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THE SOCIETY FOR INNOVATION, DEVELOPMENT AND MEDICAL EDUCATION - SideMED -

GEORGE EMIL PALADE UNIVERSITY OF MEDICINE, PHARMACY,
SCIENCE, AND TECHNOLOGY OF TÂRGU MUREȘ

CORDX MASTERCLASS 2026

Târgu Mureș, Romania
15th-17th of May 2026

BOOK OF ABSTRACTS

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REPRODUCIBILITY AND BIOMECHANICAL IMPACT OF SPECIMEN THICKNESS MEASUREMENT PROTOCOLS

Șomfălean Antonia-Maria¹, Muresan Adrian Vasile¹, Ciucanu Constantin Claudiu¹, Russu Eliza¹, Arbanasi Emil-Marian¹

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Background: Precise arterial wall thickness measurement is fundamental for vascular biomechanics, constitutive modeling, and risk stratification. Even minor inaccuracies in thickness assessment can introduce substantial systematic bias into biomechanical analyses.

Objective: To assess the reproducibility and biomechanical implications of different arterial wall thickness measurement protocols, and to determine the influence of measurement technique and operator experience on obtained values.

Material and methods: This methodological study included porcine arterial specimens harvested from the thoracic aorta, carotid arteries, and coronary arteries. Tissues were excised from standardized anatomical regions to reduce inter-sample variability. Wall thickness was measured using two devices: a digital vernier caliper (Multicomp PRO MP012475) and a dedicated digital thickness gauge (Mitutoyo 547-500S, Kawasaki, Japan). Subsequently, specimens underwent uniaxial tensile testing using the BioTester® CellScale 5000 at 50% stretch. Measurements were performed under standardized laboratory conditions by operators with different levels of experience. This research was funded by George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureș, Romania, grant no. 170/2/09.01.2024.

Results: Thickness values varied according to the measurement protocol, with the greatest dispersion observed when using caliper-based techniques on small-caliber coronary specimens. The dedicated thickness gauge demonstrated the lowest intra- and inter-operator variability and the highest reproducibility across all vessel types. Differences in measured thickness significantly affected derived biomechanical parameters, with thinner recorded values resulting in higher calculated wall stress and altered estimates of Young's modulus. Operator experience had a greater impact on caliper-based measurements than on gauge-based measurements.

Conclusions: Arterial wall thickness measurements are strongly influenced by the selected protocol, particularly in small vessels and when performed by less experienced users. A dedicated thickness gauge provides superior reproducibility and minimizes operator-dependent variability. Nevertheless, digital calipers may remain a reliable alternative when standardized measurement protocols are rigorously applied.

Keywords: Biomechanics, Digital vernier caliper, Digital thickness gauge, thickness, protocols

HPV VACCINATION RATES AND DETERMINANTS OF VACCINE HESITANCY AMONG MEDICAL STUDENTS

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Background: Human papillomavirus (HPV) infection remains a leading cause of cervical cancer, despite the availability of highly effective vaccines. In Romania, HPV vaccination coverage continues to be suboptimal, highlighting the need to better understand determinants of vaccine uptake, particularly among future healthcare professionals.

Objective: This study aimed to assess the level of knowledge, attitudes, and HPV vaccination rates among medical students, as well as the factors influencing vaccination decisions.

Material and methods: We conducted a cross-sectional study including 162 medical students (mean age 22.8 ± 2.35 years), using a structured questionnaire to evaluate knowledge, sources of information, vaccination status, and perceived barriers.

Results: Awareness of HPV infection and vaccination was nearly universal (99.4%), with most participants reporting high levels of knowledge and correctly identifying major transmission routes and HPV-related conditions. Despite this, only 56.2% of respondents reported being vaccinated. Among unvaccinated students, the most frequently reported barriers included cost, insufficient information, concerns about adverse effects, and lack of confidence in vaccine efficacy. Medical professionals (67.9%), the internet (56.8%), and university courses (51.2%) were the main sources of information. Importantly, 32.1% of respondents expressed willingness to receive the vaccine following the implementation of free vaccination programs.

Conclusions: Although future healthcare professionals are expected to promote vaccination, a substantial proportion remain unvaccinated, highlighting a gap between knowledge and practice. This finding underscores the persistence of vaccine hesitancy even in highly educated populations. Targeted educational interventions and improved access to vaccination may help increase uptake.

Keywords: HPV, cervical cancer, vaccination, vaccine hesitancy, medical students

DISEASE MODIFYING THERAPIES SWITCHING PATTERNS IN MULTIPLE SCLEROSIS

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Background: Multiple sclerosis is characterized by inflammatory activity manifested by clinical relapses that interact with chronic neurodegenerative processes which contribute to disability progression over time. The development of disease-modifying therapies (DMTs) represents an important therapeutic advance in modern neurology. These therapies primarily aim to reduce inflammatory activity, decrease relapse frequency, and slow the accumulation of disability.

The first approved DMT for MS was interferon beta. Based on individual disease activity and initial treatment response, treatment decisions may follow an escalation strategy—starting with moderate efficiency (ME) therapies and switching to higher efficiency (HE) therapies upon breakthrough disease activity—or an induction strategy, initiating a HE DMT from the onset in patients with aggressive MS.

Objective: To analyze treatment switching patterns across multiple lines of DMTs in patients with multiple sclerosis (PwMS).

Material and methods: The study was conducted in the 1st Neurology Clinic of the Emergency County Hospital of Târgu Mureș. We analyzed the entire database consisting of 690 PwMS, based on their respective DMTs. Patients were classified according to sequential lines of treatment (DMT1–DMT4). Treatments included medium efficiency DMTs: interferons, glatiramer acetate, sphingosine-1-phosphate receptor modulators, dimethyl fumarate, and teriflunomide, and high efficiency DMTs: natalizumab, anti-CD20 therapies (ocrelizumab and ofatumumab), and cladribine. Treatment switching patterns were analyzed using Sankey diagram visualization to illustrate therapeutic transitions between treatment lines. Descriptive statistical methods were used to analyze therapy distribution and switching frequencies.

Results: From the analysis of the graph, 230 patients among those receiving injectable therapies as the first line of treatment were switched to teriflunomide (n=57) and HE treatments such as natalizumab and anti-CD20 therapies. There was a continued shift toward third-line therapy, with an increasing use of anti-CD20 agents and S1P modulators, alongside ongoing transitions from ME to HE treatments.

Conclusions: A progressive shift toward HE therapies was observed across successive treatment lines in PwMS.

Keywords: multiple sclerosis, Sankey diagram, treatment switching

THE LAZARUS PHENOMENON: INEVITABLE BRAIN DAMAGE OR POTENTIAL FOR FULL RECOVERY?

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Background: The Lazarus phenomenon, also known as autoresuscitation, is the return of spontaneous circulation (ROSC) following an unsuccessful cardiopulmonary resuscitation (CPR). This typically occurring within 10 minutes after stopping CPR. Due to this period of cerebral hypoxia, patients may sustain significant neurological damage.

Objective :The primary objective of this review is to address the following clinical question: "Among patients who survive to hospital discharge following the Lazarus phenomenon, what is their neurological outcome? Is a full recovery possible?"

Materials and methods :The PubMed database was searched to identify relevant cases and studies, using the keywords and Boolean operators. We also manually screened the reference lists of the included studies to find any additional literature. This systematic review was conducted in accordance with the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines. We assessed study quality using the Newcastle-Ottawa Scale (NOS), assigning scores from 0 to 9, and evaluated the certainty of evidence for all outcomes using the GRADE framework.

Results :Our interest was in the case reports or studies that followed the neurological outcome of patients who experienced the Lazarus phenomenon. Therefore, out of the 81 unique cases identified between 1982 and 2026, we found that up to 35% of the patients who experienced a delayed ROSC survived to hospital discharge. Remarkably, among these survivors, up to 85% were discharged with a Cerebral Performance Category (CPC) score of 1 or 2, which indicates minimal deficits or a complete recovery.

Conclusion : Although this event is extremely underreported due to medicolegal implications, it is estimated that up to 50% of healthcare providers encounter it at least once in their careers. Regarding the patients, evidence demonstrates that they can survive to hospital discharge with minimal deficits or even achieve a full neurological recovery.

Keywords: Lazarus phenomenon, neurological outcome, full recovery

HOW HIGH IS ANTIMICROBIAL RESISTANCE IN HEALTHCARE-ASSOCIATED INFECTIONS?

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Background: Antimicrobial resistance in healthcare-associated infections (HAIs) is a global public health problem.

Objective: The aim of this study was to analyze the demographic, clinical and paraclinical characteristics of the patients with confirmed HAIs.

Material and methods: A retrospective observational study was conducted, including 192 patients with 242 confirmed infections, between 2019-2024, using data from the Public Health Department database, Târgu-Mureş.

Results: Among all patients, 36% were women and 64% were men with a Mean age of 67.61±12.86. Regarding the medical history, 84% of patients had documented prior antibiotic therapy and all of them had at least one comorbidity. Some patients had invasive procedures, 151 had central venous catheter and 176 required mechanical ventilation. For the microbiological examination the most frequently collected specimen was tracheal aspirate (53.31%), followed by purulent secretions (16.5%). The most frequently isolated bacteria was *Acinetobacter baumannii* (n=82; 33.9%), followed by *Acinetobacter junii* (n=55; 22.7%) and *Acinetobacter baumannii* Multidrug Resistant (MDR) (n=46; 19%). *Acinetobacter baumannii* infection was statistically significantly associated with increased mortality rate (p=0.006), as were *Acinetobacter baumannii* Carbapenem Resistant (CR) (p=0.01) and *Acinetobacter junii* (p=0.0001). *Acinetobacter baumannii* was associated with significant resistance to amikacin (p=0.0001), cefepime and ceftazidime (p=0.0001), ciprofloxacin and levofloxacin (p=0.0001 / p=0.02), imipenem and meropenem (p=0.0001), piperacillin (p=0.0001).

Conclusions: Due to increasing drug resistance, HAIs represent a challenge for the healthcare system, associated with increased morbidity and mortality.

Keywords: Public Health, HAIs, MDR, *Acinetobacter baumannii*

RELIGIOUS DIVERSITY AND ETHICAL PERCEPTIONS OF ORGAN TRANSPLANTATION

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Background: Organ transplant represents one of the most complex subjects in modern medicine. Organ donation perspective is influenced by a complex array of variables.

Objective: To identify associations between religious beliefs and organ donation perspectives.

Material and methods: The study was designed as a cross-sectional observational analysis. Data were collected using an online questionnaire distributed via social media, comprising 16 items addressing general demographic characteristics, religious beliefs, perceptions of the healthcare system, and attitudes toward organ transplantation. The overall cohort was divided into three groups based on religious affiliation: Romanian Orthodox Christian, Romanian non-Orthodox Christian and atheists/agnostics. Data processing and statistical analysis were conducted using Python 3.7 programming language in the JupyterLab environment.

Results: The cohort consisted of 908 respondents: 494 Romanian Orthodox Christians, 355 Romanian non-Orthodox Christians, and 59 religiously unaffiliated participants.

The strongest associations were found between the two Christian groups regarding familiarity with their church's perspective on organ transplantation ($p < .001$), with non-Orthodox Christians reporting greater familiarity than Orthodox believers (57.5% vs 30.4%). Compared to non-Orthodox Christians, Orthodox Christians also showed higher willingness to potentially donate to a related person (+10.4%) and to unknown recipients with different beliefs (+14.2%; $p < .001$), as well as higher trust in the medical system (+5.2%; $p = .0137$) and better understanding of the organ donation process (+10.6%; $p < .001$).

Conclusions: Orthodox Christians may demonstrate a higher willingness to donate, a tendency potentially supported by their higher level of trust in the healthcare system and better understanding of the organ donation process.

Keywords: transplant, religion, spirituality, bioethics

CHEMOTHERAPY-INDUCED CYTOPENIAS IN ONCOLOGY PATIENTS

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Background: Cytopenias are among the most common complications of chemotherapy, significantly impacting treatment outcomes and overall prognosis in oncology patients.

Objective: This study aimed to evaluate the incidence of chemotherapy-induced cytopenias, identify associated risk factors, and assess their impact on clinical evolution and hospitalization.

Material and methods: A retrospective study was conducted on a cohort of 74 oncology patients admitted to the Clinical Department of Medical Oncology and Radiotherapy of Mureş County Clinical Hospital between 2020 and 2023. Demographic, clinical, hematological, and biochemical parameters were analyzed, along with chemotherapy regimen characteristics. Cytopenias were classified based on the affected cell line and severity. Statistical analysis included Chi-square and Fisher's exact tests, with $p < 0.05$ considered statistically significant.

Results: Anemia and neutropenia were the most frequent cytopenias observed. Neutropenia frequently occurred in association with other cytopenias, predominantly as bicytopenia and pancytopenia, suggesting a global myelosuppressive effect. Most patients presented with advanced-stage malignancies and received chemotherapy regimens with moderate to high myelosuppressive risk. High-risk regimens were significantly associated with an increased incidence of severe neutropenia. Bicytopenias involving neutropenia were significantly correlated with hepatic and renal dysfunction ($p < 0.05$), indicating systemic toxicity. Anemia was significantly associated with malnutrition ($p = 0.036$), highlighting the role of nutritional status in hematological tolerance. In patients without pre-existing chronic kidney disease, cytopenias were significantly associated with newly developed organ dysfunction ($p = 0.0003$). Febrile neutropenia was identified in 10.81% of patients and was associated with the longest duration of hospitalization, reflecting increased clinical burden.

Conclusions: Chemotherapy-induced cytopenias reflect systemic toxicity, with frequent overlap between hematological impairment and organ dysfunction. Their severity is primarily driven by the intensity of chemotherapy regimens and patient-related factors, underscoring the need for individualized risk assessment and supportive management strategies.

Keywords: cytopenias; chemotherapy; neutropenia; hematological toxicity; oncology patients

THE KEY TO MEDICAL SUCCESS DOCTOR PATIENT RELATIONSHIP

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Background: Family doctor has a crucial role in active and long-term monitoring for each of his patients, so their interaction represents an essential component for research.

Objective: The main objective of this study was to assess the family doctor-patient relationship, seen as a foundation for adherence to the prescribed treatment.

Materials: In the context of this cross-sectional study, the data were collected using an active method-a psychosocial and anonymous questionnaire. It was applied to a sample consisting of 100 people who respected the inclusion criteria- to be registered with a family doctor, representing the target group.

Results: The results highlight that 56% of participants have described their relationship with doctor as being based on respect and empathy, while 41%- a good one regarding the communication. The majority reported they put their trust in their doctor. The communication represented a significant factor to our study, 80% specifying that the medical language was adapted to their level of understanding. 88% of them admitted they always respect the medical indications about treatment. When we asked "What level of importance do you consider that family doctor-patient relationship has in your own healing?", 94% answered "very high/high".

Conclusion: Following this implemented study, it results that the relationship between patient and family doctor has a strong impact both on treatment adherence and manifesting trust in medical acts.

Keywords: adherence, treatment, doctor, patient, trust

COMPARATIVE EVALUATION OF LARGE LANGUAGE MODELS IN PROVIDING STROKE-RELATED INFORMATION: COMPLETENESS AND ACCURACY ACROSS ENGLISH AND ROMANIAN QUERIES

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Background: Large Language Models (LLMs) represent a novel means of educating patients and caregivers, already serving as an important source of medical information with potential to influence medical decision-making. However, their reliability in providing accurate information about symptoms and treatments remains insufficiently studied, particularly in time-critical conditions such as stroke, where inaccurate information may delay care and worsen outcomes.

Objective: To assess the completeness and accuracy of responses generated by five LLMs — ChatGPT, Claude, Gemini, DeepSeek and Copilot — when answering questions about stroke in English and Romanian.

Material and methods: Two scenarios were designed to evaluate model responses: Scenario A involved a single, general question about stroke; Scenario B consisted of 45 specific questions addressing distinct aspects of the condition. Both were tested in two languages. Responses were assessed using an evidence-based quality benchmark, with scores ranging from 0 to 10.

Results: In Scenario A, English-language completeness scores were: 3.3 (ChatGPT); 7.3 (Claude); 3.8 (Gemini); 6.2 (DeepSeek); 1.8 (Copilot). Mean value: 4.5. The respective Romanian-language completeness scores were: 3.6; 7.3; 3.3; 5.1; 1.8. Mean value: 4.2. Accuracy scores in English were 6.0; 7.3; 5.9; 6.8; 6.9. Mean value: 6.6. The corresponding Romanian accuracy scores were: 5.3; 7.3; 7.0; 6.7; 5.7. Mean value: 6.4. In Scenario B, accuracy scores for English-language queries were: 9.6; 8.3; 6.4; 9.1; 9.3. Mean value: 8.6. The corresponding Romanian-language accuracy scores were: 8.6; 8.8; 9.0; 9.6; 9.0. Mean value: 9.0.

Conclusions: LLM performance was moderate in Scenario A but improved markedly in Scenario B. ChatGPT and DeepSeek demonstrated a slight advantage. Performance was broadly comparable between English and Romanian, with slightly higher accuracy for Romanian in Scenario B. Patients should formulate specific, targeted questions to obtain more accurate responses. For safety, LLMs should complement rather than replace professional medical consultation.

Keywords: Large Language Models, artificial intelligence, stroke, completeness, accuracy

COMPARATIVE EVALUATION OF RAPID PSYCHOACTIVE SUBSTANCE TESTING AND CONFIRMATORY TOXICOLOGICAL ANALYSES IN MEDICO-LEGAL PRACTICE

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Background: The widespread implementation of saliva-based rapid drug tests in roadside screening has significantly improved the ability to identify potential psychoactive substance use in traffic. Despite their practical advantages, these immunological assays are designed as preliminary tools and are inherently limited by issues of specificity, which may lead to a considerable number of false positive results. Consequently, confirmatory toxicological analyses remain essential for establishing a definitive diagnosis in a medico-legal context.

Objective: This study aimed to assess the level of agreement between preliminary roadside drug testing and confirmatory toxicological analyses, as well as to determine the real-world confirmation rate of initially positive screening results within the territorial jurisdiction of the Institute of Forensic Medicine in Târgu Mureş.

Material and methods: A retrospective observational study was conducted on a sample of 100 consecutive cases recorded in 2023, all presenting positive results at initial roadside screening using the Dräger DrugTest 5000 device. The analysis included demographic data, type of detected substance, presence of alcohol, and results of forensic toxicological examinations performed on biological samples. Statistical processing involved descriptive analysis and inferential testing to explore potential associations between variables.

Results: Only 13% of the initially positive cases were confirmed through laboratory toxicological analysis, indicating a low confirmation rate under real-world conditions. Methamphetamines (38%) and cannabis (36%) were the most frequently identified substances in preliminary testing. No statistically significant correlations were observed between confirmatory outcomes and either sex ($p = 0.288$) or concomitant alcohol consumption ($p = 0.766$).

Conclusions: The findings underline the limited reliability of rapid saliva-based drug tests when used in isolation and reinforce the critical importance of confirmatory laboratory methods in forensic practice. The high proportion of unconfirmed positive results highlights the need for cautious interpretation of screening data and supports the integration of robust toxicological confirmation as a mandatory step in medico-legal decision-making.

Keywords: psychoactive substances, roadside drug screening, false positives, toxicological confirmation, forensic analysis

CAUDA EQUINA NEUROENDOCRINE TUMOR: THE DECISIVE ROLE OF IMMUNOHISTOCHEMISTRY IN AN INTRADURAL EXTRAMEDULLARY MASS

Alex Crețu¹, Ioana Crișan¹, Attila Kövecsi¹

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Background: Cauda equina neuroendocrine tumors (CE-NETs), formerly classified as paragangliomas, are rare primary spinal neoplasms with a deceptive diagnostic profile. They arise from paraganglionic chief cells of the filum terminale. Accounting for only 3.5% of primary cauda equina neoplasms, formal recognition as a distinct entity came only with the 2021 WHO Classification of CNS Tumours.

Objective: We report a rare case of CE-NET initially suspected as spinal neurinoma, illustrating how immunohistochemistry resolved a diagnostic impasse that imaging could not.

Material and methods: A 45-year-old male presented with progressive low back pain, right-sided L4 radiculopathy, and a diminished patellar reflex. Lumbar MRI demonstrated a 22×13 mm intradural extramedullary mass at L4, isointense on T1 and hyperintense on T2, with clear cerebrospinal fluid delineation. Given the imaging characteristics, a spinal schwannoma was suspected preoperatively. The patient underwent microsurgical resection, and tumor tissue (total volume 10 mL; largest fragment 15×6×5 mm) was submitted for histopathological and immunohistochemical analysis.

Results: Microscopy revealed a moderately cellular epithelioid proliferation in organoid nests and cords, supported by a rich thin-walled vascular network. Nuclei were round-oval with evenly distributed chromatin; ganglionic differentiation was identified. Mitotic count was low (2/10 HPF); no necrosis was observed. Immunohistochemical analysis confirmed positivity for Cytokeratin AE1/AE3, CD56, Chromogranin A, Synaptophysin and NSE, with negativity for GFAP, CK7, S100, Neurofilament, TTF1 and EMA. Sustentacular cells showed peripheral S100 and GFAP labelling. Ki-67 index was 3–4%.

Conclusions: This case highlights the critical role of immunohistochemistry in the differential diagnosis of intradural spinal tumors. Given the significant overlap between CE-NETs, schwannoma and ependymoma on both imaging and histology, a thorough immunohistochemical workup is essential before any therapeutic decision.

Keywords: Cauda equina; neuroendocrine tumor; paraganglioma; immunohistochemistry; differential diagnosis

LATE RESPIRATORY CONSEQUENCES OF PATENT DUCTUS ARTERIOSUS: SECONDARY COPD AND SEVERE NOCTURNAL HYPOXEMIA IN A YOUNG PATIENT

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BACKGROUND: Chronic Obstructive Pulmonary Disease (COPD) is a progressive respiratory disorder characterized by irreversible airflow limitation. While typically associated with smoking, secondary forms of obstructive disease can emerge from chronic pulmonary vascular remodeling and congenital hemodynamic alterations that affect the structural integrity of the bronchial tree.

OBJECTIVE: To evaluate the impact of persistent pulmonary hypertension on ventilatory function in a young patient and to analyze the correlation between congenital vascular remodeling and the development of severe obstructive syndrome.

MATERIAL AND METHODS: We report the case of a 22-year-old female, non smoker, with surgically corrected patent ductus arteriosus (PDA) in 2015. Diagnostic evaluation included body plethysmography, diffusing capacity for carbon monoxide (DLCO), nocturnal pulse oximetry, and Angio-CT for the detailed assessment of pulmonary parenchyma and arterial vasculature.

RESULTS: Functional investigations revealed a mixed obstructive syndrome with critical impairment of small airways (MEF50% 26%, FEV1 57%), decreased DLCO (62%), and severe nocturnal hypoxemia (mean SpO₂ 87%, with saturation below 90% during 96% of monitoring). Angio-CT confirmed vascular remodeling through marked dilation of the pulmonary artery trunk (42 mm) and right ventricular hypertrophy. Management involved triple inhaled therapy and long-term nocturnal oxygen therapy (2-3 L/min), resulting in clinical stabilization and correction of associated nocturnal bradycardia. Upon admission, vital signs showed a blood pressure of 104/72 mmHg, a compensatory heart rate of 106 bpm, and an SpO₂ of 94% on room air; the 12-lead ECG confirmed sinus rhythm with signs of right heart strain, consistent with the observed cardiac structural changes.

CONCLUSION: Secondary pulmonary hypertension can induce severe obstructive syndrome even in young, non-smoking patients. This case highlights the necessity for long-term pulmonary monitoring in congenital cardiac pathology, as irreversible vascular remodeling critically limits respiratory reserves, requiring aggressive therapeutic intervention to maintain quality of life.

KEYWORDS: Nocturnal hypoxemia, Triple inhaled therapy, Pulmonary hypertension, Secondary COPD.

DIAGNOSTIC AND THERAPEUTIC MANAGEMENT OF ACUTE SUPERIOR LATERO-CERVICAL ADENITIS IN AN ELDERLY PATIENT

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Background: Acute Cervical Lymphadenitis (ACL) in elderly populations necessitates a thorough diagnostic workup to differentiate reactive processes from more severe conditions, such as malignancy or obstructive sialadenitis. Clinical history, particularly a recent Upper Respiratory Tract Infection (URTI), is a crucial factor for guiding medical or surgical management.

Objective: To evaluate the diagnostic algorithm and therapeutic management of acute superior latero-cervical adenitis in a geriatric patient, emphasizing the clinical challenge of differentiating reactive lymphadenopathy from obstructive salivary pathology.

Material and methods: A 70-year-old female presented to the emergency department with a three-day history of fever, dysphagia, and painful left latero-cervical tumefaction. Ten days prior, she had been treated for a URTI with Azithromycin. Initial evaluation included Ear, Nose, and Throat (ENT) and Oral and Maxillofacial Surgery (OMF) consultations. Diagnostic imaging was supplemented with Technetium-99m (Tc-99m) scintigraphy to evaluate salivary gland function and regional lymph node involvement.

Results: Laboratory analysis revealed an elevated C-Reactive Protein (CRP) of 15.21 mg/L, while other parameters remained stable. The Tc-99m scintigraphy excluded acute obstructive pathology of the submandibular gland, supporting the diagnosis of reactive ACL. The patient was started on Intravenous (IV) therapy consisting of Clindamycin (600 mg every 12h), Dexamethasone, and analgesics. Significant clinical improvement, including the resolution of fever and a marked reduction of the inflammatory mass, was observed within 48 hours of IV treatment.

Conclusions: A multi-disciplinary approach involving ENT and OMF specialists, combined with functional imaging like Tc-99m scintigraphy, ensures accurate diagnosis in complex cervical swellings. Early initiation of IV antibiotics and corticosteroids remains the mainstay of treatment for non-suppurative ACL in the elderly, preventing the need for invasive surgical intervention.

Keywords: Acute Cervical Lymphadenitis, Technetium-99m Scintigraphy, Upper Respiratory Tract Infection, Elderly, CRP.

HEPATIC ABSCESS MIMICKING ACUTE AORTIC DISSECTION: A DIAGNOSTIC CHALLENGE IN THE EMERGENCY SETTING

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Background: Acute aortic syndromes are a major cause of sudden thoracic pain in emergency settings; however, intra-abdominal septic conditions can occasionally present with similar symptoms, creating significant diagnostic challenges.

Objective: To describe an atypical presentation of a gas-forming hepatic abscess initially suspected as acute aortic dissection.

Material and methods: We report the case of a 58-year-old male who presented to the Emergency Department with abrupt interscapular thoracic pain radiating bilaterally to the shoulders, associated with dyspnea. A complete clinical assessment, laboratory testing, electrocardiography, arterial blood gas analysis, and contrast-enhanced CT imaging were performed.

Results: On admission, the patient was tachycardic and hypertensive, raising suspicion for acute aortic pathology. CT angiography excluded aortic dissection but revealed a large hepatic lesion containing gas, consistent with a pyogenic abscess. Laboratory evaluation showed leukocytosis ($13.45 \times 10^3/\mu\text{L}$), severe anemia (Hb 6.9 g/dL), thrombocytopenia ($77 \times 10^3/\mu\text{L}$), markedly elevated inflammatory markers (CRP >150 mg/L), increased D-dimer levels, and metabolic acidosis with elevated lactate. NT-proBNP levels were significantly increased, reflecting systemic stress. The clinical picture was consistent with septic shock secondary to hepatic abscess. The patient received broad-spectrum antibiotics, hemodynamic support, and was referred for surgical management.

Conclusions: This case highlights that hepatic abscess may mimic acute aortic syndromes, potentially delaying appropriate treatment. Rapid imaging assessment and integration of clinical and laboratory data are essential to establish the correct diagnosis in emergency conditions.

Keywords: hepatic abscess; septic shock; aortic dissection mimic; thoracic pain; emergency diagnosis

THE INDISPENSABLE ROLE OF ANAMNESIS AND SEMIOLOGICAL EXAMINATION IN CHRONIC PATIENTS: PULMONARY ADENOCARCINOMA DISCOVERED THROUGH SEQUENTIAL INVESTIGATIONS – A CASE REPORT

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Background: Persistent cough in patients with multiple comorbidities poses a real diagnostic challenge. There is a tendency to attribute it to known pre-existing chronic conditions, which delays the necessary investigations.

Objective: This paper aims to highlight the importance of thorough anamnesis and careful semiological examination in any diagnostic approach, regardless of the complexity of the case.

Material and methods: A 76-year-old male patient, known with mixed etiology liver cirrhosis Child-Pugh A, COPD grade II, pulmonary fibrosis with emphysema, and hypertensive coronary cardiomyopathy, presented with persistent cough lasting more than two weeks. Chest X-ray, bronchoscopy, contrast-enhanced CT TAP, and endoscopic ultrasound-guided fine needle biopsy (EUS-FNB) were performed sequentially.

Results: Chest X-ray revealed no consolidation foci. Bronchoscopy was likewise negative for endobronchial lesions. CT TAP identified a 20mm spiculated pulmonary nodule in the right lower lobe paravertebral region, two ground-glass areas in the right upper lobe measuring up to 13mm, a 27mm cavitory lesion, bronchiectasis, and mediastinal adenopathies with a maximum short-axis diameter of 13mm. Endosonography visualized at the level of the inferior esophagus, corresponding to the pulmonary parenchyma, a solid hypoechoic formation of 25mm. EUS-FNB performed in a single pass had no complications. Histopathological examination described tumor cells arranged in groups and pseudoglands, with an immunohistochemical profile positive for Pancytokeratin, CK7, TTF1, NapsinA and Ki-67, and negative for Synaptophysin, CD56, CDX2 and p40, consistent with pulmonary adenocarcinoma.

Conclusions: Anamnesis and semiological examination in chronic patients are indispensable. The persistent cough in our case could easily have been attributed to the known COPD and pulmonary fibrosis, but fortunately it triggered the appropriate investigations leading to the detection of adenocarcinoma. The negative chest X-ray and bronchoscopy, followed by CT which identified the spiculated pulmonary nodule, subsequently confirmed by EUS-FNB as adenocarcinoma, were investigations chosen on the basis of a thorough anamnesis, without which the correct diagnosis would not have been reached.

Keywords: pulmonary adenocarcinoma, anamnesis, spiculated nodule, EUS-FNB, chronic patient

INTRAMEDULLARY SPINAL CORD ASTROCYTOMA NOS WHO GRADE II WITH ELEVATED KI-67: A CASE REPORT OF MULTIMODAL TREATMENT AND FUNCTIONAL OUTCOME

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Background: Spinal cord astrocytomas (SCAs) are rare tumors with heterogeneous clinical behavior. Integrated histological and molecular evaluation, as emphasized by the WHO classification, guides diagnosis and treatment. Ki-67 proliferation index tends to increase with the grade, however there are no universally accepted cut-off values.

Objective: A patient without notable medical history presented with progressive bilateral lower limb weakness and hypoesthesia. Neurological examination revealed asymmetric paraparesis and bilateral sensory deficits. Spinal MRI demonstrated an intramedullary lesion at L1 (13 × 11 × 29 mm), T2-hyperintense, with homogeneous contrast enhancement. Staging CT showed no metastatic disease. The patient underwent L1 laminectomy with subtotal tumor resection under intraoperative monitoring. Histopathology confirmed astrocytoma NOS, WHO grade II, with GFAP positivity, Olig2 expression, retained ATRX, negative IDH1 R132H, neither proliferative activity nor necrosis was identified but an atypically elevated Ki-67 index of approximately 20% in two foci. Postoperatively, partial motor improvement was observed. Adjuvant radiotherapy (45Gy lumbar cord + sequential boost to L1 tumor up to 50,4Gy) was administered, followed by temozolomide chemotherapy. At 3-month follow-up, persistent motor deficit and bilateral hypoesthesia remained, with no evidence of intracranial disease. The patient started treatment with Bevacizumab at 9 months after RT.

Material and methods: The main feature of this case is the discrepancy between the low histological grade and the high proliferation index, suggesting a more aggressive biological behavior than would be expected based on histology.

