic horror and cosmic bliss, Lovecraftian writers and their works, and the emphasis of the need for further exploration of various categories of media to discover new genres, artists (writers), and philosophical ideas. **Conclusions:** Ultimately, the paper aims to demonstrate the importance of such a genre today, both in American literature and literature as a whole, as well as to justify the studying of the works by H. P. Lovecraft, Clark Smith Ashton, Robert W. Chambers and other less-known authors within the spectrum of weird stories.

Keywords: Cosmic horror, Cosmic bliss, Weird Tales

CRIMINAL OBJECTS AND THEIR USE THROUGH THE EYES OF THE PRESS IN THE ROMANIAN KINGDOM

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Background: The idea behind this study appeared while studying 19th and 20th century Romanian newspapers as sources. The idea behind this study appeared while studying 19th and 20th-century Romanian newspapers as sources for researching the use of the shepherd's axe, including as an object with the help of which crime is committed. The newspapers revealed a detailed (and, of course, intentionally captivating) monitoring of crimes and murders that were happening in the Kingdom, as well as that of the objects used in such cases. **Objective:** A somewhat statistical view of the objects of crime, specifically their quantity and variety, is being attempted, as well as highlighting certain cases which, through their notoriety, seem to benefit the local newspapers. **Material and methods:** Several dozen newspaper editions are being used, mostly made available online on Arcanum Newspapers. More specifically, certain articles are being selected from papers such as Gazeta de Iaşi, containing either the announcements of public auctions of such goods by local courts or descriptions of criminal activities of various importance. **Results :** The press proves and monitors that a great deal and a significant variety of weapons (and objects that can be used adjacently in crime) are available to the common criminal during the time of the Romanian Kingdom. Moreover, we see objects that the state actively chooses to put back in circulation through public auctioning. Also, we can witness the stories of several cases that the press exploits in order to attract readers, regardless of whether they are genuine or slightly manufactured or romanticized. **Conclusions:** The stories, as well as the publicly auctioned goods that result from criminal activity, are just another part of the business of the local press. For the reader at the time, these can be both useful and sensational. For the reader of today, they act as somehow limited windows through which we can witness, study, and perhaps even understand not-so-conformist behaviors of the common man and, why not, maybe even notice some similarities to such behaviors exhibited in the present day.

Keywords: Crime, Weapons, Romanian Kingdom, Press

DEVELOPING CRITICAL THINKING IN PRIMARY SCHOOL STUDENTS THROUGH ACTIVE-PARTICIPATORY TEACHING STRATEGIES - ACTION RESEARCH

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Background: This research aims to investigate the applicability of implementing a systematic cognitive training and development program based on strategies to stimulate critical thinking, designed for third-grade students in primary education. **Objective:** The study's objective is to highlight the effectiveness of the program entitled TDL (Think, Decide, Learn), which utilizes actively participatory techniques, such as - debates, Venn diagrams, and reflective journals - applied across various curricular areas. **Material and methods:** The study included an experimental group (EG) and a control group (CG) on a sample of 70 students aged 8 to 9 years. The EG, N=36 students, participated in the TDL program throughout the intervention period. Meanwhile, the CG, N=34 students, carried out activities according to the standard Romanian curriculum without systematically employing critical thinking development strategies. During the pre- and post-experimental phases of the study, a customized assessment sheet was applied, specifically designed to match the age characteristics of the students. The instrument evaluates children's critical thinking skills using criteria highlighted by theorists Paul & Elder (clarity, accuracy, relevance, logic, precision). **Results :** Comparative analysis of the pre- and post-experimental data revealed substantial differences between the two groups, in favor of the EG. Students who participated in the TDL program demonstrated notable improvements in formulating reasoned judgments, making rational decisions, and critically evaluating information, compared to students in the CG. **Conclusions:** The study's results support the effectiveness of the TDL program as an efficient pedagogical tool for stimulating critical thinking in primary education.

Keywords: critical thinking, debates, primary education

DEVELOPMENT OF LOGICAL THINKING THROUGH THEMATIC PLAY BASED ACTIVITIES IN PRESCHOOL CHILDREN

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Background: Background: Play-based activities play an essential role in the development of thinking and intelligence in preschool children. Through play, children develop attention to detail, spatial orientation, and logical thinking, while also stimulating visual-spatial and logical-mathematical intelligence. **Objective:** Objective: This study aims to examine how thematic play-based activities contribute to the development of thinking and intelligence in preschool children, as well as to their ability to solve tasks of increased difficulty tasks. **Material and methods:** Material and methods: The study was carried out with a group of 22 preschool children from a kindergarten in Tîrgu Mureș. The children were required to complete puzzle-type tasks to observe their progress. The initial assessment involved puzzles consisting of 2 and 4 pieces, with the level of difficulty gradually increasing. The final assessment was carried out using a 9 piece puzzle. The main methods used were direct observation and analysis of the children's performance throughout the activities. **Results :** Results: Following the implementation of thematic play-based activities, the majority of children were able to solve more complex puzzle tasks, demonstrating progress in logical thinking and spatial orientation. **Conclusions:** Conclusion: The play-based activities contributed to the development of preschool children's thinking, supporting both logical-mathematical and visual-spatial intelligence.

Keywords: preschool children, play, logical thinking, visual-spatial intelligence

EMPATHY IN THE FORMATION OF MEDICAL IDENTITY

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Background: Empathy plays an important role in shaping interactions between physicians and patients, influencing communication, trust, and the perceived quality of care. In the context of medical education, it represents a key element in the development of professional attitudes and values among future physicians. Examining empathy in medical students may offer a clearer understanding of how academic training and clinical exposure contribute to the formation of patient-centered perspectives. **Objective:** The aim of this study was to evaluate empathy levels among medical students and to examine their possible contribution to the formation of medical professional identity. The study also aimed to identify potential differences in empathy across different stages of medical training. **Material and methods:** This cross-sectional study was conducted among medical students at the George Emil Palade University of Medicine, Pharmacy, Science and Technology of Tîrgu Mureș, Romania. Empathy was assessed using the Jefferson Scale of Empathy (JSE), a validated tool consisting of 20 items rated on a seven-point Likert scale, with total scores ranging from 20 to 140. Higher scores indicate greater levels of empathy. Data were collected through an anonymous questionnaire that also included demographic variables. Descriptive statistical analysis and group comparisons were performed to evaluate differences across academic years. **Results :** A total of 70 medical students have participated in the study so far, with data collection still ongoing. Preliminary findings indicate a moderate level of empathy within the study population (mean score ≈ 111, range 79-133). Higher empathy values were observed among students in the preclinical years, particularly in the second year (≈116 points), compared to those in the clinical years. However, no statistically significant differences were identified between academic years. **Conclusions:** The assessment of empathy in medical students provides insight into how professional attitudes develop during medical training. These findings highlight the importance of educational approaches that support the development and maintenance of empathic skills throughout medical education.

Keywords: Empathy, Medical education, Medical students, Professional identity

EMPHASIS OF NATURALISM IN LIVIU REBREANU'S LITERARY WORKS

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Background: The following study presents naturalistic findings of Liviu Rebreanu's literary works. The movement is derived from Zola's theoretical manifestos about Naturalism, but it is formed from Realism. As Zola theorized the concept of Naturalism establishing the bound between science and literature, this new kind of literature arrived, marked by Positivism. The concept of Naturalism spreads in Eastern Europe, and in the first half of 20th century, the short period between the great wars is one of the most valuable periods for the Romanian literature. Liviu Rebreanu's view over the details that embody life is highly naturalistic. **Objective:** The goals of this paper are to analyse the results of human archetypes in novellas such as *Golanii*; the desire and obsession that shape the character throughout *Ion*, and the case of murder in *Ciuleandra*. Also, it evaluates the psychological overview of character's actions given by the sacrifice in *Pădurea spânzuraţilor*. **Material and methods:** The research's methods consist in observations and literary analysis emphasizing the style, the view, the characters, the themes of Liviu Rebreanu's novels and novella, related to naturalism. **Results :** Liviu Rebreanu's continuous work develops the characters throughout his novels and novellas, imitating the human beast that is driven by impulse and instinct, heredity and temper, as naturalists did in their works. Nevertheless, the writer captured the social and materialistic need of the lower class in Romanian society. **Conclusions:** Liviu Rebreanu's literary works of art have a naturalistic view because of pathological and harsh social and economic backgrounds given to his characters. His style is natural, given the way of investigating life.

Keywords: naturalism, Rebreanu, Positivism, heredity

ENGLISH IN THE DIGITAL AGE: HOW SOCIAL MEDIA SHAPES ROMANIAN LANGUAGE USE

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Background: This article examines the influence of English discourse on the Romanian linguistic landscape, specifically as driven by social media. Previous research indicates that this is a primary concern in modern sociolinguistics, as digital communication evolves globally every year. This shift actively reshapes English, Romanian, and other languages alike, creating new hybrid forms of expression. **Objective:** The primary objective of this research is to analyze the integration of English lexical elements into modern Romanian through social media platforms. The paper seeks to determine the extent to which digitalization and the status of English as a lingua franca are changing the daily communication patterns of native Romanian users. **Material and methods:** The research was conducted via a survey of 200 participants. The survey was designed to investigate and identify the frequency of English loanword integration across different social platforms, user motivations for using English, ranging from lexical necessity to the pursuit of social status, the level of speaker awareness regarding "Romglish" as a distinct linguistic phenomenon. **Results :** The results show a clear distinction between "necessary loans" used for technical concepts (e.g., feed, link) and "prestige loans" used for emotional or social expression (e.g., vibe, follow). The data reveals that the emergence of "Romglish" is not a degradation of linguistic norms, but an adaptation to digital-age communication. Furthermore, the findings show a significant morphological adaptation, where English loanwords are being integrated directly into Romanian grammatical structures (e.g., through Romanian verb endings). **Conclusions:** These results highlight the profound impact English has had-and continues to have-on the Romanian language. The study confirms that English usage on social media actively shapes other languages, with Romanian serving as a prime example of how digital platforms accelerate linguistic blending and evolution.

Keywords: loanwords, netspeak, English influence, code-switching

EVALUATING THE IMPACT OF INTERACTIVE ACTIVITIES ON THE HOLISTIC DEVELOPMENT OF PRIMARY SCHOOL STUDENTS

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Background: This study aims to investigate the impact of the systematic implementation of interactive activities on the holistic development of primary school students, focusing on the stimulation of cognitive, socio-emotional, motor, and behavioral competencies. **Objective:** The goal of the study is to highlight the effectiveness of the program titled "ActivEdu" (Educational Activities), which employs cognitive, socio-emotional, motor, and behavioral educational strategies, techniques for stimulating thinking, developing prosocial behaviors, and promoting active participation during lessons. **Material and methods:** The study employed an experimental design with a control group, including a sample of 55 students aged 7-8 years. The experimental group (EG), led by a primary school teacher, consisted of 29 students, and the "ActivEdu" educational program was implemented. The control group (CG) comprised 26 students who did not participate in the training program and followed the standard curriculum activities required in Romania. To assess the students' developmental level in the pre- and post-experimental stages, the following validated instruments were used: an initial test for cognitive development, an international SDQ (Strengths and Difficulties Questionnaire) for socio-emotional development, a workbook for motor development, and an observation grid for behavioral development. **Results :** Data processing was performed using Microsoft Excel, which allowed for the identification and quantification of major differences in the post-experimental stage between the scores obtained by the EG and CG. **Conclusions:** The results confirm the effectiveness of the "ActivEdu" program as a tool for accelerating the holistic development of primary school students.

Keywords: interactive activities, student-centered pedagogy, holistic development, activity evaluation

FEMININE TYPOLOGIES IN THE PSYCHOLOGICAL NOVEL PĂDUREA SPÂNZURAȚILOR BY LIVIU REBREANU

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Background: Liviu Rebreanu created remarkable characters who impress the readers by their complex psychology, the anxieties, convictions and intense emotions being meticulously described in novels like *Ion*, *Pădurea spânzuraților* or *Răscoala*. **Objective:** This article aims to analyse the feminine typologies depicted in the novel *Pădurea spânzuraților* (*The forest of the hanged*) by Liviu Rebreanu, through the personality traits of the characters: Marta, Ilona and Maria Bologa. **Material and methods:** The analysis of the novel is conducted using comparative and psycho-critical frameworks. **Results :** Marta Domşa, the protagonist's fiancée, exemplifies the typology of the frivolous woman. Her role in the evolution of the character Apostol Bologa is essential, because she is the one who motivates him indirectly to enlist in the army. Marta is a character defined by superficiality, who believes that the appearance or the social aspects are more important than the moral values or deep feelings of love. Ilona, the daughter of the grave-digger Vidor, unlike Marta, represents the psychological stability for the protagonist. She has an authentic, real and deep love for Apostol. Furthermore, Ilona signifies the idea of love that breaks the limits imposed by the tragedy of war. Maria Bologa embodies the typology of the pious and caring mother, for whom the moral and religious values are fundamental life principles. These definitory aspects of her personality will deeply influence the protagonist, symbolizing the superego and imposing a complex ethical model. **Conclusions:** Even though the female characters of this novel are developed through the connection each of them has with the protagonist, Apostol Bologa, they are different by the way they express their affection, moral values or through their complex personality, shaped by the tragic experience of the war.