Results: The NOS classification reflects incomplete molecular profiling; IDH1/IDH2 sequencing and H3K27M testing are recommended. The aggressive multimodal treatment approach (surgery + radiotherapy 50.4 Gy + temozolomide + bevacizumab) was justified by the Ki-67 index subtotal resection and the lack of a complete molecular diagnosis.

Conclusions: This case underscores the importance of comprehensive molecular testing in SCAs and demonstrates that the Ki-67 index may provide prognostic information beyond histological grading, potentially guiding treatment intensity.

Keywords: intramedullary astrocytoma, Ki-67

BLEEDING GASTRIC ULCER REVEALING SIGNET RING CELL CARCINOMA: A CASE REPORT

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Background: Cohesive carcinoma (signet ring cell carcinoma), infiltrative, arising in a gastric ulcer is a malignant gastric epithelial tumor that develops on the background of a gastric ulcer, characterized by tumor cells containing abundant intracytoplasmic mucin which displaces the nucleus to the periphery, giving the characteristic “signet ring” appearance.

Objective: To report a case of signet ring cell carcinoma presenting as a bleeding gastric ulcer.

Material and methods: A 68-year-old patient with significant cardiac history, recent upper gastrointestinal bleeding, and a gastric ulcer at the gastric angle, with a Zenker’s diverticulum previously treated by endoscopic septotomy, axial hiatal hernia, Los Angeles grade C reflux esophagitis, chronic alcoholic liver disease, and a history of pancreatitis, presented with a sudden onset of symptoms two days prior, including multiple episodes of coffee-ground hematemesis and diffuse abdominal pain also significant weight loss and anorexia. A nasogastric tube was placed, and gastric lavage was performed, yielding a large volume of lavage fluid mixed with fresh blood and clots. Upper gastrointestinal endoscopy revealed a gastric ulcer at the gastric angle measuring approximately 2 × 1 cm, with a fibrin- and hematin-covered crater and friable margins. Subsequently, the patient was admitted to the Department of Gastroenterology I for further investigations, monitoring, and specialized treatment. The patient underwent repeat endoscopic evaluation, and multiple biopsies were taken from the gastric ulcer. Histopathological examination revealed an infiltrative cohesive carcinoma characterized by signet ring cells and an infiltrative growth pattern.

Results: Bleeding gastric ulcers may mask underlying malignancy; prompt biopsy is essential for early diagnosis of signet ring cell carcinoma.

Conclusions: To report a case of signet ring cell carcinoma presenting as a bleeding gastric ulcer.

Keywords: Upper gastrointestinal bleeding, Gastric cancer, Gastric ulcer

FROM INFECTION TO HYPERSENSITIVITY: ACUTE OTOMASTOIDITIS ASSOCIATED WITH URTICARIA IN A PEDIATRIC PATIENT

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Background: Acute otomastoiditis is a severe complication of middle ear infections in the pediatric population, requiring prompt intravenous antibiotic therapy to mitigate the risk of intracranial spread.

Objective: The primary objective of this case report is to evaluate the clinical management of a 2-year-old patient presenting with acute otomastoiditis associated with atypical urticarial and gastrointestinal manifestations, highlighting the necessity of adaptable therapeutic strategies.

Material and methods: The patient, a 2-year-old male, was admitted to our clinic with a 48-hour history of fever, seromucous rhinorrhea, and right otalgia with mastoid Celsian signs. A thorough clinical examination, ENT consultation and multiple laboratory tests were all part of the initial evaluation.

Results: The patient presented with marked systemic inflammation (increased C-reactive protein, accelerated ESR), leukocytosis with neutrophilia and reactive thrombocytosis. Management involved intravenous dual antibiotic treatment (ceftriaxone and clindamycin), corticosteroid therapy and antipyretics. On the first day of admission, the patient presented a urticariform rash on the lower limbs, which was successfully managed with a single dose of antihistamine. Later on, the clinical course was complicated by multiple emetic episodes and abdominal pain, requiring an immediate therapeutic intervention, with antiemetics and intensive parenteral rehydration.

Conclusions: Early broad-spectrum intravenous antibiotic therapy, corticosteroid therapy, and supportive measures led to a positive clinical evolution, with the inflammatory syndrome and local symptoms gradually resolving. The urticarial symptoms were temporary and responded to the medication without requiring significant adjustments to the therapeutic strategy. A positive outcome was achieved through careful clinical and paraclinical monitoring.

Keywords: mastoiditis, acute otitis media, bacterial infections

CASE REPORT: ACUTE JEJUNAL DIVERTICULITIS IN AN 85-YEAR-OLD PATIENT

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Background: Jejunal diverticulitis is rare condition, affecting less than 1% of the population. Primarily affecting the elderly, its non-specific symptoms often lead to delayed or incidental diagnosis. If left untreated, it can cause severe complications such as perforation, abscesses, or intestinal obstruction.

Objective: To emphasize the diagnostic and clinical complexity of jejunal diverticulosis coexists with gastric ulcers and to assess conservative management as a viable alternative to high-risk surgical intervention.

Material and methods: An 85-year-old male with history of cholecystectomy, Type 2 diabetes and chronic heart failure (NYHA II) presented with diffuse abdominal pain, predominantly localized to left flank, and three-day absence of bowel movements. Physical examination revealed abdominal distension and tenderness, especially in left hypochondrium. Although patient was afebrile, laboratory evaluation demonstrated significant inflammatory response, evidenced by C-reactive protein level of 176.5 mg/L.

A multi-modal diagnostic workup was conducted. Contrast-enhanced CT imaging identified large inflamed jejunal diverticulum measuring 25/34/50 mm in left flank, with significant wall edema, confirming rare diagnosis of acute jejunal diverticulitis. Upper digestive endoscopy revealed reflux esophagitis, chronic erosive gastritis with multiple small ulcers and erosive bulbitis. Additional imaging confirmed distal choledocholithiasis, characterized by 5 mm calculus and dilated common bile duct measuring 12 mm, as well as colonic diverticulosis.

Results: The Gastroenterology department managed the patient conservatively, considering his advanced age and cardiovascular surgical risks. The therapeutic approach comprised intravenous rehydration, vitamin supplementation, and Rifaximin, with continuation of chronic cardiac and diabetic medications. Surgical consultation recommended vigilant monitoring of bowel transit and inflammatory markers, resulting in a favorable patient response.

Conclusions: Jejunal diverticulitis is an uncommon but important cause of acute abdomen. This case underlines the need for high clinical suspicion and timely CT imaging to establish diagnosis. Conservative treatment can represent a safe and effective alternative to surgery, even in the presence of multiple gastric and biliary comorbidities.

Keywords: Jejunal diverticulosis, elderly patient, gastric ulcers

EMERGENCY MANAGEMENT OF PLACENTA PERCRETA: A CASE REPORT

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Background: Placenta percreta represents the most severe form of the placenta accreta spectrum, in which placental tissue penetrates the entire thickness of the uterine myometrium and can invade neighboring organs, usually the urinary bladder. In case of bladder invasion, maternal mortality can reach values of 9.5%, and fetal mortality 24%.

Objective: The purpose of the paper is to highlight the management and urgency of emergency surgical treatment in the case of a non-monitored patient.

Material and methods: We present the case of a 17-year-old patient, secundigravida, secundipara, with anamnestic amenorrhea whose date cannot be precisely specified, non-monitored, with a cicatricial uterus after a cesarean section. She presents to the emergency department accusing abdominal colicky pain. Ultrasound examination reveals a plurimalformed fetus with omphalocele containing intestinal loops and the liver, fetal kyphoscoliosis, hypoplastic left heart and placenta without clear demarcation from the uterine wall, with invasion into the urinary bladder and large vessels. CT highlights intraperitoneal hemorrhage and bilateral renal ureterohydronephrosis grade 3/4. The suspicion of surgical acute abdomen with uterine rupture associated with placenta percreta is raised.

Results: Following a decision made multidisciplinary, an emergency laparotomy, Pfannenstiel type, is practiced, and upon opening the peritoneal cavity 4L of blood and clots are found. A cesarean section is performed, extracting transplacentally a live plurimalformed fetus with a voluminous omphalocele. Subsequently, total hysterectomy is also performed, this representing the unique method for resolving cases of placenta percreta.

Conclusions: Consequently, the particularity of this case given by the patient's young age and previous cesarean section operation, supports literature publications, according to which most cases of placenta percreta are diagnosed at the time of delivery, and not antepartum, and the prevalence of this pathology is associated with the increasing number of cesarean operations. The patient's prognosis remains reserved, having repercussions on her personal life given by the performed total hysterectomy.

Keywords: emergency, placenta, percreta, hysterectomy

STEPWISE MANAGEMENT OF COMPLICATED ACUTE NECROTIZING PANCREATITIS

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Background: Acute pancreatitis is a gastroenterological emergency with a clinical spectrum ranging from mild interstitial edematous pancreatitis to severe necrotizing pancreatitis associated with organ dysfunction and systemic complications. Necrotizing pancreatitis may be complicated by acute necrotic collections or infected pancreatic necrosis, requiring multidisciplinary management and serial imaging assessment.

Objective: To highlight the multidisciplinary and stepwise management of severe necrotizing pancreatitis complicated by suspected infected pancreatic necrosis and systemic manifestations.

Material and methods: We report the case of a 71-year-old male patient diagnosed with severe acute pancreatitis, presenting with leukocytosis, neutrophilia, markedly elevated serum amylase levels, elevated liver enzymes, and hyperglycemia.

Results: During hospitalization, the patient developed atrial fibrillation with rapid ventricular response associated with worsening inflammatory markers. Contrast-enhanced abdominal CT demonstrated necrotizing pancreatitis with extensive acute necrotic peripancreatic collections, pleural effusion, and ascites. Based on clinical deterioration and imaging findings suggestive of infected pancreatic necrosis, broad-spectrum antibiotic therapy and intensive supportive care were initiated, followed by intensive care monitoring and surgical evaluation. Serial CT examinations revealed a large pancreatic tail collection containing gas, suggestive of infected necrosis. Subsequent imaging showed partial regression of pleural effusion and stabilization of abdominal findings under conservative management. The patient progressively improved clinically and was discharged with dietary and follow-up recommendations.

Conclusions: This case highlights the importance of serial imaging assessment and multidisciplinary management in severe necrotizing pancreatitis with suspected infected pancreatic necrosis. Therapeutic decisions should be guided by the dynamic correlation of clinical, laboratory, and radiological findings.

Keywords: acute pancreatitis, necrotizing pancreatitis, infected pancreatic necrosis, acute necrotic collections, multidisciplinary management

MULTIPLE RESISTANCE TO BIOLOGICAL THERAPIES IN CROHN'S DISEASE: CLINICAL CHALLENGES AND THERAPEUTIC PERSPECTIVES

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Background: Crohn's disease is a chronic inflammatory bowel condition with a relapsing–remitting course, potentially progressive, and associated with a significant risk of structural complications. Although biological therapies have improved the prognosis of moderate and severe forms, a substantial proportion of patients develop primary non-response or secondary loss of response, making the management of refractory disease a major clinical and therapeutic challenge.

Objective: To highlight the complexity of managing severe, refractory Crohn's disease with multiple biologic therapy failures and fibrostenotic progression.

Material and methods: We present the case of a 51-year-old patient diagnosed with Crohn's disease in 2007, with distal colonic involvement, fibrostenotic phenotype, and severe onset, confirmed by lower gastrointestinal endoscopy and histopathological examination, with a Crohn's Disease Activity Index (CDAI) of 396. The disease course was characterized by intermittent severe inflammatory flares, extraintestinal manifestations, and the need for sequential biologic therapies.

Results: Following conventional treatment with mesalazine and corticosteroids, biologic therapy with Adalimumab was initiated, followed by Infliximab, which was associated with secondary loss of response, supported by increased fecal calprotectin, persistent systemic inflammation, and inadequate drug exposure. Due to anti-TNF therapy failure, treatment with Ustekinumab was started, resulting in partial inflammatory control but persistent stenosis and obstructive symptoms. Surgical intervention was repeatedly recommended but refused by the patient.

Conclusions: This case illustrates the complexity of managing severe, refractory Crohn's disease with multiple biologic failures and fibrostenotic progression, emphasizing the importance of objective monitoring, individualized treatment strategies, and early multidisciplinary evaluation in complicated cases with high surgical risk.

Keywords: Crohn's disease; biologic therapies; biologic failure; fibrostenotic phenotype; Ustekinumab

PSYCHOGENIC URINARY RETENTION AS A SOMATIC EXPRESSION OF MAJOR DEPRESSIVE DISORDER: A CASE REPORT

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Background: Major depressive disorder (MDD) is frequently associated with psychosomatic symptoms, representing a significant diagnostic challenge for clinicians, particularly in the absence of an identifiable organic substrate. Somatic manifestations reflect a complex neurobiological dysfunction involving alterations in neurovegetative control. Acute psychogenic urinary retention represents a very rare presentation in depression with psychosomatic features and is most often considered a diagnosis of exclusion.

Objective: This paper aims to highlight the relationship between MDD and acute psychogenic urinary retention, as well as the diagnostic and therapeutic implications of this association.

Material and methods: We present the case of a 68-year-old female patient with a history of recurrent MDD, generalized anxiety disorder and benzodiazepine dependence, admitted for an episode of acute urinary retention associated with fatigue and diffuse anxiety. Psychiatric evaluation revealed depressive mood (HAM-D=24), diffuse anxiety (HAM-A=24), hypoprosexia with hyperprosexia focused on somatic symptoms, cenestopathies and micromanic ideation of incapacity. Urological and neurological investigations excluded an organic cause, supporting a psychogenic etiology.

Results: Following treatment with Lorazepam 1 mg (0-0-1), Sertraline 50 mg (1-0-1), Donepezil 5 mg (0-0-1) and Zopiclone 7.5 mg (0-0-1), the patient showed a favorable evolution, with remission of acute urinary retention and improvement of associated psychiatric symptoms.

Conclusions: The clinical presentation suggests a neurovegetative dysfunction, potentially involving central nervous system structures such as the anterior cingulate cortex and periaqueductal gray, which are also described in functional urinary disorders such as Fowler's syndrome. Recognition of these manifestations is essential for minimizing unnecessary investigations and for establishing an integrated therapeutic approach.

Keywords: major depressive disorder, somatization, urinary retention, neurovegetative dysfunction

DE NOVO ANOREXIA NERVOSA IN A 57-YEAR-OLD PATIENT – PSYCHIATRIC AND SOMATIC IMPLICATIONS

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Background: Anorexia Nervosa is a severe eating disorder typically associated with adolescence. While its onset in late adulthood is exceedingly rare, de novo cases in patients over 50 pose unique diagnostic challenges and higher morbidity due to age-related somatic frailty.

Objective: This report aims to present the case of a 57-year-old female patient with de novo Anorexia Nervosa, focusing on the complex interaction between late-onset psychiatric symptoms and life-threatening somatic complications.

Material and methods: We present the case of a 57-year-old female patient with no previous psychiatric history, initially admitted to Internal Medicine for severe protein-caloric malnutrition (BMI 12 kg/m²) and severe electrolyte imbalances (Potassium 2.61 mmol/L). Following hydroelectrolytic rebalancing and the exclusion of organic causes, the patient was transferred to Psychiatry (BMI 14 kg/m²). She reported drastically restricting her daily caloric intake, motivated by a distorted body image and a strong fear of gaining weight. According to DSM-5 criteria, the patient was diagnosed with late-onset de novo anorexia nervosa. The treatment strategy was complex and included pharmacotherapy - an antipsychotic (Olanzapine 10 mg/day) to address thought rigidity and promote weight gain, a Serotonin-Norepinephrine Reuptake Inhibitor (Duloxetine 90 mg/day) for depressive symptoms, a mood stabilizer (Valproic acid 500 mg/day), psychotherapy, and a supervised nutritional protocol.

Results: CT imaging revealed multiple pathological bone lesions, confirming severe secondary osteoporosis due to prolonged malnutrition. However, the patient demonstrated significant improvement under the multidisciplinary treatment approach. The pharmacological and nutritional intervention led to steady weight gain (BMI increased to 17.7 kg/m² within two months) and a notable reduction in food-avoidant behaviors.

Conclusions: This case highlights the necessity of considering eating disorders in elderly patients presenting with unexplained weight loss. The presence of pathological fractures showcases the severity of somatic decline, requiring a combined psychiatric and medical approach to ensure recovery.

Keywords: Late-onset anorexia nervosa, somatic complications, multidisciplinary approach.

NODULAR HEPATIC INVOLVEMENT IN CROHN'S DISEASE: EXTRAINTESTINAL MANIFESTATION VERSUS CONCURRENT VIRAL PATHOLOGY – CASE STUDY

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Background: Crohn's disease is a systemic inflammatory condition that can progress with diverse extraintestinal manifestations. Although hepatobiliary and cutaneous involvement are frequent, their late appearance relative to the initial diagnosis necessitates careful monitoring to differentiate between complications of the primary disease and intercurrent pathologies, such as viral infections.

Objective: To present a case where nodular hepatic involvement was determined by a concurrent hepatitis C virus (HCV) infection rather than Crohn's disease activity, highlighting the importance of a rigorous differential diagnosis.

Material and methods: A 23-year-old patient, diagnosed in 2019 with ileocolonic and bulbar Crohn's disease (at which time liver tests were normal and anti-HCV antibodies were negative), was reassessed in 2022. At that time, the patient presented with cutaneous manifestations (acquired epidermolysis bullosa) and changes in liver function tests. The investigation protocol included contrast-enhanced abdominal MRI, FibroMax, HCV-RNA determination, and fecal calprotectin levels.

Results: MRI imaging revealed a nodular hepatic structure, splenomegaly, and segmental wall thickening in the terminal ileum and colon. Laboratory evaluation confirmed marked inflammatory activity (calprotectin 1350 µg/g) and the presence of HCV viral replication. Management consisted of a multidisciplinary approach by initiating direct-acting antiviral therapy (Maviret) concurrently with biological therapy with Infliximab. Under this regimen, the patient achieved clinical and biological remission, reflected by a significant decrease in calprotectin to 82 µg/g and normalization of liver enzymes.

Conclusions: This case underlines the importance of differential diagnosis in Crohn's disease. Although hepatic changes may initially be interpreted as extraintestinal manifestations, identifying a concurrent viral pathology was crucial for treatment adaptation, demonstrating that combined treatment (biological and antiviral) is safe and effective in achieving disease control.

Keywords: Crohn's disease, Hepatitis C virus, Nodular hepatic involvement, Infliximab, Extraintestinal manifestations.

CLIVAL CHORDOMA: A RARE TUMOR WITH RELENTLESS LOCAL AGGRESSION

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Background: Chordomas are rare malignant notochordal tumors arising along the axial skeleton, most often at the skull base (clivus) or sacrum. They are typically slow-growing but locally invasive, infiltrating bone and adjacent neural structures. These tumors characteristically recur at the primary site.

Objective: The aim of this paper is to present a case of clival chordoma and detail its clinical, imaging, and histopathological features.

Material and methods: We present the case of a 66-year-old man with an expansile clival mass. Clinical data and imaging (MRI and CT) were reviewed. Brain MRI showed a 32×30×35 mm enhancing lesion in the posterosuperior nasopharyngeal region. The mass demonstrated gadolinium enhancement, with erosion of the clivus and extension into the bilateral cavernous sinuses, encasing both internal carotid arteries without significant flow compromise. A transsphenoidal approach was performed, and tumor fragments were sent to the Pathology Department.

Results: Histopathological examination revealed a lobular tumor infiltrating bone, composed of cords of cells with round-to-oval nuclei and abundant vacuolated (physaliphorous) cytoplasm. Immunohistochemistry showed positivity of the tumor cells for cytokeratin (CK) AE1/AE3, CK8/18, epithelial membrane antigen (EMA), and S100 protein. No positivity for GFAP, Olig2, CK7, or CK20 was observed. The integrated clinicopathological and imaging findings supported the diagnosis of conventional clival chordoma.

Conclusions: Although often indolent in appearance, chordoma is a locally aggressive tumor with a high risk of recurrence. Complete surgical resection followed by high-dose conformal radiotherapy remains the standard approach. This case highlights the characteristic MRI findings (contrast-enhancing clival mass with bone destruction) and histopathological features (physaliphorous tumor cells) of chordoma. Early detection and appropriate treatment are important for improving patient outcomes.

Keywords: Chordoma, Clivus, Skull base tumor

THE RELATIONSHIP BETWEEN FUNCTIONAL AUTONOMY, ANXIETY AND DEPRESSION IN INDIVIDUALS WITH VISUAL DISABILITIES

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Background: Vision is the primary sense through which humans experience life, collecting over 70% of environmental information. Consequently, vision loss is not just a functional limitation, but deconstructs the individual's entire autonomy, significantly increasing the levels of anxiety and depression in visually impaired individuals.

Objective: The present study aims to analyze the relationship between the level of functional autonomy and the severity of anxiety and depressive symptoms among persons with visual disabilities, identifying their real support needs.

Material and methods: A cross-sectional study was conducted on 104 members of the Romanian Association of the Blind. Data were collected via telephone interviews using: GAD-7 (anxiety), PHQ-9 (depression), Barthel Index, IADL and reduced ADL (functional autonomy). Statistical analysis was performed using Jamovi (v. 2.7.24), employing Spearman correlation, Mann-Whitney U and Kruskal-Wallis tests.

Results: Participants showed moderate levels of depression (Md PHQ-9 = 11.0) and mild-to-moderate anxiety (Md = 9.00). While participants maintained relative independence in basic activities (Md = 75.0), significant limitations were found in instrumental tasks (Md = 4.00). Strong negative correlations were found between IADL scores and both anxiety ($\rho = -0.552$, $p < .001$) and depression ($\rho = -0.499$, $p < .001$). Urban residents (Md = 5.00) exhibited significantly higher instrumental autonomy compared to those in rural areas (Md = 3.00, $p = .005$). Depressive symptoms differed significantly across age groups ($p = .047$), with higher scores in elderly participants. Sleep disturbances and inability to relax were the most prevalent individual symptoms.

Conclusions: Visual impairment is a major trigger for psychological distress, with over 80% of participants experiencing anxiety and more than half suffering from moderate to severe depression.

Keywords: visual impairment, anxiety, depression, autonomy

STAGE III ACUTE KIDNEY INJURY PRESENTING WITH SEVERE METABOLIC ACIDOSIS IN A PATIENT WITH COMPLEX GASTROINTESTINAL AND ONCOLOGICAL HISTORY

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Background: Acute kidney injury (AKI) is a severe clinical condition frequently associated with metabolic complications such as life-threatening metabolic acidosis. In patients with complex comorbidities, AKI often has a multifactorial etiology and rapid progression.

Objective: To present a case of stage III AKI associated with severe metabolic acidosis in a patient with complex gastrointestinal and oncological history.

Material and methods: We report the case of a 64-year-old male with a history of ileocecal neoplasm (surgically treated), multiple abdominal surgeries including cholecystectomy, and suspected tumor recurrence. Laboratory findings revealed severe metabolic acidosis and markedly elevated nitrogen retention parameters.

Results: Laboratory evaluation showed severe renal impairment (creatinine 9.3 mg/dL, urea 211 mg/dL) with stage III AKI, associated with severe metabolic acidosis (pH 6.96, with significantly decreased bicarbonate). The patient also presented macrocytic anemia and electrolyte imbalances. The clinical findings suggested a multifactorial etiology, including prerenal dehydration due to diarrhea and possible underlying oncological progression.

Conclusions: This case highlights the severity of AKI in patients with complex comorbidities and emphasizes the importance of early recognition of metabolic acidosis and prompt management. Gastrointestinal losses and oncological background may significantly contribute to rapid renal deterioration.

Keywords: acute kidney injury, metabolic acidosis, diarrhea, gastrointestinal malignancy, renal failure

SUICIDE ATTEMPT IN THE CONTEXT OF ALCOHOL ABUSE

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Background: Suicidal attempts are an important clinical manifestation in psychiatry, being one of the main risk factors for suicide, often resulting from the interaction between affective disorders, chronic psychosocial stressors and impulsivity. Alcohol use can be associated both with increased impulsivity and depressed mood.

Objective: The aim is to present a case of suicidal attempt in a depressed and anxious patient following alcohol consumption, emphasizing psychiatric assessment and risk factors.

Material and methods: We present a case of a female patient admitted to the psychiatry department following voluntary ingestion of 9 Stresclean tablets. Clinical data were obtained through structured psychiatric interview.

Results: The patient has a complex background characterized by poor-quality social support, long-term familial conflicts, and recent psychotraumatic events, including sudden behavioral changes of her adult son, suspected of post-traumatic stress disorder following the suicide of a close friend by river submersion. The familial context also reveals a history of domestic violence perpetuated by her husband, a chronic alcohol user, with previous suicidal attempts.

On mental status examination, the patient presents a clinical picture marked by: depressed mood, anhedonia, generalized anxiety with episodic paroxysms, auditory hyperesthesia, concentrative hypoprosexia, mild fixation hypomnesia, bradypsychia and bradylalia, persistent rumination regarding family difficulties, self-blaming thoughts and worries about her son and the financial situation of the family, low frustration tolerance, mild hypobulia, impulsivity, mixed insomnia, inappetence, weight loss and reduced self-preservation instinct. We must note that a recent suicidal act through medication ingestion took place in the context of acute alcohol intoxication.

Conclusions: This case illustrates a suicidal attempt, in a depressed and anxious patient, following acute alcohol intoxication, in the context of chronic psychological stress and long-term familial conflicts, highlighting the need for integrated psychiatric care.

Keywords: suicidal attempt, depression, acute alcohol intoxication

CHALLENGES IN THE MANAGEMENT OF PEDIATRIC PATIENTS WITH CYSTIC FIBROSIS - CASE REPORT

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Background: Cystic fibrosis (CF) is a multisystem genetic disorder characterized by chronic pulmonary disease and pancreatic insufficiency. While CFTR modulators like Orkambi (Lumacaftor/Ivacaftor) and Kaftrio (Elexacaftor/Tezacaftor/Ivacaftor) have revolutionized prognosis, safety monitoring in pediatric patients remains critical due to potential adverse reactions such as hepatotoxicity.

Objective: The aim of this case report is to highlight the management challenges encountered in pediatric patients with cystic fibrosis, treated with CFTR modulators.

Material and methods: We present the case of a 5-year-old patient diagnosed at 2 years old with cystic fibrosis (homozygous genotype F508del). The patient was re-evaluated clinically and biologically periodically to assess the response to treatment with CFTR modulators and adverse reactions. The monitoring included BMI, liver enzymes (ALT, AST, bilirubin), renal function, liver ultrasound, ophthalmological examination, and sweat chloride test.

Results: At the first reassessment after initiating Orkambi treatment, elevated liver enzymes were observed, requiring immediate discontinuation of treatment, which was reinstated after normalization of biochemical values, being well tolerated. Subsequently, the patient was transitioned to Kaftrio at the age of 4, under which liver function remained stable. Clinical benefits were superior: reduced infectious exacerbations, an increase in BMI from 15.1 kg/m² to 15.4 kg/m², and a reduction in sweat chloride levels (from 165 mmol/L to 110 mmol/L).

Conclusions: The case highlights the benefits of these therapies, along with the need for careful monitoring and individualized management. The “stop-and-restart” strategy represents an effective solution in managing hepatotoxicity, while the transition to Kaftrio ensures a superior clinical response and a favorable safety profile.

Keywords: Cystic fibrosis, hepatotoxicity, CFTR modulators, pulmonary exacerbations, pediatric management.

ACADEMIC STRESS AND EMOTIONAL EATING AMONG STUDENTS DURING EXAM SESSIONS

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Background: Academic stress during exam sessions represents a significant challenge for students and has been associated with various maladaptive coping behaviors, including emotional eating. Emotional eating refers to the tendency to consume food in response to negative emotions such as stress, anxiety, or fatigue, rather than physiological hunger. This behavior is often linked to increased intake of high-calorie foods and may contribute to unhealthy dietary patterns and weight changes. Understanding the relationship between stress and emotional eating in students is essential for identifying risk factors and developing effective preventive strategies.

Objective: The present study aimed to investigate the relationship between perceived stress levels during exam sessions and the intensity of emotional eating behaviors among students.

Material and methods: The study sample consisted of a total of 50 students from UMFST. Participation was voluntary, and students were invited to complete an 18-question online questionnaire.

Results: During the exam session period, compared to the rest of the semester, the majority of respondents reported an increase in the amount of food consumed ($p = 0.032$). Food intake was predominantly higher in the second part of the day, especially in the evening and at night after 10:00 PM. Students who perceive food as a source of emotional comfort tend to consume larger quantities of food ($p = 0.001$), with 23 respondents indicating this to some extent and 15 to a great extent.

Conclusions: This study highlights the existence of a significant relationship between academic stress during exam sessions and emotional eating among students. The results confirm the working hypothesis, demonstrating that higher stress levels are associated with a higher frequency of emotional eating.

Keywords: emotional eating; students; exam session; stress; eating behavior

DEPRESSION AND PAIN: A CROSS-SECTIONAL ANALYSIS

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Background: Pain is frequently reported by patients with depression, yet it remains often underestimated and insufficiently integrated into routine clinical assessment. The relationship between depression and pain is complex, and both the intensity of pain and its contribution to depressive severity may vary across clinical contexts. Evaluation of both depressive symptoms and pain may offer a more comprehensive understanding of the patient's clinical profile.

Objective: The aim of this study was to evaluate pain symptoms in patients with depression and to analyze the relationship between depression severity, and pain intensity.

Material and methods: The study had a cross-sectional design and included 31 subjects diagnosed with depression (22 women and 9 men). For each patient, demographic data, total Hamilton Depression Rating Scale (HAM-D17) score, type of pain, and pain intensity measured through subjective and objective Visual Analogue Scale (VAS) were collected. Statistical analysis included descriptive and analytical biostatistic methods. A p-value < 0.05 was considered statistically significant.

Results: Most patients reported osteoarticular pain (n=22) or chronic headache (n=6). HAM-D17 scores indicated levels of depression ranging from mild to severe. No significant correlation was identified between depressive severity and pain intensity, either subjective or objective. Likewise, no significant differences were found between women and men regarding HAM-D17 or VAS scores.

Conclusions: In this sample, we found no significant correlation between chronic pain and the severity of depressive symptoms, and also, no sex-related differences were observed. These findings suggest that, in the studied cohort, pain was not a major determinant of depressive severity, nor the other way around. The results underline the heterogeneity of depressive presentations, suggesting that pain may play a variable and individualized role across different patients. Moreover, these findings indicate that pain intensity should not be used in isolation to estimate the severity of depressive symptoms.

Keywords: depression, pain, psychosomatics

PARTICULARITIES OF SECONDARY ADULT TUBERCULOSIS: CLINICAL EXPERIENCE IN TÂRGU MUREȘ

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Background: Secondary tuberculosis remains a significant public health challenge in Romania, as the country maintains one of the highest incidence rates in Europe. This study aims to characterize the clinical, epidemiological, and evolutionary profile of patients with this pathology to optimize diagnostic and management strategies.

Objective: The primary objective of this study was to analyze the clinical features and treatment outcomes of patients with secondary TB, identifying key risk factors that influence the progression and success of the therapeutic intervention.

Material and methods: A retrospective cohort study was conducted on a sample of 99 patients diagnosed with secondary TB at the Pneumology Clinic in Târgu Mureș between 2020 and 2025. Statistical analysis evaluated the correlations between demographic variables, nutritional status, comorbidities, and the response to standard treatment.

Results: The majority of patients were male (72%), smokers (82%), and predominantly from rural areas (65%). The most frequent symptoms were cough (91%) and dyspnea (76%). Radiologically, the cavitary form was the most common presentation (32%). A significant correlation was identified between male gender and smoking, as well as between the presence of fever and treatment resistance. Therapeutic compliance was 90%, however, patients with advanced hepatic cytolysis exhibited a mortality rate of 40%.

Conclusions: Therapeutic success in secondary tuberculosis is highly dependent on treatment adherence and the monitoring of liver function. These results highlight the necessity for active screening in rural communities and early intervention for smoking patients with pulmonary comorbidities (COPD) to reduce mortality and the risk of drug resistance.