Keywords: Rebreanu, female typologies, psycho-critical approach

FIGHTING DEMONS: IMPLICATIONS OF METAPHOR USE IN THE CONCEPTUALIZATION OF DEPRESSIVE DISORDERS

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Background: Lau (2011) posits that attributing concrete properties to an abstract concept serves no other purpose apart from rhetorical ends. However, Conceptual Metaphor Theory (CMT) maintains that mapping the concrete onto the abstract constitutes a conceptual metaphor, which transcends stylistic and literary dimensions, constituting by itself a form of communication and cognition (Lakoff and Johnson, 1980). In particular, it will be analyzed how illness-as-battle metaphors of depressive disorders aid patients in conceptualizing them inside and outside of therapy. The analysis will take into account contemporary empirical evidence showing how both therapists and clients use CM to render the abstract notion of a psychopathological diagnosis more experientially concrete, as this can promote clearer understanding by the patient than in the case of medical jargon-based assessments. Based on this reasoning, I will challenge the view that clinical use of exclusively precise terminology in describing depressive disorders should prevail over favoring metaphor implementation in therapy. Thus, I will argue for the claim that abstract-concrete militaristic mappings of depression are useful, because they enhance the informativeness of mental health diagnostic communication, as shown in previous research, but with crucial nuances. This refers to what this paper seeks to contribute to an already vast field; namely, a theorization of illness-as-battle metaphor adequacy according to the type of depressive disorder suffered by the patient (e.g. the militaristic metaphor may or may not fit Major Depression conceptualization better than others). Notably, research shows that various CM are extensively employed in making sense of psychopathological diagnostics as patients and therapists see fit - meaning that progress in recovery, root of disorder, and client idiosyncrasies are all factors to be considered in what, how, and when conceptual metaphors are used. **Objective:** The aim of this paper is to demonstrate the beneficial scope of the agonistic conceptual metaphor use in the treatment of various depressive disorders from a qualitative-comparative point of view. **Material and methods:** As this is a qualitative study, the Conceptual Metaphor Theory framework proposed by Lakoff and Johnson is applied to clinical treatment practices and patient conceptualization of depressive disorders in order to analyze its pertinence. **Results :** Based on literature, Conceptual Metaphor use is beneficial to psychiatric treatment of depression. **Conclusions:** The present analysis suggests that medical jargon precision can benefit from the inherent experiential quality provided by conceptual metaphors, remarkably in the field of psychiatry, wherein emotion and phenomenal experience play a key role, and therefore ought to be embedded in clinician-patient dialogue.

Keywords: conceptual metaphor theory, depressive disorders, patient feel-good, conceptualization

FRAGMENTED CERAMICS. CONNECTING WITH THE PAST IN THE DIGITAL ERA

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Background: Archaeology is a field that is constantly adapting to new research methods. The present study focuses on the pottery workshops located near the legionary camp at Potaissa. The analysis of the pottery provides a clear perspective on the military unit stationed at this location. The function of this unit was to defend the northern frontier against the Marcomanni. Pottery is a material used in both everyday life and ritual activities, thereby offering insights into the relationship with the Deities and details related to personal preferences. Additionally, the production, sale, and use of various categories of pottery vessels indicate the level of creativity and aesthetic sense of the population, as well as the patterns of use exhibited by consumers. **Objective:** The aim of this project is to translate the technical information resulting from systematic excavations into a format accessible to the general public. The primary goal of this initiative is to raise awareness about the protection of cultural heritage sites. **Material and methods:** The materials used in this study are derived from archaeological excavations conducted between July 2021 and July 2025, consisting of ceramic fragments, mainly from Roman kitchenware. The methodology includes photogrammetry and three-dimensional processing of the ceramic materials, resulting in a series of interactive models intended for educational use. **Results :** Presenting 3D models to the public, accompanied by accessible textual explanations, represents a significant step forward in efforts to give this field, often seen as inconsequential, a human dimension. History and archaeology have a

substantial influence on contemporary society, and using interactive presentations to communicate the past has been shown to change public engagement, encouraging individuals to seek further knowledge in this domain.

Conclusions: Photogrammetry is a method through which archaeology transcends traditional boundaries, allowing information about a heritage site to reach the public in an interactive and accessible manner.

Keywords: archaeology, 3Dmodel, pottery, photogrammetry

FROM THE POLLYANNA HYPOTHESIS TO POSITIVITY BIAS

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Background: The Pollyanna Hypothesis suggests that people have a natural tendency to focus on the positive side of things (Boucher & Osgood, 1969). Originally formulated as a psycholinguistic theory regarding the universal use of positive words, this concept has evolved into the modern scientific framework known as "positivity bias." In our opinion, studying this phenomenon is essential because it explains how we stay optimistic and how we communicate with others in our daily lives. **Objective:** Our goal was to analyze the transition of the Pollyanna hypothesis into a scientifically proven bias. The review focused on how this bias manifests in linguistic patterns, autobiographical memory, and risk assessment. **Material and methods:** We conducted a literature review of 10 representative scientific articles covering different areas, from linguistics to cognitive psychology. We compared data from research on how people use language, how memories change over time, and how personality traits affect social judgments. **Results :** The results of the analyzed studies show that our brains are "programmed" for positivity. Research on many different languages proves that happy words are used more frequently than negative ones. Even in negative situations, like bad reviews, studies have demonstrated that people still use positive words combined with negations. In terms of memory, multiple studies have found that the "Fading Affect Bias" (FAB) makes negative emotions disappear faster than positive ones. However, the evidence also suggests that being a "Pollyanna" type does not mean being nice all the time; agreeable people can be very strict when others break social rules. Furthermore, this bias can sometimes lead to unrealistic optimism regarding personal risks. **Conclusions:** Our analysis highlights that moving from a simple hypothesis to a proven bias shows that our minds are built to keep us emotionally stable. This "innate positivity" helps maintain mental health and social cohesion, but it requires a balance with realistic risk perception to avoid ignoring real dangers. In the end, the Pollyanna tendency is a complex tool for adaptation, shaping both language and human memory.

Keywords: Pollyanna hypothesis, positivity bias, Fading Affect Bias, literature review

FROM VICTORIAN CONSTRAINTS TO MODERN FREEDOMS: WOMEN IN THE BRITISH LITERARY IMAGINATION, 1840-1940

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Background: A woman's role in society has been a subject greatly discussed across different literary periods. A comparison between the 19th and the 20th century Britain in this respect is particularly relevant, in light of the fact that over the course of these centuries one can observe stark contrasts when it comes to the patriarchally imposed norms. Important literary works of the time serve both as social mirrors for the oppression women were subjected to, as well as a critical exploration of this limitation, depicting a tension between the reality and the individual aspirations of female characters. **Objective:** The main purpose of this paper is to examine the representation of female autonomy as reflected in literary works written in the 19th and the 20th century by great prominent British authors such as Charlotte Brontë and Virginia Woolf. The focus will be on the ways in which female characters are shaped by different social, political and cultural contexts and how themes such as motherhood, education, limitations and identity reflect the Evolution of women across these two centuries. Furthermore, the paper will focus on analysing the shift from external struggles in Victorian literature to internal tensions in the Modernist era. **Material and methods:** Close reading, textual analysis, comparative approach and feminist literary criticism. **Results :** An overview of how the depiction of female characters evolved from one century to another conditioned by the changes of the times. **Conclusions:** The examination and comparison of the literary works reveals that writers between these periods depicted female characters radically differently due to the cultural, social and political circumstances of their time. The transition between the 19th century and the 20th century female roles and

lives showcases growth in individual identity and awareness.

Keywords: female characters, gender roles, female autonomy, freedom vs constraint

GAMIFICATION AS AN INNOVATIVE METHOD IN TEACHING THE PERSONAL PRONOUN AND THE PERSONAL PRONOUN OF POLITENESS IN PRIMARY SCHOOL

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Background: The present research analyses the importance and role of gamification as an innovative didactic strategy in Romanian language and literature classes, in the teaching of the personal pronoun and the personal pronoun of politeness. For a motivating and engaging experience, the game and its specific elements transform the educational process into an interactive, student-centred method that develops the language skills of young schoolchildren. **Objective:** The objectives of the research are to identify the impact of gamification on students, to improve understanding of personal pronouns and polite pronouns, and to evaluate the effectiveness of active and interactive strategies in teaching. The working hypothesis focuses on demonstrating the effectiveness of gamification in the teaching-learning process and highlighting students' motivation and increased interest in learning through play. Thus, the methods used lead to better results for schoolchildren. **Material and methods:** The research was carried out using pedagogical observation and experimentation in the fourth grade at Solovăstru Secondary School, with a sample of 8 students aged between 10 and 11 years. The pedagogical research was carried out by administering an initial test to assess the class level, implementing the proposed gamified activities, and administering a final test to assess students' progress. **Results :** Increasing students' motivation and involvement in activities, evolving performance in the use and understanding of personal pronouns and personal pronouns of politeness are the expected results of the proposed case study. **Conclusions:** Following the integration of gamification into the educational process, it has been confirmed that gamification contributes to optimising and facilitating the teaching of personal pronouns and the personal pronouns of politeness and the development of language skills in primary school.

Keywords: gamification, primary education, personal pronoun, interactive teaching strategies

GENERATION Z'S PERCEPTION OF THE CREDIBILITY OF AI-GENERATED CONTENT ON TIKTOK IN THE DIGITAL ENTERTAINMENT SECTOR

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Background: This study examines how Generation Z evaluates the credibility of AI-generated content in the digital entertainment sector, focusing on the TikTok platform. The theoretical framework draws on source credibility theory and the authenticity model of computer-mediated communication, positing that users assess digital content through realism, coherence, and source perceptions. Credibility thus emerges as a subjective construct shaped by message authenticity, platform characteristics, and users' online experience. **Objective:** The primary objective is to assess young people's ability to distinguish AI-generated from human-created content, along with their attitudes toward this technology. The research tests the hypothesis that content perceived as more authentic is deemed more credible, that users struggle to identify AI-generated material, and that credibility perceptions shape attitudes toward AI in entertainment. **Material and methods:** Methodologically, the research employs a quantitative approach via an online opinion survey. Data were collected from 100 Generation Z respondents aged 14 to 29, who are active users, through a structured questionnaire with closed-ended questions and Likert-scale items to measure perceptions of authenticity, credibility, and attitudes. Prior to responding, participants viewed an AI-generated entertainment video to elicit realistic reactions. Analysis involves descriptive and simple inferential statistics. **Results :** Expected results suggest that Gen Z tends to trust realistic, coherent, contextually integrated content, even if AI-generated. Furthermore, it is anticipated that there will be challenges in distinguishing automatically generated content, as well as a mixed attitude characterized by increased interest but also a certain degree of skepticism. **Conclusions:** In conclusion, the study highlights the need to understand Gen Z's credibility assessments amid rising AI prevalence, informing user behavior insights and responsible technology deployment.

Keywords: Generation Z, AI-generated content, Credibility, TikTok

ILLNESS IN WORDS: THE IMPORTANCE OF PATHOGRAPHIES AND PATIENT NARRATIVES IN ULCERATIVE HEMORRHAGIC COLITIS (UHC)

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Background: UHC is an inflammatory bowel disease that causes inflammation, sores, and ulcers in the lower digestive tract, affecting the mucosa (inner layer) of the colon and rectum. This condition can be chronic and can sometimes lead to life-threatening complications. The term inflammatory bowel disease does not refer to a single disease or medical condition, but it broadly describes any condition or disease that causes inflammation of the gastrointestinal tract. The specific causes of these disorders are not yet fully known. However, it is well-known that UHC is a disease that affects not only the colon but also the well-being, psychology, identity, and social life of the person living with it. Moreover, the suffering also affects the people close to them, such as friends and especially the family. While the biopsychosocial model focuses on the diagnosis and treatment of this pathology, the part of the lived experience remains largely in the darkness, being described meagerly in the literature. Pathographies, defined as first-person narratives of a disease, as well as patient narratives, offer a profound perspective on how patients with UHC adapt, reinvent themselves, and manage to live with it. **Objective:** Pathographies and patient narratives bring to light the silent suffering, the invisibility of symptoms, the uncertainty and emotional burden of this chronic disease. They also highlight the gaps in knowledge between clinical assessment and the reality of living with this disease, which underlines the need for radical listening, understanding, reflection, and empathetic care towards UC patients. **Material and methods:** The present study examines existing pathographies in UHC, especially multimedia narrative materials YouTube - Inside Out by R. Zamolo, that are very rare compared to those available for other conditions. Starting from the narrative medicine framework and based on narrative analysis, this presentation evaluates themes of identity, stigma, and coping strategies in UHC that can be identified in the analysed pathographies. The four guiding research questions are: Who is leading: me or the disease? How is the body described: friend or foe? Which is the main enemy: the symptom or the system? **Results :** UHC ,Pathographies ,Patient Narratives, Chronic Illness Experience, Illness Narratives, Patient Perspective ,Qualitative Research, Medical Humanities **Conclusions:** Integration of pathographies and UHC patient narratives consolidates understanding and strengthens the doctor-patient alliance, proposing a holistic, patient-centred approach. The importance of elements of narrative medicine is even greater in diseases for which there is insufficient narrative evidence, such as UHC, for the patients' well-being

Keywords: 187, 56, 104

INFLUENCERS' SELF-PRESENTATION ON SOCIAL MEDIA: VULNERABILITY AS A STRATEGY FOR BUILDING AUTHENTICITY

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Background: In the contemporary digital landscape, social media influencers grapple with a persistent tension between audience demands for authenticity and the commercial pressures to project idealized, aspirational personas. Grounded in Erving Goffman's Dramaturgical Theory, which conceptualizes social interaction as a theatrical performance distinguishing front-stage presentations from back-stage realities, and Social Penetration Theory, which models relational development through layered, reciprocal self-disclosure, we frame vulnerability not as mere confession but as a deliberate self-presentation tactic. This dual lens reveals how influencers calibrate disclosure to penetrate audience boundaries, fostering trust and emotional investment. **Objective:** This paper investigates how influencers strategically harness vulnerability as a performative tool to forge deeper connections with followers, transforming personal exposure into a mechanism for relational intimacy and brand loyalty. **Material and methods:** Focusing on the visually driven platforms TikTok and Instagram, this study conducts a qualitative content analysis of 42 videos and posts by prominent Romanian influencer Marilu Dobrescu, covering April 2024 to April 2025. This 12-month period captures a transformative arc in her content evolution: from curated aesthetic lifestyle posts to raw, unscripted disclosures of profound personal traumas, including failed fertility treatments, relational crises, and mental health struggles. The timeframe highlights oversharing dynamics, digital identity reconstruction, and the risks of boundary erosion during personal upheaval. **Results :** Preliminary findings

uncover platform-specific patterns in vulnerability deployment: TikTok enables spontaneous, unfiltered "raw dumps" that spark immediate, high-engagement comments and duets, emphasizing immediacy and relatability. Instagram, by contrast, favors aesthetically refined narratives with soft lighting and captions, blending vulnerability with visual polish to sustain aspirational appeal. These strategies cultivate parasocial relationships-unidirectional yet emotionally reciprocal bonds-where constructively managed vulnerability transcends performative facades, driving metrics like follower retention and community loyalty. **Conclusions:** Ultimately, the research underscores vulnerability's dual-edged power: it humanizes influencers, redefines audience bonds beyond transactional metrics, and challenges scholarly understandings of authenticity in mediated spaces, with implications for digital ethics, mental health, and platform governance.

Keywords: vulnerability, self-presentation, social media influencers, TikTok vs. Instagram

INTEGRATING FAITH FROM A BIBLICAL PERSPECTIVE FOR MIDDLE SCHOOL HISTORY STUDENTS

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Background: Seventh-day Adventist education seeks to restore the image of God in the human being through a holistic approach that unites intellectual, moral and spiritual development. In a society characterized by moral relativism and fragmented knowledge, there is an urgent need for education grounded in biblical values and truth. In the process of integration of faith and learning the teachers help studends to develop their own worldview by understanding historical events from a biblical perspective. In the study of history, this integration takes on particular significance, as history involves moral judgment, interpretation of events and understanding of God's providence in human affairs. Despide its relevance, limited empirical research has explored how younger students experience this process. **Objective:** The purpose of this study is to understand how fifth and sixth grade student form a biblical worldview of history through faith- integrated lessons. Specifically it seeks to analyze students initial perceptions of a relationship between faith and history, explore their learning experiences during intentional lessons, identify changes in their understanding of historical events from a biblical point of view and document effective pedagogical strategies that support this process. **Material and methods:** This research adopts a qualitative action research design with a case study component. The intervention consists of a series of history lessons that intentionally combine academic content with biblical principles. Participans are students aged 11-13 years. Data is gathered through reflective journals, focus groups and classroom observations. Data analysis employs the GLATER model and thematic analysis. Strategies such as data triangulation reinforce validity and reliability **Results :** . Expected results: this research is currently in the implementation phase, focused on the teaching sessions that integrate faith with history. Results, discussion and conclusion are not yet available. However, the study is expected to provide valuable insights into how faith- based learning shapes historical understanding and spiritual growth among elementary students **Conclusions:** Conclusions (to be developed): the findings aim to contribute to Adventist educational theory and practice by identifying effective strategies for fostering a biblical worldview through history teaching, reinforcing that faith integration can transform intellectual learning into moral and spiritual formation.

Keywords: faith integration, history teaching, biblical worldview, action research

LANGUAGE DEVELOPMENT THROUGH PLAY-BASED ACTIVITIES

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Background: The study shows that implementing playful activities in the group can significantly impact preschoolers' language development and social development. **Objective:** The main objective of this article is to study the importance of playful activities in the preschool period, with a focus on their impact on children's language development. **Material and methods:** The research was conducted using pedagogical observation and experimentation in a case study with 20 preschoolers aged 4 to 5 years in the middle group. The examination involved testing the preschoolers before and after implementing playful activities aimed at language development over two months. Qualitative and quantitative analyses were applied to the data collected during the research to

draw clear conclusions regarding the evolution of language and the importance of play in the child's development in the early period. **Results** : It is estimated that, through instructional-educational activities carried out through play, preschoolers develop harmoniously, and thus a clear evolution in linguistic and social development can be observed. **Conclusions**: The conclusions of the study show that playful activities are essential for improving language performance in preschool children and positively impact learning in kindergarten.

Keywords: playful activities, language development, preschool

LINGUISTIC AND TERMINOLOGICAL ASPECTS IN THE TRANSLATION OF A VOCAL TECHNIQUE MANUAL

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Background: Vocal pedagogy is a field characterized by a fast evolution, yet it faces significant challenges in the Romanian linguistic landscape due to the absence of a standardized vocabulary. Currently, innovative vocal concepts are predominantly developed and disseminated in English, creating a terminological gap for Romanian practitioners and educators. **Objective:** This study aims to evaluate the process of terminological adaptation from English to Romanian within the context of vocal pedagogy. The primary goal is to identify effective linguistic strategies for integrating specialized technical terms into the Romanian framework while maintaining conceptual precision. **Material and methods:** The research employs a comparative analysis of source and target text samples, focusing on four key pillars: phonation, resonance, breathing, and vocal placement. The methodology evaluates the efficiency of various translation techniques, including descriptive translation, adaptation, and contextual reformulation, applied to specific case studies. **Results** : The output of the research is potentially a bilingual glossary (English-Romanian) featuring standardized definitions and usage guidelines. It will be used as a communication and teaching instrument that ensures terminological consistency in the education of modern vocal techniques. **Conclusions:** This analysis demonstrates that the translation of a vocal technique manual extends beyond linguistic transfer, requiring a sophisticated synthesis of music, anatomy, and linguistics. The research highlights two fundamental elements of modern specialized translation: - Interdisciplinary competence: This project illustrates that translating a technical manual demands far more than general language aptitude. It necessitates a profound understanding of both anatomical precision and musical aesthetics to ensure that the pedagogical intent remains intact across languages. - Methodological precision: The findings prove that the development and application of specialized glossaries are indispensable for the modern translator. Such tools are essential for maintaining terminological consistency and ensuring clarity when navigating highly technical discourse.

Keywords: terminology, specialized glossary, vocal technique, terminological adaptation

LITERATURE AS A PEDAGOGICAL TOOL FOR STIMULATING LANGUAGE DEVELOPMENT IN PRESCHOOLERS

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Background: This article addresses the importance of literature as an educational means for developing preschool children's language, emphasising the use of literary texts in instructive-educational activities in kindergarten. The study emphasises the importance of using stories to develop children's vocabulary, oral expression, and communication skills, as well as involving them in teaching activities. **Objective:** The research proposes to analyse the impact of using stories on language development, correct expression, and children's involvement in preschool activities. The objective of the qualitative study is to analyse and demonstrate the role of literature as an effective pedagogical tool in developing communication skills among preschoolers. The hypothesis on which we based this research is that using literature as a pedagogical tool in educational activities can significantly contribute to the language development of preschool children. **Material and methods:** The research was based on observation and document analysis to identify how preschoolers respond to literary stimuli. The research was carried out using the methods of pedagogical observation and document analysis in the upper kindergarten group from Kindergarten "Albinuța" in Tg. Mureş, on a sample of 18 preschoolers aged between 5 and 6 years. **Results** : The results of the research demonstrate a significant improvement in the preschooler's language and vocabulary, with the preschooler forming clearer, more developed sentences and using the words

learned in instructional-educational activities. There is also a more active involvement in communication, as well as a development of the ability to express oneself more clearly. **Conclusions:** The study underscores the importance of integrating literature into the instructional-educational process, as it is an effective tool for developing language skills and preparing the child for the environment.

Keywords: Language, Preschoolers, Literature, Vocabulary

PERCEPTIONS OF SOCIAL MEDIA CREDIBILITY AMONG GENERATIONS Y AND Z

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Background: This study examines how members of Generations Y and Z perceive the credibility of information found on social media platforms, particularly Facebook and Instagram. The issue of the legitimacy of information distributed online is becoming increasingly important due to the rapid development of the digital environment and the growing significance of social networks as a primary source of information. Although these platforms allow quick access to information, they also promote misinformation and fake news, which affects users. **Objective:** The purpose of this study is to investigate how generations Y and Z assess the authenticity of content on Facebook and Instagram, as well as the factors that influence their confidence in the content posted on these platforms. In addition, the paper aims to highlight the differences between the two generations in terms of exposure to false information, frequency of social media use, and how they act to verify that information is accurate before sharing it. **Material and methods:** Employing a quantitative methodology, the study draws on an online questionnaire distributed to Generation Y and Z social media users. Items measured platform usage frequency, time spent online, trust levels in digital information, and verification habits. Analysis of the collected data identifies relationships between these variables and their influence on users' perceptions of information credibility. **Results :** However, studies show that social media sites play a significant role in shaping users' opinions and attitudes, especially among younger generations. How users see reality and the credibility of information sources can be affected by quick access to information and how platform algorithms choose and share content. So, it's really important to understand how users judge the truthfulness of information in the digital world. **Conclusions:** Findings enhance understanding of digital media consumption patterns in these generations, underscoring the need for media literacy and critical thinking initiatives. By illuminating misinformation challenges and user navigation strategies, the study contributes to communication and media studies literature. It also emphasizes media education's role in equipping users to discern truthful content amid online information floods.

Keywords: credibility, social networks, users, information

PRESCHOOL TEACHERS INTERCULTURAL COMPETENCIES AND THEIR ROLE IN PROMOTING TOLERANCE AND CULTURAL DIVERSITY IN KINDERGARTEN.

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Background: This study explores the role of the kindergarten teacher as an active medium in the cultivation tolerance and cultural diversity in the preschool environment, starting with the premise that kindergarten represents the first social space in which the child interacts with diversity. **Objective:** The research follows the identity of effective pedagogic strategies through which the faculty member can cultivate attitudes of respect, cooperation and openness to cultural, ethnic or linguistic differences present in children with ages between 3 and 6 years old. It follows the demonstration of the application of the "Unit Div" program for the improvement of the educational process through the usage of proper teaching materials, open educational resources, methodical guides, and continuous formation courses on the theme of intercultural education. **Material and methods:** The data has been collected from 61 students across Romania through the use of the questionnaire "The actual challenges in intercultural education", a structured instrument which measures the correlation between professional formation of the faculty members and the intercultural pedagogic approaches integrated in daily activities. **Results :** The teachers who recently finished bachelor degree studies in pedagogy, a masters degree in pedagogy, which has been integrated in curriculum the subject of "intercultural education" have demonstrated a higher significant frequency for the advanced activities of cultural diversity and tolerance, compared to the ones that don't have studies in this field. These result portrait that educational formation supported in the intercultural educational field

shape in a significant way the pedagogic directory of education. **Conclusions:** The necessary integration of intercultural competences in each initial developmental stage and continuous of faculty members is the essential key to tolerance stimulation and of cultural diversity in kindergarten. The obtained data confirms the efficiency of the "Unit Div" program and supports the necessity of the activities that are focused on intercultural education with the purpose of improving the curriculum of early education.

Keywords: cultural diversity, tolerance, intercultural education, kindergarten teacher

READING AS A TOOL TO STIMULATE IMAGINATION AND VOCABULARY IN PRESCHOOLERS

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Background: This article addresses the importance of imagination in preschool age, highlighting imagination and reading as essential factors in developing vocabulary and critical thinking, skills necessary in the current educational context. Starting from the need to stimulate creativity and free expression in children. **Objective:** The research aims to highlight how activities based on storytelling and reading contribute to the development of language and communication. The research aimed to examine the impact of stimulating preschoolers' imagination in language and communication development activities. **Material and methods:** The study was conducted between February and April 2026, at the "Căsuța din Povești" Kindergarten in Mureş County, on a sample of 14 children aged between 5 and 6 years, from the large group using the methods of pedagogical observation and experimentation. **Results :** The results obtained highlight the positive impact of the strategies used in storytelling activities on the development of imagination and expressive and receptive language skills. The imagination stimulation program created a creative and motivating educational environment, based on expressive creativity activities, mimicry and gesticulation correlated with rhythm and sound, as well as the recombination of known and imaginary elements. In order to assess progress, activities included solving multiple-choice items and learning by discovery, in which the literary text offered various opportunities for interpretation and expression. **Conclusions:** In conclusion, the results of the research confirm that stimulating imagination through storytelling and creative activities contributes significantly to the development of preschoolers' language, vocabulary, and creativity, supporting the formation of original ways of expressing and understanding the surrounding reality.