Keywords: tuberculosis, smoking, drug resistance, comorbidities, mortality

THE SHRINKING PROFILE: 3D DIGITAL QUANTIFICATION OF LABIAL AGING AND ESTHETIC BALANCE

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Background: Age-related alterations in lip anatomy and morphology represent critical determinants in facial age estimation. While prior research has focused on thinning and elongation, limited evidence exists regarding anterior lip projection relative to Ricketts; E-line and its association with the naso-mentalangle.

Objective: The study investigated age-related differences in lip position relative to Ricketts; aesthetic plane (E-line). Additionally, it examined changes in the naso-mental and columella-labial angles and their correlation with anterior lip projection.

Material and Method: The study included 208 female participants aged over 20 years, all possessing natural or restored dental arches and no history of lower-face aesthetic treatments. Participants were categorized into three groups: Group 1 (20–39 years), Group 2 (40–59 years), and Group 3 (60 years and older). Lip projection was assessed using the VECTRA H2 3D imaging system, lip projection was measured as the distance from the E-line to the most prominent points of the lips. The software additionally quantified the columella-labial and naso-mental angles.

Results: Measurements indicated that the distance from the upper and lower lips to the E-line increased with age, suggesting a more retruded lip position in older individuals. A significant correlation was observed between anterior lip projection and the naso-mental angle, although the naso-mental angle did not change significantly with aging. No significant correlation was observed between the columella-labial angle and lip projection.

Conclusion: Aging in the oral region is characterized by the anatomical retrusion of both the upper and lower lips. These changes result from a combination of soft tissue alterations and bone remodeling, leading to a diminished esthetic profile.

Keywords: 3D imaging, shrinking profile, aging

ASSESSING MASK-WEARING BEHAVIORS IN THE POST-PANDEMIC ERA: AN EXPLORATORY SURVEY IN ROMANIA

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Background: The COVID-19 pandemic represented the most significant public health crisis of recent history. With the end of the pandemic and the lifting of mandates, mask-wearing has become an individual choice.

Objective: This study aims to evaluate current mask-wearing adherence among Romania's population and the factors associated with maintaining this behavior.

Material and methods: A cross-sectional study was conducted on a sample of 443 respondents, using an online survey during October 2025-January 2026. The survey assessed sociodemographic characteristics, vaccination status, pandemic experience, current behaviors, and personal perceptions of masking. Statistical analysis was performed using Microsoft Excel and GraphPad Prism 11.

Results: Mask-wearing adherence has significantly decreased, with only 6,32% of respondents reporting high adherence indoors. Sociodemographic factors had no significant impact on adherence, except for education level. The primary motivation was protecting others (54,93%), while altruism and perceived benefit were facilitating factors. Discomfort negatively correlated with adherence ($p < 0,0001$). In the event of a future pandemic, 53,95% of respondents would wear a mask voluntarily.

Conclusions: Despite predominantly low adherence, findings suggest that mask-wearing is no longer seen as a self-protective measure, but as an act of social responsibility. In the eventuality of a future public health crisis, communication strategies should prioritize the protection of vulnerable individuals and the benefits of masking.

Keywords: COVID-19, face mask, adherence, preventive behaviors

ASSOCIATION BETWEEN RHEUMATOID ARTHRITIS AND ANEMIA: RETROSPECTIVE DATA FROM CLINICAL PRACTICE

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Background: Rheumatoid arthritis (RA) is a chronic inflammatory disease driven by an autoimmune process. As the disease progresses, it often leads to extra-articular involvement. Among the systemic features, anemia emerges as a predominant comorbidity and stands out as a key driver of morbidity and a significant risk factor for mortality.

Objective: The study aims to identify the prevalence of anemia in patients diagnosed with RA and to examine its associations with clinical parameters and laboratory findings.

Material and methods: We conducted a retrospective cross-sectional study of 114 patients diagnosed with RA. The study population consisted of patients recruited from the Rheumatology Department of the County Emergency Clinical Hospital of Târgu Mureş, with evaluations conducted between July and December 2024. Demographic characteristics, clinical data and laboratory results were collected and analysed using Microsoft Excel and GraphPad software.

Results: The overall prevalence of anemia was 43,86%, anemia of inflammation accounted for the majority of cases (76%). There was a statistically significant association between decreased hemoglobin level and elevated levels of inflammatory markers (CRP, ESR). Additionally, patients with concomitant Type 2 Diabetes Mellitus or Chronic Autoimmune Thyroiditis showed a significantly higher likelihood of anemia compared to those without these comorbidities.

Conclusions: The results reinforce the idea that anemia associated with RA should be interpreted as an expression of systemic inflammation and immune dysregulation, rather than an isolated issue. An integrated assessment of both hematological and inflammatory markers is essential for effective clinical management of RA patients and for optimising their prognosis.

Keywords: rheumatoid arthritis, anemia, autoimmune diseases, comorbidity, cross-sectional study

MEDICAL RESIDENTS' PERSPECTIVE ON EMPATHY

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Background: In today's patient-centered medicine, empathy is no longer just a personality trait — it's become a core clinical skill. This paper looks at how medical residents perceive the role of empathy in diagnosis and treatment, and what gets in the way of actually practicing it in a hospital setting.

Objective: The main goal was to assess how empathy affects the quality of medical care from the residents' point of view, particularly when it comes to patient trust, the accuracy of the information gathered and the physician's own professional satisfaction.

Material and methods: The study relies on a questionnaire administered to a target group of 55 medical residents. The sample covered physicians from different specialties, all working in direct contact with patients. The questionnaire was descriptive in nature, meant to capture an honest picture of current clinical reality.

Results: The findings point to an almost unanimous acknowledgment of empathy's therapeutic value. Specifically, 94.5% of respondents felt that a lack of empathetic attitude considerably damages the patient's trust in their doctor. Meanwhile, 89.1% believed that empathy helps obtain more accurate patient histories, which are critical for reaching the right diagnosis. One of the more telling findings was the tension between wanting to be empathetic and the reality of systemic constraints: around 74.6% of medical residents cited time pressure as their biggest obstacle, and the same proportion (74.6%) reported struggling to maintain empathetic behavior with so-called "difficult patients."

Conclusions: The study suggests that, while empathy is widely regarded as central to good medical care and a genuine source of professional satisfaction, putting it into practice is made harder by time constraints and the absence of concrete strategies for handling more demanding interactions.

Keywords: empathy, medical residents, medical communication, trust, professional satisfaction

INTERGENERATIONAL OBESITY TRANSMISSION: THE ROLE OF CURRENT FAMILY ENVIRONMENT IN CHILDREN

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Background: Childhood obesity represents a major public health challenge, with rates surging in recent decades. Understanding how family lifestyles influence children's metabolic status is crucial for targeted prevention strategies.

Objective: This study evaluates the intergenerational transmission of obesity, focusing on correlations between family weight status (parents and close relatives) and children's weight outcomes.

Material and methods: We conducted a cross-sectional study on 152 children (mean age: 10.01 ± 4.47 years). Data on pediatric weight status (WHO BMI percentiles), parental weight history (adolescence and current), close relatives' current weight, and children's lifestyles were collected via online questionnaires. Statistical analysis used Fisher's Exact Test.

Results: Excess weight prevalence was 28.29% (19.08% overweight, 9.21% obese). Current obesity in at least one parent significantly correlated with child excess weight ($p=0.0367$; $OR=2.37$). Parental weight during childhood/adolescence showed no significant association (mothers: $p>0.99$; $OR=0.95$; fathers: $p=0.52$; $OR=1.58$). Close relatives' weight status in the household was associated ($OR=4.15$; $p=0.0018$). Lifestyle factors had the strongest impact: fast-food ≥ 2 /week increased risk 3.67-fold ($p=0.0091$); physical inactivity (<60 min/day) 2.74-fold ($p=0.0107$); screen time ≥ 4 hours/day 3.26-fold ($p=0.0180$).

Conclusions: Excess weight in this pediatric cohort is primarily driven by the current home environment rather than parents' distant weight history. Interventions should emphasize family-wide lifestyle changes, targeting ultra-processed food intake and screen-based sedentarism.

Keywords: pediatric overweight, dietary habits, sedentary behaviour

DYSPLASIA AND ASSOCIATED RISK FACTORS IN LARGE COLORECTAL POLYPS

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Background: Colonic polyps represent well-established precursor lesions in the development of colorectal cancer (CRC), frequently presenting with different grades of epithelial dysplasia. Understanding the factors linked to the presence of dysplastic features remains clinically important, particularly in relation to lesion size, anatomical distribution, and patient-related risk factors.

Objective: This study evaluates the relationship between polyp size and dysplastic changes, while also examining lesion distribution, histological features, and associated risk factors.

Material and methods: A retrospective, cross-sectional observational study was performed on 81 patients who underwent colonoscopy with subsequent histopathological evaluation. Endoscopic characteristics were analyzed alongside histological findings across individual colonic segments. Both patient-related and lifestyle-associated risk factors were assessed. Lesions were stratified by size (10–19 mm vs. ≥ 20 mm).

Results: Male patients represented the majority of the study cohort. A greater number of lesions were observed in the distal colon, with the sigmoid segment representing 42% of all detected lesions. From a histological perspective, tubular adenomas were the most frequently encountered lesions, while tubulovillous patterns appeared more commonly in distal locations. Larger polyps showed a higher proportion of advanced dysplasia compared to smaller lesions, although this trend did not reach statistical significance. No evident association was found between metabolic dysfunction-associated steatotic liver disease (MASLD) and either lesion size or severity of dysplastic changes.

Conclusions: The distal colon represents a key area of interest in the evaluation of colorectal lesions. Although larger polyps appeared to be associated with more advanced dysplastic changes, this relationship was not statistically confirmed, suggesting the involvement of additional contributing factors. The lack of association with MASLD further supports the multifactorial nature of dysplasia development. Overall, these findings emphasize the need for careful lesion characterization and individualized surveillance strategies, particularly in patients presenting with high-risk morphological features.

Keywords: colorectal cancer, dysplasia, colonoscopy

OUTCOME PREDICTORS IN CIRRHOTIC PATIENTS WITH VARICEAL BLEEDING

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Background: Acute variceal bleeding represents a major complication of portal hypertension in cirrhotic patients, with persistently high in-hospital mortality despite advances in management. Identifying reliable prognostic indicators remains essential for early risk stratification and optimized clinical decision-making.

Objective: The aim of the study is to identify variables associated with short-term prognosis in patients hospitalized for variceal upper gastrointestinal bleeding.

Material and methods: We conducted a retrospective, single-center study including 79 adult patients diagnosed with variceal upper gastrointestinal bleeding over a one-year period. Demographic, clinical, endoscopic, and biochemical data were collected. Prognostic scores, including Child–Pugh and MELD, were calculated for each patient. Comparative statistical analysis between survivors and non-survivors was performed to identify predictors of mortality.

Results: Alcohol-related cirrhosis represented the predominant etiology, with an overall in-hospital mortality rate of 17.7%. Patients with fatal outcomes showed significantly impaired hepatic and renal function, characterized by elevated bilirubin, creatinine, and INR levels, alongside reduced serum albumin. Severe thrombocytopenia was also more frequently observed in this subgroup. Higher Child–Pugh class and increased MELD scores were strongly associated with mortality. In contrast, demographic characteristics and endoscopic features did not significantly influence survival. The requirement for mechanical ventilation was additionally linked to poor prognosis.

Conclusions: In patients with variceal bleeding, prognosis is primarily determined by the severity of underlying organ dysfunction rather than bleeding-related characteristics. Prognostic scoring systems remain essential tools for mortality risk assessment and clinical management.

Keywords: variceal bleeding, mortality, cirrhosis, MELD, risk stratification

LEVEL OF KNOWLEDGE AND PARENTAL COMPLIANCE REGARDING VITAMIN D SUPPLEMENTATION IN CHILDREN

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Background: Vitamin D plays an essential role in the proper growth and development of children, especially during the first years of life, when the physiological need is increased. Since endogenous synthesis is often insufficient, prophylactic vitamin D supplementation is an important recommendation in pediatric practice. However, parental compliance may be influenced by the level of information, trust in healthcare professionals, and various socio-demographic factors.

Objective: The objective of this study was to assess parents' knowledge regarding vitamin D, their sources of information, and behaviors related to supplement administration.

Material and methods: A descriptive cross-sectional study was conducted on a sample of 158 parents of children aged between 0 and 18 years. Data were collected through an online questionnaire and analyzed using descriptive statistical methods.

Results: The study results showed that 83.5% of participants correctly identified sun exposure as a source of vitamin D, while 60.1% mentioned diet. However, only 13.3% of respondents correctly identified the recommended dose of 1000 IU for healthy children up to 2 years of age. Most parents administered insufficient doses, ranging from 200 to 400 IU, while 29.1% were unaware of the recommended dosage. Regarding sources of information, the pediatrician was the main source for 49.4% of respondents, followed by the family physician for 22.2%, while 13.3% reported that they had not received any information regarding vitamin D administration.

Conclusions: The study highlights a significant gap between parents' general awareness of vitamin D sources and the correct implementation of prophylactic supplementation recommendations. Poor knowledge regarding the recommended dosage may reduce the effectiveness of prophylaxis and increase the risk of vitamin D deficiency. Strengthening communication between healthcare professionals and parents, as well as providing clear and accessible recommendations regarding vitamin D supplementation throughout childhood, is essential for ensuring effective prevention.

Keywords: Vitamin D, knowledge, parents, children.

MULTIDISCIPLINARY MANAGEMENT OF INVASIVE BRONCHOPULMONARY ADENOCARCINOMA IN A PATIENT WITH SEVERE RESPIRATORY AND CARDIOVASCULAR COMORBIDITIES

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Background: Invasive bronchopulmonary adenocarcinoma, specifically the hepatoid variant, is a highly aggressive neoplasm. Management is particularly challenging in frail patients with end-stage obstructive respiratory disease and multisystem cardiovascular conditions that severely limit functional reserves.

Objective: To evaluate the clinical progression of a patient with operated adenocarcinoma, local recurrence, and metastases, highlighting the challenges of administering chemotherapy amidst multisystem comorbidities and critical complications.

Material and methods: We clinically followed a 74-year-old male, former smoker (50 pack-years, ceased 2 years ago), with an ECOG 2 status. His severe multisystem pathology included Stage IV COPD, intricate bronchial asthma, chronic ischemic heart disease, NYHA II left ventricular failure, and chronic viral hepatitis B. The oncological course began with a metabolically active mass in the left upper lobe (SUV 21.6), treated via atypical pulmonary resection and mediastinal lymphadenectomy. Histopathology confirmed hepatoid invasive adenocarcinoma (pT1cN0M0), while molecular profiling revealed KRAS pG12C and non-driver EGFR p(L718M) mutations, with a PD-L1 score of 30%. Consequently, first-line Pemetrexed and Carboplatin were initiated, with doses reduced by 20% due to his fragile status.

Results: Treatment produced a dimensional reduction of the pulmonary consolidation and the left lower lobe nodule, without new metastases. However, a Grade 5 anaphylactic reaction to contrast media led to resuscitated cardio-respiratory arrest, requiring orotracheal intubation and mechanical ventilation in the ICU. Following stabilization and management of moderate normochromic anemia, the patient transitioned to monotherapy.

Conclusions: Managing oncology in patients with limited functional reserves is complex. Despite a partial response, Stage IV COPD, heart failure, and the risk of severe anaphylaxis necessitate continuous multidisciplinary surveillance. Strategies must balance tumor control with hepatitis B prevention and acute complication management through a strictly personalized therapeutic plan.

Keywords: Hepatoid adenocarcinoma, KRAS mutation, Multidisciplinary management, Anaphylaxis

THE IRON MASK: HEREDITARY HEMOCHROMATOSIS HIDDEN BEHIND METABOLIC SYNDROME IN A YOUNG PATIENT WITH NEW-ONSET DIABETES

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Background: Hyperferritinemia is frequently attributed to dysmetabolic inflammation in patients with Type 2 Diabetes Mellitus (T2DM) and Nonalcoholic Steatohepatitis (NASH), potentially masking clinically significant iron overload.

Objective: To emphasize the diagnostic importance of transferrin saturation in differentiating Dysmetabolic Iron Overload Syndrome (DIOS) from Hereditary Hemochromatosis (HH) in a young patient with metabolic syndrome.

Material and methods: A 35-year-old patient presented with persistent vomiting and acute urinary retention, in the context of newly diagnosed T2DM and hypertension. Laboratory evaluation revealed severe hyponatremia (108 mmol/L) and hypokalemia (2.42 mmol/L), requiring prompt correction. Subsequent investigations showed persistent hepatocytolysis (ALT 135 U/L), hyperferritinemia (970 ng/mL), and elevated transferrin saturation (53%). Abdominopelvic CT confirmed NASH.

Results: Although initially suggestive of DIOS, transferrin saturation >50% raised strong suspicion of HH, prompting genetic testing for HFE mutations. The patient was discharged with metabolic treatment and specific recommendations for etiological clarification and follow-up.

Conclusions: Transferrin saturation >45% in young patients with metabolic syndrome should be considered a red flag for Hereditary Hemochromatosis, rather than attributed solely to inflammatory hyperferritinemia. Early recognition is essential, as timely initiation of phlebotomy remains the only intervention capable of preventing irreversible complications, including hepatic fibrosis and “bronze diabetes.”

Keywords: Hemochromatosis, T2DM, Hyperferritinemia, NASH

HISTRIONIC TRAITS IN INDIVIDUALS WITH INTELLECTUAL DISABILITY

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Background: The diagnosis of personality disorders in individuals with intellectual disability is clinically challenging due to symptom overlap and the impact of cognitive deficits on emotional and behavioral expression and sometimes even controversial. As a result, personality disorders are often underrecognized or misdiagnosed. Histrionic traits, in particular, may be difficult to identify, as attention-seeking and emotionally expressive behaviors can be misattributed to developmental limitations rather than underlying personality features.

Objective: To present a case of mild intellectual disability associated with histrionic traits, emphasizing the challenges related to diagnosis, clinical course, and management.

Material and methods: We report the case of an adult male who presented for psychiatric evaluation. Data were obtained through clinical interview and behavioral observation. The assessment focused on cognitive functioning and personality traits, interpreted in relation to developmental level.

Results: The clinical presentation was consistent with mild intellectual disability, characterized by concrete thinking, reduced abstract reasoning, impaired judgment, severe dyscalculia, and concentrative hypoprosia. In addition, the patient exhibited prominent histrionic traits, including attention-seeking behavior, emotional exaggeration, suggestibility, and a persistent need for reassurance. The clinical course was marked by recurrent psychiatric admissions triggered by minor interpersonal conflicts, reflecting reduced impulse control and a tendency to exaggerate trivial situations. Functional assessment indicated partial independence in basic activities, with significant limitations in higher-level adaptive skills, particularly in the social domain.

Conclusions: This case emphasizes the diagnostic challenge posed by the overlap between intellectual disability and personality pathology. Recognition of histrionic traits requires careful clinical judgment, with direct implications for individualized management.

Keywords: intellectual disability, histrionic traits, personality disorder, diagnostic challenges.

GRAPHED SCHIZOPHRENIA- WHEN INTELLECTUAL DISABILITY MEETS PSYCHOTIS

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Background: Schizophrenia in individuals with intellectual disability (also called grafted schizophrenia) is associated with diagnostic complexity, atypical symptom expression, and increased risk of maladaptive and potentially dangerous behaviors, particularly in the absence of social support.

Objective: To present a case of schizophrenia superimposed on mild intellectual disability, emphasizing diagnostic challenges, clinical course, and risk-related behavioral manifestations.

Material and methods: We report the case of a male patient in his late 20s/ early 30s, with a history of schizophrenia and poor treatment adherence, admitted voluntarily for psychiatric evaluation. Clinical assessment included psychiatric examination and longitudinal history based on patient report.

Results: The patient, raised in institutional care and lacking social support, presented with chronic psychotic symptoms, including complex auditory hallucinations with imperative content and religious–grandiose delusions centered on divine mission. Cognitive evaluation revealed mild intellectual disability (IQ≈67), with impaired abstraction and judgment. The clinical course was marked by persistent residual psychotic symptoms, periodic decompensations, and severe adaptive dysfunction. Notably, the patient exhibited repeated high-risk behaviors under delusional influence, including arson of a public institution and attempted arson of a psychiatric facility. Insight was absent, and affective responses were partially incongruent. The combination of intellectual deficit, poor insight, and lack of support contributed to an unfavorable prognosis.

Conclusions: Schizophrenia superimposed on intellectual disability represents a high-risk clinical condition requiring careful diagnostic assessment and multidisciplinary management. This case highlights the role of social deprivation and impaired intellectual functions in amplifying the risk of dangerous behaviors. Early intervention, continuous monitoring, and structured support systems are essential for improving outcomes and reducing societal risk.

Keywords: schizophrenia, intellectual disability, arson, psychosis, social deprivation

MODERATE ACUTE PANCREATITIS IN A POST-CHOLECYSTECTOMY PATIENT WITH MULTIPLE COMORBIDITIES: A CASE REPORT

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Background: Acute pancreatitis (AP) is a complex inflammatory disease and one of the most clinically challenging abdominal disorders. Although cholecystectomy removes the most common source of biliary pancreatitis, post-cholecystectomy patients may still develop common bile duct (CBD) obstruction from residual or de novo ductal pathology. The presence of multiple comorbidities can further complicate both diagnosis and management.

Objective: Our aim is to report the case of a patient with suspected biliary obstruction occurring post-cholecystectomy, with significant gastrointestinal and systemic comorbidities.

Material and methods: A 70-year-old female with multiple comorbidities and a history of cholecystectomy presented to the Emergency Unit with diffuse abdominal pain, nausea, and vomiting. Laboratory investigations revealed elevated inflammatory markers (CRP), liver enzymes, and serum lipase. Imaging included abdomino-pelvic computed tomography (CT) and abdominal ultrasound, which showed a dilated CBD of 14 mm, with distal narrowing and peripancreatic fat stranding, consistent with early edematous AP. The patient was managed successfully based on the guidelines therapy, requiring also antibiotherapy.

Results: The patient was discharged in hemodynamic and respiratory stable condition. Clinical, biochemical, and imaging findings supported a diagnosis of moderate acute edematous pancreatitis of likely biliary obstructive origin, despite prior cholecystectomy. The dilation of the CBD without a visible obstructing stone suggested a calculus passage or functional impairment.

Conclusions: Acute pancreatitis may occur post-cholecystectomy due to a new biliary duct obstruction. Multimorbidity complicates diagnosis and management, pointing to the importance of a multidisciplinary approach and high-tech imaging for accurate etiological assessment.

Keywords: comorbidities, cholecystectomy, dilated CBD, computed tomography

SUBSTANCE-INDUCED PSYCHOSIS OR SCHIZOPHRENIA? A DIAGNOSTIC CHALLENGE IN A YOUNG ADULT WITH POLYSUBSTANCE USE

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Background: Chronic psychoactive substance use is increasingly associated with the development of psychotic disorders in young adults, raising significant diagnostic and prognostic challenges, particularly in distinguishing substance-induced psychosis from primary psychiatric conditions such as schizophrenia.

Objective: To highlight the clinical, temporal and diagnostic complexity of psychosis associated with long-term polysubstance use in a young adult, in the context of relevant psychosocial vulnerability factors.

Material and methods: We report the case of a 26-year-old male with continuous polysubstance use (cannabis, heroin and synthetic cannabinoids) for approximately 8 years, beginning in late adolescence. The patient had a significant psychosocial background, marked by the loss of his father at the age of 5 and being raised solely by his mother and grandmother. Psychotic symptoms debuted 2 years prior to admission and progressively worsened. Clinical manifestations included disorganized thinking, auditory and visceral hallucinations, persecutory and grandiose delusions, delusions of external control (passivity phenomena), as well as mystical delusional content. Behavioral disturbances were prominent, including episodes of wandering (dromomania), impulsivity, unpredictable behavior and potential heteroaggressiveness.

Results: The prolonged exposure to psychoactive substances during a critical neurodevelopmental period, combined with early-life psychosocial stressors, suggests a cumulative vulnerability to psychosis. The delayed but progressive onset of symptoms raises the possibility of both substance-induced psychosis and the unmasking of an underlying predisposition to a primary psychotic disorder. This overlap represents a major diagnostic challenge, with important implications for long-term prognosis, including the risk of transition to schizophrenia.

Conclusions: This case emphasizes that sustained abstinence from psychoactive substances is not only therapeutic but also a crucial diagnostic tool. Monitoring symptom persistence after cessation of drug use is essential for differentiating substance-induced psychosis from schizophrenia. The presence of psychosocial vulnerability factors further highlights the need for an integrated, multidisciplinary approach targeting both biological and environmental determinants of disease.

Keywords: polysubstance use, substance-induced psychosis, psychosocial factors, differential diagnosis, young adult

ANGIOSARCOMA TREATED WITH OFF-LABEL IMMUNOTHERAPY

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Background: Angiosarcomas (AS) make up 1-2% of soft tissue sarcomas, mainly affecting elderly men, with a non-favourable prognosis. The main line of medicated treatment tends to be debated upon, as the cases are rare, but in recent years the action of immunotherapy, with the programmed death 1 (PD- 1) and its receptors ligand-1 (PD-L1) and ligand-2 (PD-L2) has been studied.

Objective: Using immunotherapy- pembrolizumab in treating angiosarcoma, which is an off-label line of treatment in Romania.

Material and methods: We report the case of a 49-year-old man, who presents at the general practice clinic for lumbar pain for which he is advised to get a PET-CT scan. The results show a tumorous mass located in the right gluteus which invades the iliac bone; the scans also highlight solid pulmonary nodules and lesions with vascular periphery in the liver consistent with secondary hepatic lesions. Subsequently, a biopsy is taken from the mass in the right hip which confirms the presence of AS. The follow-up treatment consisted of chemotherapy- paclitaxel, which is first or second line of treatment in metastatic disease, denosumab for the bone invasion and immunotherapy with pembrolizumab.

Results: Follow-up on the most recent PET-CT shows some changes in the tumorous masses: a slight decrease in hypermetabolism in the right hip mass; sized up pulmonary nodules and new pulmonary nodules and nonspecific hypermetabolism in the posterior larynx. Pembrolizumab has been stopped as a line of treatment, since the patient presented impairment of the pituitary gland.

Conclusions: This case highlights the use of an off-label immunotherapy. The European Commission prescribes pembrolizumab against melanoma as monotherapy and other types of cancer, but not against AS. Meanwhile, the success of this immunotherapy has been shown in small trials of AS cases. Nevertheless, our patient has shown unfavourable results to this type of therapy.

Keywords: Angiosarcoma, pembrolizumab, PET-CT.

INCIDENTAL FINDING OF HIGH-GRADE BILIARY INTRAEPITHELIAL NEOPLASIA IN A CASE OF ACUTE CALCULOUS CHOLECYSTITIS

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Background: Biliary Intraepithelial Neoplasia (BillIN) is a premalignant and clinically silent lesion characterized by the presence of dysplasia in the epithelium of intra- or extrahepatic bile ducts. It is frequently associated with chronic inflammation and its importance lies in the potential for malignant transformation.

Objective: The objective was to present the importance of the histopathological diagnosis of Biliary Intraepithelial Neoplasia in surgical resection specimens.

Material and methods: We present the case of a 40-year-old male patient clinically diagnosed with acute calculous cholecystitis, who underwent laparoscopic cholecystectomy and with no other significant medical history. The surgical specimen was submitted to the Mureș County Clinical Pathology Department for gross inspection and histopathological diagnosis.

Results: Grossing revealed a gallbladder measuring 85x40x15 mm, with a wall thickness of 6 mm, showing a smooth serosa with preserved glistening and focal haemorrhages with a finely granular and greenish mucosa. Microscopically, the gallbladder wall was lined by simple columnar epithelium with areas of pseudopyloric metaplasia. Focally, the mucosa showed high-grade intraepithelial dysplasia, characterized by cells with enlarged, hyperchromatic nuclei with prominent nucleoli, nuclear stratification throughout the epithelium, an increased nuclear-to-cytoplasmic ratio, and frequent mitotic figures. Within the papillary projections, clusters of macrophages with pale, foamy cytoplasm were identified. The wall showed Rokitansky-Aschoff sinuses, extensive fibrosis, congested vascular structures and moderate mixed inflammatory infiltrate, that in some areas formed lymphoid aggregates. Immunohistochemical examination revealed positivity for CK7 and CK8/18, supporting the epithelial origin, an increased Ki-67 proliferation index was observed within the dysplastic epithelium together with a positive CD68 expression in macrophages.

Conclusions: The case illustrates the importance of morphological and immunohistochemical analysis in the diagnosis and risk stratification of BillIN, contributing to subsequent clinical decisions. Management of high-grade dysplasia requires surgical removal, which may be the best prevention measure in order to avoid malignant transformation.

Keywords: Biliary intraepithelial neoplasia, gastrointestinal pathology, Ki-67

AGAINST THE ODDS: PROLONGED LATENCY IN EARLY PPROM WITH OLIGOHYDRAMNIOS

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Background: Preterm premature rupture of membranes (PPROM) is a significant cause of perinatal morbidity and mortality, particularly at early gestational ages. It is commonly associated with prolonged latency, oligohydramnios, and increased risks of intrauterine infection and fetal compromise. Management remains challenging, requiring a balance between prolonging pregnancy and minimizing maternal and fetal risks.

Objective: This study describes the clinical course, management, and perinatal outcomes of early PPROM with persistent oligohydramnios.

Material and methods: We report the case of a 24-year-old primigravida admitted at 17-18 weeks of gestation with confirmed membrane rupture and signs of threatened pregnancy loss. The patient was managed expectantly in a tertiary care center. Maternal condition, fetal well-being, and amniotic fluid volume were closely monitored through serial clinical evaluations, laboratory testing, and ultrasound examinations. According to protocols antenatal corticosteroids were administered at 24 weeks of gestation.

Results: The clinical course was characterized by persistent oligohydramnios secondary to continuous amniotic fluid leakage, without evidence of maternal infection. Serial ultrasound evaluations demonstrated ongoing fetal growth and maintained cardiac activity. Despite a prolonged latency period, maternal complications were minimal. The patient underwent a cesarean section due to obstetrical indications related to fetal status and labor progression. The delivery occurred on 29.08.2025 at 33–34 weeks of gestation. The newborn was delivered with a weight of 2600 g with Apgar scores of 2 at 1 minute, 5 at 5 minutes, and 7 at 10 minutes, requiring neonatal intensive care unit admission due to prematurity.

Conclusions: This case highlights that favorable perinatal outcomes may be achieved in early PPROM under careful monitoring and individualized management. Pregnancy prolongation is possible even in the presence of persistent oligohydramnios, provided maternal and fetal conditions remain stable. Multidisciplinary care and timely obstetrical decision-making are essential for optimizing outcomes.

Keywords: preterm premature rupture of membranes, oligohydramnios, fetal monitoring.

WHEN THE REAL HIDES THE FAKE: MUNCHAUSEN SYNDROME DESPITE REAL PSYCHIATRIC AND SOMATIC DISORDERS

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Background: The severe form of factitious disorder, Munchausen Syndrome, is characterized by symptom imitation motivated by the need for medical attention, without other incentives. Although some patients have no other history, diagnosis can be delayed in cases where the patient has genuine psychiatric and somatic conditions.

Objective: To report on the difficulty of Munchausen Syndrome diagnosis in the context of real psychiatric and somatic comorbidities.

Material and methods: A 28-year-old woman was seen in a psychiatric day hospital after 11 months of hospital stay, with initial diagnoses of borderline personality disorder (BPD), PTSD, and ADHD with recurrent self-harm. Munchausen Syndrome was not initially suspected because of her documented somatic comorbidities (pituitary adenoma, obstructive sleep apnea).

After multiple contradictory sexual assault allegations and incoherent legal complaints, mobilizing both medical and legal resources, and in the absence of any forensic corroboration, Munchausen Syndrome was considered.

Results: The patient's presentation fulfilled the Factitious Disorder Imposed on Self described in the DSM-5 as well as the classical Munchausen triad: hospital-hopping, pathological lying, and lack of external incentives. The absence of any financial or legal benefit helped exclude malingering. Munchausen Syndrome does not exclude real comorbidities: BPD, despite being linked to Munchausen, accounted for emotional instability but not for medico-legal fabrications, and the pituitary adenoma being documented obscured the fabricated layer. The repeated victim role seemed to substitute the sick role, which is a documented Munchausen form.