Keywords: imagination, storytelling, language development, creativity in preschoolers

RELATIONAL DIMENSIONS OF PHYSIOTHERAPY PRACTICE: EMPATHY, SHARED DECISION-MAKING, AND THE THERAPEUTIC ALLIANCE

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Background: In rehabilitation medicine, the therapeutic relationship represents a core dimension of effective care. Beyond technical interventions, the interaction between physiotherapist and patient shapes both experience of illness and rehabilitation outcomes. Within the framework of Medical Humanities, relational competencies such as emphatic and shared decision-making are increasingly recognised as central to patient-centred care and to the development of a strong therapeutic alliance. **Objective:** The study aimed to explore the relationship between physiotherapist's empathy, the use of shared decision-making, and the perceived quality of the therapeutic alliance in clinical practice. **Material and methods:** A cross-sectional observational study was conducted among physiotherapists engaged in clinical practice. Data were collected through an anonymous online questionnaire distributed via professional networks. Three validated instruments were used: the Toronto Empathy Questionnaire (TEQ), the Shared Decision-Making Questionnaire - clinical version (SDM-Q-Doc), and the Working Alliance Inventory - Short Revised, therapist version (WAI-SR-T). Descriptive statistics and exploratory correlation analyses were performed. **Results :** Preliminary analysis based on 25 respondents indicated a moderate level of affective empathy (TEQ: M= 43.52 out of 80), a high level of shared decision-making (SDM-Q-Doc: M= 85.16 out of 100), and strong therapeutic alliance (WAI-SR-T: M= 46.16 out of 60). These findings suggest a predominantly collaborative and patient-centred orientation in physiotherapy practice. A statistically significant moderate positive association was found between shared decision-making and the therapeutic alliance ($r = 0.52$, $p < 0.01$), highlighting the role of patient involvement as a relational process that strengthens therapeutic connection. No

statistically significant association was observed between empathy and the therapeutic alliance ($p > 0.05$). **Conclusions:** Relational competencies appear to play a key role in physiotherapy practice. Shared decision-making, in particular, may contribute to strengthening the therapeutic alliance, supporting a more human-centred approach to rehabilitation. As data collection is ongoing, these findings should be interpreted as preliminary.

Keywords: Emphaty, Shared decision-making, Therapeutic alliance, Physiotherapy

RELATIONAL ECOLOGY OF FUTURE SOCIETY: THE CONJUGAL PARTNER ROLE VS. THE PARENTAL ROLE

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Background: Contemporary social transformations have redefined family dynamics, necessitating analysis of the "relational ecology" within which child development occurs. **Objective:** This paper proposes that the child's psychological balance depends less on formal family structure and more on adults' maturity in rigorously differentiating the conjugal role (intimate partnership, couple project) from the parental role (safety, transgenerational modeling). Confusion between these roles generates "relational pollution" manifested through parental triangulation, parentification, and alienation, severely impairing child development. **Material and methods:** Narrative synthesis of recent literature (2020-2025) using adapted PRISMA criteria: from 87 identified sources (Google Scholar, PubMed, Romanian journals), 15 studies were selected (N=12,847 participants) after eliminating 52 irrelevant titles and 20 incomplete texts. Analysis integrates Bronfenbrenner's bioecological model (micro/meso/exosystem family levels) with Jeffrey Young's schema therapy framework (maladaptive schemas: abandonment, emotional deprivation, self-sacrifice), focusing on parental conflict, co-parenting, and systemic resilience. Results: Adult emotional immaturity fosters triangulation (63% divorce cases, Schrodtt 2025), parentification (58% monoparental families, Popa 2024), and parental alienation, generating disorganized attachment and relational burnout. "Kintsugi" redefined: the system's "gold" = mature parental collaboration for the child's benefit; the final "work of art" = resilient future adult. Resilience builds not on absence of conjugal cracks, but on parents' capacity to repair them through assumed responsibility. Conclusions: Rigorous adult role differentiation constitutes the fundamental pillar of child resilience, transcending structural family forms. Parents bear ethical duty to transform conjugal interactions into "relational art" prioritizing child well-being. The ecological model calls for empirical validation through longitudinal studies and co-parenting interventions. **Keywords:** relational ecology, role differentiation, parental triangulation, redefined Kintsugi, systemic resilience. **Results :** Adult emotional immaturity fosters triangulation (63% divorce cases, Schrodtt 2025), parentification (58% monoparental families, Popa 2024), and parental alienation, generating disorganized attachment and relational burnout. "Kintsugi" redefined: the system's "gold" = mature parental collaboration for the child's benefit; the final "work of art" = resilient future adult. Resilience builds not on absence of conjugal cracks, but on parents' capacity to repair them through assumed responsibility. **Conclusions:** Rigorous adult role differentiation constitutes the fundamental pillar of child resilience, transcending structural family forms. Parents bear ethical duty to transform conjugal interactions into "relational art" prioritizing child well-being. The ecological model calls for empirical validation through longitudinal studies and co-parenting interventions.

Keywords: role differentiation, parental triangulation, systemic resilience, redefined Kintsugi

REPRESENTATION OF THE FEMALE CHARACTER IN THE ROMANIAN INTERWAR NOVEL. A COMPARATIVE STUDY OF ENIGMA OTILIEI AND PATUL LUI PROCUST

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Background: The purpose of this paper is to conduct a detailed comparative analysis of female character types in two seminal novels of interwar Romanian literature: *Enigma Otiliei* by George Călinescu and *Patul lui Procust* by Camil Petrescu. **Objective:** The central objective of the study is to examine how female characters such as Otilia Mărculescu and Doamna T. manage to express through their inner structure the tensions and identity shift specific to early modernity. **Material and methods:** From a methodological standpoint, hermeneutic analysis is employed, focusing on the decoding of feminine symbols. Comparative analysis is also applied to draw parallels between Călinescu's realist aesthetics and Camil Petrescu's psychological modernism. Narratological analysis outlines the

techniques of focalization, closed or open narrative perspectives, and the fundamental role of introspective tools—such as the letter and diary techniques—in shaping the female image. The theoretical frameworks underpinning this analysis draw on concepts from feminist criticism and elements of psychoanalysis (referencing the theories of Freud and Jung), while also engaging with the benchmarks established by Beauvoir in gender studies. **Results :** The study focuses on the various representations of femininity, addressing important themes such as seduction, vulnerability, the need for emancipation, lucidity, idealization, and psychological interiority. At the same time, it depicts the oscillation between male idealization and the subjective psychological reality of femininity. The relationship with male characters is interpreted not only as a form of interdependence, but also as a space for intellectual and emotional confrontation. In this case, female identity is frequently shaped through refusal or by maintaining an air of mystery. **Conclusions:** The compared novels are expected to offer an ambivalent and nuanced portrait of interwar femininity. A femininity caught in a constant oscillation between patriarchal tradition, social pressure in the urban environment, and the need for psychological modernization.

Keywords: identity, interwar, femininity, representation

ROMAN DIETARY HABITS: DISCOVERIES BASED ON THE LIFE AT THE CASTRUM OF LEGIO V MACEDONICA

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Background: The Castrum of Legio V Macedonica, based in Potaissa (the modern city of Turda, Cluj county, Romania), is one of the 70 legio castra of the Roman Empire that are still being researched, constantly offering valuable information about the lifestyle of Roman soldiers. **Objective:** This paper aims to present the eating habits of the Romans by identifying their main meals, the foods and beverages they consumed, as well as the methods used to prepare them, along with the cookware they used for this purpose. **Material and methods:** With the help of the existing literature and archaeological discoveries performed on the territory of the Castrum of Legio V Macedonica over the course of time, we could identify the main types of meat, other foods and beverages consumed by the members of the legio, the connections of this settlement with other production centres, and the types of pots and cookware they used. **Results :** Through this study, we managed to establish that: the Romans did not limit themselves to eating just one type of meat - based on the discovery of various types of animal bones, they used boiling and frying as main cooking techniques for preparing their three daily meals and also the fact that they consumed a lot of other foods such as fruits, vegetables and grains. The dietary diversity was accompanied by a wide variety of cookware, which also provided evidence of beverage consumption - primarily water and wine. **Conclusions:** The Romans' diet was also influenced by their commercial relationships, social class, local traditions and by the resources available at Potaissa. Yet, it remained one of the most important aspects of their lives.

Keywords: Roman soldiers, eating habits, foods, cookware

SOCIAL BEHAVIOR PATTERNS AT YOUNG AGES: EDUCATIONAL INFLUENCES

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Background: Social behavior in young children is a crucial aspect of their development. It is greatly influenced by school and by how they interact with adults and other children. If a child learns to get along well with others, they will be able to integrate into the community and build positive relationships from an early age. **Objective:** The aim of the research was to study how young children behave in society and to examine how the educational environment helps them develop positive relationships with others. **Material and methods:** In this study, I used observation and questionnaires method on a group of 18 fourth-grade primary school students from a rural school in Ideciu de Jos, Mureș County. At the beginning of the study, I administered an initial questionnaire to the primary students to assess their social skills and a different questionnaire to the teacher. Subsequently, I organised activities designed to foster positive relationships between the children. Finally, I administered another questionnaire to evaluate the outcomes of the educational activities. **Results :** By making an assessment, we can say that there is a close correlation between educational influences and the level of positive interaction between children. I believe that supportive educational environments help foster appropriate social behaviors, such as cooperation, respect for

each other and ability to fit into groups. **Conclusions:** Education plays a very important role in shaping social behavior at a young age. A suitable educational environment helps children develop the ability to interact positively with others, which has a beneficial impact on how they adapt to society.

Keywords: social behavior,, positive interaction,, early childhood,, step-by-step development

SYMBOLS AND INITIATIONS IN THE RAKES OF THE OLD COURT. DECADENCE AS DESTINY

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Background: Mateiu I. Caragiale's novel, *The Rakes of the Old Court* intricately blends late 19th century aesthetic affinities of decadence within a distinctly Romanian, but also Balkan-inflected setting. The narrative explores marginal and overlooked spaces of early 20th century Bucharest, from dilapidated taverns to degraded brothels, foregrounding the economic as well as social disintegration of the author's country. Through his four central characters, Mateiu I. Caragiale articulates a pervasive sense of decay, one which extends beyond the material realm into the sphere of lived experience and identity. **Objective:** The following paper aims to identify and interpret the numerous symbols of decadence interspersed throughout the novel. By examining these symbolic structures, decadence emerges as a dynamic and continually shifting phenomenon. The classification of such symbols reveal decadence as a the conceptual core of the text, generating an overarching sense of inevitability and fatalism. **Material and methods:** The analysis is performed through the usage of selected textual excerpts from the novel, interpreted through the lens of modern literary theory, as well as philosophical discourse pertaining to the fields of: decadence, vanity, and fatalism. The focus is on linguistic and stylistic features which, upon rigorous examination, demonstrate how symbolic representations of decay operate at a largely subconscious level. In doing so, the narrative form as well as reader perception are shifted simulatenously. **Results :** The findings within this paper imply that the novel is built upon a nuanced relationship between decadence and the inhabited social environment. The stylistic choices employed by the author reveal themselves as symbolic inserts which uncover layered meanings. These numerous interpretations are present within a narrative already under heavy load with history, ambiguity, and heraldic imagery. The denouement lays in the discovery of a symbolic network which reinforces the interconnectivity of personal decline with societal collapse. **Conclusions:** The paper concludes that decadence in *The Rakes of the Old Court* operates less as a purely symbolic or structural device and more as an existential condition which shapes both character and narrative. Through the usage of atmosphere, gesture, and aesthetic sensibility, the novel layers the foundation of a world in which decadence is continuously lived and internalized as a possible and sole method of existence. In perceiving decadence as destiny, the main characters embody the tragedy of a life governed by hedonistic consumerism and vanity, which emerge as their sole, yet illusory methods of escape from the permanent atmosphere of decay that defines their world.

Keywords: decadence, hedonism, vanity, consumerism

THE ADVERB SOMEHOW: A CASE STUDY

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Background: The present bachelor's thesis, entitled "The Adverb Somehow: A Case Study", aims to analyze one of the adverbs frequently encountered in contemporary Romanian. Ro language is an expressive and diverse language, in which each grammatical category contributes to the construction of meaning, and adverbs play an important role in the way sentences are formed and interpreted. Among these, the adverb "somehow" stands out due to the variety of its uses. It is precisely this flexibility that makes it linguistically interesting and justifies its selection as the subject of this study. This paper examines the main aspects related to the use of the adverb "somehow", taking into account its morphosyntactic, semantic, and pragmatic features. **Objective:** The main aim of this paper is to analyze the adverb "cumva" in contemporary Romanian, starting from the observation that it is a very frequently used word, but not always easy to explain. Depending on the context, "somehow" can have multiple meanings and functions within a sentence. The study focuses on identifying the main values of this adverb, such as expressing uncertainty, softening a statement, or being used in interrogative constructions. The analysis is based on examples drawn from everyday language as well as from written texts, in order to clearly

illustrate how this adverb is used. **Material and methods:** This study employs methods such as morphosyntactic, semantic, pragmatic, typological, and contextual analysis. Its originality lies in the systematic correlation between grammatical values and the identified semantic and pragmatic functions, as well as in the proposed classification based on the type of utterance and the discursive role of the adverb. **Results :** The analysis has shown that the adverb "somehow" is highly flexible and capable of modifying the nuance of a sentence. When used carefully, "somehow" contributes to the clarity and balance of the message, making communication more natural and expressive. In certain situations, it suggests a degree of uncertainty, while in others it adds subtlety to the formulation of a statement or a question. **Conclusions:** In conclusion, the adverb "somehow" proves to be a flexible and important element in Romanian language, contributing to the way ideas are expressed and understood. Its varied uses show that even simple words can play a significant role in shaping meaning and communication.