Conclusions: Munchausen can be difficult to diagnose when patients have genuine clinical comorbidities. The lack of external incentives, the overuse of healthcare, and contradictory statements are the key diagnostic features. Recognizing the symptoms early can prevent unnecessary interventions and guide psychiatric care.

Keywords: Munchausen Syndrome, Factitious Disorder Imposed on Self(FDIS), Somatic comorbidities, Psychiatric comorbidities

SOMATIC AND PSYCHOLOGICAL BURDEN IN AUTOIMMUNE RHEUMATIC DISEASES: IMPLICATIONS FOR PATIENT QUALITY OF LIFE

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Background: Autoimmune rheumatic diseases are chronic conditions that significantly impact the somatic component, which is closely correlated with the patient's psychological status and quality of life.

Objective: To evaluate the relationship between somatic component, anxiety, depressive symptoms, and quality of life in these patients

Material and Methods: A cross-sectional study included 108 patients at the Târgu Mureș County Emergency Hospital. The assessment included instruments like PHQ-15 for somatic symptoms, HADS for anxiety and depression, and WHOQOL-BREF for quality of life.

Results: Females represented the majority of the cohort (65.7%, mean age: 48.8 years). Strong positive correlations were identified between somatic symptom severity and both anxiety (Spearman's $\rho = 0.692$; $p < 0.001$) and depression (Spearman's $\rho = 0.735$; $p < 0.001$). Quality of life was significantly impaired, with depression being the strongest negative correlation with the psychological health domain of quality of life (Spearman's $\rho = -0.808$; $p < 0.001$) and physical health domain (Spearman's $\rho = -0.712$; $p < 0.001$). Compared to males, females reported significantly higher levels of somatic symptom severity (Mdn = 15 vs. 6), anxiety (Mdn = 12 vs. 7), and depression (Mdn = 9 vs. 4), alongside lower quality of life scores ($p < 0.001$). Comparative analysis across pathologies revealed that patients with Systemic Lupus Erythematosus and Rheumatoid Arthritis demonstrated the highest thresholds for somatic and anxiety symptom severity ($p < 0.001$). Patients with Ankylosing Spondylitis maintained psychological scores and quality of life scores within normal ranges, showing a significantly better adaptation to the disease compared to the systemic cohort.

Conclusions: Autoimmune rheumatic diseases carry a significant psychosomatic burden, negatively impacting patients' quality of life. Female gender and systemic diagnoses (SLE, RA) identify high-risk groups for severe quality of life degradation. The more favorable adaptation observed in patients with axial involvement (Ankylosing Spondylitis) highlights the specific needs of the systemic cohort.

Keywords: autoimmune diseases, somatic symptoms, mental health

ATYPICAL DISSEMINATION OF PANCREATIC NEUROENDOCRINE CARCINOMA: PULMONARY AND CEREBRAL METASTASES IN THE ABSENCE OF HEPATIC INVOLVEMENT

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Background: Pancreatic neuroendocrine carcinoma (PanNEC) is a rare and aggressive neoplasm arising from the pancreatic islet cells. PanNEC shows a five-year overall survival rate of 20%. While the liver is the predominant metastatic site, pulmonary metastases occur in up to 10% of cases and cerebral involvement is exceedingly uncommon, with only a few cases reported in the literature.

Objective: To highlight an aggressive behavior and atypical dissemination pattern of PanNEC.

Material and methods: We present the case of a 78-year-old man diagnosed in 2021 with stage IV pancreatic tail neuroendocrine carcinoma (86×56mm) and a right upper lobe pulmonary metastasis (27×30mm). The patient underwent radiotherapy and first-line etoposide-platinum chemotherapy. Computed tomography (CT) follow-up over a 5-year period revealed several changes. Abdominal CT revealed tumor enlargement (86×134×96mm) with multiple vascular complications and increased size and number of peritumoral and retroperitoneal lymph nodes (up to 30mm). Pulmonary CT showed progressive growth of the right upper lobe nodule (58×64×47mm), associated with satellite nodules (10-15mm) and multiple bilateral micronodules in the left upper lobe and right middle lobe (2-3mm). Subsequently, the patient developed neurological symptoms. Cerebral CT revealed a right frontal cortico-subcortical mass lesion associated with extensive right frontotemporal vasogenic edema.

Results: The patient developed progressive regional lymph node, pulmonary and cerebral metastases, without evidence of hepatic involvement. Given the gradual deterioration of the patient's general condition, he passed away in 2026.

Conclusions: This case highlights the importance of follow-up imaging in detecting atypical dissemination sites in patients with PanNEC, underscoring its aggressive behavior, limited response to standard therapies and rapid clinical deterioration.

Keywords: pancreatic neuroendocrine carcinoma, lung metastases, cerebral metastasis

ENCEPHALOPATHY FOLLOWING INCOMPLETE HEMOLYTIC UREMIC SYNDROME IN A PEDIATRIC PATIENT

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Background: Hemolytic uremic syndrome (HUS) is a thrombotic microangiopathy primarily affecting children, characterized by hemolytic anemia, thrombocytopenia, and acute kidney injury (AKI). Most pediatric cases represent typical HUS due to Shiga toxin-producing *Escherichia coli* (STEC). Extra-renal complications, particularly neurological involvement, critically influence survival and long-term morbidity.

Objective: This paper underscores the need for a multidisciplinary approach and rigorous neurological follow-up in pediatric STEC-HUS patients, even without severe renal involvement.

Material and methods: We report the case of a 3-year-old boy with a left ectopic kidney who presented with 3 days of vomiting, abdominal pain, bloody diarrhea, and hematochezia. He was diagnosed with incomplete Stx1/stx2-positive STEC-HUS, featuring typical hematological abnormalities but preserved renal function. At discharge, he was stable, with residual microscopic hematuria and reactive thrombocytosis.

Two days post-discharge, he developed an ataxic gait with lateral swaying and dysarthria. Normal brain CT/MRI and C3/C4 levels ruled out structural lesions and atypical HUS, confirming post-HUS encephalopathy during the convalescent phase, without AKI.

Results: Neuroprotective therapy was initiated, including B-vitamin complex and omega-3 fatty acids. At one-month follow-up, ataxic gait had partially resolved, but dysarthria persisted, necessitating a speech therapy evaluation.

Conclusions: STEC-HUS may cause significant extra-renal complications despite absent AKI. The delayed ataxia onset emphasizes the need of extended post-discharge surveillance. A multidisciplinary team (nephrology, neurology, speech therapy) is vital for optimizing recovery and minimizing long-term neurodevelopmental deficits in children.

Keywords: ataxic syndrome, HUS, pediatric, Shiga toxin

DIAGNOSTIC CHALLENGES IN EARLY T-CELL PRECURSOR ACUTE LYMPHOBLASTIC LEUKEMIA- THE IMPACT OF AUTISM SPECTRUM DISORDER AND EPSTEIN-BARR VIRUS INFECTION

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Background: Early T-cell precursor acute lymphoblastic leukemia (ETP-ALL) is a rare subtype of T-cell acute lymphoblastic leukemia in pediatric patients, characterized by an unusual immunophenotypic profile and variable clinical presentations. Establishing the diagnosis is frequently challenging, particularly when the clinical presentation overlaps with infectious mononucleosis or when comorbidities such as autism spectrum disorder limit clinical evaluation.

Objective: To highlight the diagnostic challenges of a malignant hematologic disease associated with autism spectrum disorder and convalescent infectious mononucleosis.

Material and methods: We report the case of a 9-year-old male patient known with autism spectrum disorder and infectious mononucleosis 6 months prior, presented to the pediatric unit with poor general condition, extensive bilateral lymphadenopathy involving the lateral cervical, preauricular, and occipital regions and severe leukopenia. Diagnostic evaluation included laboratory data, bone marrow aspiration, lymph node histopathology, flow cytometry, abdominal ultrasound and lymph node ultrasound.

Results: Complete blood count revealed severe leukopenia and mild anemia. Serological testing was positive for EBV IgG, suggestive of prior exposure. Abdominal ultrasound demonstrated hepatosplenomegaly, while cervical ultrasound revealed multiple enlarged inflammatory lymph node conglomerates. An initial bone marrow aspirate was inconclusive due to limited patient cooperation and impaired communication related to autism spectrum disorder. A subsequent bone marrow aspirate revealed 11% lymphoblasts. Flow cytometry identified 10–15% immature T-lymphoblasts with an early T-cell precursor immunophenotype (icCD3+, CD7++, CD4-/CD8-, CD5 dim, CD33+, CD34+). Lymph node biopsy confirmed the diagnosis of ETP-ALL. Behavioral difficulties associated with autism spectrum disorder contributed to a significant delay in diagnosis.

Conclusions: This case highlights the impact of autism spectrum disorder on diagnostic access, as well as the role of prior Epstein-Barr virus infection in confounding the atypical presentation of ETP-ALL. Early use of immunophenotyping and a multidisciplinary approach are essential to reduce diagnostic delays.

Keywords: ETP-ALL, autism spectrum disorder, Epstein-Barr virus, immunophenotyping

ESOPHAGEAL ADENOCARCINOMA IN THE ABSENCE OF BARRETT'S ESOPHAGUS: A DIAGNOSTIC CHALLENGE

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Background: Esophageal adenocarcinoma is a malignant epithelial neoplasm of glandular origin, typically developing in Barrett's esophagus, where the normal squamous epithelium is replaced by columnar epithelium due to chronic gastroesophageal reflux. However, in rare cases, this may occur without these precursor changes.

Objective: This case aims to present a rare occurrence of esophageal adenocarcinoma developing in the absence of Barrett's esophagus and to highlight the diagnostic challenges associated with this atypical presentation.

Material and methods: A 68-year-old male presented with a clinically suspected tumor located in the middle third of the esophagus and presumed Barrett's esophagus. Endoscopic biopsies were obtained from the distal esophagus and the tumor area. Histopathological examination of the distal biopsy revealed fragments of columnar mucosa of cardiac type with acute inflammation, without evidence of intestinal metaplasia, confirmed by negative PAS- Alcian staining. The second biopsy consisted of four small fragments: two showed necrotic tissue with fibrino-leukocytic exudate, while the remaining fragments, along with a portion of non-keratinized stratified squamous epithelium, demonstrated infiltrative epithelial proliferation composed of atypical cells. Immunohistochemical analysis was performed using CK7 and p63 markers.

Results: Histopathological evaluation revealed marked nuclear pleomorphism and frequent mitotic figures. Tumor cells exhibited enlarged, hyperchromatic nuclei, arranged in cords and small clusters, with focal gland-like structures. Alcian-positive mucinous material was identified in the adjacent stroma, along with desmoplastic reaction and moderate mixed inflammatory infiltrate. Immunohistochemistry showed CK7 positivity and p63 negativity, supporting adenocarcinoma and excluding squamous cell carcinoma.

Conclusions: Esophageal adenocarcinoma may develop in the absence of Barrett's esophagus. This case highlights the discordance between endoscopic suspicion and histopathological findings, as well as the diagnostic complexity related to unusual tumor location and poorly differentiated morphology. Histopathological and immunohistochemical examinations are essential for correct diagnosis.

Keywords: Esophageal adenocarcinoma, intestinal metaplasia, immunohistochemistry, cytokeratin7, p63

SIGNET-RING CELL GASTRIC CARCINOMA PRESENTING AS A STENOSING ANTRAL TUMOR: A CASE REPORT

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Background: Gastric signet-ring cell carcinoma is a diffuse-type adenocarcinoma characterized by infiltrative growth, poor differentiation, and unfavorable prognosis. Its predominantly diffuse spread may delay diagnosis and reduce the sensitivity of superficial biopsies.

Objective: To illustrate the diagnostic limitations and aggressive behavior of gastric signet-ring cell carcinoma through a representative clinical case.

Material and methods: We report the case of a 59-year-old female with a history of valvular heart disease, lower limb varicosities, and colonic diverticulosis, who was diagnosed with a stenosing gastric tumor and admitted for surgical treatment. Initial upper gastrointestinal endoscopy was inconclusive for malignancy, prompting repeat endoscopy with biopsy. Histopathological examination was performed, followed by surgical intervention, with subsequent correlation of clinical, intraoperative, and pathological findings.

Results: Histopathological examination revealed discohesive tumor cells with abundant intracellular mucin and eccentrically displaced nuclei, consistent with signet-ring cell carcinoma. The tumor showed diffuse infiltration by poorly cohesive cells without glandular differentiation, indicating a high-grade carcinoma. Additional findings included stromal edema, smooth muscle hyperplasia, and mild inflammatory infiltrate. Lack of interaction with the surrounding stroma imposes additional difficulty in diagnosis. Intraoperatively, a stenosing tumor involving approximately two-thirds of the stomach was identified, with invasion of the hepatic hilum and extension to the third portion of the duodenum, along with perigastric lymphadenopathy. A gastrojejunostomy with Roux-en-Y reconstruction was performed. The postoperative course was favorable, and a central venous port was inserted for chemotherapy.

Conclusions: Gastric signet-ring cell carcinoma is an aggressive malignancy frequently diagnosed at an advanced stage due to its infiltrative growth pattern and subtle early findings. Repeated and multiple biopsies are essential when clinical suspicion persists despite inconclusive initial investigations.

Keywords: Signet-ring cell carcinoma, Gastric neoplasm, Inconclusive biopsy, Diffuse infiltration, Roux-en-Y gastrojejunostomy

PATHOLOGICAL SYNERGISM IN THE ASSOCIATION OF PHENYLKETONURIA WITH TRISOMY 21: FROM PROBABILITY TO CLINICAL CONSEQUENCES

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Background: Phenylketonuria is an rare autosomal recessive metabolic disorder caused by a deficiency of phenylalanine hydroxylase. This deficiency leads to the accumulation of phenylalanine which will have a neurotoxic effect. In the absence of treatment, it leads to severe intellectual disability, with the intelligence quotient not exceeding 50–60.

Down syndrome is the most common chromosomal abnormality, frequently associated with congenital heart malformations and resulting in intellectual disability.

Objective: To present a very rare clinical case of the association between phenylketonuria and trisomy 21 and to evaluate its impact on neurocognitive and cardiac outcomes, as well as the importance of therapeutic compliance.

Material and methods: We describe the case of a male patient, diagnosed neonatally with homogeneous trisomy 21, cytogenetically confirmed (47,XY,+21) following a strong suspicion based on the characteristic phenotype. Neonatal screening raised suspicion of phenylketonuria, confirmed upon repeat analysis. Cardiac evaluation identifies multiple cardiac malformations that are likely to occur in Down syndrome. The patient was monitored clinically and paraclinically, receiving specific treatment.

Results: Cardiac evolution was favorable, with spontaneous closure of the patent ductus arteriosus and remission of pulmonary hypertension. However, in terms of cognitive abilities, these were severely affected, the patient presenting profound intellectual disability (IQ = 18 at the age of 10 years), in the context of poor adherence to dietary treatment for phenylketonuria, with extremely high phenylalanine levels (20,422 mg/dl). The normal value should be below 6 mg/dl. The probability of coexistence of these two genetically independent conditions is estimated at approximately 1 in 12 million.

Conclusions: This association has a major impact on neurocognitive development, with the conditions exerting a cumulative negative effect. Neonatal screening and early intervention are essential, and adherence to dietary treatment remains a critical prognostic factor.

Keywords: phenylketonuria, trisomy 21, intelligence quotient, phenylalanine

STENOSING CROHN'S DISEASE UNDER ADVANCED THERAPY: IMPACT OF TREATING ASSOCIATED COMORBIDITIES

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Background: In stenosing Crohn's disease, maintaining sustained disease control is often difficult, as the response to treatment is frequently incomplete and disease progression may also be influenced by comorbidities and severe adverse effects.

Objective: The aim of this study is to highlight the therapeutic challenges in a patient with ileocolonic Crohn's disease with a stenosing pattern, in the context of drug toxicity, limited response to biologic agents, and a chronic comorbidity.

Material and methods: We present the case of a 54-year-old woman evaluated in September 2023 for recurrent abdominal pain, persistent diarrhea, and significant weight loss. The diagnosis of moderate-to-severe ileocolonic Crohn's disease with a stenosing pattern was established on the basis of endoscopic and histopathological findings.

Results: From the outset, the disease had an unfavorable course. Bone marrow aplasia occurred as a severe adverse reaction to azathioprine, requiring treatment discontinuation and revision of the therapeutic strategy. Infliximab also failed to achieve an adequate response, as active inflammation persisted and the fibrotic component worsened, leading to a switch to ustekinumab. However, only partial clinical and biological improvement was observed, without achieving complete remission, and treatment optimization remained necessary. The presence of a chronic musculoskeletal disorder further complicated disease control, as repeated use of nonsteroidal anti-inflammatory drugs was difficult to avoid and may have influenced disease activity.

Conclusions: This case illustrates the complexity of Crohn's disease with a stenosing pattern and the difficulty in achieving a favorable outcome in the setting of drug intolerance, limited response to biologic agents, and associated comorbidities.

Keywords: Crohn's disease, stenosing pattern, bone marrow aplasia, comorbidities, ustekinumab

EVALUATING THE EFFICACY AND TOLERABILITY OF OCRELIZUMAB TREATMENT IN PATIENTS WITH MULTIPLE SCLEROSIS IN THE REAL WORLD

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Background: Multiple sclerosis (MS) is a chronic, immune-mediated demyelinating disease of the central nervous system that affects young adults. The introduction of high-efficacy disease-modifying therapies (DMTs), such as the anti-CD20 monoclonal antibody ocrelizumab, has radically changed the therapeutic landscape. While pivotal phase III clinical trials demonstrated robust efficacy, real-world evidence is essential to confirm long-term outcomes, treatment persistence and safety profiles in heterogeneous patient populations outside strictly controlled trial environments.

Objective: To evaluate the real-world efficacy and tolerability of ocrelizumab in MS patients treated at the Regional Treatment Center in Târgu Mureș.

Material and methods: A retrospective observational study analyzed medical records of MS patients receiving ocrelizumab. Data included demographics, Expanded Disability Status Scale (EDSS) scores, and clinical relapse rates. Safety was assessed via adverse events (AEs) and laboratory parameters (lymphocytes, IgG, IgM).

Results: The cohort included 134 patients (58.96% female; mean age 48.69±11.11 years). Post-initiation, the median number of relapses decreased significantly from 1.0 to 0.0 ($p<0.0001$), reflecting an 84% reduction in relapse odds. Median EDSS remained statistically stable (5.5 at initiation vs. 6.0 at last evaluation, $p=0.0612$). AEs occurred in 38.81% of patients, presenting a manageable safety profile. The most common were urinary tract infections (82.69% of symptomatic cases) and allergic reactions (21.15%). IgG and IgM levels decreased below normal limits in 15.00% and 22.69% of patients, respectively. This hypogammaglobulinemia did not significantly increase the risk of urinary tract infections.

Conclusions: Ocrelizumab demonstrates a highly favorable real-world efficacy and safety profile. It effectively controls clinical disease activity by markedly reducing the relapse rate while stabilizing disability progression, validating the outcomes of pivotal clinical trials.

Keywords: multiple sclerosis, ocrelizumab, real-world evidence, EDSS

EPIDEMIOLOGICAL ANALYSIS OF THE LEVEL OF KNOWLEDGE OF GASTRIC CANCER RISK FACTORS

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Background: Gastric cancer is a significant global health concern, with well-established modifiable and non-modifiable risk factors. Public awareness of these factors plays a key role in prevention.

Objective: To assess knowledge of gastric cancer risk factors in the general adult population using a questionnaire-based approach.

Material and methods: A total of 507 adults from the general population were included. Data were collected using a structured questionnaire evaluating awareness of major risk factors, including *Helicobacter pylori* infection and family history. Statistical analysis included descriptive and inferential methods, with associations tested using the chi-square (χ^2) test. Statistical significance was set at $p < 0.05$.

Results: Unhealthy diet (78.9%), *Helicobacter pylori* infection (61.4%), and smoking (36.5%) were the most commonly identified risk factors. Significant associations were observed ($p < 0.05$), indicating variability in knowledge levels among participants.

Conclusions: There are notable gaps in awareness of gastric cancer risk factors within the general population. These findings support the need for targeted educational strategies, particularly the integration of structured health education programs in schools to enhance prevention.

Keywords: gastric cancer, risk factors, *Helicobacter pylori*, health education

NAVIGATING THE DIGITAL FRONT DOOR: AN EVALUATION OF THE QUALITY AND CLINICAL ACCURACY OF BREAST CANCER INFORMATION PROVIDED BY LARGE LANGUAGE MODELS

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Background: Widespread internet accessibility has enabled the adoption of conversational AI in healthcare settings. These linguistic models play a significant role in patient education and may influence clinical outcomes and decision-making.

Objective: The objective was to analyze and compare the performance of five Large Language Models (LLMs) - ChatGPT, Gemini, Claude, DeepSeek, and Copilot across two languages, Romanian and English, by measuring the reliability and depth of their responses to questions regarding breast cancer.

Material and methods: The models were queried with questions reflecting common breast cancer concerns. Responses were evaluated for completeness and accuracy, 0–10, using an established framework across two scenarios: a single broad question (Scenario A) and multiple targeted questions (Scenario B).

Results: In Scenario A, completeness scores for Romanian queries, Copilot achieved the highest score of 6.8, above the average of 5.5. In English, four models shared a top score of 5.0, with the overall average of 4.9. Accuracy scores were lower, with Gemini leading in Romanian, 5.0 versus 3.3 average, and DeepSeek in English, 6.4 versus 3.1 average.

In Scenario B, completeness was excluded due to the inherently exhaustive nature of responses. Accuracy significantly improved across all models, with DeepSeek achieving a perfect score (10.0) in both languages, followed closely by Gemini. Average accuracy increased substantially, reaching 9.5 in Romanian and 9.4 in English.

Average accuracy scores increased substantially across scenarios. For the Romanian scenario, the score rose from 3.3 to 9.5 (187.9%), while for the English scenario, it improved from 3.1 to 9.4 (203.2%).

Conclusions: A slight superiority was observed across all Romanian scenarios. Overall, DeepSeek provided the most nuanced responses. The findings suggest that no single model is universally optimal, and AI tools should complement, not replace, professional medical expertise.

Keywords: breast cancer, patient education, conversational AI

PERCEIVED STRESS AND SLEEP DEPRIVATION AS MAJOR FACTORS ASSOCIATED WITH GASTROINTESTINAL DISTRESS IN MEDICAL STUDENTS: A CROSS-SECTIONAL STUDY

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Background: Gastrointestinal (GI) distress is highly prevalent among medical students, frequently acting as a somatic manifestation of chronic academic pressure and unhealthy daily habits.

Objective: This study aimed to investigate the impact of perceived stress (PS), lifestyle factors, and sociodemographic variables on the severity of GI symptomatology, seeking to isolate the most significant associations within this population.

Material and methods: A cross-sectional study was conducted via an online survey; after applying exclusion criteria, a sample of 158 medical students was included in the analysis. Psychometric and somatic parameters were collected using validated self-administered tools: a 12-item scale for PS (Cronbach's $\alpha = 0.88$) and a 15-item scale for GI symptoms (Cronbach's $\alpha = 0.87$). For statistical evaluation, Fisher's Exact and Kruskal-Wallis tests were used, with the significance set at $p < 0.05$.

Results: The analysis revealed a highly significant association between PS and the severity of GI symptoms ($p < 0.001$), minimal symptoms prevailed in low-stress students (78.9%), whereas the severe-stress group exhibited predominantly moderate symptoms (65.5%) and included all cases of severe GI distress ($n=6$). Among lifestyle habits, sleep duration showed the strongest association with GI symptoms ($p < 0.001$), 65.5% of those consistently achieving ≥ 7 hours of rest per night reported minimal symptoms, whereas 66.7% of participants who never slept 7 hours/night experienced severe symptoms. Regarding physical activity levels, walking (steps/day) ($p= 0.034$) demonstrated a stronger association with digestive symptoms compared to general physical activity ($p=0.153$). Among sociodemographic variables, female sex was associated with more severe symptom severity ($p= 0.014$).

Conclusions: Perceived stress and sleep duration demonstrated the strongest associations with GI health among medical students. These findings highlight the need for institutional wellness programs focused on stress management and healthy lifestyle habits to alleviate somatic symptoms and improve academic outcomes.

Keywords: perceived stress, gastrointestinal symptoms, sleep duration

TREATMENT CHALLENGES WITH METHOTREXATE - FRIEND OR FOE: A FIVE-CASE SERIES IN RHEUMATIC DISEASES

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Background: Methotrexate remains the first-line treatment in rheumatic diseases, however, its hepatotoxic potential, even at low doses, continues to raise clinical concern.

Objective: This study illustrates the potential pathogenic diversity of methotrexate-induced hepatotoxicity to underscore the importance of continuous monitoring and risk factor management.

Material and methods: We conducted a retrospective case series of five patients admitted over a 12-month period in 2025 to the Rheumatology Clinical Department of the “Târgu Mureş County Emergency Clinical Hospital”. Inclusion criteria included: a rheumatologic condition, ongoing methotrexate therapy, and elevated serum transaminase levels or evidence of hepatic impairment.

Results: Four distinct patterns of hepatotoxicity associated with methotrexate therapy were identified: suspected hepatitis B virus reactivation, autoimmune liver disease overlap syndrome, acute idiosyncratic drug-induced liver injury, and drug-induced steatosis/steatohepatitis, with two fatal outcomes.

Conclusions: This case series suggests that, while low-dose methotrexate remains the primary therapy in rheumatology and is generally well-tolerated, its hepatotoxic potential is multifaceted. Associated risk factors such as type 2 diabetes mellitus, obesity, alcohol consumption and lack of folic acid supplementation may have cumulative effect or even potentiate the development of liver injury.

It is crucial to avoid clinical complacency, given the diversity of hepatotoxic forms even in the context of long-term stability. Regular monitoring and appropriate management of risk factors are essential for maintaining long-term safety.

Keywords: methotrexate, rheumatic diseases, hepatotoxicity, drug-induced liver injury

PSYCHOLOGICAL ASPECTS IN INFLAMMATORY RHEUMATIC DISEASES

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Background: Rheumatologic diseases, such as Rheumatoid Arthritis (RA) and Ankylosing Spondylitis (AS), influence both functional status and psycho-emotional balance, given the involvement of chronic inflammation and pain.

Objective: The aim of the study is to determine the correlations between disease activity and mental state (depression, anxiety, cognitive fusion), the impact of diagnosis delay and the effect of biological therapy compared to standard therapy on quality of life.

Material and methods: A cross-sectional observational study was conducted in a group of 90 patients (45 AR, 45 SA). Disease activity was assessed using the DAS28 score for RA and the ASDAS and BASDAI scores for AS. Psychological status was evaluated using the PHQ-9 (depression), GAD-7 (anxiety) and CFQ-7 (cognitive fusion) scales. The data were statistically analyzed, including the calculation of the Spearman coefficient and the use of comparison tests (level of significance $p < 0.05$).

Results: For both diseases, a significant correlation between the disease activity and the impact on mental status was highlighted. In patients with RA, the DAS28 score indicated a strong correlation with anxiety ($r=0.704$), depression ($r=0.704$) and cognitive fusion ($r=0.701$). In patients with AS, disease severity showed a very strong correlation with GAD-7 ($r=0.808$) score and a strong correlation with PHQ-9 ($r=0.735$) and CFQ-7 ($r=0.733$) scores. Among patients with RA, rural residence was associated with a significant delay in diagnosis (5 years vs 1 year), which contributed to psychological deterioration. Patients receiving biological therapy exhibited significantly less impairment of psycho-emotional status in both groups compared with those receiving standard therapy.

Conclusions: The severity of the disease and late diagnosis are major determinants of depression, anxiety and cognitive fusion. Compared to standard therapy, biological therapy has a superior impact on mental state.

Keywords: rheumatoid arthritis, ankylosing spondylitis, psycho-emotional status

DOCTOR–PATIENT COMMUNICATION IN THE POSTPARTUM PERIOD

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Background: In the context of increasing patient dissatisfaction regarding interactions with healthcare professionals, the present study investigates the role of doctor–patient communication during the postpartum period.

Objective: The main objective was to assess the quality of communication from the perspective of women in the puerperal period, with the aim of identifying directions for improving the therapeutic relationship.

Material and methods: The basis of our study is a psychosocial questionnaire applied to 85 mothers, who constituted the target group. The sample includes women who have experienced at least one postpartum episode. The questionnaire is descriptive in nature and follows a cross-sectional design.

Results: The results highlight a significant correlation between the perceived need for emotional support and the level of satisfaction with communication with the physician. Moreover, effective communication was associated with a reduced perceived risk of developing postpartum problems or complications.

When asked, “Were you satisfied with the way the physician communicated with you?”, 90% of respondents selected “satisfied/very satisfied.” To the question “Do you believe that effective communication helped you avoid postpartum problems?”, 87% of participants indicated “much/very much.”

Conclusions: The findings of this study demonstrate that communication, as an essential component of medical care during the postpartum period, emphasizes the need for an integrated and collaborative approach in the doctor–patient relationship.

Keywords: communication, postpartum, puerperium, engagement, doctor

PYOGENIC GRANULOMA

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Background: Pyogenic granuloma is a benign vascular lesion characterized by rapid growth and a tendency to bleed easily. It often develops after minor trauma or local irritation and can resemble infectious or malignant conditions, which may complicate the diagnostic process.

Objective: To present a pediatric case of pyogenic granuloma located in the posterior cervical region, with emphasis on clinical presentation, diagnostic approach, differential diagnosis, and therapeutic outcome.

Material and methods: We report the case of a pediatric patient presenting with a rapidly enlarging, erythematous nodular lesion on the nape of the neck, associated with inflammatory and crusted scalp lesions. Diagnosis was established clinically, based on lesion appearance and progression. Differential diagnosis included bacterial and fungal infections, as well as malignant conditions such as amelanotic melanoma.

Results: The patient received combined treatment including topical chloramphenicol, systemic amoxicillin–clavulanic acid, antifungal therapy, and a topical combination of nystatin, chloramphenicol, and mometasone. The scalp lesions were additionally treated with methylene blue applications, alongside symptomatic pain management. Under this regimen, the lesion showed gradual regression, with reduction in inflammation and bleeding, followed by complete healing without complications.

Conclusions: Pyogenic granuloma should be considered in the differential diagnosis of rapidly growing vascular lesions in pediatric patients, especially when associated with signs of infection. Careful evaluation is necessary to exclude malignant conditions such as amelanotic melanoma. Appropriate combined therapy leads to complete resolution and a good prognosis.

Keywords: pyogenic granuloma, amoxicillin–clavulanic acid, antifungal therapy, amelanotic melanoma

CLINICAL, BIOLOGICAL, AND OUTCOME CHARACTERISTICS OF ACUTE MENINGOENCEPHALITIS IN CHILDREN

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Background: Meningoencephalitis in children represents an important cause of morbidity, characterized by clinical variability and difficulties in the differential diagnosis between meningitis and encephalitis.

Objective: Comparative analysis of the clinical, paraclinical, and evolutionary characteristics of meningitis and encephalitis in pediatric patients.

Material and methods: A study conducted on a cohort of children diagnosed with meningitis and encephalitis, in which demographic characteristics, etiology, clinical manifestations, cerebrospinal fluid changes, and outcomes were evaluated. The data were statistically analyzed to identify significant differences and correlations between variables.

Results: Meningitis was more frequently observed in younger children, whereas encephalitis was more often associated with seizures and a longer duration of hospitalization. Fever and meningeal signs were predominant in meningitis. Hypoglycorrhachia and elevated C-reactive protein levels were more commonly identified in meningitis. In a relevant number of cases, the etiology remained undetermined. Mortality did not differ significantly between the two groups. Correlations were observed between serum inflammatory markers and those in the cerebrospinal fluid.

Conclusions: The identified differences between meningitis and encephalitis may help guide the differential diagnosis and optimize the management of pediatric patients

Keywords: meningitis, encephalitis, cerebrospinal fluid, C-reactive protein, seizures

PAIN AND ANXIETY AND DEPRESSIVE SYMPTOMS AMONG ONCOLOGY PATIENTS

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Background: Cancer is one the leading causes of mortality and morbidity worldwide. Pain, anxiety and depressive symptoms often appear among oncological patients, interfering with work capacity, daily activities and overall well-being.

Objective: This study aims to evaluate if there is a correlation between pain and symptoms of anxiety and depression in cancer patients.

Material and methods: This observational study included 150 patients diagnosed with cancer, admitted to the Oncology and Radiotherapy Clinic of the Mures County Clinical Hospital between December 2025 and April 2026. Data were collected using the Brief Pain Inventory–Short Form (BPI-SF) and the Hospital Anxiety and Depression Scale (HADS). The inclusion criteria concerned patients over 18 years of age, diagnosed with neoplastic disease, who expressed their agreement to participate. Exclusion criteria included inability to independently complete self-assessment questionnaires, failure to fully complete the questionnaires and presence of cognitive decline.

Results: The current study included 150 patients diagnosed with cancer, 51% of whom were women and 49% men. Mean age was identified to be 62.79 ± 13.72 years. 78.7% of the patients presented symptoms of anxiety, while 76% showed symptoms of depression, with a similar distribution across both sexes. Minimal anxiety symptoms predominated in both women (53.9%) and men (64.9%), as did minimal depressive symptoms (61.8% of women and 54.1% of men). Moderate positive correlations were observed between pain intensity and both depression ($r = 0.43$, $p < 0.001$) and anxiety ($r = 0.35$, $p < 0.001$), indicating that higher pain levels correspond to increased depressive and anxiety symptoms.

Conclusions: In this study population, pain intensity showed significant correlations with both depression and anxiety. These findings emphasize the need for integrated assessment and management of both physical and psychological symptoms in cancer patients.

Keywords: cancer, pain, anxiety, depression

PEDIATRIC RESPIRATORY HEALTH IN THE CONTEXT OF THE RESIDENTIAL ENVIRONMENT: A COMPARATIVE STUDY BETWEEN RURAL AND URBAN AREAS

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Background: Respiratory health constitutes a fundamental indicator of child well-being, being significantly influenced by the rearing environment. Analysis of differences between urban and rural communities highlights the specific risks associated with each residential setting.

Objective: To evaluate the impact of environmental, socio-economic, perinatal, and behavioral factors on respiratory health and infectious morbidity in children, aiming to identify risk and protective factors by comparing their environments of origin.

Material and methods: This observational study included 100 children aged 3 months to 17 years, divided into two groups: 51 (51%) from urban areas and 49 (49%) from rural areas. The study population had a mean age of 2.76 ± 3.48 years, with a predominant distribution in the 0-2 years age group (64%). Data were collected over a three-month period through a standardized questionnaire completed by parents in the Pediatric Clinical Department of the Târgu Mureş County Emergency Clinical Hospital. Statistical analysis was performed using the Mann-Whitney U test for group comparisons and Spearman's rank correlation (ρ) for variable associations, with significance set at $p < .05$.

Results: The study highlights distinct exposure profiles based on residential environment: while the urban setting shows a significant association with heavy traffic ($p < .001$), the rural setting is associated with the use of solid fuels ($p < .001$). Additionally, a highly statistically significant difference was observed between rural and urban settings regarding hand hygiene ($U = 58.83$; $p = .002$). A strong correlation was also identified between maternal educational level and the frequency of room ventilation for the child ($\rho = 0.551$; $p < .001$).

Conclusions: Risk factors for pediatric respiratory health differ according to the residential environment. Differences in preventive behavior indicate the influence of socio-educational factors and the necessity for targeted interventions.

Keywords: child well-being, risk factors, residential environment

A SILENT VARIANT, A HYPERTROPHIC HEART: MYBPC3:C.927-9G>A IN A YOUNG PATIENT

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Background: Pathogenic variants in the sarcomeric gene MYBPC3 are a frequent cause of inherited cardiomyopathies. Heterozygous MYBPC3 mutations are inherited in an autosomal dominant manner and may cause hypertrophic cardiomyopathy (HCM), but the same variants have been associated with dilated cardiomyopathy (DCM) and left ventricular (LV) noncompaction.

Objective: To report a case of a young patient with obstructive HCM carrying the heterozygous MYBPC3:c.927-9G>A variant, and to highlight its clinical implications and the need for family screening.

Material and methods: A 17-year-old female was presented to clinical evaluation (echocardiography, 48h Holter) and genetic testing (next-generation sequencing panel of cardiomyopathy genes). Findings were interpreted in the light of known MYBPC3 genotype–phenotype correlations.

Results: The patient exhibited obstructive HCM with severe asymmetric left ventricular hypertrophy, predominantly involving the interventricular septum, and dynamic LV outflow tract obstruction (resting gradient ~20 mmHg). Systolic anterior motion of the mitral valve resulted in mild to moderate mitral regurgitation. Global systolic function was maintained. Holter monitoring showed non-sustained ventricular tachycardia. Genetic testing revealed a single heterozygous variant in MYBPC3, c.927-9G>A, which was deemed pathogenic for hypertrophic cardiomyopathy. No further pathogenic or likely pathogenic variants were found.

Conclusions: This case supports the association of the heterozygous MYBPC3:c.927-9G>A variant with early-onset obstructive hypertrophic cardiomyopathy. Clinical and genetic findings in the patient are consistent with previously reported MYBPC3-related disease manifestations. Given the known phenotypic heterogeneity of MYBPC3-associated cardiomyopathies, careful longitudinal follow-up and cascade genetic screening of first degree relatives should be considered. Early identification of affected individuals may allow for appropriate surveillance and individualised management.

Keywords: Hypertrophic cardiomyopathy, MYBPC3, left ventricular non-compaction

SYSTEMIC INFLAMMATORY RESPONSE AND HYPERCOAGULABILITY IN ADVANCED OVARIAN CANCER: CLINICAL IMPLICATIONS FOR POSTOPERATIVE RECOVERY

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Background: Advanced ovarian cancer is frequently associated with systemic inflammation and a prothrombotic state, components of a tumor-driven biological milieu that significantly contribute to postoperative morbidity. Characterizing these alterations may provide important prognostic information.

Objective: To evaluate the relationship between the preoperative biological profile and postoperative evolution in a case of advanced ovarian cancer with peritoneal dissemination.

Material and methods: We report the case of an 81-year-old female patient admitted for a right ovarian mass associated with ascites. Preoperative laboratory findings revealed leukocytosis ($25.66 \times 10^3/\mu\text{L}$), thrombocytosis ($398 \times 10^3/\mu\text{L}$), elevated lactate dehydrogenase (LDH, 426 U/L), increased C-reactive protein (CRP, 31.5 mg/L), fibrinogen (445 mg/dL), and cancer antigen 125 (CA-125, 5191 U/mL), outlining a tumor-driven systemic inflammatory and prothrombotic milieu. The patient underwent extensive cytoreductive surgery.

Results: Intraoperative findings revealed a large ovarian tumor with peritoneal dissemination. Histopathological examination confirmed a low-grade (G1) endometrioid ovarian adenocarcinoma. The postoperative course was complicated by hemoperitoneum requiring reintervention, marked inflammatory response (CRP 208.46 mg/L, leukocytes $22.38 \times 10^3/\mu\text{L}$), severe anemia (hemoglobin, Hb 8.2 g/dL), and coagulation disturbances (international normalized ratio, INR 1.32), as well as acute cholecystitis. Under multidisciplinary management, the patient showed favorable recovery.

Conclusions: This case highlights the role of the tumor-driven inflammatory and prothrombotic milieu in shaping postoperative morbidity in advanced ovarian cancer. The discrepancy between low histological grade and extensive peritoneal disease underscores the biological heterogeneity of this malignancy. Integrating biological parameters into preoperative assessment may improve risk stratification and guide clinical management.

Keywords: advanced ovarian cancer, systemic inflammation, hypercoagulability, postoperative complications.

PATHOLOGICAL SPLENIC RUPTURE COMPLICATED BY HEMORRHAGIC SHOCK: A CASE REPORT

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Background: Hypovolemic shock is a consequence of a reduction in intravascular volume, leading to impaired tissue perfusion and cardiovascular function. Etiologically, it is caused by severe dehydration or acute blood loss, such as in the case of splenic rupture.

Objective: This case report underscores diagnostic and treatment challenges associated with splenic rupture and emphasizes the critical role of timely, multidisciplinary therapeutic management in optimizing clinical outcome.

Material and methods: We present the case of a 75-year-old male with a history of decompensated liver cirrhosis, hepatomegaly, prior acute myocardial infarction, and ischemic stroke, who presented to the emergency department with fatigue, dyspnea, and bilateral lower limb edema. Physical examination revealed marked abdominal distension suggestive of large-volume ascites. Thoraco-abdominal computed tomography (CT) demonstrated a right pleural effusion with basal compressive atelectasis, as well as hepatomegaly and splenomegaly. Splenic imaging demonstrated multiple peripheral subcapsular lesions consistent with splenic infarctions, associated with splenic lacerations and a subcapsular fluid collection at the inferior pole. In the setting of hemoperitoneum secondary to rupture of a pathological spleen, with suspicion of splenic lymphoma and hemorrhagic shock, emergency surgery was undertaken, consisting of splenectomy, evacuation of approximately 8 liters of hemorrhagic ascites, peritoneal lavage and drainage.

Results: The postoperative course was complicated by recurrent episodes of respiratory decompensation, a marked inflammatory syndrome, and a dialysis catheter-related infection with *Staphylococcus epidermidis*. Comprehensive management, including targeted antibiotic therapy, anticoagulation, and respiratory support, alongside transfusional support, led to gradual clinical recovery and hemodynamic and respiratory stability, ultimately allowing for hospital discharge.

Conclusions: Spontaneous splenic rupture represents a rare but life-threatening cause of hemoperitoneum in patients with advanced hepatic disease. Prompt recognition of suggestive clinical and imaging features is crucial for timely surgical intervention in the setting of hemorrhagic shock, followed by complex multidisciplinary postoperative management in high-risk patients.

Keywords: Spontaneous splenic rupture, Decompensated cirrhosis, Hypovolemic shock

RAPID HEMODYNAMIC AND BIOMARKER RESPONSE TO MAVACAMTEN IN HYPERTROPHIC OBSTRUCTIVE CARDIOMYOPATHY: CASE REPORT

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Background: Hypertrophic obstructive cardiomyopathy (HOCM) is a hereditary cardiac disorder characterized by left ventricular hypertrophy and dynamic LVOT obstruction, causing reduced exercise capacity, heart failure symptoms, and arrhythmias. Traditional therapy include negative inotropic medications and septal reduction procedures. Cardiac myosin inhibitors represent a novel disease-modifying approach that has transformed HOCM management.

Objective: To report clinical, hemodynamic, and biomarker improvements following mavacamten treatment in a patient with symptomatic HOCM in clinical practice.

Material and methods: A 48-year-old man with HOCM, hypertension, dyslipidemia, supraventricular ectopy, and persistent NYHA II symptoms despite optimal therapy was evaluated by ECG, 24-hour Holter, functional testing, laboratory analysis, and transthoracic echocardiography. Family history included hypertension and sudden cardiac death at age 55. Echocardiography showed asymmetric septal hypertrophy, maximum wall thickness 25 mm, SAM with moderate mitral regurgitation, EF 60%, and dynamic LVOT obstruction with a spontaneous peak gradient of 71 mmHg. Baseline NT-proBNP was 464 pg/mL. Mavacamten was initiated and titrated to 10 mg daily with close monitoring.

Results: After mavacamten initiation, symptoms and exercise tolerance improved markedly. At 12 weeks, NT-proBNP decreased from 464 to 77 pg/mL, and spontaneous peak LVOT gradient fell from 71 to 30 mmHg. Six-minute walk test showed satisfactory functional capacity: 470 m, Borg dyspnea score 2. Holter monitoring revealed sinus rhythm with isolated ventricular ectopy and no sustained arrhythmias. Sudden cardiac death risk was low at 1.7%, so ICD was not indicated and surveillance continued.

Conclusions: This case suggests that mavacamten may improve symptoms, LVOT obstruction, and biomarker profile in selected HOCM patients under close monitoring. It may help defer invasive septal reduction in appropriate cases, longer follow-up is needed to assess durability and long-term benefit.

Keywords: hypertrophic obstructive cardiomyopathy; mavacamten; LVOT obstruction; real-world evidence; cardiac myosin inhibitor

AIH–PBC OVERLAP SYNDROME PRESENTING WITH DECOMPENSATED CIRRHOSIS: MANAGEMENT CHALLENGES AND CLINICAL EVOLUTION

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Background: Autoimmune hepatitis (AIH) - primary biliary cholangitis (PBC) overlap syndrome is a rare clinical entity characterized by dual hepatic injury and an increased risk of rapid progression to cirrhosis. Therapeutic management represents a challenge, requiring simultaneous control of hepatocellular inflammatory mechanisms and cholestatic processes in order to preserve liver function.

Objective: Presentation of management considerations and the clinical course in a male patient with AIH–PBC overlap syndrome, diagnosed at the stage of decompensated liver cirrhosis.

Material and methods: Retrospective case study based on an analysis of clinical, immunological, and imaging data over a 24-month follow-up period.

Results: A 53-year-old male patient with a history of chronic alcohol use and significant neurological and cardiovascular comorbidities was diagnosed with overlap syndrome, confirmed by the presence of a specific immunological profile (anti-LC1 and anti-gp210 antibodies). The therapeutic strategy targeted the dual nature of the disease, combining ursodeoxycholic acid for the cholestatic component with corticosteroid therapy to suppress the active autoimmune process, alongside supportive management of both vascular and parenchymal complications of decompensated liver cirrhosis.

The clinical course was marked by progression to Child-Pugh class C cirrhosis, with the development of severe complications related to portal hypertension, including refractory ascites, hepatic encephalopathy, and hepatorenal syndrome. Despite appropriate management, the severely impaired hepatic functional reserve resulted in a limited therapeutic response. The outcome was unfavorable, with death occurring in the setting of advanced liver failure and severe metabolic decompensation.

Conclusions: This case highlights the difficulty of achieving clinical stabilization in overlap syndrome diagnosed at advanced stages of liver cirrhosis. The presence of the anti-gp210 marker represents an indicator of poor prognosis, underscoring the need for early and aggressive management of both autoimmune components to prevent progression to end-stage liver failure.

Keywords: overlap syndrome, liver cirrhosis, autoimmune hepatitis, primary biliary cholangitis

“RETHINKING ACUTE PANCREATITIS ETIOLOGY: A CASE OF SEVERE DUODENITIS”

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Background: Acute pancreatitis represents one of the most severe medical emergencies, carrying significant lethal potential. It involves numerous etiological factors, the most common being biliary tract disease and alcohol consumption, accounting for 80% of cases. Approximately 20% are idiopathic, with a high probability of an underlying genetic cause. Even so, the usual clinical signs and symptoms typically allow for a prompt diagnosis.

Objective: The aim of this case report is to highlight one of the atypical etiologies of acute pancreatitis.

Material and methods: A 24-year-old male patient, known to have a history of gastritis, presented to the Emergency Department in Târgu Mureș with intense epigastric pain radiating toward the anterior chest and back. Initial laboratory investigations showed leukocytosis, neutrophilia, and increased levels of amylase, AST, LDH, CK, and CRP. An abdominopelvic CT scan was then carried out.

Results: Imaging findings revealed severe acute duodenitis, characterized by moderate thickening of the pyloric antrum and duodenal bulb (6 mm), and severe thickening of the second and third duodenal segments (12 mm). Edema of the adjacent adipose tissue was observed, extending to the pancreatic head, leading to a diagnosis of secondary acute pancreatitis. Additionally, local lymphadenopathy and a distended gallbladder were noted.

Conclusions: Although the etiological factors of acute pancreatitis are well-known and extensive, the list remains open and continuously evolving. Atypical triggers can still challenge medical professionals and complicate clinical management, despite the classic signs and symptoms of the disease remaining largely unchanged.

Keywords: Epigastric pain, gastritis, acute pancreatitis, acute duodenitis;

FROM NEPHROURETERECTOMY TO SEPTIC SHOCK: A COMPLEX CASE OF POSTOPERATIVE BILIARY SEPSIS

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Background: Postoperative complications following major urological surgery in elderly patients may lead to severe abdominal pathology and life-threatening septic conditions.

Objective: To highlight the clinical course and management of a complex postoperative patient who developed biliary sepsis following nephroureterectomy.

Material and methods: We report the case of an 80-year-old male admitted for right-sided urothelial carcinoma involving the renal pelvis and pelvic ureter, who underwent laparoscopic right nephroureterectomy with lymphadenectomy. In the postoperative period, the patient subsequently developed acute cholecystopancreatitis and pyloric stenosis, followed by two episodes of hematemesis. Upper gastrointestinal endoscopy revealed stress-related gastric ulcers (Forrest IIb–IIc), as well as erosive bulbitis and erosive duodenitis involving the second portion of the duodenum. Further magnetic resonance imaging (MRI) identified persistent biliary obstruction and portal vein thrombosis, leading to initiation of anticoagulation therapy.

Results: Following postoperative clinical deterioration, the patient was transferred to the intensive care unit (ICU) due to biliary sepsis progressing to septic shock, with procalcitonin levels exceeding 10 ng/mL. He required mechanical ventilation, vasopressor support, and broad-spectrum antibiotic therapy. Because of associated duodenal stenosis, endoscopic management was not feasible. Ultrasound-guided external biliary drainage via a left intrahepatic approach was performed, resulting in bile externalization and partial improvement of cholestasis. During ICU hospitalization, the clinical course was further complicated by infection with *Candida auris*, requiring targeted antifungal treatment. Despite intensive multidisciplinary management, the patient remains hospitalized in critical condition, with persistent organ dysfunction and unfavorable evolution.

Conclusions: This case illustrates the complexity of postoperative biliary sepsis and the limitations of standard therapeutic approaches in the presence of gastrointestinal obstruction. Intensive care management and alternative biliary drainage are critical, although the clinical course may remain unfavorable.

Keywords: Nephroureterectomy, biliary sepsis, septic shock, portal vein thrombosis

WHEN PNEUMOPERITONEUM PRESENTS AS PNEUMONIA: A CHALLENGING DIAGNOSIS - CASE REPORT

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Background: Acute respiratory failure is a life-threatening condition characterized by the inability of the respiratory system to maintain adequate oxygenation and/or eliminate carbon dioxide. Pneumoperitoneum refers to the presence of free air within the peritoneal cavity, most commonly due to gastrointestinal perforation, and represents a surgical emergency.

Objective: To highlight the importance of accurate and timely diagnosis in patients with overlapping thoracic and abdominal clinical features, emphasizing the risk of misinterpretation when respiratory and intra-abdominal pathologies coexist.

Material and methods: We report the case of a 49-year-old female with a history of hypertension, obesity and stage IV endometriosis, who recently underwent gynecological surgery consisting of left adnexectomy and right ovariectomy. She was admitted with acute respiratory failure, suspected pulmonary embolism, and basal pneumonia. At admission to the intensive care unit, laboratory findings revealed a marked inflammatory response, with a C-reactive protein level of 490 mg/L and fibrinogen level of 999 mg/dL. Initial thoracic imaging showed bilateral basal pulmonary consolidations without evidence of pulmonary embolism. However, abdominal computed tomography revealed postoperative pneumoperitoneum with multiple intra-abdominal air-fluid collections, shifting the diagnostic focus from pulmonary pathology to an intra-abdominal process.

Results: The patient underwent emergency surgical intervention, which confirmed generalized feculent peritonitis secondary to sigmoid colon perforation. Surgical management included laparotomy, repair of the sigmoid lesion, protective ileostomy, lavage, and drainage. Postoperatively, the patient showed a favorable clinical evolution under intensive care support.

Conclusions: This case underlines the potential for atypical clinical presentations in postoperative patients and the need for continuous reassessment when the clinical course does not correlate with the initial diagnosis. Early identification of intra-abdominal complications can significantly improve patient outcomes.

Keywords: Acute respiratory failure, pneumonia, pneumoperitoneum, sepsis

THERAPEUTIC CHALLENGES IN SJÖGREN'S SYNDROME WITH SEVERE SYSTEMIC INVOLVEMENT: THE SYNERGY BETWEEN ANTIFIBROTICS AND IMMUNOSUPPRESSANTS

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Background: Sjögren's syndrome is a systemic autoimmune disease with potential severe extraglandular involvement, including interstitial lung disease (ILD), a major contributor to morbidity and mortality. Fibrotic ILD, especially with a usual interstitial pneumonia (UIP) pattern, often requires combined antifibrotic and immunosuppressive therapy.

Objective: To highlight the therapeutic challenges and management of progressive fibrosing ILD associated with Sjögren's syndrome.

Material and methods: We report the case of a 70-year-old former smoker diagnosed with Sjögren's syndrome (positive anti-La antibodies, positive Schirmer test), fibrosing ILD, and immune-mediated chronic myopathy. Comorbidities included grade II hypertension, chronic ischemic heart disease, and obesity. Disease progression was assessed by high-resolution computed tomography (HRCT), pulmonary function tests including Diffusion Capacity of the Lung for Carbon Monoxide (DLCO)—a measure of the lung's ability to transfer gas from alveoli to pulmonary capillary blood—and a six-minute walk test.

Results: Despite antifibrotic therapy with Nintedanib, the patient showed radiological and functional progression of pulmonary fibrosis. Clinical evolution included oxygen-dependent chronic respiratory failure and suspected secondary pulmonary hypertension. The six-minute walk test revealed significant desaturation (93% to 85%) and markedly reduced exercise capacity. Laboratory findings indicated persistent inflammatory activity (hypocomplementemia and hypergammaglobulinemia). Given disease progression and local reimbursement constraints, Azathioprine was added to ongoing antifibrotic therapy, with careful monitoring of hepatic and hematological parameters.

Conclusions: This case underscores the complexity of managing Sjögren's-associated ILD and supports a combined antifibrotic-immunosuppressive approach in progressive disease. Individualized treatment strategies, adapted to patient profile and healthcare system limitations, are essential for optimizing outcomes.

Keywords: Sjögren's syndrome, Interstitial lung disease, Pulmonary fibrosis, Nintedanib, Azathioprine

THE MYSTERY BEHIND HICCUPS - A LITERATURE REVIEW

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Background: Singultus, also known as hiccup, is a spasmodic contraction of the diaphragm and intercostal muscles, alongside with the closure of the epiglottis and the sound "hic" to come out. It is an involuntary action which is based on a reflex arc that consists of the vagus, phrenic nerves and sympathetic fibers, the hiccup center, and efferent pathways which supply the respective muscles involved.

Objective: The aim of these paper is to present the hiccups in a different light and to try to offerer a better understanding of this strange, rather common, phenomenon.

Material and methods: This literature review was conducted based on numerous articles from thrusted sources, like PubMed, ScienceDirect-Elsevier and Mayo Clinic, published between 2019-2025.

Results: During the research, the findings suggest that singultus appear when there is a disruption in the reflex arc, but their exact etiology and pathophysiology is still unclear. Also, the location of the center is still yet to be fully determined. The neurotransmitters involved in singultus are dopamine, GABA and serotonin. Acute hiccups can be caused by drinking too much alcohol, eating too much or sudden temperature changes. In some cases, hiccups were linked as a sign of myocardial infarction, atrial fibrillation and aortic aneurism. Some drugs, especially steroids, like prednisone, methylprednisolone, dexamethasone, but also tramadol and diazepam were observed as causal factors, in some individuals for hiccups. There has been shown that hiccups can occur even in utero. Medication that is proven to be useful in treating hiccups are Baclofen and Gabapentin, which are regarded as first line therapy for persistent singultus.

Conclusions: To sum it all up, there is still room for further research on this topic. There should be conducted more studies, in order to have a better understanding of this strange symptom.

Keywords: singultus, hiccups, reflex arc, steroids, Gabapentin.

ISCHEMIC STROKE AS A RARE PRESENTING FEATURE OF MULTIPLE MYELOMA: A CASE REPORT

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Background: Multiple myeloma (MM) is a plasma cell malignancy characterized by monoclonal immunoglobulin production and systemic complications, most notably AL amyloidosis. It is hypothesised that blood hyperviscosity and amyloid-associated vascular dysfunction represent key mechanisms in the increased risk of blood clot formation in MM patients.

Objective: To report a case of acute ischemic stroke as the presenting feature of previously undiagnosed MM with systemic AL amyloidosis and to highlight its accompanying characteristics.

Material and methods: A 50-year-old woman with bilateral lower limb edema and New York Heart Association (NYHA) class I heart failure presented with acute right central facial palsy, right hemiparesis and hemisensory deficit, motor aphasia (NIHSS score: 5). Intravenous thrombolysis with alteplase was administered, resulting in partial neurological improvement (NIHSS score: 4). Subsequent investigations revealed nephrotic-range proteinuria, prompting further evaluation.

Results: Cutaneous biopsy confirmed amyloid proteic structures, while serum protein electrophoresis revealed an M-Band. As such, serum and urine immunofixation electrophoresis was initiated, showing elevated free lambda light chains. 12–14% atypical plasma cells were present in the bone marrow examination, establishing the diagnosis of MM and systemic AL amyloidosis, associated with renal and cardiac involvement and a probable vascular contribution to the cerebrovascular event. Treatment with D-VCD regimen (daratumumab, bortezomib, cyclophosphamide, and dexamethasone) was initiated, with ongoing therapy over five cycles. Given the young age and relative lack of comorbidities, the patient is currently being evaluated for autologous stem cell transplantation.

Conclusions: This case aims to highlight the importance of considering MM as an underlying cause for ischemic stroke in order for early targeted treatment to be initiated, as well as to prevent cerebrovascular events in already diagnosed MM patients.

Keywords: Multiple myeloma, ischemic stroke, AL amyloidosis, hyperviscosity

MECONIUM PERITONITIS IN A PRETERM INFANT: A CHALLENGING CLINICAL COURSE

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Background: Meconium peritonitis is a rare condition caused by intrauterine bowel perforation. While emergency surgical intervention is life-saving, the resulting ileostomy significantly predisposes preterm infants to hydro-electrolytic imbalances and growth stagnation.

Objective: The aim of this case report is to present the clinical progression and management of severe metabolic acidosis, associated with hyponatremia in a preterm infant.

Material and methods: We report the case of a female infant, born prematurely at 34 weeks of gestation, with a birth weight of 1800 grams. Following a prenatal diagnosis of massive fetal ascites, the patient underwent an emergency median laparotomy with ileal resection and stoma formation for meconium peritonitis. The patient remained under specialized medical observation and was subsequently admitted in our clinic at two months of age due to severe dehydration.

Results: Upon admission, laboratory evaluations revealed a critical metabolic state characterized by severe hyponatremia (Na: 120 mmol/L) and metabolic acidosis, with a pH of 7.14 and a base excess of -23.3 mmol/L. Management necessitated intensive therapeutic escalation, including parenteral hydro-electrolytic rehydration, alongside metabolic stabilization. Under this treatment, the patient achieved metabolic stability, evidenced by the normalization of pH (7.39) and electrolyte levels, while demonstrating an ascending weight curve, reaching 2700 grams at the time of discharge.

Conclusions: Meconium peritonitis can have an apparently favorable early postoperative outcome, while significant complications may develop later. In preterm infants with ileostomy, metabolic disturbances and impaired growth are more likely to appear, making continued multidisciplinary follow-up essential for long-term recovery.

Keywords: meconium peritonitis, prematurity, ileostomy, hyponatremia

SWITCHING SSRIS TO SNRIS IN PARTIALLY RESPONSIVE DEPRESSION: A DULOXETINE CASE REPORT

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Background: Major Depressive Disorder affects over 280 million people globally, with remission rates below 40% in first-line trials. Up to 35% of patients show inadequate response to initial SSRIs (Selective Serotonin Reuptake Inhibitors), particularly those with prominent noradrenergic symptoms—fatigue, apathy, cognitive impairment, and somatic pain. Duloxetine, a balanced serotonin-norepinephrine reuptake inhibitor, modulates descending pain pathways and prefrontal noradrenergic circuits, offering a distinct advantage in somatic-cognitive depressive profiles.

Objective: Evaluation of the rationale, titration, and clinical outcomes of switching from escitalopram to duloxetine in a partially SSRI-resistant depressive episode.

Material and methods: A 42-year-old female patient with no somatic comorbidities and a prior history of mixed anxiety–depressive disorder (in full remission under escitalopram) presented with a severe reactive depressive episode triggered by her mother’s diagnosis of an incurable illness. Clinical features included persistent low mood, anhedonia, marked fatigue, anxiety, insomnia, impaired concentration, and significant functional decline. Initial treatment with escitalopram 10 mg/day, increased to 15 mg/day after partial response at one month, failed to achieve sufficient clinical improvement after two months. Following a shared decision-making process, treatment was switched to duloxetine, initiated at 30 mg/day for 7 days, titrated to 60 mg/day for two weeks, and further increased to 90 mg/day administered as a single morning dose.

Results: Under duloxetine 90 mg/day, the patient showed marked clinical improvement across all domains. Mood and anxiety symptoms improved within two weeks, followed by recovery of energy, concentration, and sleep. Social and occupational functioning returned close to baseline. No clinically significant adverse effects were reported during titration or maintenance treatment.

Conclusions: This case highlights duloxetine’s dual mechanism in depressive profiles with somatic and cognitive symptoms. The 30→60→90 mg titration was effective, well tolerated, and supported functional remission through individualized treatment and shared decision-making in MDD patients.

Keywords: Duloxetine, Titration, anxiety depressive disorder

A RARE COMBINATION OF ADVANCED ATRIOVENTRICULAR CONDUCTION DISEASE AND LONG QT INTERVAL IN A PATIENT WITH THYROIDECTOMY

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Background: Atrioventricular conduction disturbances (AV-blocks and intraventricular blocks) have a heterogeneous etiology and could have serious consequences, including Adam-Stokes syndrome. In certain cases, the management of these changes could be complicated by association of rapid arrhythmias, e.g. atrial fibrillation, or conditions with impact on cardiac electrophysiology. Our case comprises all these elements.

Objective: To present the complexity of cardiac evaluation and management of a 73-year-old female patient with advanced atrioventricular conduction disease and atrial fibrillation, associated with a potentially dangerous electrolyte imbalance.

Material and methods: A 73-year-old female patient with persistent atrial fibrillation was admitted for electrical cardioversion. She was on chronic treatment with amiodarone and oral anticoagulation. The patient's medical history included diabetes, hypertension and thyroidectomy (on hormonal supplementation). Clinical evaluation included ECG, echocardiography (showing a restrictive cardiac pattern, left atrial PA/longitudinal diameters 48/70 mm, EF 45-50% and mild/moderate mitral and tricuspid regurgitations) and laboratory work-up.

Results: Initial ECG showed an incomplete LBBB alternating with narrow QRS complexes with inverted, memory T waves. After cardioversion, the patient developed a very long PQ interval (360 ms) with a long QTc interval (500ms), resulting from a prolonged ST segment. Total serum Ca²⁺ was 5.3 mg%. Thyroid ultrasound and decreased PTH levels confirmed hypoparathyroidism as substrate for severe hypocalcemia. Intense Ca²⁺ supplementation was started and amiodarone treatment was discontinued. The clinical course of the patient was uneventful until discharge, with normal serum Ca values on oral supplements and without 2nd or advanced AV-block on Holter monitoring.

Conclusions: The case illustrates the complexity and consequential clinical challenges such a case might pose, underlining the importance of maintaining electrolyte balance and vigilant therapeutic approach in significant conduction disorders.

Keywords: Hypocalcemia, Adam-Stokes syndrome, atrioventricular conduction disturbances, memory T waves

INFLUENZA-ASSOCIATED PULMONARY ASPERGILLOSIS (IAPA) IN AN IMMUNOCOMPETENT PATIENT: THERAPEUTIC CHALLENGES AND THE ROLE OF ADVANCED RESPIRATORY SUPPORT

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Background: Influenza-associated pulmonary aspergillosis (IAPA) is a severe complication of viral pneumonia, associated with high mortality rates even in immunocompetent individuals. In cases of refractory acute respiratory distress syndrome (ARDS), conventional mechanical ventilation strategies may prove insufficient, requiring the implementation of extracorporeal life support.