Keywords: Modalization, Indefinite adverb, Polyfunctionality, Quantitative

THE BIBLICAL MYTH OF GENESIS IN ROMANIAN LITERATURE: INTERPRETATIONS, INFLUENCES AND PERSPECTIVES

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Background: The biblical myth of Genesis is one of the most important elements of Western culture, as it explains the origin of the world and of humankind, as well as the relationship between humans and the divine. Over time, this myth has strongly influenced literature and has been reinterpreted in different ways. In Romanian literature, the creation myth becomes a starting point for reflections on existence, knowledge and the relationship between the sacred and the profane. **Objective:** The aim of this paper is to show how the myth of Genesis is reinterpreted in Romanian literature and how it moves from a religious narrative to a complex symbolic model. At the same time, it explores how writers use this myth to express ideas about the human condition and the meaning of existence. **Material and methods:** The research has a qualitative character and is based on the interpretation of literary texts. The study uses mythological analysis, comparison between texts and interpretative approaches to observe how the symbols of Genesis are taken and transformed. The works of major Romanian authors such as Mihai Eminescu, Lucian Blaga, Tudor Arghezi, Nichita Stănescu and Marin Sorescu are analysed. **Results :** The analysis shows that each author reinterprets the myth of Genesis in a different way. In Eminescu's work, creation has a cosmic dimension, in Blaga, it is linked to mystery and knowledge, in Arghezi, it reflects the tension between humans and the divine, while in Nichita Stănescu and Marin Sorescu, the myth is reinterpreted in a modern way. In this sense, the myth becomes a way of expressing ideas about existence and the human condition. **Conclusions:** The myth of Genesis remains important in Romanian literature, being constantly reinterpreted depending on each author and cultural context. It is no longer just a religious text, but a way of reflecting on the world and on the human condition.

Keywords: Genesis myth, Creation myth, Biblical symbolism, Cosmogony

THE BORDER BETWEEN MARAMUREŞ AND TRANSYLVANIA IN THE MEDIEVAL AND EARLY MODERN PERIODS: IMPLICATIONS FOR THE NOBILITY OF THE DISTRICT OF CUHEA

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Background: Beginning in the sixteenth century, the conflict between the nobility of the District of Cuhea and the inhabitants of Rodna District intensified and developed into a prolonged legal dispute over the demarcation of the border. This dispute continued until the border issue was finally settled under Habsburg rule. **Objective:** The aim of this paper is to identify the causes of the border dispute between Maramures and Transylvania, to identify and reconstruct the boundaries of the relevant estates situated along the frontier, and, if possible, to reconstruct the border itself during the medieval and early modern periods. It also seeks to explain why this border dispute was important to the nobility of the District of Cuhea from both economic and strategic perspectives. **Material and methods:** In order to achieve these objectives, I examined the primary sources, especially the boundary perambulations of the estates of Borsa, Saliste, Cuhea, Ieud, Moisei, and Sacel, as well as those of the Cuhea

domain and other charters relevant to the border in question. I compared this evidence with the situation of the estates in Rodna District as reflected in the charters, travellers' accounts from Hungary and Transylvania, military maps, cadastral maps, topographic maps, and other maps of Hungary and Transylvania available online, as well as with the historiography on the subject and studies drawn from auxiliary historical sciences. **Results** : The research shows that the border between Maramures, Solnok, and Rodna District was not clearly delimited in the fourteenth century, but rather followed general lines that later came to be defined more precisely in the charters issued in the fourteenth century and at the beginning of the sixteenth century in favor of the nobility and cnezes from District of Cuhea. **Conclusions**: This suggests that the nobility of the District of Cuhea - cnezes and voivodes - possessed older legal claims to the mountain pastures situated on the southern slopes. These pastures appear to have been of greater importance to them than to the Hungarian nobility of Inner Solnok County. The dispute seems to have arisen in connection with the development of the villages and estates in the Upper Someș Valley during the second half of the fifteenth century and the first half of the sixteenth century, while earlier disputes between the voivodes of Cuhea and the nobility of Transylvania remain unclear and are only indirectly suggested by toponymy attested much later.

Keywords: Maramures, Transylvania, boundary, middle ages

THE COGNITIVE LOAD OF MULTILINGUALISM: CHALLENGES IN REAL-TIME SPEECH

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Background: This paper aims to identify and analyze the complex speech production challenges encountered by multilingual speakers, focusing on the mental and linguistic structures that allow multilingual speech. The standardization of multilingual proficiency makes understanding the system behind multilingual communication essential. **Objective:** The objective is to investigate how polyglot individuals form mental connections between their languages, both voluntarily and involuntarily, how these connections impact the processes of structuring thoughts, and how they choose and verbalize language in different communicative situations. The theoretical framework is based on the works of Ulrike Jessner, Birgit Spechtenhauser, Eve Higby, Seamus Donnelly, Jungmee Yoon and Loraine K. Obler. The working hypothesis underlines the lexical retrieval difficulty multilinguals experience due to simultaneous activation of multiple languages, which leads to code-switching, hesitations and slower verbal expression. **Material and methods:** Through a Google Forms questionnaire, data was collected from multilingual individuals regarding lexical retrieval difficulties, code-switching, thinking patterns and overall effort required to express oneself while speaking multiple languages. The theoretical framework highlights that lexical retrieval constraints are not simply due to lack of competence but due to mental management of multiple language systems. **Results** : Results show that even though they are proficient and use these languages daily, difficulties still arise consistently when expressing ideas in less dominant languages. Ulrike Jessner's A Dynamic Systems Theory approach to second language acquisition reveals that difficulties arise in a consistent manner when expressing ideas and it is a natural outcome of multilingualism. **Conclusions:** Ultimately, the work underlines that speech challenges arise not due to markers of linguistic deficiency, but are rather the natural consequences of multilingualism.

Keywords: cognitive load, lexical retrieval, language system, code-switching

THE DEPICTION OF THE ROMANIAN VILLAGE: FROM TRADITION TO THE CONTEMPORARY. A COMPARATIVE STUDY OF "BALTAGUL" BY MIHAIL SADOVEANU AND "CÂT DE APROAPE SUNT PLOILE RECI" BY BOGDAN COȘA.

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Background: This study aims to provide a detailed analysis of how the Romanian village is portrayed in two novels from different eras: *Baltagul* by Mihail Sadoveanu, published during the interwar period (1918-1939), and *Cât de aproape sunt ploile reci* by Bogdan Coșa, published in the contemporary period (1945 to the present). The Romanian village represents a fundamental landmark in terms of both cultural and literary identity. The Romanian village no longer functions as a static marker of national identity, but rather as a constantly changing environment in which the customs and traditions that once meant so much to people have lost their significance,

giving rise to the tensions of contemporary society. **Objective:** The aim of this paper is to highlight the transformations undergone by the Romanian rural village, from a traditional, sacralized vision to a fragmented one, marked by a crisis of values. **Material and methods:** Methodologically, the study employs literary hermeneutic analysis supplemented by comparative analysis, thereby allowing for the interpretation of the Romanian rural village as a symbolic and social space that has taken on extraordinary significance, ranging from the mythical or idyllic visions of the great classics to the harsh realism of contemporary authors. **Results :** The contrast between the two novels analyzed is highlighted by the difference in the representation of the image of the Romanian village from the interwar period to the contemporary period. **Conclusions:** Thus, the results shed light on a significant rupture between the traditional Sadoveanu village, organized according to unwritten laws, and Bogdan Coșa's contemporary village, characterized by a crisis of values and uprooting.

Keywords: Tradition, Bogdan Coșa, Mihail Sadoveanu, Alienation

THE DEVELOPMENT OF ATTENTION AND CONCENTRATION THROUGH EDUCATIONAL GAMES IN PRESCHOOL-AGED CHILDREN

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Background: Given the current educational landscape, marked by a visible decline in children's concentration spans and an increasing presence of digital technology, I considered it timely to demonstrate that the organized use of educational games can successfully train organizational skills and sustained attention. **Objective:** To demonstrate that the organized use of educational games can successfully train organizational skills and sustained attention in preschool children. **Material and methods:** The adopted methodology begins with a diagnosis of current state and continues with corrective and developmental measures, based on an experimental design conducted at the "Căsuța din Povești" Kindergarden. The research was carried out with a middle group (ages 4-5) consisting of a sample of 20 preschoolers, where I implemented an intervention program structured on specific ludic activities (such as "Musical Statues" or "What has Changed?"). To measure progress, I utilized psycho-pedagogical tests applied during the pre-test and post-test stages, analyzing the evolution of how children maintain their attention. **Results :** The results obtained indicate a significant improvement in attention indicators for the majority of the children in the group. This allowed me to confirm the hypothesis that the educational game, through its interactive nature and internal rules, represents the most effective strategy for cognitive training. **Conclusions:** In conclusion, this paper highlights the necessity of prioritizing play within the early childhood education curriculum as an essential requirement for learning success and the harmonious development of the child.

Keywords: voluntary attention, preschoolers, educational game, cognitive development

THE DIALECTICS OF OTHERNESS IN FRANZ KAFKA'S THE TRIAL

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Background: The present paper analyses Franz Kafka's literary works within a theoretical framework situated at the intersection of critical theory and world literature studies. Its primary objective is to explore how different contemporary methodologies of literary analysis may converge in the interpretation of Kafka's writing, particularly in relation to the construction of identity and alterity. **Objective:** The working hypothesis of this research is that Kafka's literary system articulates a complex self-other relationship that can only be fully understood by combining close reading with broader sociological perspectives on literature. **Material and methods:** The paper is based on the close reading of *The Trial* by Franz Kafka, focusing on formal strategies and recurring thematic elements such as alienation, fear, the absurd, and the (in)ability to communicate. These elements are examined as narrative mechanisms through which identity and otherness are simultaneously produced and destabilized. In a second analytical step, the paper situates Kafka's writing within his historical and cultural context, addressing his position as a Jewish German author living in Prague and the implications of this marginal identity for his literary production. By integrating textual analysis with concepts drawn from the sociology of literature, the research aims to demonstrate the methodological compatibility between seemingly divergent approaches. **Results :** The expected results suggest that Kafka's work exemplifies a productive tension between individual experience and collective structures. **Conclusions:** The conclusion argues for the relevance of interdisciplinary methodologies in

contemporary Kafka studies.

Keywords: Otherness, Minor Literature, Identity, Alterity

THE DUAL LIFE OF A SENTENCE: STRUCTURE IN FORMAL COMMUNICATION SAMPLES, SPONTANEITY IN CHATS

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Background: The rapid evolution of digital communication has significantly altered traditional language registers. While linguistic research has long distinguished between formal and informal speech, the digital landscape introduces a hybrid space where text and visual elements coexist. Understanding how users navigate these shifts; transitioning from the structured conventions of formal communication to the fluid, multimodal nature of private messaging; is essential for modern sociolinguistics. **Objective:** The study aims to investigate the variation in language registers across different digital environments, specifically comparing formal communication with informal peer-to-peer messaging. Furthermore, it seeks to analyze the role of emojis as multimodal tools that facilitate this register shift and compensate for the absence of non-verbal cues. **Material and methods:** The research employs a comparative qualitative analysis of two distinct corpora: a set of formal communication samples and a collection of anonymized instant messages (WhatsApp/Discord) exchanged between friends. To ensure contextual validity, the formal corpus focuses on structured communication in institutional or professional contexts, highlighting hierarchical interaction. Conversely, the messaging corpus is strictly limited to spontaneous, everyday conversations among established peer groups. The analysis focuses on lexical choices, sentence structure, and the frequency and function of emojis as pragmatic markers. **Results :** The findings indicate a clear "register awareness" among users; formal communication remains predominantly text-based and adheres to conventional syntax, whereas informal communication is highly multimodal. Emojis in informal contexts are not merely decorative but serve critical functions: they signal irony, soften potential confrontations, and establish social proximity. The study observes a "pictorial turn" where emojis often replace punctuation or even entire phrases to convey complex emotional states. **Conclusions:** The study concludes that digital register is defined by a balance between textual and visual elements. Emojis act as the "digital intonation" of modern discourse, bridging the gap between written and spoken language. This research highlights the impact of multimodality in redefining communicative competence in the 21st century.

Keywords: digital communication, language register, multimodality, pragmatic markers

THE EFFECTS OF AN INTERDISCIPLINARY ARTS AND MUSIC EDUCATION PROGRAM ON THE DEVELOPMENT OF CREATIVITY IN PRIMARY SCHOOL STUDENTS

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Background: This study aims to track the results of applying an interdisciplinary program for training and developing creative skills through art and music education activities addressed to primary school students. **Objective:** The purpose of the study is to highlight the results of the systematic application of a DCAI educational program (Development of Creativity through Interdisciplinary Activities), for the training and development of creative skills, which capitalizes on interdisciplinary integration strategies and teaching techniques specific to art and music education, aiming to develop flexibility, originality and fluency in the creation of works by third-grade students. **Material and methods:** The study adopted a quasi-experimental design with an experimental group (EG) and a control group (CG) on a sample of 70 students aged 9-10. In GE, n=36 children coordinated by 1 teacher, we implemented the DCAI training program. GC, n=34 carried out activities according to curricular requirements, without focusing on developing creativity through interdisciplinary activities. In the pre- and post-experimental stages of the study, we applied the "Torrance Test of Creative Thinking" (TTCT) adapted for primary school students, an assessment tool used to evaluate the level of creativity of students. **Results :** Data processing with the SPSS 22 statistical software allowed the identification and quantification of relevant differences between the score values obtained by EG and CG. **Conclusions:** The results support the effectiveness of the DCAI program as a pedagogical method to stimulate creativity through an interdisciplinary approach.