Objective: To analyze the clinical management and favorable outcome of a 35-year-old patient with severe ARDS secondary to Influenza A and *Aspergillus flavus* co-infection, successfully treated with veno-venous extracorporeal membrane oxygenation (VV-ECMO).

Material and methods: We report the case of a 35-year-old male presenting with an 8-day history of progressive respiratory failure. Diagnostic confirmation was achieved through RT-PCR for Influenza A and positive tracheal aspirate cultures for *Aspergillus flavus*. Therapeutic escalation included non-invasive ventilation, followed by invasive mechanical ventilation, neuromuscular blockade, and prone positioning.

Results: Despite optimal conventional management, the patient maintained severe hypoxemia. VV-ECMO was initiated as a rescue therapy. The patient received targeted systemic antifungal therapy with Voriconazole for 14 days and antiviral treatment with Oseltamivir. Extracorporeal support was maintained for 13 days, facilitating gas exchange stabilization and gradual recovery of pulmonary compliance. Following successful decannulation on day 13, the patient was weaned from mechanical ventilation. Secondary complications, including colonization with multidrug-resistant *Acinetobacter baumannii*, were addressed with targeted antibiotic therapy (Colistin). The patient was discharged in stable condition for specialized rehabilitation.

Conclusions: This case underscores the necessity of early screening for fungal co-infections in severe post-viral ARDS. VV-ECMO serves as a critical therapeutic intervention for refractory hypoxemia, allowing time for targeted antimicrobial regimens to achieve clinical resolution.

Keywords: ARDS, Influenza A, *Aspergillus flavus*, VV-ECMO, IAPA

MULTIDISCIPLINARY MANAGEMENT AND DIAGNOSTIC CHALLENGES IN ACUTE PNEUMOCOCCAL MENINGITIS: FROM NEUROINFECTIOUS EMERGENCY TO INFLAMMATORY CEREBRAL ARTERITIS

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Background: Acute bacterial meningitis is a life-threatening condition with unpredictable evolution. Beyond infection, immune-mediated vascular complications significantly increase morbidity, requiring coordinated multidisciplinary care.

Objective: To emphasize diagnostic challenges and management of pneumococcal meningitis complicated by inflammatory cerebral arteritis.

Materials and Methods: We present the case of a 52-year-old woman admitted with high fever, persistent holocranial headache, and clear meningeal signs. Early emergency evaluation enabled rapid cranial CT to exclude intracranial hypertension. Lumbar puncture confirmed *Streptococcus pneumoniae* meningitis, revealing purulent cerebrospinal fluid with pleocytosis, elevated protein, and severe hypoglycorrhachia. ENT assessment excluded local infectious sources, suggesting hematogenous dissemination. Serial neurological evaluations monitored cognitive function and ruled out focal deficits.

Results: On day five, the patient developed fluctuating somnolence and transient attention impairment despite sterilized cerebrospinal fluid under adequate antibiotic therapy. These findings raised suspicion of inflammatory cerebral arteritis, a rare complication caused by leukocytic infiltration of cerebral vessels. Management required escalation of corticosteroids and strict hemodynamic monitoring to prevent ischemic events. Combined therapy with high-dose ceftriaxone, dexamethasone, and cerebral depletive measures led to progressive clinical and neurological recovery. The patient was discharged without sequelae.

Conclusion: Pneumococcal meningitis involves both infectious and inflammatory vascular mechanisms. Early diagnosis, continuous monitoring, and multidisciplinary management are crucial for preventing complications and achieving favorable outcomes.

BEYOND NON-ADHERENCE: THE ROLE OF SOCIAL ISOLATION AND INSTITUTIONALIZATION IN SCHIZOPHRENIA RELAPSE - A CASE REPORT

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Background: Paranoid schizophrenia is a chronic psychiatric disorder characterized by recurrent psychotic episodes, with treatment non-adherence representing the most significant modifiable risk factor for relapse. Relapses are associated with marked functional deterioration and reduced quality of life.

Objective: To highlight the impact of treatment non-adherence and psychosocial factors on relapse, clinical severity, and functional decline in a patient with chronic schizophrenia.

Material and methods: This paper presents a descriptive case study of a 57-year-old female with a long-standing history of schizophrenia, institutionalized in a long-term care facility, with partial adherence to outpatient treatment. Clinical evaluation included psychiatric examination, and assessment using standardized scales: PANSS and GAF. Data regarding medical history, treatment adherence, and psychosocial context (family support, institutionalization, social integration) were also analyzed.

Results: The clinical presentation included paranoid delusions with persecutory, referential, and mystical content, bradypsychia, disorganized behavior, hallucinatory-delusional behavior, impulsivity and unpredictability. The clinical picture was further characterized by global hypoprosia, memory impairment with reduced fixation and recall, affective flattening, and mixed insomnia. The patient presented with severe functional impairment, reflected by a PANSS score of 94 and a GAF score of 40. Notably, she lacked family involvement and did not benefit from a consistent social support network. Long-term institutionalization, in the absence of active psychosocial rehabilitation and community integration, may have contributed to reduced autonomy, social withdrawal, and limited insight, further impacting treatment adherence and overall prognosis.

Conclusions: This case highlights treatment non-adherence as a major driver of relapse in schizophrenia, leading to significant psychopathological decompensation and functional decline. The absence of family support, social isolation, and prolonged institutionalization likely contributed to poor adherence, delayed recognition of early relapse signs, and increased vulnerability to stressors. Continuous antipsychotic treatment, close monitoring, individualized long-term management, and structured psychosocial interventions, including community reintegration strategies, are essential to reduce relapse risk and improve outcomes.

Keywords: Schizophrenia, Treatment non-adherence, Relapse, Functional impairment, Institutionalization

COMPARATIVE BIOMECHANICAL CHARACTERIZATION OF PATCH MATERIALS USED IN VASCULAR SURGERY

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Background: Vascular patches are widely utilized in arterial reconstructive surgery, particularly in procedures such as carotid (CEA) or femoral endarterectomy (FEA). Their primary function is to enlarge the arterial lumen and reduce the risk of restenosis. The use of an appropriate patch has been shown to improve blood flow, reduce suture-line tension, and optimize local hemodynamics, thereby contributing to reduced long-term complications.

Objective: This study aims to compare the biomechanical properties of the great saphenous vein (GSV) and commercial bovine pericardium (BP) with the human carotid artery (HCA).

Material and methods: In the present study, specimens of GSV, commercial BP (TisgenX), and HCA were biomechanically analyzed at BioMerieux CellScale 5000. Samples were subjected to uniaxial tensile loading to 25% strain without preconditioning, using two opposing BioRakes over 10 consecutive stretch–recovery cycles. Data obtained from the final cycle were used to determine Cauchy stress and Young's modulus. This work was supported by the George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureș, Romania, through research grant no. 170/2/09.01.2024.

Results: Significant differences were identified among the tested materials. HCA showed the greatest thickness (1.18 ± 0.16 mm) and the lowest Cauchy stress (39.61 ± 13.67 kPa) and Young's modulus (195.78 ± 29.61 kPa), indicating the highest compliance. GSV demonstrated intermediate values, with biomechanical behavior closer to native carotid tissue. TisgenX was the thinnest material (0.47 ± 0.05 mm) and exhibited the highest Cauchy stress (273.69 ± 140.02 kPa) and stiffness (812.09 ± 314.02 kPa), reflecting reduced elasticity compared with both HCA and GSV (for all $p < 0.05$).

Conclusions: GSV most closely resembled native carotid artery biomechanics, whereas TisgenX showed significantly greater stiffness. Material-specific biomechanical properties should be considered when selecting vascular patches.

Keywords: vascular surgery, vascular patch, biomechanics, great saphenous vein, bovine pericardium.

PATIENT PERSPECTIVES ON COCHLEAR IMPLANT SUCCESS

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Background: Beyond conventional audiometry, quality of life (QoL) assessment has emerged as a fundamental clinical indicator, providing a more accurate reflection of the subjective benefits of auditory rehabilitation. Consequently, the implementation of specialized assessment tools, such as the CIQOL-35 questionnaire, has become essential to capture the multifaceted impact of implantation on the social and emotional well-being of the patient.

Objective: This study aims to evaluate the impact of cochlear implantation on QoL by analyzing the six fundamental CIQOL-35 domains. The research further investigates how these indicators correlate with demographic variables, surgical techniques, and the duration of device utilization.

Material and methods: The study cohort included 50 participants monitored at SCJU Târgu Mureș. Data were collected using the validated CIQOL-35 instrument. Evaluation covered six domains: Environment; Entertainment; Social; Emotional; Communication and Listening Effort, quantified via a 5-point Likert scale (0-4).

Results: The highest scores were recorded for: Environment (3,08); Entertainment (3,04) and Social (3,04) domains, while the lowest was observed in Listening Effort (1,89). Children reported superior QoL outcomes compared to adults (2,76 vs. 2,56). Scores improved with device use duration: 2,19 (5 years). Surgically, the round window approach showed higher scores (2,63) than cochleostomy (2,51). Regarding SmartNav technology, a score of 2,56 was noted (compared to 2,67 for conventional methods), a result attributed to its targeted use in complex cases and the shortened adaptation period of these specific patients.

Conclusions: A global mean score of 2,65 highlights the significant role of cochlear implants in enhancing patient QoL, with benefits becoming more pronounced over time through neuroplasticity and adaptation. These results validate the clinical importance of early implantation and the adoption of minimally invasive surgical techniques, such as the round window approach, in optimizing patient-centered outcomes.

Keywords: cochlear implant, quality of life, CIQOL-35, auditory rehabilitation

MULTILEVEL REVASCULARISATION CHALLENGES IN A POLYMORBID PATIENT WITH RECURRENT PERIPHERAL ARTERIAL DISEASE

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Background: Peripheral arterial disease (PAD) in patients with multiple metabolic comorbidities often necessitates complex, multilevel interventions. Maintaining long-term bypass patency and managing recurrent ischemia remains a significant clinical hurdle in the elderly population.

Objective: This report aims to highlight the diagnostic and therapeutic challenges in the management of extensive arterial disease with a history of multiple failed revascularisation attempts and surgical complications.

Material and methods: A 74-year-old female was diagnosed with PAD and also presented a complex medical background, including Type II diabetes, NYHA class II heart failure with preserved ejection fraction, Grade II hypertension, and mixed dyslipidemia. The clinical course was analysed based on serial interventions performed between July 2023 and January 2025, involving both surgical and endovascular approaches.

Results: The patient's history is marked by extensive bilateral reconstructions: right common femoral endarterectomy with heterologous pericardial patch, bilateral femoro-popliteal bypasses (OMNIFLOW and PTFE), and multilevel angioplasties (iliac and popliteal) utilising drug-coated balloons, stenting, and Jetstream atherectomy. Despite aggressive treatment, the patient presented in January 2025 with acute left limb ischemia due to proximal bypass thrombosis, associated with total occlusion of the tibio-peroneal trunk and distal arteries. The management was further complicated by a recent coumarin overdose and a history of local hematoma evacuation, illustrating the fragile balance between required anticoagulation and bleeding risks.

Conclusions: This case underlines the high risk of recurrent thrombosis in complex PAD despite modern hybrid approaches. Achieving limb recovery in such patients requires a meticulous, individualised strategy that balances aggressive revascularisation with the optimised management of underlying metabolic and hemostatic risk factors.

Keywords: Peripheral Arterial Disease, Bypass Thrombosis, Multilevel Revascularisation, Hybrid Intervention, Acute Limb Ischemia.

FROM MRI SUSPICION TO SURGICAL SUCCESS: MINIMALLY INVASIVE RESECTION OF A LEFT VENTRICULAR HEMANGIOMA

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Background: Primary cardiac tumours are rare clinical entities, and those located within the left ventricle present significant surgical challenges due to their position and potential for systemic embolisation. Cardiac hemangiomas are particularly rare benign variants. Utilising minimally invasive techniques for such complex pathologies can significantly reduce surgical trauma while maintaining surgical and functional efficacy.

Objective: The objective of this report is to present the surgical management and total resection of a symptomatic left ventricular tumour using a minimally invasive right lateral minithoracotomy.

Material and methods: The case concerned a 40-year-old male patient with a diagnosis of left ventricular tumour. Preoperative echocardiography and Cardiac Magnetic Resonance Imaging (MRI) identified a mass attached to the posterior interventricular septum, which was associated with moderate mitral regurgitation. The surgical strategy prioritised a minimally invasive approach via a right lateral minithoracotomy.

Results: Total resection of the left ventricular tumour was successfully performed. Intraoperative and postoperative echocardiography confirmed the complete removal of the mass and the resolution of associated hemodynamic concerns. The patient experienced a favourable postoperative recovery, highlighting the benefits of the minimally invasive approach in reducing hospital stay and surgical morbidity.

Conclusions: A right lateral minithoracotomy provides an effective and safe alternative to traditional sternotomy for the resection of rare intracardiac tumours, even those located in the left ventricle. Multimodal imaging is crucial for precise preoperative planning to ensure complete excision and optimal patient outcomes in rare cases like cardiac hemangiomas.

Keywords: Left ventricular tumour, cardiac hemangioma, minimally invasive surgery, right lateral minithoracotomy.

CASE OF RENO-URETERAL DUPLICATION WITH PERMANENT URINARY INCONTINENCE

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Background: Duplex renal collecting system in children is a common urinary malformation, a clinical entity which often eludes diagnosis because of its lack of pronounced symptomatology, resulting in its true prevalence being uncertain.

Objective: We aim to present the surgical management of an congenital urology abnormality with a late-onset symptomatology in a paediatric patient.

Material and methods: We present a case of a 17 year old female admitted to the Pediatric Surgery department of Emergency County Clinical Hospital in Târgu Mureş with acute onset urinary incontinence. Due to her non-contributory medical history, the medical team decided to proceed with an ultrasonography and a three-dimensional urography which indicated two distinct ureters exiting the right kidney, one of them with an ectopic insertion into the vaginal vault. This result demonstrated that the duplication is a complete one where the two ureters are separate and drain the same kidney, but in some cases it can also be partial, meaning that the two ureters connect before reaching the bladder.

Results: When choosing the best management of the diagnosis, a few factors were taken into consideration such as the function of the affected renal moiety, the clinical symptoms, the anatomy of the duplication and the presence of the complications. In this case, the decision was to proceed with a distal ureteroureterostomy, which is a sparing kidney surgery, with an end-to-side anastomosis. Following the surgery, the patient had a quick recovery and a complete resolution of her urinary incontinence.

Conclusions: In conclusion, this malformation can be clinically silent, but once diagnosed, a surgical management should be taken into account, keeping in mind that urinary incontinence can have a psychological and social impact on the well-being of the patient.

Keywords: duplex collecting system, urinary incontinence

PERFORMANCE OF PROXIMAL RADIO-CEPHALIC ARTERIOVENOUS FISTULA FOR HEMODIALYSIS ACCESS

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Background: According to European guidelines, the distal radiocephalic arteriovenous fistula (RC-AVF) is the preferred first-line vascular access (VA) for hemodialysis. However, in many patients, RC-AVF creation is not feasible because of poor vascular quality, diabetes mellitus, smoking, previous VA procedures, or other risk factors, necessitating a more proximal approach.

Objective: This study aims to evaluate the indications for proximal RC-AVF creation, identify the preferred surgical techniques, and assess the performance of this type of VA.

Material and methods: This systematic review included all studies published over the last 25 years. Eligible publications were identified through an electronic literature search of PubMed and Google Scholar. Inclusion criteria were studies reporting the use of proximal RC-AVF and published after 2000. Exclusion criteria comprised studies evaluating other types of fistulae, case reports, and review articles. The variables analyzed included study design, follow-up duration, demographic characteristics, comorbidities, prior VA, anatomical and operative features, and primary outcomes.

Results: Most studies reported a predominance of male patients (63%), with a median age of 61 years. Among the 1,264 patients who underwent creation, 50.73% had diabetes mellitus. Four studies reported a hypertension prevalence of 92.64% among participants, while six studies documented previous VA in 44.82% of patients. The outflow vein varied and included predominantly the cephalic vein, as well as the median antebrachial vein and perforating vein. Technical success rates were comparable across studies. Primary patency at 12 months was 78.76%, with a secondary patency rate of 81.2%.

Conclusions: Proximal RC-AVF is a safe and effective alternative when distal RC-AVF is not feasible, providing favorable 12-month patency and high technical success in a high-risk population. These findings support its consideration as a valuable forearm access option before proceeding to more proximal upper-arm AVF.

Keywords: vascular access, vascular surgery, arteriovenous fistula, hemodialysis.

SURGICAL MANAGEMENT OF ADVANCED PERIPHERAL ARTERIAL DISEASE WITH ILIO-FEMORAL BYPASS: A CASE REPORT

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Background: Peripheral arterial disease (PAD) is a progressive atherosclerotic condition that can lead to critical limb ischemia and requires timely revascularization. Surgical bypass remains a key option in complex occlusive disease.

Objective: To present a case of advanced lower limb arterial occlusive disease managed with surgical revascularization and to highlight clinical, imaging, and therapeutic aspects.

Material and methods: A 53-year-old male with multiple cardiovascular risk factors (chronic smoking, hypertension, dyslipidemia, sedentary lifestyle) presented with intermittent claudication (walking distance ~200 m) and progressive right lower limb ischemia. Prior history included percutaneous transluminal angioplasty of the right common femoral artery. Laboratory evaluation showed mild leukocytosis ($11.1 \times 10^3/\mu\text{L}$) and elevated fibrinogen (393.89 mg/dL), with otherwise stable renal, hepatic, and lipid parameters. Angio-CT demonstrated ~64% stenosis of the right external iliac artery due to mixed atheroma and occlusion of the right femoro-popliteal segment over ~7 cm, with collateral revascularization. The patient underwent right ilio-femoral bypass using a synthetic graft, with intraoperative anticoagulation (heparin) and standard vascular surgical technique.

Results: Postoperative evolution was favorable, with restoration of distal perfusion and palpable pulses in the affected limb. The patient remained hemodynamically stable, without complications. Dual antiplatelet therapy (aspirin 100 mg and clopidogrel 75 mg), along with statins and supportive treatment, was initiated.

Conclusions: This case highlights the importance of early diagnosis and comprehensive management of PAD. Surgical bypass remains an effective treatment for extensive occlusive disease when endovascular options are limited or unsuitable.

Keywords: peripheral arterial disease, femoro-popliteal occlusion, ilio-femoral bypass, vascular surgery, atherosclerosis

OVARIAN CYST RUPTURE PRESENTING AS POST-ABORTION ACUTE ABDOMEN

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Background: In the context of recent medical abortion, acute abdomen represents a surgical emergency that often leads clinicians to suspect an uterine etiology. However, extrauterine causes such as ovarian cyst rupture may present as an acute abdomen, potentially misleading and delaying the correct diagnosis.

Objective: This paper aims to highlight the importance of considering extrauterine causes in the differential diagnosis of patients presenting with acute abdomen following a medical abortion.

Material and methods: We present the case of a 26-year-old woman who was admitted to the emergency department with colicky abdominal pain, abdominal guarding and signs of peritoneal irritation, one month after a medical abortion. Transvaginal ultrasound revealed retained post-abortion tissue, fluid in the pouch of Douglas and a large left ovarian cyst measuring 6x6 cm. A two-steps surgical procedure was performed for the management of the left ovarian cyst and uterine evacuation. During the first step, exploratory laparoscopy revealed a moderate hemoperitoneum which was completely aspirated. The cyst was identified and managed with incision and evacuation of serosanguinous content, followed by cystectomy, hemostasis, capsule retrieval and peritoneal lavage. A suction drain was placed in the pouch of Douglas. During the second step, uterine evacuation was carried out, removing a moderate-abundant amount of red-brown clots and retained post-abortion tissue. The cyst capsule and fragments of retained post-abortion tissue were sent for histopathological examination.

Results: Imaging findings and exploratory laparoscopy were consistent with an ovarian etiology of the acute abdomen. The patient had a favorable evolution, without postoperative complications.

Conclusions: Acute abdomen following medical abortion may not always be of uterine origin. Maintaining a broad differential diagnosis and considering extrauterine causes, even in the presence of suggestive uterine findings, is essential for preventing misdiagnosis and ensuring appropriate surgical management.

Keywords: acute abdomen, ovarian cyst, medical abortion, hemoperitoneum

DELAYED SURGICAL SALVAGE OF A THROMBOSED BRACHIOCEPHALIC ARTERIOVENOUS FISTULA USING A RETROGRADE C-SHAPED CEPHALIC-TO-AXILLARY VEIN DACRON BYPASS

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Background: Cephalic arch stenosis (CAS) is a major cause of dysfunction in brachiocephalic arteriovenous fistulas (BC-AVFs). In the absence of standardized postoperative ultrasound surveillance protocols, this lesion is often identified only after AVF thrombosis.

Objective: To present the surgical management of a delayed thrombosed BC-AVF by using a retrograde C-shaped cephalic-to-axillary vein Dacron bypass after failed conventional recanalization.

Material and methods: We report the case of a 48-year-old patient with class III obesity on hemodialysis via a left BC-AVF, created 3 years before. The patient was referred to our vascular surgery department because of access dysfunction secondary to partial thrombosis of the BC-AVF. Preoperative duplex ultrasound demonstrated patency of the juxta-anastomotic segment, with a small venous side branch serving as the outflow tract, followed distally by thrombosis of the cephalic vein. The patient subsequently underwent surgical thrombectomy of the BC-AVF, with consideration of venous outflow transposition depending on intraoperative findings.

Results: Recanalization of the cephalic vein up to the cephalic arch was successfully achieved; however, the CAS could not be corrected. Consequently, venous outflow transposition was performed by constructing a retrograde C-shaped loop bypass between the cephalic and axillary veins using a prosthetic Dacron graft. In the postoperative period, hemodialysis was successfully resumed on postoperative day 1, with cannulation performed at the same sites used before thrombosis. At 8-month follow-up, the fistula remained fully functional, with no evidence of rethrombosis or access-related complications.

Conclusions: Delayed surgical salvage of a thrombosed BC-AVF is feasible and can preserve existing vascular access even when CAS precludes conventional recanalization. A retrograde C-shaped cephalic-to-axillary vein Dacron bypass provided immediate restoration of dialysis access, enabled early reuse of the fistula, and demonstrated sustained mid-term patency without complications. This technique may represent a valuable alternative to fistula abandonment and the creation of new AVF.

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

CRANIOFACIAL RECONSTRUCTION FOLLOWING BEAR ATTACKS: A COMPLEX SURGICAL APPROACH

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Background: Animal attacks on humans may result in severe craniofacial and intracranial injuries, requiring complex multidisciplinary management. Although rare, bear attacks represent a major therapeutic challenge due to the extent of tissue damage and the high risk of complications.

Objective: To present the surgical management and outcome of a complex cranio-cerebral and craniofacial trauma caused by a bear attack, emphasizing a multidisciplinary approach.

Material and methods: We present the case of a 66-year-old male patient with no relevant medical history, who sustained severe cranio-cerebral and cranio-facial trauma following a bear attack. Upon admission, CT imaging revealed an acute right hemispheric subdural hematoma, extensive frontal and interhemispheric hemorrhage, cerebral edema, and multiple comminuted fractures involving the frontal bone, orbital floor, maxillary sinuses, and nasal skeleton. The patient underwent emergency surgical management, including craniectomy, evacuation of the hematoma, duroplasty, fixation of bone fragments using osteosynthesis plates, reconstruction of soft tissues with local flaps and skin grafts, and tracheostomy.

Results: Postoperative imaging showed partial resolution of the hematoma and cerebral edema, with preserved midline structures. The clinical evolution was favorable, with progressive neurological improvement and no signs of infection. The patient was discharged in stable condition with complete neurological recovery.

Conclusions: Bear attacks can result in life-threatening polytrauma requiring prompt surgical intervention, intensive care, and close monitoring to optimize overall recovery and functional outcomes. This case highlights the need for a multidisciplinary, integrated approach in managing trauma caused by animal encounters.

Keywords: craniofacial trauma, bear attack, reconstructive surgery

FROM DARKNESS TO LIGHT: SURGICAL RESTORATION OF VISION IN A RARE CASE OF BILATERAL LATE-EVOLVING CONGENITAL CATARACT

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Background: Congenital cataract is manifested as clouding of the eye's lens, present at birth or early childhood, with a prevalence of 1–6 cases per 10,000 live births. Some lens opacities do not progress and remain visually insignificant, while others can produce profound visual impairment. Etiologies include genetic factors, intrauterine infections (e.g., rubella, toxoplasmosis, varicella, syphilis), and metabolic disorders.

Objective: To present a rare case of bilateral, late-evolving congenital cataract, highlighting its delayed progression after decades of stability and the outcomes of surgical management. To present a rare case of bilateral, late-evolving congenital cataract, highlighting its delayed progression after decades of stability and the outcomes of surgical management.

Material and methods: A 49-year-old female patient with a diagnosis of congenital cataract since the age of 8, without initial visual impairment, presented with progressive bilateral vision blurring over the past two years, affecting daily activities. Ophthalmic examination revealed decreased visual acuity (VA 0.5 in the right eye and 0.4 in the left eye) and dense bilateral posterior subcapsular opacities at slit-lamp examination. Intraocular pressure, posterior segment examination, and retinal tomography were normal. The patient underwent sequential cataract surgery with implantation of a multifocal intraocular lens.

Results: Although the surgery was technically challenging due to congenital lens alterations, the postoperative course was uneventful. The patient regained 20/20 visual acuity in both eyes, with significant improvement in daily functioning.

Conclusions: This case highlights the rare late progression of congenital cataract after decades of stability. Long-term monitoring is essential, as visual impairment may develop later in life. Surgical treatment should be performed by experienced surgeons to minimize complications, and multifocal intraocular lenses can ensure good visual outcomes and reduced spectacle dependence, especially in active patients.

Keywords: Congenital cataract, cataract surgery, multifocal intraocular lens, visual acuity, late progression

ANIMAL AGGRESSION POLYTRAUMA: PRECISION ORIF FOR RADIAL-ULNAR FRACTURES

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Background: Bear attacks on humans, estimated at 300-400 incidents annually, carry severe risks of polytrauma. Approximately 10% of these cases result in mortality, with orthopedic injuries, particularly upper limb fractures due to instinctive defensive posturing, being predominant.

Objective: To present a severe animal-aggression-related forearm trauma case, highlighting diagnostic and therapeutic challenges of a complex fracture with soft-tissue injuries, and underscoring expeditious surgical management's role in a favorable outcome.

Material and methods: We present a 58-year-old patient who was admitted to the emergency department after a bear attack, reporting movement-limiting pain in the left forearm and right thigh. Immediate tetanus-rabies prophylaxis was instituted to avert infectious sequelae. Diagnostic evaluations, including clinical and paraclinical examination, confirmed a distal left ulnar fracture, mid-diaphyseal left radial fracture, contused lacerations of the right thigh, and a left submandibular wound. The patient was admitted for definitive specialized management.

After thorough preoperative assessment and anesthesia optimization, the surgical strategy employed open reduction and internal fixation (ORIF) for precise realignment and secure stabilization of the fractured bones using osteosynthetic implants. Due to the contaminated wound from the animal assault, comprehensive debridement of necrotic tissues, extensive irrigation, and precise soft-tissue management were integral. A lateral external fixator was additionally applied, using two proximal and two distal pins, to ensure interim stability during early healing.

Results: Postoperatively, the patient demonstrated a favorable recovery course, characterized by significant pain relief and preserved stability in the affected area. Upon discharge, clinical review confirmed overall improvement with no acute systemic issues.

Conclusions: This case underscores the severity of animal assault injuries, characterized by the combination of forearm fractures and contused soft tissue damage. Prompt surgical intervention centered on anatomical reduction, adequate stabilization, and rigorous wound debridement was crucial for achieving a favorable outcome and averting functional and infectious complications.

Keywords: ORIF, Bear, fracture

A SINGLE FALL, A COMPLEX OUTCOME: ORIF FOR A VANCOUVER TYPE A PERIPROSTHETIC FEMORAL FRACTURE

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Background: Postoperative complications in elderly patients are of major clinical importance, with multiple fractures being among the most frequently encountered ones. Lower limb fractures, especially femoral and pelvic, are more severe, being associated with a 22% mortality rate. In this context, the Open Reduction and Internal Fixation (ORIF) technique is highly advantageous due to its high success rate in treating lower-limb fractures and its lower rate of post-traumatic arthritis compared to circular external fixation.

Objective: This case highlights the importance of the ORIF technique in patients with lower-limb trauma in order to prevent postoperative complications.

Material and methods: We present the case of a 75-year-old patient who was admitted to the emergency department with pain, functional impairment, and abnormal positioning of the left lower limb, following a ground-level fall caused by mobilization without assistance. The patient underwent a left hip hemiarthroplasty one day prior to presentation. Clinical and paraclinical examination established the diagnosis of Vancouver type A (G+L) periprosthetic fracture of the left femur. After preoperative and anesthesiological preparation, the fracture was treated surgically by ORIF. The procedure involved open reduction of the fracture site and fixation with an anatomical proximal femoral plate, one screw, and four multifilament orthopedic cables under fluoroscopic control. The surgery was completed with hemostasis, lavage, suturing, and sterile dressing.

Results: In elderly patients, the recovery after ORIF is usually prolonged. However, two days later, the patient fell again from the bed level due to noncompliance with medical recommendations. Subsequent radiographic control showed no new bone lesions. The patient received haloperidol administration to prevent further complications.

Conclusions: Even a minor fall in elderly patients can lead to severe complications requiring a longer recovery period. Although ORIF is a highly advantageous surgical method with a low risk of complications, it is essential to follow medical recommendations carefully.

Keywords: ORIF, Vancouver type A, fracture

FERTILITY-PRESERVING SURGERY FOR UTERINE FIBROMATOSIS IN A PATIENT WITH RECURRENT PREGNANCY LOSS

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Background: Uterine fibromatosis is a common benign condition that may become clinically significant when associated with compressive symptoms or reproductive dysfunction. In women of reproductive age, fibroids may contribute to infertility or recurrent pregnancy loss, particularly when large or strategically located, emphasizing the importance of fertility-preserving surgical strategies.

Objective: To highlight the role of conservative surgical management in a patient with symptomatic uterine fibromatosis associated with compressive phenomena and a history suggestive of recurrent pregnancy loss.

Material and methods: We report the case of a 38-year-old female presenting with abdominal discomfort and urinary symptoms, with a history of four pregnancies without live births. Clinical examination, laboratory testing, and pelvic imaging, including transvaginal ultrasonography was performed. Surgical management consisted of open myomectomy via laparotomy, with excision of fibroid nodules and subsequent uterine wall reconstruction.

Results: Intraoperative findings revealed a fibromatous uterus with multiple nodules, including a dominant anterior fibroid measuring approximately 8 cm and a posterior fibroid of approximately 3 cm. Complete excision of fibroid nodules was performed, followed by careful uterine reconstruction and hemostasis, with drainage of the Douglas pouch. The postoperative course was favorable, with stable hemodynamic and respiratory parameters, absence of complications, restoration of intestinal transit, and good overall recovery. The patient was discharged in good general condition, with preserved uterine integrity. Given the clinical context, surgical treatment may contribute to improved future reproductive outcomes.

Conclusions: In patients with uterine fibromatosis presenting with both compressive and reproductive implications, conservative surgical management is essential. Myomectomy not only relieves symptoms but may also improve reproductive prognosis. Individualized, fertility-oriented surgical strategies remain the key in optimizing patient outcomes.

Keywords: uterine fibromatosis, recurrent pregnancy loss, fertility preservation

COMPLEX INCISIONAL HERNIA WITH SUPERINFECTED SUTURE GRANULOMA COMPLICATED BY TRANSVERSE COLON PERFORATION AND SEPTIC PERITONITIS: DIAGNOSTIC AND OPERATIVE CHALLENGES

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Background: Incisional hernia represents a frequent postoperative complication, with a multifactorial pathogenesis involving increased intra-abdominal pressure and impaired wound healing. While many cases remain asymptomatic, complex variants such as multilocular or multisaccular hernias carry a higher risk of incarceration and strangulation. The coexistence of a superinfected suture granuloma may further compromise tissue integrity and obscure diagnosis.

Objective: To highlight the diagnostic and surgical challenges associated with the simultaneous occurrence of intestinal obstruction and transverse colon perforation in a complicated incisional hernia.

Material and methods: A 71-year-old female presented to the emergency department in septic condition with signs of acute abdomen. Abdominopelvic CT revealed a complex incisional hernia with two parietal defects and a fluid-filled sac suggestive of incarceration, associated with pneumoperitoneum, gastric stasis, and edematous bowel loops with air–fluid levels. Following hemodynamic stabilization, emergency exploratory laparotomy was performed. A giant (6 × 6 cm) superinfected suture granuloma was excised, and extensive adhesiolysis was required. Intraoperative findings included generalized purulent peritonitis secondary to transverse colon perforation and a 6 × 8 cm incisional hernia sac. After peritoneal lavage, an extended right hemicolectomy was performed. Intestinal continuity was restored via a mechanical end-to-side ileotransverse anastomosis using a 32 mm circular stapler. The procedure concluded with mesenteric defect closure, peritoneal and subcutaneous drainage, and abdominal wall reconstruction.

Results: The postoperative course was favorable, with resolution of sepsis and restoration of bowel function without immediate complications.

Conclusions: Prompt surgical intervention is essential in complicated incisional hernias associated with sepsis. Early recognition of concomitant bowel perforation significantly reduces morbidity. Superinfected suture granulomas may contribute to local tissue damage and should be considered in complex presentations.

Keywords: incisional hernia, granuloma, colon perforation

THE DIAGNOSTIC CHALLENGES OF FALLOPIAN TUBE NEOPLASMS- A CASE REPORT

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Background: Primary fallopian tube carcinomas represent a rare malignancy, often diagnosed incidentally during surgery due to their vague clinical presentation. This lack of specificity requires a rigorous differential diagnosis, particularly to rule out inflammatory conditions such as tubo-ovarian abscesses, in order to ensure appropriate therapeutic management.

Objective: This case report aims to highlight the diagnostic challenges in differentiating malignant adnexal masses from inflammation-associated pathologies, based on the clinical and paraclinical presentation.

Material and methods: We present the case of a 34-year-old patient, a smoker, with no significant personal or family medical history, who was admitted to the emergency department with colicky pain in the right iliac fossa. Clinical and paraclinical evaluation revealed leukocytosis ($17,7 \times 10^3$ cells/ μ L), as well as a large right adnexal mass (7 x 8 cm), with tenderness to palpation, heterogeneous and associated with retroperitoneal lymphadenopathy identified on computer tomography. Based on these findings, the initial diagnosis was that of a tubo-ovarian abscess.

Results: An exploratory laparotomy was performed, revealing the right adnexa involved in a 10 cm tumor-like mass, comprising the fallopian tube, rectosigmoid colon and the posterior layer of the right broad ligament, extending to the level of the Douglas pouch. Although not responsible for the main symptoms, the left fallopian tube was found to be dilated containing a 2 cm solid mass. Subsequently, the presumptive diagnosis was now that of a malignancy. Histopathological examination, however, established the definitive diagnosis of bilateral acute phlegmonous salpingitis.

Conclusions: In cases where clinical and imaging findings are inconclusive or contradictory, surgical exploration combined with histopathological examination, becomes a key tool for both etiological clarification and appropriate therapeutic management. A prompt, individualized approach, along with multidisciplinary collaboration, remains essential for preventing complications and improving patient outcomes.

Keywords: Primary fallopian tube carcinomas, Differential diagnosis, Tubo-ovarian abscesses, Multidisciplinary collaboration

MULTIDISCIPLINARY MANAGEMENT AND SUCCESSFUL RECOVERY OF A CRITICAL HIGH-VOLTAGE ELECTRICAL INJURY: A 68-DAY CLINICAL JOURNEY

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Background: High-voltage electrical injuries cause extensive deep tissue damage, rhabdomyolysis, and high amputation rates, requiring prolonged intensive care, serial surgical interventions and coordinated multidisciplinary care.

Objective: This case demonstrates characteristic high-voltage injury features: compartment syndrome requiring early fasciotomy, rhabdomyolysis-induced renal failure, and progressive necrosis requiring serial amputations.

Material and methods: A 47-year-old male sustained high-voltage electrical injury with 20% total body surface area grade IIB-III burns. On arrival, he required mechanical ventilation with hyperchromic urine indicating severe rhabdomyolysis. Injuries included right thumb necrosis, distal forearm necrosis, central abdominal wall defect, and bilateral lower extremity necrosis with absent peripheral pulses. ABSI score was 8 (30-50% mortality risk). Laboratory findings confirmed rhabdomyolysis, metabolic acidosis, and AKIN stage III acute kidney injury requiring continuous hemodiafiltration. Immediate decompression fasciotomies were performed, followed by right thumb amputation and bilateral proximal leg amputations due to irreversible ischemia. Tracheostomy was performed on day 9. Massive abdominal wall necrosis required repeated necrectomies, negative pressure therapy, and reconstruction with Integra dermal matrix and split-thickness skin grafting. Progressive left lower extremity necrosis necessitated re-amputation at the distal thigh. Subsequently, mechanical ventilation and dialysis were discontinued. Wounds demonstrated granulation and epithelialization under specialized dressings (Atrauman, Hyalo4). After 68 days, the patient was discharged stable with recommendations for physiotherapy and prosthetic fitting.

Results: The amputation rate for this type of injury ranges from 5.5% to 23.6%; therefore, early surgical intervention is recommended to rule out significant risk factors. Management followed evidence-based principles: early decompression, serial tissue-sparing debridement, delayed reconstruction after demarcation, and multidisciplinary care. Integra dermal matrix successfully reconstructed the complex abdominal defect, with reported success rates exceeding 97%.

Conclusions: Successful management of severe high-voltage electrical injuries, which improves survival despite multiple complications, requires aggressive early intervention, serial surgical debridement, advanced wound reconstruction techniques, and prolonged multidisciplinary support.

Keywords: high-voltage electrical injury, amputation, Integra dermal matrix

STAGED PALLIATIVE SURGICAL MANAGEMENT OF ADVANCED ANORECTAL CANCER PRESENTING WITH RECTOVAGINAL FISTULA AND MASSIVE HEMORRHAGE

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Background: Rectovaginal fistula caused by advanced anorectal malignancy is rare and severe, often associated with invasive disease, sepsis, bleeding, and poor quality of life. Management is especially difficult in elderly patients with metastases and low physiological reserve, where treatment is mainly palliative.

Objective: To present staged surgical management in a complex case involving advanced anorectal cancer with rectovaginal fistula, metastases, pelvic fixation, and hemorrhagic shock.

Material and Methods: We report the case of an 81-year-old woman admitted emergently with fecal vaginal discharge, fever, and altered general condition, with a two-year history of untreated rectal tumor. Evaluation revealed a large anorectal mass of probable rectal origin invading the posterior vaginal wall and extending to the rectosigmoid, associated with rectovaginal fistula, complete anal canal stenosis, frozen pelvis, adhesions, and hepatic and cutaneous metastases.

Given the advanced unresectable disease and pelvic sepsis, initial management consisted of exploratory laparotomy, adhesiolysis, left terminal colostomy for fecal diversion, peritoneal lavage, drainage, vaginal toilet, and tumor biopsy, with palliative intent.

During hospitalization, the patient developed massive hemorrhage from the tumoral area, resulting in hemorrhagic shock. Emergency reintervention for hemorrhage control included combined ano-vaginal and abdominal approaches, with vascular ligation, sacral cavity drainage and pelvic packing.

Results: The patient presented with severe anemia (Hb 4.9 g/dL), requiring transfusion. Findings confirmed unresectable advanced malignancy with fistula, metastases, and vascular involvement. Colostomy reduced septic contamination. Emergency surgery successfully controlled life-threatening hemorrhage and pelvic sepsis despite inability to achieve curative resection.

Conclusion: In advanced anorectal cancer with rectovaginal fistula, staged palliative surgery is crucial for controlling sepsis and bleeding. Even without curative potential, surgical intervention can stabilize the patient and improve comfort in end-stage disease.

Keywords: Rectovaginal fistula, palliative surgery, tumor hemorrhage.

LEFT VENTRICULAR PSEUDOANEURYSM FOLLOWING MYOCARDIAL INFARCTION: SURGICAL REPAIR USING TEFLON-REINFORCED CLOSURE

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Background: Left ventricular pseudoaneurysm is a rare but potentially fatal mechanical complication of myocardial infarction caused by contained rupture of the left ventricular free wall by the pericardium or adjacent structures. Unlike true aneurysms, pseudoaneurysms lack a full-thickness myocardial wall and therefore carry a markedly increased risk of rupture and sudden death. Early recognition and timely surgical correction are critical.

Objective: To describe the surgical treatment of a large postero-lateral left ventricular pseudoaneurysm developing in the subacute phase after myocardial infarction and to highlight a repair strategy adapted to fragile myocardial tissue and distorted ventricular geometry.

Material and Methods: We report the case of a 70-year-old man with ischemic cardiomyopathy secondary to circumflex artery occlusion who developed a large postero-lateral left ventricular pseudoaneurysm in the subacute phase following myocardial infarction. Cardiac imaging demonstrated a pseudoaneurysmal cavity associated with significant left ventricular remodeling and reduced ejection fraction. Surgical repair was performed under general anesthesia with orotracheal intubation and cardiopulmonary bypass under moderate hypothermia. After aortic cross-clamping, myocardial protection was achieved using Custodiol cardioplegia, inducing diastolic arrest. Intraoperatively, a large postero-lateral pseudoaneurysm with a thin, friable wall and organized thrombotic content was identified and resected. Left ventricular reconstruction was performed using a continuous double-layer suture reinforced with Teflon felt strips, followed by ventricular remodeling, aortic declamping, and myocardial reperfusion.

Results: Cardiac activity resumed with temporary electrical pacing, and the patient was successfully weaned from cardiopulmonary bypass under stable hemodynamic conditions. No immediate postoperative complications occurred, and the postoperative course was uneventful. The adopted repair strategy allowed secure exclusion of the pseudoaneurysm and satisfactory reconstruction of the left ventricle despite fragile myocardial tissue and complex postero-lateral involvement. This case emphasizes the technical feasibility of reinforced direct closure without patch reconstruction in selected post-infarction pseudoaneurysms when careful ventricular remodeling can be achieved.

Keywords: Left ventricular pseudoaneurysm , myocardial infarction , cardiopulmonary bypass , Teflon felt

SALVAGE OF A BRACHIOCEPHALIC ARTERIOVENOUS FISTULA BY INFLOW ARTERY TRANSPOSITION IN A PATIENT WITH DOUBLE BRACHIAL ARTERY ANATOMY

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Background: The arteriovenous fistula (AVF) is considered the 'gold standard' for hemodialysis access because it has lower complications than the arteriovenous graft and the central venous catheter (CVC). Anatomic variations of the brachial artery affect fistula maturation by the selection of an inappropriate inflow artery.

Objective: This case aims to highlight how failure of AVF maturation caused by undiagnosed brachial artery (BA) duplication can be corrected by arterial inflow relocation to the dominant vessel.

Material and methods: We present the case of a 52-year-old woman on hemodialysis for 4 years through a tunneled right internal jugular CVC, with a brachiocephalic AVF (BC-AVF) created in 2024 that failed to mature. Preoperative duplex ultrasound revealed that the axillary artery bifurcated shortly after its origin into two BA: a smaller, non-dominant vessel with a superficial course and a larger, dominant vessel with a deep intramuscular course. The BC-AVF has the non-dominant BA as its inflow artery, which remained patent but exhibited very low flow (275ml/min). This work was supported by the George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureş, Romania, with research grant number 170/3/09.01.2024.

Results: A surgical revision was undertaken, consisting of ligation of the previous anastomosis and relocation of the inflow to the dominant BA using an interposition reversed basilic vein graft. Exposure of the target artery required division of a muscular bridge at the level of the biceps muscle. Postoperatively, access flow improved to 535 mL/min at 12 hours, increased to 680 mL/min at 2 weeks, and exceeded 750 mL/min at 4 weeks.

Conclusions: The non-maturation of AVF should not be considered a definitive failure without thorough evaluation of underlying causes. Appropriately selecting the inflow artery can convert a nonfunctional fistula into a usable dialysis access, avoiding the unnecessary creation of a new access.

Keywords: arteriovenous fistula, arterial anatomical variation, hemodialysis

ADDITION OF PCSK9 INHIBITORS TO STATIN-EZETIMIBE THERAPY IN POST-ACS PATIENTS: IMPACT ON LDL-C AND INFLAMMATORY RISK

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Background: A substantial proportion of post-acute coronary syndrome (ACS) patients do not achieve guideline-recommended low-density lipoprotein cholesterol (LDL-C) targets despite maximally tolerated statin therapy combined with ezetimibe, leaving them at persistent residual cardiovascular risk.

Objective: To compare lipid control, inflammatory response, and clinical outcomes in post-ACS patients treated with statin-ezetimibe therapy alone versus statin-ezetimibe plus PCSK9 inhibitor therapy.

Material and methods: In this prospective observational study, 70 post-ACS patients with LDL-C ≥ 55 mg/dL despite statin-ezetimibe therapy were allocated into two groups: group 1 received additional PCSK9 inhibitor therapy (evolocumab or alirocumab, n = 35), and group 2 continued statin-ezetimibe therapy without PCSK9 inhibitors (n = 35). Lipid profile, high-sensitivity C-reactive protein (hs-CRP), and adverse events were assessed at baseline, 3, 6, and 12 months. Recurrent cardiovascular events were recorded during follow-up.

Results: Baseline LDL-C was comparable between groups (group 1: 94.1 ± 15.9 mg/dL; group 2: 92.8 ± 17.2 mg/dL; p = 0.68). At 12 months, LDL-C decreased to 34.8 ± 9.6 mg/dL in group 1 versus 66.7 ± 14.1 mg/dL in group 2 (p < 0.001). Target LDL-C <55 mg/dL was achieved in 33 patients (94.3%) in group 1 and 11 patients (31.4%) in group 2 (p < 0.001). hs-CRP declined from 3.7 mg/L (IQR 2.3–5.4) to 1.6 mg/L (IQR 0.9–2.4) in group 1, compared with 3.5 mg/L (IQR 2.1–5.1) to 3.0 mg/L (IQR 1.8–4.6) in group 2 (p = 0.01). Recurrent ischemic events occurred in 1 patient (2.9%) in group 1 and 4 patients (11.4%) in group 2. Injection-site reactions were mild and observed in 2 patients (5.7%).

Conclusions: Adding PCSK9 inhibitors to statin-ezetimibe therapy significantly improved LDL-C target attainment, reduced inflammatory activity, and was associated with fewer recurrent ischemic events compared with dual oral therapy alone. These findings support escalation to PCSK9 inhibition in high-risk post-ACS patients with persistent hypercholesterolemia.

Keywords: acute coronary syndrome, PCSK9 inhibitor, evolocumab, alirocumab, residual risk

APOLIPOPROTEIN B AS A MARKER OF A WORSE LIPID PROFILE — ASSOCIATED WITH A HIGHER RISK OF PERIPHERAL ARTERY DISEASE

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Background: Apolipoprotein B (ApoB) is a robust marker of atherogenic lipoprotein burden and cardiovascular risk. Because peripheral artery disease (PAD) reflects systemic atherosclerosis, ApoB may also be associated with objective markers of lower-limb arterial impairment, including ankle-brachial index (ABI) and intermittent claudication.

Objectives: To evaluate the association between serum ApoB, classic lipid profile parameters, bilateral ABI values, and intermittent claudication in the Romanian adult population

Material and Methods: This cross-sectional study included 923 adults aged 18–80 years from the general population of Romania, mean age 51.77 ± 16.45 years. Participants were divided according to ApoB levels: Group 1, ApoB <130 mg/dL, $n=820$, and Group 2, ApoB ≥ 130 mg/dL, $n=103$. All subjects underwent full lipid profile assessment, bilateral resting ABI measurement, analyzed separately for the right and left lower limb, and standardized evaluation of intermittent claudication using the Edinburgh Claudication Questionnaire.

Results: Compared with Group 1, participants with ApoB ≥ 130 mg/dL had significantly higher total cholesterol, 279.00 ± 4.75 vs. 191.50 ± 1.26 mg/dL; LDL-cholesterol, 203.00 ± 4.24 vs. 124.00 ± 1.22 mg/dL; and triglycerides, 173.00 ± 12.34 vs. 95.00 ± 2.46 mg/dL, together with lower HDL-cholesterol, 49.00 ± 1.23 vs. 52.00 ± 0.48 mg/dL; all $p < 0.05$. Group 2 also showed significantly lower right ABI, 0.81 ± 0.04 vs. 1.07 ± 0.01 , $p < 0.0001$, and left ABI, 0.83 ± 0.05 vs. 1.05 ± 0.01 , $p < 0.0001$. Intermittent claudication was more frequent in Group 2: 31.1% vs. 8.4%; OR=4.87; 95% CI: 3.05–7.78; $p < 0.0001$.

Conclusions: Elevated ApoB was associated with an adverse lipid profile, reduced bilateral ABI values, and higher claudication prevalence. ApoB may help identify both subclinical and symptomatic peripheral atherosclerosis and could improve vascular risk stratification.

Key words: Apolipoprotein B, peripheral artery disease, ankle-brachial index, intermittent claudication, lipid profile.

EVALUATION OF THE IMPACT OF NUTRITIONAL STATUS ON THE EVOLUTION OF PATIENTS WITH HEART FAILURE WITH PRESERVED EJECTION FRACTION – FOLLOW-UP STUDY

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Background: Malnutrition, sarcopenia, and frailty are increasingly recognized as important determinants of prognosis in patients with heart failure with preserved ejection fraction (HFpEF). These patients frequently present reduced functional capacity and multiple comorbidities, where nutritional status may significantly influence disease progression and outcomes.

Objective: To evaluate the impact of nutritional status, assessed by the Controlling Nutritional Status (CONUT) score, on clinical outcomes in patients with HFpEF.

Material and methods: A total of 99 consecutive patients diagnosed with HFpEF (LVEF $\geq 50\%$) were included in this prospective observational study. Nutritional status was assessed at baseline using the CONUT score. Patients were divided into a well-nourished group (CONUT 0–2, n = 45) and a moderate-to-severe malnutrition group (CONUT ≥ 3 , n = 52). During the 24-month follow-up period, 2 patients were lost to follow-up (2.02%). For the remaining 97 patients, we assessed composite endpoints including heart failure-related hospitalization, cardiovascular death, and 3-point major adverse cardiovascular events (MACE: non-fatal myocardial infarction, non-fatal stroke, cardiovascular death).

Results: Patients with impaired nutritional status presented significantly higher rates of heart failure-related hospitalizations (44.2% vs. 20.0%, p=0.01) and 3-point MACE (38.5% vs. 15.6%, p=0.008) compared to well-nourished patients. Cardiovascular mortality was also increased in the malnourished group (19.2% vs. 6.7%, p=0.04). Additionally, these patients exhibited reduced functional capacity, with a lower 6-minute walk test distance (320 \pm 80 m vs. 400 \pm 85 m, p<0.001) and a higher proportion of NYHA class \geq III (55.8% vs. 28.9%, p=0.02). Higher CONUT scores were associated with an increased risk of MACE (HR 1.38, 95% CI 1.08–1.76, p=0.01).

Conclusions: Nutritional status is an important predictor of clinical outcomes in patients with HFpEF. The CONUT score represents a simple and effective tool for risk stratification. Early identification of malnutrition and targeted nutritional interventions may improve prognosis in this patient population.

Keywords: HFpEF, CONUT, malnutrition, MACE, functional capacity

PREDICTORS OF ONE-YEAR HEART FAILURE DECOMPENSATION AFTER STEMI

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Background: Early identification of patients at risk for heart failure (HF) decompensation after ST-elevation myocardial infarction (STEMI) is essential for optimizing follow-up and tailoring therapy.

Objective: To identify in-hospital clinical, laboratory, and echocardiographic predictors of HF decompensation within one year after acute STEMI in patients without prior HF.

Material and methods: We conducted a prospective, single-center study including 126 patients admitted with STEMI and no history of HF. All received guideline-directed reperfusion and medical therapy and were followed for 12 months. At one year, patients were classified according to the occurrence of at least one HF decompensation requiring intravenous diuretics and/or hospitalization: Group A – with HF decompensation (n=45) and Group B – without decompensation (n=81). Univariable and multivariable logistic regression analyses were used to identify independent predictors of HF decompensation.

Results: Patients in Group A more frequently had diabetes (49% vs. 28%, p=0.02) and chronic kidney disease (eGFR <60 mL/min/1.73 m²: 42% vs. 19%, p=0.004). Mean LVEF at discharge was lower in Group A (33±6% vs. 39±7%, p<0.001). NT-proBNP was markedly elevated in patients who later decompensated (4,850 pg/mL [IQR 3,200–7,600] vs. 2,300 pg/mL [1,400–3,700], p<0.001). Suboptimal implementation of four-pillar HF therapy at discharge was more frequent in Group A (58% vs. 32%, p=0.006). Independent predictors of HF decompensation were LVEF ≤35% (OR 2.9, 95% CI 1.4–5.9, p=0.004), NT-proBNP >3,500 pg/mL (OR 3.5, 95% CI 1.7–7.2, p=0.001), eGFR <60 mL/min/1.73 m² (OR 2.3, 95% CI 1.1–4.8, p=0.03), and incomplete guideline-directed HF therapy (OR 2.1, 95% CI 1.0–4.3, p=0.04). The combined model yielded an AUC of 0.81 for predicting 1-year HF decompensation.

Conclusions: In patients who develop HF during STEMI hospitalization, reduced LVEF, elevated NT-proBNP, impaired renal function, and suboptimal HF therapy independently predict decompensation within one year.

Keywords: ST-elevation myocardial infarction, heart failure decompensation, NT-proBNP, left ventricular ejection fraction.

ASSOCIATION BETWEEN RESIDUAL LDL-CHOLESTEROL AND CLINICAL-METABOLIC PROFILE IN PATIENTS WITH ATRIAL FIBRILLATION UNDER STATIN TREATMENT

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Background: Elevated low-density lipoprotein cholesterol (LDL-C) remains a marker of residual atherosclerotic risk, even in patients treated with statins. This residual risk may contribute to adverse cardiovascular outcomes.

Objective: To evaluate the association between residual LDL-C levels and AF phenotype, and to analyze their relationship with thromboembolic and atherosclerotic risk in patients receiving statin therapy.

Material and methods: 634 AF patients from the Cardiology Clinic of SCJU Târgu Mureș were included in the present study. All patients were on moderate-high dose statin therapy for at least 3 months. Patients were divided into two groups: group 1 – LDL-C at target (n = 342), respectively group 2 – elevated residual LDL-C (n = 292). Clinical data, CHA₂DS₂-VA and HAS-BLED scores, as well as echocardiographic parameters were collected.

Results: Patients in group 2 had a significantly higher prevalence of coronary artery disease (48% vs. 32%; p=0.002) and peripheral arterial disease (18% vs. 9%; p=0.01). p<0.001). The CHA₂DS₂-VA score was higher in the group with elevated residual LDL-C (3.8±1.4 vs. 3.2±1.3; p<0.001), while the HAS-BLED score did not show significant differences (2.1±0.9 vs. 2.0±0.8; p=0.28). Left atrial diameter was larger in patients with elevated residual LDL-C (42.1±5.6 vs. 40.7±5.2mm; p=0.03), but the distribution of AF phenotype did not show significant differences (p=0.21). In multivariate analysis, obesity (OR 2.10; 95% CI 1.50–2.95; p<0.001), diabetes mellitus (OR 1.65; 95% CI 1.18–2.30; p=0.004), and coronary artery disease (OR 1.80; 95% CI 1.28–2.54; p=0.001) were independent predictors of elevated residual LDL-C, unlike AF type (p=0.42).

Conclusions: Elevated residual LDL C in patients with AF on statin treatment correlates predominantly with a more severe metabolic profile, and not with a more aggressive AF phenotype, which supports the need for intensified lipid-lowering therapy and global optimization of risk factors in this population.

Keywords: atrial fibrillation , residual LDL-C , statin therapy , atherosclerotic risk

INFLAMMATORY BIOMARKER TRAJECTORIES PREDICT ADVERSE REMODELING AND ARRHYTHMIC RISK IN ACUTE DECOMPENSATED HEART FAILURE

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Background: Systemic inflammation is increasingly recognized as a key contributor to acute decompensated heart failure (ADHF), with potential roles in myocardial injury, adverse remodeling, and arrhythmic risk.

Objective: To assess whether serial inflammatory biomarker trajectories predict adverse ventricular remodeling, in-hospital arrhythmias, and short-term readmission in patients hospitalized for ADHF.

Material and methods: We conducted a prospective observational study including 54 patients admitted for ADHF. High-sensitivity C-reactive protein (hsCRP), interleukin-6 (IL-6), tumor necrosis factor-alpha (TNF- α) were measured at admission, 48 hours, and discharge. Echocardiography was performed at baseline and 90 days to evaluate remodeling indices, including left ventricular ejection fraction and left ventricular end-diastolic volume. In-hospital ventricular arrhythmias and 90-day readmissions were recorded.

Results: At discharge, 31 patients (57.4%) had persistently elevated inflammatory biomarkers. These patients showed greater adverse remodeling at 90 days, with a larger increase in left ventricular end-diastolic volume compared with those with biomarker normalization (11.8 ± 4.6 mL vs. 3.9 ± 2.8 mL, $p < 0.001$) and a smaller improvement in ejection fraction ($2.6 \pm 1.9\%$ vs. $7.8 \pm 3.4\%$, $p < 0.001$). Persistently elevated IL-6 independently predicted ventricular arrhythmias during hospitalization (OR 3.9, 95% CI 1.4–10.8; OR 3.2, 95% CI 1.1–9.1, respectively) and 90-day readmission (OR 4.5, 95% CI 1.6–12.7; OR 3.8, 95% CI 1.3–10.9). hsCRP decreased from 18.4 ± 7.2 mg/L at admission to 9.1 ± 4.5 mg/L at discharge in the low-risk group, but remained elevated in the high-risk group (16.9 ± 6.8 mg/L).

Conclusions: Persistent inflammatory activation during hospitalization for ADHF identifies a high-risk phenotype associated with maladaptive remodeling, ventricular arrhythmias, and early readmission. Biomarker profiling may improve risk stratification and support future anti-inflammatory strategies as adjunctive heart failure therapy.

Keywords: acute decompensated heart failure, inflammation, IL-6, hsCRP, ventricular arrhythmia

COMPARATIVE EFFICIENCY OF HIGH-SENSITIVITY TROPONIN VERSUS LIPIDIC PROFILING FOR CARDIOVASCULAR RISK STRATIFICATION IN ASYMPTOMATIC INDIVIDUALS

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Background: Cardiovascular disease remains a leading cause of morbidity and mortality. Effective prevention strategies rely on early identification of individuals at increased cardiovascular risk before irreversible myocardial injury occurs. High-sensitivity cardiac troponin I (hs-cTnI) marks myocardial damage, whereas lipid biomarkers reflect atherogenic pathways associated with cardiovascular risk.

Objective: We aim to compare hs-cTnI testing and lipid profiling in determining cardiovascular risk among asymptomatic individuals.

Material and methods: A cross-sectional study including 147 asymptomatic adults with at least one established cardiovascular risk factor and no known overt disease was conducted. Laboratory evaluation included hs-cTnI, total cholesterol (TC), low-density lipoprotein cholesterol (LDL-C), high-density lipoprotein cholesterol (HDL-C), triglycerides, apolipoprotein A1, apolipoprotein B, and lipoprotein(a) [Lp(a)]. Pearson correlation coefficients were calculated to assess relationships between biomarkers. Increased risk was defined using sex-specific hs-cTnI thresholds (men >6 ng/L; women >4 ng/L), LDL-C concentrations ≥ 100 mg/dL.

Results: Strong correlations were observed between HDL-C and apolipoprotein A1 ($r=0.9193$). LDL-C and Lp(a) showed only weak correlation ($r=0.1400$). hs-cTnI showed weak positive correlations with LDL-C ($r=0.2521$). Elevated LDL-C was present in 103 participants (70.06%). However, only 3 individuals (2.04%) exceeded hs-cTnI thresholds. These findings suggest that many individuals with adverse lipid-associated risk profiles would not be identified by hs-cTnI testing alone.

Conclusions: In this cohort of asymptomatic adults, defined by a mean age of 38.94 ± 11.69 years, a sex distribution of 53.7% males and 46.3% females and a risk-factor profile primarily including sedentarism and obesity, lipid profile assessment proved more efficient than hs-cTnI for primary risk screening. LDL-C and Lp(a) identify upstream atherogenic risk before detectable cardiac damage. Lipid biomarkers may therefore be more appropriate for early preventive screening, although prospective studies are required to confirm their comparative prognostic value.

Keywords: cardiovascular, risk stratification, lipidic profile, hs-cTnI

PERIOPERATIVE MANAGEMENT OF MULTIVALVULAR ENTEROCOCCAL INFECTIVE ENDOCARDITIS COMPLICATED BY PULMONARY EMBOLISM AND SYSTEMIC MANIFESTATIONS

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Background: Infective endocarditis is a severe condition caused by microbial infection of the endocardial surface, most commonly involving cardiac valves. Multivalvular involvement further increases disease complexity and is associated with higher morbidity and challenging therapeutic decisions.

Objective: The aim of this report is to analyze the challenges of perioperative management and surgical timing in a patient with multivalvular infective endocarditis.

Material and methods: We describe the multidisciplinary evaluations in a 54-year-old male patient admitted for dyspnea, fatigue, and peripheral edema. Diagnostic workup included clinical examination, laboratory investigations with inflammatory and hematologic markers, repeated blood cultures, transthoracic echocardiography in dynamic assessment, EKG, chest radiography, CT pulmonary angiography, carotid Doppler ultrasound, coronary angiography and abdominal ultrasound. Initial management consisted of targeted antibiotic therapy, supportive treatment including transfusions, diuretics, and metabolic correction. Surgical valve replacement was not initially pursued due to severe thrombocytopenia and multiorgan dysfunction.

Results: Echocardiographic evaluation revealed large, highly mobile vegetations on both mitral and tricuspid valves, associated with severe regurgitation and preserved biventricular function. CT pulmonary angiography demonstrated a left segmental pulmonary embolism with pulmonary infarction, consistent with septic embolic dissemination. Minimal bilateral pleural effusion on chest radiography was noted and abdominal ultrasound showed hepatosplenomegaly, mild portal hypertension and small-volume ascites. Laboratory findings showed persistent inflammatory syndrome, severe thrombocytopenia, moderate anemia, and hepatorenal dysfunction. Perioperative optimization includes antibiotic therapy, transfusion support with thrombocytes and red blood cell concentrates, resulting in clinical and biological stabilization. Surgical intervention was performed, consisting of mitral valve replacement with a mechanical prosthesis and tricuspid valve replacement with a biological prosthesis via a minimally invasive right thoracotomy approach. The postoperative course was favorable, with hemodynamic stabilization and good prosthetic valve function.

Conclusions: This case highlights the complexity of an enterococcal multivalvular infective endocarditis in a patient with history of systemic bacteremia, diabetes mellitus, hypertension, characterized by large vegetations involving both the mitral and, particularly, the tricuspid valve, associated with severe valvular regurgitation.

Keywords: infective endocarditis, multivalvular involvement, thrombocytopenia

SURGICAL REINTERVENTION FOR PULMONARY VALVE STENOSIS IN A 62-YEAR-OLD PATIENT WITH TETRALOGY OF FALLOT: A CASE REPORT

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Background: Tetralogy of Fallot (ToF) is the most common cyanotic congenital heart defect, representing approximately 7–10% of all congenital cardiac malformations. While early surgical repair has dramatically improved survival — with over 85% of patients reaching adulthood — late reoperations are required in up to 40% of cases due to progressive pulmonary valve dysfunction, right ventricular outflow tract (RVOT) obstruction, and ventricular remodeling. Pulmonary valve stenosis as a late complication poses particular surgical challenges in elderly patients, where decades of hemodynamic strain produce calcified, fibrotic anatomy.