Keywords: creativity, interdisciplinary, arts, music

THE ENEOLITHIC CIVILIZATION AT MĂGURA GUMELNIȚA

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Background: *The history of the archaeological site at Măgura Gumelnița is exceptional; it is one of the most important Eneolithic sites in southeastern Europe and the eponymous location that gave its name to the Gumelnița culture. Among the archaeologists who have conducted research at this site are: Vladimir Dumitrescu - the initiator of the systematic excavations in 1924-1925; Ion Nestor - who contributed to the study of the culture by analyzing the discovered materials; and Dinu V. Rosetti - who was involved in contextualizing them.* **Objective:** *This paper aims to highlight the historical and archaeological significance of the site, as well as the distinctive features of the Gumelnița culture, which is relatively unknown to the general public. In this regard, the paper reviews the systematic excavation campaigns, as well as the main discoveries that resulted from them. The analysis considers both the material and human aspects, seeking to reconstitute their customs and beliefs.* **Material and methods:** *From a methodological standpoint, this study is based on an examination of sources referring to the archaeological campaigns, the artifacts discovered, and the burial complexes investigated. Such data enables us to construct a coherent picture of the social organization, burial practices, and symbolic universe of the Gumelnița culture.* **Results :** *The results obtained provide a better understanding of how this little-known civilization lived, how its members viewed life and death, and, above all, how they adapted to their environment and the challenges it presented.* **Conclusions:** *Lastly, the archaeological site at Măgura Gumelnița is a fundamental landmark for understanding the Eneolithic period in south-eastern Europe. It offers us essential information about a community lost in the mists of time. The discoveries highlight a high level of material and spiritual development, reflected both in the archaeological materials found and in the diversity of the remains. In this way, the archaeological site at Măgura Gumelnița remains a point of reference in Romanian and European archeological research.*

Keywords: archeology, prehistory, Măgura Gumelnița, prehistoric archeology

THE HERO FIGURE IN ROMANIAN AND BRITISH MYTHOLOGY

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Background: The presentation aims to analyze the figure of the mythical hero as an expression of cultural identity through a comparative approach between two representative figures from distinct cultural spheres: Făt-Frumos, the iconic hero of Romanian mythology, and King Arthur, the central figure of British mythology. This research is grounded in the premise that heroic myths constitute symbolic forms through which communities articulate their fundamental values, moral ideals, and perceptions of order, justice, and destiny. **Objective:** The study integrates theoretical perspectives on the concepts of myth, mythology, and the heroic archetype, tracing how the initiatory journey, supernatural intervention, and the confrontation with trials define the symbolic construction of the hero. The individual analysis of these two characters is complemented by a comparative framework that highlights both the shared elements of mythical structure and the specificities shaped by cultural and historical contexts. **Material and methods:** The analysis dedicated to Făt-Frumos examines his symbolic origins, miraculous birth, confrontations with antagonistic forces, and the role of supernatural aids, emphasizing the direct relationship between the hero and the values of traditional Romanian society. In contrast, the study of King Arthur sheds light on his dual dimension as both hero and leader, as well as the symbolic significance of royal legitimacy, the sword Excalibur, and the chivalric ideal represented by the Round Table. **Results :** While Făt-Frumos represents the individual hero in a constant quest for moral balance and justice, King Arthur embodies the ideal of collective unity and social order. Thus, the analysis reveals a transition from the model of the folk hero to that of the royal, institutionalized hero. **Conclusions:** By comparing the two figures, we observe similarities: such as the initiatory path, supernatural intervention, and the triumph over evil, alongside clear cultural distinctions: Făt-Frumos embodies the individual hero, whereas Arthur represents the regal one. The research findings indicate that, despite originating from different cultures, both figures belong to the same archetypal pattern, demonstrating the universality of the heroic myth. Furthermore, their reinterpretation in modern culture shows that these narratives continue to be instrumental in our understanding of cultural identity and values.

Keywords: mythic hero, King Arthur, comparative analysis, Făt-Frumos

THE IMPACT OF GENERATIVE ARTIFICIAL INTELLIGENCE ON THE QUALITY OF DISCOURSE IN SOCIAL MEDIA: AN ANALYSIS OF COMMUNICATION AUTHENTICITY

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Background: In the current landscape, the rise of Generative Artificial Intelligence (GAI) on social media platforms has triggered a paradigm shift. These platforms have transitioned from spaces exclusively dedicated to human-to-human contact into hybridized ecosystems, where Generative AI models emerge as actors that directly influence interaction dynamics and online discourse. This surge in synthetic content has sparked a crisis regarding the erosion of epistemic trust, as users struggle to distinguish authentic from AI-generated material. The real impact of this phenomenon is particularly visible among vulnerable demographic groups, especially those with low technological literacy. Consequences include cognitive fatigue, blanket skepticism toward content, and epistemic injustice, where all information faces diminished credibility irrespective of source. **Objective:** This study uses an exploratory-descriptive quantitative design via an online opinion survey of 100 active Romanian social media users aged 45-60, to examine the extent to which the erosion of epistemic trust affects social media interactions and consumption habits in Romania. It tests three hypotheses: (I1) repeated exposure reduces trust, (I2) AI labeling fails to curb skepticism and (I3) human-AI transparency boosts trust. **Material and methods:** The 18-item questionnaire spans six sections covering demographics/usage habits, detection difficulty, trust/skepticism, labeling effects, blanket doubt, and collaboration benefits. The analysis employs descriptive and inferential statistics. **Results :** Preliminary findings reveal that repeated exposure to AI-generated content lowers the overall level of epistemic trust, while existing labeling systems for post provenance do not correlate directly with a reduction in skepticism. **Conclusions:** The paper advocates transparency regarding human-AI collaboration (the human-in-the-loop model) as a key strategy to mitigate these perceptions, aiming to restore authenticity and epistemic trust in the digital environment.

Keywords: social media networks, Generative Artificial Intelligence, epistemic trust, epistemic injustice

THE JOURNEY OF THE SELF IN YANN MARTEL'S LIFE OF PI

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Background: This article aims to analyze the journey of the self in Yann Martel's *Life of Pi*, starting from the idea that survival, faith, loss and resilience combined with storytelling, change and shape identity. **Objective:** The focus and goal of this study is to analyze Pi Patel's arduous journey in crossing the Pacific Ocean and how it turns out to be the defining element in Pi's process of self-discovery and identity reconstruction. His syncretic perspective on religion and loss of his family plays a crucial role in his transformation. Being stranded in the Pacific Ocean and forced to survive under extreme conditions further shapes this process. The base hypothesis for the following analysis is that the novel does not expose identity as something fixed, rigid, but as a product of environment, choices, events, and how they shape the individual according to personal perspective on things. **Material and methods:** The employed methodologies for this work rely on close reading and interpretation, symbolic analysis, trauma, and selfhood narration. Pi's symbolic relation with Richard Parker has particular attention given due to concepts such as religion and faith as sources of meaning and for the dual survival stories and the significance behind these. **Results :** As the analysis goes on, Pi's identity is revealed to be in a continuous state of alterity between imagination and reality, faith and reason, meaning and truth. These fluctuations are going to be analyzed meticulously because they are the starting point in his identity journey. Storytelling becomes a key mechanism that allows Pi to preserve his sanity along the journey and builds a stable form of personal identity in response to traumatic events. **Conclusions:** In conclusion, *Life of Pi* illustrates the journey of the self as a narrative process and how identity is shaped by a story that individuals choose to believe in, gives or takes meaning to existence.

Keywords: identity journey, trauma, religion, storytelling

THE LANGUAGE OF SENSITIVITY: AN ANALYSIS OF EUPHEMISM USAGE IN CLINICAL PRACTICE

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Background: Words play a significant role in human communication and interaction. The choice of words is important in clinical practice, and euphemisms are frequently used to communicate sensitive information and help reduce patients' anxiety. According to the Cambridge Dictionary, a euphemism is a word or phrase used to avoid saying an unpleasant or offensive word. **Objective:** The aim of this study was to gain a better understanding of how healthcare professionals use euphemisms in clinical practice, examining how often they use euphemisms versus specialized medical terms and how they perceive euphemistic expressions in communication with patients. From a linguistic perspective, the study also examines how euphemisms function as pragmatic and sociolinguistic strategies that support effective communication in sensitive contexts. **Material and methods:** To perform this study, an online survey was created and shared through social media platforms. The questionnaire collects information on participants' professional status and clinical experience, the frequency and context of euphemism use, preferences between euphemistic and specialized medical terms. Data collection is still ongoing. **Results :** Preliminary results suggest a preference for adapting medical terminology according to the emotional context, especially in the case of serious diagnoses or painful procedures. Although most respondents believe that euphemisms help protect the patient's psychological well-being, there are also opinions that warn about the risk of creating ambiguity. **Conclusions:** Most participants indicated that euphemisms play an important role in clinical communication, and that their usage and perception vary across different professional groups. As a study based on linguistic analysis, it highlights the application of pragmatic and sociolinguistic principles specific to language studies, underlining the importance of linguistics in understanding and improving communication in medical contexts. This perspective allows for a closer examination of how meaning is constructed and adapted in interactions between healthcare professionals and patients. Understanding these patterns may contribute to improving communication and adapting language to reduce patients' anxiety while maintaining clarity. Further data collection is needed in order to draw more solid conclusions.

Keywords: Euphemisms, Pragmatics, Sociolinguistic, Linguistic analysis

THE LEGACY OF JANE AUSTEN'S FEMALE CHARACTERS AND HER INFLUENCE ON CONTEMPORARY ROMANCE LITERATURE

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Background: The study aims to elaborate on how femininity has been portrayed, represented and reinterpreted across time, especially within the British literary and historical scenery of the late 18th and early 19th century, until modern age. Jane Austen's novels belong into the genre of manners and literary realism, therefore the female characters are accurately mirroring the reality of that time, and the constraints of the Regency-era. These works represent a timeless source of insight into the exploration of female identity and a relevant starting point for understanding how women were portrayed in the context of that time. Austen's vision is essential because it left a lasting influence on the theorization of the female protagonist and the contemporary representations of femininity in literature. **Objective:** The analysis is grounded in the diversity of female typologies in Jane Austen's novels. Her characters are the embodiment of paradox - challenging social pressure and gender roles while undergoing personal growth. The female protagonists often express nuanced layers of moral strength, integrity, resilience but also rationality, intellectual wit and poses subtle attributes of feminine power - the assertion of independence without direct rebellion. In addition, the focus will ultimately shift towards how these character models have influenced contemporary romance literature and how modern ideas of female identity have brought significant contribution to reshaping gender roles. **Material and methods:** close textual analysis, contextual-historical approach, contemporary resonance, feminist literary analysis **Results :** An overview of Jane Austen's contribution in shaping timeless representations of women in literature. **Conclusions:** This research demonstrates the importance of Jane Austen's insights into the construction and evolution of the female character archetypes and how such complex roles are depicted into the modern novel.

Keywords: Female protagonists, Novel of manners, Gender roles, Social norms

THE PHILOSOPHICAL DIMENSION OF „ SĂRMANUL DIONIS" BY MIHAI EMINESCU

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Background: Mihai Eminescu is one of the most important writers in Romanian literature his work is known for its deep ideas and expressive language. His work, *Sărmanul Dionis* combines fantastic elements with reflections on human life, time and identity it is influence by different philosophical ideas, including Eastern views on time and reincarnation. The text explores connections between reality and ideal and raises questions about knowledge and existence. **Objective:** This paper aims to present the main meanings of the novella *Sărmanul Dionis*, it focuses on the romantic and fantastic elements and on the important symbols in the text. On main objective is to show that Dionis is not only a fictional character, but also a symbol of the romantic spirit, defined by the desire for the absolute and the wish to escape reality. The presentation also examines how time and identity are presented **Material and methods:** The paperwork uses a qualitative method based on literary analysis, it focuses on the main themes and symbols of the text. In the study are analyzed important ideas such as time, the double, reincarnation love. The analysis also considers how these elements are connected and how they contribute to the overall meaning of the text. By examining these aspects the study offer a clear understanding of the structure and ideas of the novella. **Results :** The analysis shows that *Sărmanul Dionis* is both a fantastical and a philosophical work, the fantastic elements explore deeper ideas about human existence not only used for imagination. The main character, Dionis is presented as a romantic thinker who desires to reach the absolute but is unable to adapt to reality these creates a conflict between his inner world and external world. The presentation also shows that time and identity are not fixed, but changing unstable which reflects the character's inner struggles. **Conclusions:** The presentation shows that *Sărmanul Dionis* is more than a simple fantastic story, it is a reflection on human life, knowledge, and the limits of understanding. The author, Mihai Eminescu combines romanticism with philosophical ideas in a clear and original way. The study also highlights that the themes of time, identity, and the search for meaning are still relevant today, this makes the novella an important work for understanding both the literature and human experience.

Keywords: Romanticism, Fantastic, Identity, Time

THE POETIC UNIVERSE OF NICHITA STĂNESCU

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Background: Nichita Stănescu is one of the most influential voices in modern Romanian literature, revered for his incorporation of philosophical elements in an altogether innovative form of poetry. Among the many philosophical topics of choice, Nichita Stănescu often aimed to represent the many nuances of time. **Objective:** This paper aims to highlight the methods in which Nichita Stănescu reimagines temporal experience. Furthermore, it seeks to demonstrate how the poet transforms time from a linear and measurable concept, into a subjective one. The study aims to explore how time becomes fluid and frequently paradoxical in its dimension of existence. **Material and methods:** The argument is based on the close reading of certain poems which highlight Stănescu's understanding of time. This analysis adopts a stylistic and semantic focused on metaphor, imagery and innovation found in the body of the selected works. The interpretation is further supported by the use of relevant concepts from philosophy and modern literary theory which concern themselves with temporality, subjectivity and the poetic construction of reality. **Results :** The analysis reveals that time in Stănescu's poetry is frequently deconstructed. Linear temporality is superseded by discontinuity and the chronological aspect is replaced with simultaneity, fluidity and circularity. The poetic voice is proven to be in a constant alternation between past, present and future, dissolving their boundaries in favor of a unified field of experience. **Conclusions:** By redefining temporality, Nichita Stănescu constructs a complex lyrical universe in which existence itself is in a permanent state of negotiation with the subjective experience which underlies the poetic language of choice. As such, the following perspective suggests that time plays the central role in understanding the poet's works as a whole.

Keywords: time, subjectivity, fluidity, paradox

THE PREPOSITIONAL AND VERBAL STATUS OF THE LEXEME "A"

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Background: The Romanian language presents a series of multifunctional elements. A relevant example is the letter "a", whose variable nature creates uncertainties in determining its semantic and syntactic value. **Objective:** The paper proposes the research of prepositional uses and prepositional origins of the element "a", as well as the verbal ones, by identifying its contextual values. Additionally, it attempts to compare the classification criteria in literature, for highlighting and avoiding the overriding in grammatical values. **Material and methods:** The methodological approach consists of carrying out a theoretical and applied synthesis. The theoretical part consists of carrying out an analysis based on notions proposed by linguists and a comparative analysis of their perspectives, in order to determine the morphological and functional values of the element "a". A contrastive analysis is also presented, which aims at the differences between the uses of the mentioned element in the old and current language. The applicative part consists of the own examples and explanatory interventions illustrated in parallel with the theoretical notions. **Results :** The research into the multifunctionality of "a" begins with the verbal uses in which it is encountered. A first variant is the quality of auxiliary verb in the structure of the compound perfect. The element can also be found in the form of an invariable particle in the structure of the regional future. Regarding prepositional uses or uses of prepositional origin, we distinguish three situations in which "a" can be encountered. One of them is the lexical preposition value with two values, modal and modal-comparative, the second is that of a functional preposition for the purpose of marking the genitive and dative cases, and the last is that of a marker for the analytical form of the infinitive. **Conclusions:** The approach represents an investigation that offers the possibility of easier understanding of the multifunctionality of "a". Prepositional and verbal uses represent some of the situations that generate ambiguities of interpretation and require increased attention to its context of use.

Keywords: multifunctionality, value, analytical, grammaticalization

THE ROLE OF DIDACTIC PLAY IN THE FORMATION OF SOCIAL AND CIVIC BEHAVIORS IN PRESCHOOLERS

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Background: Educational play plays a major role in child development; it helps young children develop social and civic behaviors, demonstrating how well-organized play activities influence social bonds and integration within the group as well as in society. **Objective:** The main objective is to determine how the consistent use of educational play helps develop cooperation, respect for rules, and the assumption of responsibility. The study's hypothesis posits that children's regular participation in these games encourages communication and social skills with other preschoolers as well as with adults. **Material and methods:** The study took place over a four-week period at a preschool in Tîrgu Mureș, in the large group, which consists of 22 children, using methods such as systematic observation, pedagogical experimentation, and behavioral analysis. Activities included games for positive communication, exercises for recognizing appropriate and inappropriate behaviors, role-playing related to professions, self-control activities through following rules, collaborative tasks in pairs, and creative team activities, all adapted to the children's age and designed to encourage their interactions and active participation. **Results :** the results show an improvement in prosocial behaviors, such as empathy, cooperation, and mutual respect, while conflicts and inappropriate behaviors have decreased. Additionally, better organization in group activities and clearer role definition were observed. **Conclusions:** Educational play is the primary means through which children learn in early childhood education, greatly contributing to the balanced development of their personality and social and civic skills.

Keywords: educational play, child development, social and civic behaviors, cooperation

THE ROLE OF DRAWING IN THE DEVELOPMENT OF SOCIO-EMOTIONAL EXPRESSION SKILLS IN PRESCHOOL CHILDREN.

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Background: This study aims to measure how the systematic use of drawing as an educational activity can improve emotional expression skills in older preschoolers. The research is based on the idea that artistic activities, especially drawing, can help children develop their socio-emotional competencies by helping them identify, express, and manage their feelings. **Objective:** The main objective of the research is to evaluate the effectiveness of the program "Soul on Paper," which integrates socio-emotional education techniques, such as expressing and identifying emotions using visual language. **Material and methods:** The study implemented an experimental design, including a sample of 36 preschoolers aged between 5 and 6 years and 4 teachers. The experimental group (EG, N = 21), coordinated by two teachers, consisted of 21 kids who participated in the educational program ("Soul on Paper," MD), structured around activities that integrate drawing as a means of socio-emotional expression, based on drawing activities with emotional valences. The control group (CG, N = 15) consisted of 15 preschoolers who did not participate in the training program; the two teachers carried out activities according to the curricular requirements in Romania. In the pre-experimental and post-experimental stages, we used the assessment tool "Emotional Competence Screening" (educator form SCE-E), validated in Romania, to measure the children's level of socio-emotional expression. The collected data were processed and analyzed using the statistical software SPSS 22, allowing the identification and quantification of participants' progress from the initial to the final stage of the research. **Results :** The results support the effectiveness of systematically integrating drawing in the improvement of children's ability to recognize and express emotions, contributing to the improvement of the socio-emotional climate. **Conclusions:** The research highlights the connection between artistic skills and socio-emotional education in optimizing the affective and relational environment of older preschoolers.

Keywords: Drawing, Socio-Emotional, Development, Preschool

THE ROLE OF THEMATIC STORY IN THE DEVELOPMENT OF LANGUAGE AND CREATIVITY IN PRESCHOOL CHILDREN

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Background: This research analyzes the role of thematic story in the development of language and creativity in preschool children. The study aims to highlight the extent to which storytelling activities, guided dialogue, and storytelling based on images contribute to improving verbal expression and stimulating the imagination of children in the younger preschool group. **Objective:** To analyze the role of thematic storytelling in the development of language skills in preschool children. To investigate how storytelling activities, guided dialogue, and image-based storytelling contribute to improving children's verbal expression. To assess the impact of storytelling activities on stimulating creativity in younger preschool children. To observe and measure improvements in sentence organization, clarity of expression, and originality of ideas following the educational intervention. To determine the effectiveness of thematic storytelling as an interactive pedagogical strategy, adapted to the age characteristics of preschool children. **Material and methods:** The research has a qualitative, descriptive character and was conducted in an urban kindergarten. The sample consisted of 19 preschool children, aged between 4 and 5 years, out of a total of 22 children enrolled in the group. The educational intervention was carried out over a period of three weeks and included activities such as a verbal role-play game (If I were Santa Claus...), the oral narration of a legend (The Legend of Rudolf), accompanied by open-ended questions, as well as storytelling activities based on pictures using illustrated boards. **Results :** The data were collected through direct observation and by analyzing the children's verbal responses, focusing on their ability to formulate sentences, the clarity of their expression, and the manifestation of creativity in expressing ideas. The results obtained following the initial and post intervention evaluation of language and creativity indicate improvements in verbal expression, sentence organization, and creative expression. The children showed a high level of involvement in storytelling activities and provided varied and original responses. **Conclusions:** The conclusions of the study highlight that activities based on the thematic

story, used in an interactive manner and adapted to the age characteristics of preschool children, contribute significantly to the development of oral language and to the stimulation of creativity. The thematic story thus represents an effective pedagogical strategy in early childhood education.

Keywords: thematic story, language, Creativity, Preschool children

THE ROMANIAN AVANT-GARDE: BETWEEN REBELLION AND CANONIZATION

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Background: Avant-Garde materialized in the early 20th century, manifesting across literature, visual arts, theatre and film as a composite and radical cultural phenomenon. By definition, it is characterized as a break from tradition, rejecting already established aesthetic paradigms and reshaping the dynamic between creator, text and audience. This movement introduced a new understanding of artistic expression, a perspective that is characterized by negation, experimentation and the reconfiguration of cultural values. **Objective:** The present paper intends to analyze the defining characteristics, principles and thematic diversity of avant-garde movements. The focus of this study lays in understanding the radical departure from tradition, the experimental nature and the impact on literary and artistic expression that avant-garde artists bestowed upon literature as a whole, with emphasis on the Romanian literature. **Material and methods:** The study employs a qualitative, analytical approach through the usage of theoretical perspectives and critical interpretations from literary critics. It examines representative avant-garde works, tendencies and authors, as well as the underlying principles and thematic structures that define the artistic movement. **Results :** The analysis highlights that avant-garde is fundamentally characterized by a spirit of negation, experimentalism and a search for absolute novelty. This artistic movement promotes the destruction of traditional literary structures all while embracing absurdity, randomness and the unconscious. All these elements aim at redefining artistic creation as a process of innovation and disruption. As such, five dominant traits are identified: the negating spirit, the crises of literature, the ludic dimension, textual deconstruction and the primacy of existence. The movement encloses various subcurrents such as Dadaism, Constructivism, Futurism, Surrealism, each contributing with unique methods and perspectives; these subcurrents share a common goal of overturning classical poetics. Romanian avant-garde developed through several stages, closely linked to influential literary magazines, it included notable figures such as Tristan Tzara, Geo Bogza and Gellu Naum. **Conclusions:** In modern culture, avant-garde represents a transformative force, redefining artistic expression through radical experimentation and rejection of pre-established norms and conventions. Although initially met with resistance and misunderstanding, its innovative approaches reshaped literature and the arts, paving the way for new forms of creativity and perception. Its legacy lies in its enduring emphasis on freedom of expression, the exploration of the unconscious and the continuous reinvention of artistic language.

Keywords: Avant-garde, anti-tradition, literary innovation, artistic radicalism

THE TEACHING OF THE GERUND AT THE MIDDLE SCHOOL LEVEL

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Background: The proposed study addresses the challenges of teaching the gerund in lower secondary education, from the perspective of appropriate linguistic characteristics and the difficulties encountered by students during the learning process. **Objective:** The objective of this paper is to highlight the importance of the gerund in the development of cognitive, linguistic, and communication processes, and to suggest teaching methods for its effective instruction at the lower secondary level, aimed at increasing student motivation and engagement. **Material and methods:** The methodology includes the analysis of the school curriculum, Romanian language and literature textbooks, academic articles, curriculum analysis, reference materials, text analysis (both literary and non-literary), and teaching processes that involve the active participation of students in classroom activities. The didactic approach offers a modern, student-centered perspective through strategies and methods based on collaboration and discovery. This study also focuses on correcting systematic errors, analyzing the underlying factors and causes of each student's difficulties, and providing guidelines for overcoming and preventing these obstacles, with the aim of ensuring progress. **Results :** The results obtained do not only include grammatical correction, but also the students' ability to use the gerund appropriately in both oral and written contexts. The paper

is structured in two parts: a theoretical section, dedicated to a detailed presentation of the gerund from different perspectives, grammatical (morphological and syntactic), semantic, stylistic, and didactic, and a practical section, focused on exercises, teaching methods, and activities suited to the level of understanding of lower secondary students. **Conclusions:** The conclusions of the study emphasize the importance of a structured and contextualized approach to the non-personal verb form of the gerund, combining theoretical and practical analysis. This facilitates the understanding of the gerund's functions, the consolidation of acquired knowledge, and its application in various communication contexts. The role of the study is to provide teachers with practical and useful guidelines for lesson planning and for adapting activities to each student's level, thereby encouraging an effective lower secondary education focused on long-term results.

Keywords: Gerund, Didactics, Language instruction

TRANSFORMATION AND CONTINUITY IN CONTEMPORARY ARTISTIC TERMINOLOGY: THE IMPACT OF DIGITAL ART

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Background: This study examines the impact of the development of digital art on contemporary artistic terminology from the perspective of specialised linguistics. Considering that the digital medium not only introduces new concepts but also transforms traditional terms, the research explores the idea that this evolution can be understood as a form of continuity and transformation rather than a rupture between earlier artistic terminology associated with traditional art forms and modern artistic terminology emerging in digital art. In the context of the new artistic expansions in terms of media, migration to, or even fusion with the digital environment, artistic terminology has undergone many changes, adaptation and hybridisation. **Objective:** The study aims to explore how the interaction between tradition and innovation influences the transformation of artistic terminology, highlighting the idea of continuity rather than rupture between traditional and digital artistic language. **Material and methods:** The paper adopts a predominantly practical approach relying on discourse analysis and a comparative examination of terminological forms across different artistic media and historical contexts in the development of art. Particular attention is given to the mechanisms of term formation, adaptation and reshaping. The corpus consists of texts drawn from both traditional and digital artistic contexts, sourced from the artistic and linguistic communities. **Results :** The findings indicate that artistic terminology has undergone processes of adaptation and hybridisation in response to digital transformation. Traditional terms are frequently recontextualised within digital frameworks, while new terms emerge through technological influence. This interaction reflects a broader linguistic tendency toward flexibility and innovation, highlighting the responsiveness of specialised language to cultural and technological change. **Conclusions:** The evolution of artistic terminology can be understood as a process of continuity and transformation, shaped by the interaction between traditional and digital artistic practices and by the broader changes in media and technology.

Keywords: Artistic terminology, Digital medium, Art community, Comparative terminology

TRANSLATING TABOO - A MATTER OF FREEDOM AND/OR ETHICAL CONSTRAINTS

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Background: What this study aims to achieve is to highlight the role that the translator holds when handling texts that people may consider forbidden or taboo in nature. **Objective:** This study explores the ways in which the act of translating such controversial works pushes the boundaries of constraints, fidelity, and ethics. It will also look upon the effect that the translation itself has upon its translator. **Material and methods:** The methodology used to reach the expected results will include comparative analysis of the original text in contrast with its translation, with a focus on the rendering of taboo themes in the target language. It will look at controversies, regarding either the translation or the translator themselves, and, of course, cultural impact. **Results :** The working hypothesis is that translation of such language, terms, and/or themes, often viewed negatively, requires a steady balance between maintaining the fidelity of the original text and the adherence to the social norms of the target language's culture group. **Conclusions:** It is my hope that this study will help open the door to more discussion regarding the topic of taboo and its translation, emphasising how the translator is the mediator between cultures, regardless of the type

of text in question.

Keywords: translation, taboo, ethics, controversy

TUDOR ARGHEZI- THE LUDIC DIMENSION IN HIS WORK

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Background: The topic addressed in my paper is the concept of the ludic in the works of Tudor Arghezi.

Objective: I will analyze both elements related to language and those focused on the textual substrata. Regarding language, it is essential to point out the limits the poet explores through each stylistic device, as well as through so-called wordplay. Concepts such as the aesthetics of the ugly will also be revisited, along with its relevance in the context of the ludic. **Material and methods:** The poems on which I will focus are "Flori de mucigai", "Testament", and "Psalmii", each of them featuring a central element that will be analyzed from a different perspective. **Results :** In Arghezi's work, the ludic is both a form of knowledge and a means of concealing oppressive feelings of helplessness, even of damnation-feelings that the author frequently brings back to the reader's attention. In "Psalmii", emphasis is placed on a different kind of play, one that oscillates between faith and rebellion, as it is grounded in the central opposition between the sacred and the profane. **Conclusions:** In conclusion, the entire study focuses on Arghezi's literary style from the perspective of the ludic approach in his work.

Keywords: ludic, play, poetry, language

USING MODERN TECHNOLOGIES IN TEACHING CHILDREN'S LITERATURE

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Background: In the current educational context, modern technologies have become essential tools that enable the teacher to address the entire teaching-learning-assessment process in a different way. The use of digital resources in literature classes has given primary school teachers the opportunity to interact with literary texts in innovative ways. By accessing a variety of interactive digital educational resources, teachers can stimulate students' creativity and critical thinking and actively involve them in the learning process. **Objective:** The main objective of this paper is to analyse how modern technologies influence students' performance in teaching children's literature at the primary level. The working hypothesis is based on the assumption that the use of technology in primary school significantly improves students' understanding of the message and reading performance. **Material and methods:** In conducting the study, we used an experimental pedagogical model to examine students' performance before and after the implementation of technology as a teaching tool in the instructional-educational process. **Results :** The introduction of technology as a teaching tool has led to a significant increase in test scores among students in the experimental group. **Conclusions:** The findings show that technology plays an important role in the learning process, positively impacting it.

Keywords: impact of technology, literature, interactive methods, digital education

WHEN A BOOK BECOMES EVIDENCE: LITERARY TRIALS FROM FLAUBERT TO ARGHEZI

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Background: There are moments in cultural history when a book ceases to be read as literature and begins to be treated as evidence. In such moments, the courtroom becomes a space where style, desire, irony, and dissent are no longer interpreted aesthetically, but morally and politically. The trials surrounding Gustave Flaubert's *Madame Bovary*, James Joyce's *Ulysses*, and Tudor Arghezi's "*Baroane!*" reveal three distinct ways in which literary writing came under legal or punitive scrutiny. These cases matter because they show that literature is often judged not only for what it says, but for what it is *believed to awaken, disturb, or endanger*. **Objective:** This study aims to examine *why literary texts become objects of prosecution or repression* and *how legal and political authority attempt to transform literature into proof of obscenity, immorality, or subversion*. **Material and methods:** The

paper uses a comparative humanities approach, combining close reading with contextual analysis of three emblematic cases: *Flaubert*, *Joyce*, and *Arghezi*. It examines the relation between literary form and accusation, focusing on the language of the charge itself: what is isolated, what is feared, and what kind of reader the authorities imagine. **Results** : The comparison reveals that literary repression follows recurring patterns. *First*, power removes fragments from the living body of the text and presents them as incriminating evidence. *Second*, literature is judged less by artistic structure than by its presumed moral or political effects. *Third*, these trials expose different anxieties of authority: in Flaubert and Joyce, the fear of obscenity and corrupted sensibility; in Arghezi, the fear of direct verbal resistance. At the same time, the study shows that *prosecution can paradoxically intensify a work's historical force by making visible the very power that seeks to silence it*. **Conclusions**: When a book becomes evidence, the trial concerns the right to imagine, offend, and speak beyond the power. These cases demonstrate that literary trials do not censor texts, they reveal the moral and political boundaries through which a *society tries to govern language itself*.

Keywords: literary trials,, censorship,, obscenity,, repression.

'IT'S ONLY CRAZY UNTIL YOU DO IT'. THE LANGUAGE OF EMPOWERMENT IN NIKE'S 2019 CAMPAIGN

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Background: Nike, as a widely established clothing brand, has always made it its mission to inspire and support athletes from all over the world, constantly promoting its inclusive and sustainable approach to sport and sport attire. In 2019, its campaign, 'Dream crazier' addressed the prevalent gender bias from which women inside the sports world suffer. Consequently, the advertisement concentrates on the importance of acknowledging the merits of female athletes, while advocating for their liberty of self-actualization and self-expression. **Objective:** This study aims to shed some light on and analyse the pragmalinguistic strategies employed by the discourse used in the 'Dream crazier' campaign, as they highlight and, at the same time, undermine the mainstream discriminatory mindset surrounding women in sports. **Material and methods:** The main material that was operated on was the audio-visual support of the campaign, using pragmalinguistic strategies that emphasized elements such as the language exercised inside the discriminatory discourse - with its subdivisions: syntax, grammar, lexis - and the visual elements sustaining the main viewpoint of the advertisement, i.e. transforming predominant, degrading discussions in regards to women into a motivational, endorsing message. **Results** : The analysis highlighted the undertones and connotations ubiquitous inside the discourse presented, elements that ultimately persuade the female consumer into believing that, indeed, it is only crazy until you do it. Moreover, the study shows that there is a clear metamorphosis from derogatory speech ('dramatic', 'nuts', 'delusional') towards a discourse of empowerment surrounding women and their 'place' inside the world of sports. **Conclusions:** While debunking prevalent myths surrounding women's ability of succeeding in a male-dominated field, while converting general negative bias into positive affirmations, sarcastically focusing on the buzzwords overused in relation to women's position inside the world of sports, appealing to emotion, and delivering a motivational message towards all female athletes, the 2019 Nike's campaign proposes a very relevant discussion through its overt and covert pragmalinguistic strategies, promoting its motto: 'It's only crazy until you do it'.

Keywords: language, empowerment, pragmalinguistic strategies, advertisement

"A STUDY ON THE ROLE OF SOCIODRAMATIC PLAY IN THE EMOTIONAL REGULATION OF PRESCHOOLERS."

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Background: This study aims to investigate the extent to which the systematic application of sociodramatic play contributes to the emotional regulation of preschool children, through activities specifically made for this purpose. **Objective:** The purpose of the research is to evaluate the effectiveness of the program "In the World of Emotions" (ILE), focused on socio-emotional development and the formation of desirable behaviors. **Material and methods:** The study employed an experimental design with a control group, conducted on a sample of 38 preschool children aged between 4 and 5 years. The experimental group (EG), coordinated by two teachers and consisting of n = 20

preschoolers aged 4-5, implemented the ILE program. In contrast, the control group (CG), consisting of $n = 18$ preschoolers of the same age, participated in activities aligned with curricular requirements, without the implementation of a program specifically focused on social and emotional development. In both the pre- and post-experimental stages, we administered the "Emotional Competencies Screening" (ECS) for teachers, developed by Cognitrom and validated for the Romanian population, which measures children's social and moral skills. The statistical processing of the data was carried out using the SPSS software. **Results** : The comparative analysis of pre- and post-experimental data highlights a significant improvement in emotional and social abilities within the experimental group compared to the control group. Children who participated in the ILE program demonstrated considerable improvements in emotional regulation and in the adoption of positive prosocial behaviors. **Conclusions**: The results support the effectiveness of sociodramatic play as a pedagogical strategy in early education. The study argues that the implementation of structured programs focused on socio-emotional development substantially contributes to emotional regulation and the formation of adaptive behaviors.

Keywords: socio-emotional, emotional regulation, sociodramatic play, early education

"MAGICO-RELIGIOUS PRACTICES IN ROMAN DACIA: DEFIXIONES"

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Background: Magic-religious practices were a fundamental part of daily life in the Roman world, including in the province of Dacia. Among these, curse tablets (defixiones) were often used by individuals seeking to influence outcomes related to love, personal conflicts, justice, or theft. Usually inscribed on lead sheets, these objects were deposited in liminal or sacred settings—such as graves, wells, or sanctuaries—reflecting a belief in divine or supernatural intervention. The close relationship between religion and magic in Antiquity makes distinguishing between them difficult, particularly in a culturally diverse province like Roman Dacia, known for its strong syncretic influences. **Objective:** The aim of this study is to examine the nature, function, and importance of curse tablets in Roman Dacia, focusing on their role within wider magic-religious practices. The research also aims to highlight the relationship between magic and religion, as well as how these practices reflect the mentalities and everyday concerns of the provincial population. **Material and methods:** The study relies on archaeological and epigraphic evidence, including an analysis of relevant artefacts such as the curse tablet from Apulum and the gold lamella from Dierna. Comparative methodology is used to place these discoveries within the broader context of the Roman Empire, highlighting parallels with similar findings from other regions, particularly Bath. The approach combines artefact analysis with the interpretation of inscriptions and historical background. **Results** : The research shows that curse tablets were commonly used in Roman Dacia and were part of a wider, empire-wide phenomenon. The artefacts analysed demonstrate the practical use of magic-religious beliefs and highlight the syncretic nature of religious life in the province, where Roman, local, and Eastern elements coexisted. Additionally, these practices offer valuable insights into everyday concerns and the psychological need to manage uncertainty in life. The findings confirm that magic and religion worked together as interconnected parts of a complex belief system, reflecting both individual anxieties and the cultural diversity of Roman provincial society. **Conclusions:** Defixiones were a fairly common practice in the Roman world, and although they belong to the 'darker' side of the collective mentality, they offer a clear snapshot of ancient spiritual aspects.

Keywords: Dacia, Curse tablets, Religion, Magic

"THE IMPACT OF EDUCATIONAL APPROACHES FOCUSED ON DEVELOPING EXECUTIVE FUNCTIONS FOR SUCCESSFUL SCHOOL INTEGRATION."

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Background: The present study investigates the impact of systematic interactive activities aimed at developing executive functions in preschool children, with a focus on strengthening those functions that need to be consolidated prior to the beginning of formal schooling. The research is based on the premise that certain systematic educational approaches can significantly accelerate the maturation of executive functions, thereby facilitating the optimal adaptation of six-year-old children to school requirements. **Objective:** This research aims to evaluate the effectiveness of adopting the program "Start for School Success" (SSS), designed to improve

preschoolers' performance in tasks that involve three fundamental components of executive functions: working memory, inhibitory control, and cognitive flexibility, understood as abilities related to maintaining and actively processing information. The program integrates differentiated pedagogical intervention strategies. **Material and methods:** The study adopted an experimental design with a control group, including a sample of 42 children aged 5-6 years. The experimental group (EG) consisted of 20 preschoolers who participated in the intervention program. The control group (CG) included 22 children who followed regular educational activities according to the curricular requirements in Romania, without the implementation of the intervention program. In the pre- and post-experimental stages of the study, the level of executive function development was assessed through the Childhood Executive Functioning Inventory (CHEXI) questionnaire, an internationally validated psychopedagogical instrument, also used in Romania to measure the development of executive functions in preschool children.

Results : The data were processed using the statistical software SPSS 22, confirming the effectiveness of the SSS program in achieving its objectives. The results highlighted significant score differences between the experimental group and the control group in the post-experimental stage. **Conclusions:** The findings confirm the effectiveness of the SSS program and support the need for the systematic implementation of activities focused on the development of executive functions in preschool educational practice.

Keywords: executive functions, working memory, inhibitory control, cognitive flexibility

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