Objective: To describe surgical management of late symptomatic pulmonary valve stenosis in a 62-year-old patient with previously repaired Tetralogy of Fallot, involving biological valve replacement and right ventricular outflow tract reconstruction through redo sternotomy.

Material and methods: A 62-year-old female with a history of Tetralogy of Fallot underwent initial repair at age 16, consisting of ventricular septal defect closure and pulmonary valvuloplasty. Four decades later, she presented with symptomatic pulmonary valve stenosis. Redo surgery was performed via median sternotomy. Intraoperatively, the calcified pulmonary valve was explanted and replaced with a biological prosthesis. The right ventricular outflow tract was widened, and a calcified patch was removed and replaced during reconstruction.

Results: The postoperative course was uneventful. Hemodynamic assessment demonstrated optimal results, with a 4–5 mmHg linear pressure gradient across the newly implanted pulmonary valve. The patient was discharged five days post-surgery in stable condition, with no perioperative complications reported.

Conclusions: This case demonstrates that surgical reintervention for late ToF complications can achieve excellent outcomes even in the seventh decade of life. Biological prostheses combined with RVOT reconstruction represent viable and durable options for managing complex late-stage valvular pathology. Lifelong structured follow-up remains essential in all patients with repaired congenital heart disease to enable timely identification of surgical indications.

Keywords: Tetralogy of Fallot, right ventricular reconstruction, biological valve prosthesis.

WHEN RISK FACTORS CONVERGE: OBSTRUCTIVE SLEEP APNEA AS A HIDDEN DRIVER OF HEART FAILURE WITH PRESERVED EJECTION FRACTION

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Background: Heart failure with preserved ejection fraction (HFpEF) is increasingly recognized as a systemic, multifactorial syndrome driven by the cumulative burden of cardiovascular risk factors. Among these, obstructive sleep apnea (OSA) remains underdiagnosed despite its significant contribution to sympathetic overactivation, nocturnal blood pressure dysregulation, and adverse cardiac remodeling.

Objective: To highlight the role of obstructive sleep apnea as a key, modifiable contributor within a cluster of cardiovascular risk factors leading to HFpEF.

Material and methods: We report the case of a 55-year-old male undergoing comprehensive cardiovascular evaluation, including clinical assessment, electrocardiography, transthoracic echocardiography, laboratory testing, ambulatory blood pressure monitoring (ABPM), and polysomnography.

Results: The patient presented with a high-risk cardiovascular profile, including grade 3 hypertension, obesity (BMI 38 kg/m²), dyslipidemia, smoking, and chronic alcohol use, along with newly diagnosed type 2 diabetes mellitus. Clinically, he reported exertional dyspnea, palpitations, and excessive daytime sleepiness.

Echocardiography revealed preserved left ventricular ejection fraction (55%) with concentric left ventricular hypertrophy, consistent with hypertensive heart disease. Laboratory findings confirmed metabolic dysregulation (fasting glucose 210 mg/dL, HbA1c 7.5%, LDL 160 mg/dL).

ABPM demonstrated a non-dipping nocturnal blood pressure pattern, suggesting autonomic imbalance. Polysomnography subsequently confirmed moderate obstructive sleep apnea (AHI 5–15 events/hour), identifying a previously unrecognized driver of disease.

A multidisciplinary therapeutic approach, including optimized antihypertensive therapy, initiation of an SGLT2 inhibitor (empagliflozin), and continuous positive airway pressure (CPAP), resulted in significant symptomatic improvement and improved risk factor control at 3-month follow-up.

Conclusions: HFpEF should be conceptualized as the clinical expression of cumulative cardiometabolic stress rather than an isolated cardiac disorder. This case underlines the importance of actively screening for obstructive sleep apnea in high-risk patients, as its identification enables targeted, multidisciplinary intervention. Addressing this often-overlooked condition may significantly improve clinical outcomes and alter disease trajectory.

Keywords: obstructive sleep apnea, cardiovascular risk clustering, cardiometabolic syndrome

BICUSPID AORTIC VALVE: CHALLENGES IN PEDIATRIC PATHOLOGY

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Background: Bicuspid aortic valve (BAV) constitutes one of the most prevalent congenital cardiac defects. The presence of associated obstructive lesions is reported in less than 2% of cases and has a significant influence on disease progression and long term prognosis.

Objective: The aim of this report is to present the clinical evolution and management of a pediatric patient with bicuspid aortic valve and serial obstructive lesions of the left ventricular outflow tract.

Material and methods: We present the case of an 11-year-old female diagnosed with BAV who had previously undergone surgery for subvalvular aortic stenosis. During follow-up, echocardiography showed progression of the stenosis, with increasing transvalvular pressure gradients and signs of left ventricular hypertrophy. In response to disease progression, the patient was referred for percutaneous balloon aortic valvuloplasty. Clinical status and echocardiographic parameters were evaluated before the procedure, immediately after the intervention and at follow-up.

Results: Following the intervention, the invasive peak-to-peak pressure gradient was lower, decreasing from 46 mmHg to 19 mmHg. No relevant aortic regurgitation was detected. On follow-up echocardiography, moderate residual aortic stenosis was present, with a mean gradient of around 36 mmHg and preserved ventricular function. The patient had good exercise tolerance and no clinical symptoms.

Conclusions: The particularity of this case is the existence of serial obstructive lesions associated with bicuspid aortic valve, encompassing early subvalvular aortic stenosis necessitating surgical correction, succeeded by progressive valvular aortic stenosis managed through interventional methods. This evolution accentuates the dynamic character of bicuspid aortic valve pathology in pediatric patients and underscores the importance of careful and long term monitoring to identify progression and determine the optimal timing of intervention.

Keywords: bicuspid aortic valve, aortic stenosis, balloon valvuloplasty, pediatric cardiology, congenital heart disease

SUBACUTE IN-STENT THROMBOSIS DUE TO TREATMENT NON-ADHERENCE IN A YOUNG MALE WITH ETHNOBOTANICAL SUBSTANCE USE: A CASE REPORT

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Background: In-stent thrombosis is a rare but potentially fatal complication following percutaneous coronary intervention (PCI). Non-adherence to dual anti-platelet therapy (DAPT) significantly increases the risk of subacute and late thrombosis, representing a major modifiable risk factor. Furthermore, behavioural and socio-economic factors, particularly substance use disorders, pose substantial challenges to the long-term management of coronary artery disease.

Objective: The primary objective of this report is to highlight the severe clinical consequences of DAPT non-adherence and to illustrate the complex interplay between high-risk behavioural profiles—specifically ethnobotanical drug consumption—and cardiovascular outcomes in young patients undergoing PCI.

Material and methods: We present the case of a 38-year-old male subject with a history of an anterior ST-elevation myocardial infarction (STEMI) treated with PCI at the age of 31, who presented 7 years later with recurrent infarction in the right coronary artery (RCA) territory. The patient's clinical and demographic profile was assessed, noting a history of longstanding behavioural risk factors, including chronic tobacco and alcohol use, as well as ethnobotanical drug consumption.

Results: The patient initially underwent a successful intervention with a drug-eluting stent (DES) for the recurrent RCA infarction. However, he prematurely discontinued his prescribed medication. Two days post-discharge, he presented with cardiogenic shock, third-degree atrioventricular (AV) block, and an inferior STEMI. Angiography revealed a subacute thrombotic occlusion of the previously stented segment. To successfully restore coronary flow, the patient required emergency intra-coronary thrombolysis combined with balloon angioplasty.

Conclusions: This case illustrates the critical role of medication adherence in preventing life-threatening stent thrombosis and highlights how behavioural risk factors severely complicate cardiovascular outcomes. In young patients presenting with recurrent STEMI and high-risk substance use profiles, aggressive secondary prevention, multidisciplinary management, and highly structured follow-up are essential to prevent recurrence and reduce mortality.

Keywords: In-stent thrombosis, dual anti-platelet therapy, substance use, medication non-adherence, coronary artery disease.

SIMULTANEOUS DUAL-VESSEL CULPRIT LESIONS IN INFERIOR STEMI COMPLICATED BY SUSTAINED VENTRICULAR TACHYCARDIA AND ACUTE SEVERE MITRAL REGURGITATION

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Background: Simultaneous multiple culprit lesions in ST-elevation myocardial infarction (STEMI) are uncommon, reported in only 2–3% of cases, and are associated with higher rates of hemodynamic instability, malignant arrhythmias, and mechanical complications.

Objective: To present a case of inferior STEMI with two simultaneous culprit lesions, further complicated by sustained ventricular tachycardia and acute severe mitral regurgitation.

Material and methods: A 74-year-old male with prior anterior myocardial infarction presented with inferior STEMI with right ventricular extension and Killip class III pulmonary edema. Emergent coronary angiography revealed two simultaneous culprit lesions, acute thrombotic occlusion of the right coronary artery (RCA, segment II) with high thrombus burden and of the proximal circumflex artery (LCx), alongside severe in-stent restenosis of the previously implanted LAD stent. On the RCA, manual thrombus aspiration was performed, complicated by distal embolization requiring repeat aspiration, followed by drug-eluting stent (DES) implantation. Two overlapping DES were deployed in the LCx, under adjunctive GP IIb/IIIa inhibitor therapy.

Results: The procedure was complicated by sustained ventricular tachycardia requiring 200 J synchronized cardioversion and transient cardiogenic shock requiring dobutamine. Post-procedural echocardiography revealed reduced LVEF (35–40%) and severe eccentric mitral regurgitation due to P2 posterior leaflet prolapse with suspected chordal rupture. The patient declined surgical mitral valve repair and was discharged against medical advice.

Conclusions: The particularity of this case lies in the simultaneous occurrence of three high-risk features rarely coexisting in a single STEMI: dual-vessel culprit lesions, sustained ventricular tachycardia, and acute severe mitral regurgitation due to suspected chordal rupture. Patient refusal of surgical correction further illustrates how autonomy can limit evidence-based management in complicated STEMI.

Keywords: mitral valve insufficiency, ST-segment elevation myocardial infarction, percutaneous coronary intervention, ventricular tachycardia.

WHEN FIXING THE VALVE TRIGGERS THE RHYTHM

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Background: Congenital heart disease (CHD) encompasses a spectrum of structural cardiac abnormalities that carry lifelong hemodynamic and electrophysiological consequences. Among these, Tetralogy of Fallot and its variant, Pentalogy of Fallot (POF), frequently require surgical correction early in life. In patients undergoing repair with a transannular patch, Pulmonary regurgitation is inevitable. Although well tolerated for years, progressive right ventricular dilation and dysfunction necessitate pulmonary valve replacement.

Objective: This report highlights the complexity of managing severe Pulmonary regurgitation in adults with repaired Pentalogy of Fallot, underscoring post-procedural arrhythmias tendency in a structurally vulnerable right ventricle.

Material and methods: We report the case of a 46-year-old male with a history of surgically corrected POF at the age of 21, followed by mechanical aortic valve replacement at 33 years. His clinical course was further complicated by recurrent atrial flutter, for which he underwent two prior catheter ablation procedures. The patient presented with exertional dyspnea at low activity and rapid palpitations. Electrocardiography revealed junctional rhythm with 50 bpm ventricular rate. Transthoracic echocardiography indicated a dilated, hypokinetic right ventricle, with an ejection fraction of 44% in the setting of severe pulmonary regurgitation.

Given the hemodynamic impact and symptomatic status, a Harmony pulmonary valve was implanted, with no immediate peri-procedural complications.

Results: In early post-procedural phase, the patient exhibited two episodes of non-sustained ventricular tachycardia, followed by a sustained ventricular arrhythmia progressing to torsades de pointes, requiring electrical cardioversion. Considering the documented ventricular arrhythmias, junctional rhythm and arrhythmic history, a dual-chamber implantable cardioverter-defibrillator was indicated and implanted for secondary prevention of sudden cardiac death.

Conclusions: The growing population of adults with CHD presents unique, evolving challenges. This case illustrates the importance of comprehensive, multidisciplinary management in CHD patients, particularly in peri-interventional setting, where arrhythmic risk is significant and warrants vigilant monitoring and timely intervention.

Keywords: Pentalogy of Fallot, Harmony valve, torsades de pointes

AORTIC ROOT ANEURYSM WITH CONCOMITANT SINUS OF VALSALVA ANEURYSM, SUBAORTIC MEMBRANE AND PSEUDOCOARCTATION: A COMPLEX SURGICAL CHALLENGE

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Background: Aortic root aneurysm and sinus of Valsalva aneurysm (SVA) are distinct but related pathological entities. Their simultaneous occurrence with a subaortic membrane, aortic arch malformation, and anomalous coronary anatomy constitutes an exceptionally rare constellation, with only isolated cases reported in the literature, representing a formidable diagnostic and surgical challenge.

Objective: To present a case of concurrent aortic root aneurysm, non-coronary SVA, subaortic membrane, and aortic arch pseudocoarctation in a patient with NSTEMI, describing the multimodal diagnostic approach and individualized surgical strategy.

Material and methods: A 56-year-old male smoker with arterial hypertension presented with a posterolateral NSTEMI. Selective right coronary cannulation was impossible due to a high ostial origin; no obstructive lesions were identified, and the NSTEMI was attributed to supply-demand imbalance in the context of the structural anomalies. Cardiac CT angiography was performed for anatomical characterization. Surgical correction was performed electively under cardiopulmonary bypass.

Results: Cardiac CT demonstrated a 62 mm aortic root aneurysm, non-coronary sinus protrusion into right-sided chambers, a subaortic membrane, severe distal arch kinking with post-isthmus dilatation (pseudocoarctation), 90° left main angulation, left coronary dominance, and a high right coronary ostium. The arch was conserved intraoperatively given the absence of a measurable hemodynamic gradient across the kinked segment. Surgical strategy comprised Bentall root replacement, SVA resection, and subaortic membrane resection. ICU stay was 3 days; discharge on POD 8. No complications at 2-year follow-up.

Conclusions: This rare combination of aortic root pathologies underscores the indispensable role of comprehensive multimodal imaging in operative planning. Conservative arch management is justified without a significant hemodynamic gradient. A tailored surgical approach achieves excellent short- and long-term outcomes.

Keywords: Aortic root aneurysm, Sinus of Valsalva aneurysm, Bentall procedure, Subaortic membrane, Aortic arch malformation

MULTIMODALITY IMAGING AND REVERSE REMODELLING IN HEART FAILURE WITH IMPROVED EJECTION FRACTION SECONDARY TO SUSPECTED TOXIC CARDIOMYOPATHY: A CASE REPORT

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Background: Heart failure with improved ejection fraction (HFimpEF) is increasingly recognised as a distinct clinical phenotype characterised by significant recovery of left ventricular ejection fraction (LVEF) in patients with prior HFrefEF. Rather than representing a cure, HFimpEF is considered a state of remission requiring continued therapy and surveillance.

Objective: To illustrate the role of multimodality imaging and guideline-directed medical therapy (GDMT) in the diagnosis, management, and longitudinal assessment of HFimpEF in a patient with suspected toxic (alcohol-related) cardiomyopathy.

Material and methods: We report the case of a 47-year-old male with chronic alcohol consumption and prior ischaemic stroke, presenting with exertional dyspnoea and fatigue, included in class III NYHA classification of HF. Electrocardiography showed no significant abnormalities. Transthoracic echocardiography revealed a severely dilated left ventricle with an LVEF of 22% (biplane Simpson method) and a LV diameter of 72 mm. Coronary angiography excluded significant coronary artery disease. Cardiac magnetic resonance identified inferoseptal fibrosis with a transverse diameter of 8 mm, supporting a non-ischaemic aetiology. Baseline NT-proBNP was 1822 pg/mL. The patient was advised strict alcohol abstinence and initiated on comprehensive GDMT, including angiotensin receptor–neprilysin inhibitor, beta-blocker, mineralocorticoid receptor antagonist, sodium–glucose co-transporter 2 inhibitor, and loop diuretic.

Results: At 12-month follow-up, after GDMT and total alcohol abstinence, the patient showed marked clinical and structural improvement, being included in class NYHA II. Echocardiography demonstrated reverse remodelling, with normalisation of left ventricular dimensions to a diameter of 54 mm and an improvement in LVEF to 48%. NT-proBNP decreased to 979 pg/mL, consistent with haemodynamic improvement.

Conclusions: This case highlights the potential for significant reverse remodelling in HFimpEF through strict etiological control and optimised GDMT. Multimodality imaging plays a central role in diagnosis and follow-up. Despite LVEF recovery, HFimpEF should be regarded as a state of remission, supporting the need for lifelong therapy and close monitoring.

Keywords: heart failure with improved ejection fraction, toxic cardiomyopathy, reverse remodelling, multimodality imaging, guideline-directed medical therapy

COMBINED BENTALL PROCEDURE AND MITRAL ANNULOPLASTY FOR AORTIC ROOT AND ARCH ANEURYSM WITH MITRAL REGURGITATION

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Background: Aortic (Ao) root aneurysm counts as one of the most common aortic root diseases, with no clear aetiology and a 90% mortality rate. The best outcome for the patients is surgery, the Bentall procedure being widely used and accepted as gold standard intervention.

Objective: The conduct of the Bentall procedure in a patient with aortic root aneurysm.

Material and methods: We report the case of a 47-year-old man with aneurysm of the aortic root and aortic arch, confirmed via angio CT, aortic stenosis, severe mitral regurgitation (MR), permanent atrial fibrillation and chronic heart failure NYHA III. Pre-operative echocardiography showed an ascending Ao of 57 mm and an Ao arch of 46 mm; the MR volume was of 108 mL. Moreover, a bicuspid Ao with calcifications was highlighted and rupture of the A2 chordae tendineae. Key surgical steps include annuloplasty performed for the MR, using a semi-rigid complete ring, followed by the Bentall procedure. Replacement of the aortic arch aneurysm was executed with an excision en bloc of the supra-aortic vessels, subsequently reimplanted onto a Dacron graft anastomosed to the thoracic descending aorta. Ultimately, the two grafts were anastomosed to each other.

Results: The patient was kept in the service for two months, and the postoperative course was complicated by cardiogenic shock corrected via vasoactive medication, acute kidney disease managed by multiple haemodialysis sessions, bilateral pneumonia with transient respiratory failure solved by mechanical ventilation followed by surgically conducted tracheostomy, and sepsis with a pulmonary starting point treated with antibiotics. Post-operative echocardiography showed a functional aortic prosthesis, a MR volume of 48mL. The ascending aortic graft measured 34 mm. Permanent anticoagulation was initiated.

Conclusions: This case highlights a multi-step surgical driven approach when dealing with such a complex aortic aneurysm and a slow-paced favourable recovery in the patient, despite the postoperative complications.

Keywords: Bentall, aneurysm, mitral annuloplasty

POCKET WOUND DEHISCENCE LEADING TO CARDIAC RESYNCHRONIZATION THERAPY DEFIBRILLATOR UPGRADE: A CASE REPORT

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Background: Cardiac implantable electronic devices (CIED) are a critical tool in managing rhythm disturbances, but pocket wound dehiscence requires swift action to avoid cardiac or infectious complications, especially in patients with multiple comorbidities.

Objective: To report a case of device explantation and upgrade due to pocket wound dehiscence.

Material and methods: A 58-year-old man with dilated cardiomyopathy (LVEF 38%), permanent AF, type 2 diabetes, and COPD, implanted with an Abbott dual-chamber ICD, presented with pocket wound dehiscence and an exposed electrode. The patient was hemodynamically stable, but ECG showed AF with slow ventricular rhythm (35–47 bpm) and RBBB. TTE confirmed reduced LV function, moderate mitral regurgitation, and no vegetations. He was afebrile (36.5°C) with normal laboratory results (WBC 8.79 K/mcL); based on clinical stability and normal inflammatory markers, blood/pocket cultures and TEE were deferred. Intravenous amoxicillin-clavulanate was initiated. Complete transvenous extraction of the ICD was performed via manual traction under local anesthesia. Severe post-extraction bradycardia (33–35 bpm) required isoproterenol infusion. CRT-D reimplantation was performed 72 hours later via left subclavian approach, justified by near-100% pacing dependency, depressed LVEF, and RBBB posing high risk of pacing-induced cardiomyopathy.

Results: Post-implantation ECG confirmed biventricular pacing. Chest X-ray confirmed correct device positioning and TTE ruled out pericardial effusion. The patient was discharged on day 5 with optimized therapy (Sacubitril/Valsartan, Dapagliflozin) and one-month follow-up scheduled.

Conclusions: Early diagnosis, exclusion of systemic infection and endocarditis via clinical assessment, normal inflammatory markers, and TTE showing no vegetations, combined with targeted antibiotic therapy and timely CRT-D upgrade, allowed successful management of CIED pocket dehiscence in this high-risk patient.

Keywords: CIED, Pocket Dehiscence, CRT-D, Device Explantation, Dilated Cardiomyopathy

PSORIASIS VULGARIS AS A CARDIOVASCULAR RISK MULTIPLIER: FROM SYSTEMIC INFLAMMATION TO END-STAGE HEART FAILURE

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Background: Psoriasis vulgaris is currently recognized as a systemic inflammatory disease that acts as a cardiovascular risk multiplier, independent of traditional factors. This case explores the devastating impact of the synergy between a long-standing fifteen-year history of severe psoriatic inflammation and a severe cluster of metabolic comorbidities, which led to the aggressive acceleration of coronary atherosclerosis and end-stage heart failure.

Objective: The primary objective is to present the clinical management and therapeutic escalation in a 54-year-old male with a high-risk inflammatory and metabolic profile. We emphasize how periods of uncontrolled skin and joint disease activity directly preceded cardiovascular deterioration, and highlight the role of cardiac resynchronization therapy-defibrillator in stabilizing complex ischemic dilated cardiomyopathy.

Material and methods: The patient's clinical history was comprehensively reviewed, focusing on a severe psoriatic phenotype characterized by a Psoriasis Area and Severity Index score greater than 20 and a Body Surface Area involvement exceeding 30%. Despite treatment with Etanercept, the patient maintained persistent systemic inflammation, evidenced by consistently elevated C-reactive protein and erythrocyte sedimentation rate levels. This inflammatory burden showed a clear temporal correlation with the rapid progression from a 2020 anterior myocardial infarction—revascularized with two drug-eluting stents in the left anterior descending artery—to global ventricular remodeling. Current diagnostic assessment utilized echocardiography and electrocardiography to quantify ventricular dysfunction and electrical dyssynchrony.

Results: Investigations confirmed ischemic dilated cardiomyopathy with a severely reduced left ventricular ejection fraction of 30%, restrictive diastolic dysfunction, and a major left bundle branch block with a QRS duration of 170 milliseconds. Clinical data revealed a direct temporal link between flare-ups of psoriatic activity and the worsening of his NYHA functional class. Due to the failure of maximal medical therapy and significant electrical dyssynchrony, a cardiac resynchronization therapy-defibrillator was successfully implanted. The post-procedural course was favorable, showing marked improvement in functional status and stabilization of comorbidities despite the patient's renal and glycemetic fragilities.

Conclusions: The temporal relationship between severe psoriatic flares and cardiovascular decline underscores the need for aggressive systemic control of inflammation. In cases of extreme multi-organ fragility, a multidisciplinary approach is essential, allowing for advanced interventions like cardiac resynchronization to serve as a life-saving solution when chronic inflammation accelerates structural heart disease.

Keywords: Psoriasis vulgaris, systemic inflammation, ischemic dilated cardiomyopathy, cardiac resynchronization therapy, metabolic syndrome.

RUPTURED NON-CORONARY SINUS OF VALSALVA ANEURYSM WITH AORTO-RIGHT ATRIAL FISTULA: AN INCIDENTAL FINDING IN A YOUNG FEMALE PATIENT

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Background: Sinus of Valsalva aneurysm (SVA) is a rare congenital or acquired cardiac anomaly, with an estimated prevalence of 0.1–3.5% among patients undergoing open-heart surgery. Rupture most commonly occurs into the right-sided cardiac chambers, causing an aorto-cardiac fistula with left-to-right shunting. Prompt recognition is critical due to the risk of hemodynamic compromise or infective endocarditis.

Objective: To report a case of ruptured non-coronary SVA with aorto-right atrial fistulization incidentally identified in an asymptomatic young woman, describing the diagnostic workup and surgical management.

Material and methods: A 29-year-old asymptomatic female was referred following incidental echocardiographic detection of a right atrial mass during workup for a grade III systolic murmur. Multimodal imaging included TTE, TEE, and cardiac CT angiography. Surgical correction was performed under cardiopulmonary bypass via median sternotomy.

Results: TTE identified a highly mobile filamentous mass (27×12 mm) above the tricuspid valve plane with turbulent systolic and diastolic flows. TEE confirmed a 5 mm non-coronary sinus discontinuity with a restrictive left-to-right shunt (V_{max} 5 m/s, ΔP_{max} 100 mmHg); pulmonary artery pressure was within normal limits with no echocardiographic signs of pulmonary hypertension. Cardiac CT confirmed a tubular fistulous structure (~45 mm length, 4.5–7 mm diameter) with aorto-right atrial contrast passage, no intracavitary thrombus, and an associated patent foramen ovale. Given the small defect size and favorable tissue quality, direct double-layer suture closure was preferred over patch repair. Antero-septal tricuspid commissuroplasty was also performed. Postoperative echocardiography confirmed no residual shunting and good biventricular function. At 3-month follow-up the patient remained asymptomatic with no recurrence.

Conclusions: Ruptured SVA may mimic intracardiac tumors or accessory valvular tissue, posing a significant diagnostic challenge. Multimodal imaging is essential for surgical planning. Direct suture closure achieves excellent outcomes, and elective repair even in stable, asymptomatic patients prevents life-threatening complications.

Keywords: Sinus of Valsalva aneurysm, Aorto-right atrial fistula, Left-to-right shunt, Congenital heart defect, Open-heart surgery

DEFINING SURGICAL OPERABILITY IN A HIGH-RISK PREMATURE TODDLER WITH COMPLEX SEPTAL DEFECTS AND PULMONARY HYPERTENSION

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Background: Large septal defects may lead to heart failure, failure to thrive, and pulmonary hypertension. Management is particularly challenging in premature children with chronic lung disease and severe nutritional impairment, in whom operability assessment and surgical timing are critical.

Objective: To illustrate the role of individualized hemodynamic assessment in guiding surgical repair in a high-risk premature toddler with complex septal defects and pulmonary hypertension.

Material and methods: We report the case of a 2-year-old girl born at 33 weeks of gestation, with a birth weight of 1200 g, bronchopulmonary dysplasia, severe failure to thrive, severe neurodevelopmental delay, and heart failure (Ross III/IV), diagnosed with a large perimembranous ventricular septal defect with subaortic extension and a large ostium secundum atrial septal defect. Echocardiography showed hemodynamically significant shunting, a Qp/Qs ratio of 2.2, and moderate-to-severe pulmonary hypertension. Cardiac catheterization demonstrated pulmonary vascular resistance of 2.44 WU/m², decreasing to 1.81 WU/m² after inhaled nitric oxide, with a PVR/SVR ratio decrease from 0.22 to 0.14, supporting the decision for surgical repair.

Results: After multidisciplinary heart team discussion, the patient underwent surgical closure of the septal defects under cardiopulmonary bypass. Despite prematurity, bronchopulmonary dysplasia, severe failure to thrive, neurodevelopmental delay, and preoperative pulmonary hypertension, the postoperative course was favorable. Follow-up echocardiography showed good biventricular function, a decrease in the right ventricle–right atrium gradient from 50 mmHg preoperatively to 21–22 mmHg at discharge, marked improvement in echocardiographic estimates of pulmonary pressure, and only small residual shunts.

Conclusions: This case highlights the importance of individualized hemodynamic assessment and multidisciplinary decision-making in defining surgical operability in high-risk premature children with complex septal defects and pulmonary hypertension. Despite severe malnutrition, chronic lung disease associated with respiratory support requirements, baseline pulmonary hypertension, and significant heart failure symptoms, favorable postoperative hemodynamic and clinical outcomes were achieved following surgical repair, without the need for long-term pulmonary vasodilator therapy. Follow-up showed reduction in pulmonary pressures, only small residual shunts, and improvement in clinical status.

Keywords: Bronchopulmonary Dysplasia; Heart Septal Defects, Atrial; Heart Septal Defects, Ventricular; Hypertension, Pulmonary; Infant, Premature

FOCAL INFRARENAL AORTIC OBSTRUCTION MIMICKING DISTAL OCCLUSIVE DISEASE IN A YOUNG FEMALE: AN ENDOVASCULAR APPROACH

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Background: While atherosclerotic disease typically manifests as aneurysmal dilation or diffuse calcification in the abdominal aorta, focal high-grade stenosis represents a less frequent clinical entity. Such lesions can severely compromise perfusion, mimicking the symptoms of more distal occlusive disease.

Objective: This report describes the successful endovascular treatment of a focal, high-grade infrarenal aortic stenosis in a young patient presenting with advanced peripheral arterial disease (PAD) and tissue loss.

Material and methods: We report the case of a 40-year-old female patient admitted for endovascular revascularization. Clinical presentation was marked by Rutherford Category 5 ischemia, with severe intermittent claudication and an ischemic ulcer on the right hallux. Physical examination revealed significantly diminished femoral pulses and absent distal pulses bilaterally. Given the patient's young age, the diagnostic workup was expanded to address differential etiologies, including congenital narrowing, inflammatory aortitis (Takayasu) and thrombotic disease. However clinical assessment and imaging confirmed premature atherosclerosis as a result of severe dyslipidemia and chronic nicotine dependence. Diagnostic angiography via dual radial (5F) and femoral (7F) access revealed a focal, hemodynamically critical stenosis of the infrarenal aorta. Measurements indicated a luminal reduction to 3.91 mm from a baseline of 12.4 mm. The lesion was treated with sequential balloon angioplasty followed by the implantation of a covered stent-graft.

Results: Post-procedural imaging confirmed excellent stent apposition to the aortic wall with total resolution of the pressure gradient. Robust distal flow was restored bilaterally. At 14-day follow-up, the patient reported complete symptom relief with evidence of ulcer healing.

Conclusions: Focal infrarenal aortic stenosis can be effectively managed through targeted endovascular stenting. The use of covered stent-grafts provides a minimally invasive alternative, facilitating immediate hemodynamic restoration.

Keywords: Aortic stenosis, PAD, premature atherosclerosis.

ENDOVASCULAR LIMB SALVAGE IN A MULTIMORBID PATIENT WITH CRITICAL LIMB-THREATENING ISCHEMIA AND MULTILEVEL ARTERIAL OCCLUSION

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Background: Critical Limb-Threatening Ischemia (CLTI) represents the end-stage of peripheral arterial disease (PAD), carrying a high risk of major amputation and mortality. In patients with significant comorbidities, endovascular intervention offers a minimally invasive alternative to traditional surgery.

Objective: This report highlights the successful endovascular management of a complex case of CLTI involving total occlusion of the left external iliac artery (EIA) in a patient with extensive systemic atherosclerosis and multiple competing pathologies.

Material and methods: We report the case of a 78-year-old male presenting with Rutherford Category 5 ischemia, characterized by rest pain in the left lower limb and a non-healing ulcer on the left hallux. Clinical examination revealed absent femoral pulses on the left and absent distal pulses bilaterally. Comorbidities included an infrarenal abdominal aortic aneurysm, HFrEF (NYHA II), secondary to a prior inferolateral myocardial infarction and COPD. Angiography confirmed total occlusion of the left EIA and moderate atherosclerotic changes in the femoropopliteal and infrapopliteal segments. Under local anesthesia, access was obtained via the right common femoral artery (7F sheath). The occlusive lesion was crossed and treated with sequential balloon angioplasty followed by the implantation of three overlapping self-expanding nitinol stents (8x60mm, 8x40mm and 7x60mm) to accommodate anatomical tapering.

Results: Post-procedural angiography demonstrated complete recanalization of the left EIA with robust distal flow. Immediate improvement was noted, with the restoration of a palpable left femoral pulse and improved skin temperature. Follow-up at 14 days demonstrated significant ulcer healing and resolution of rest pain, successfully achieving limb salvage.

Conclusions: Endovascular revascularization is an effective strategy for limb salvage, even in the presence of complex multilevel occlusions. In this high-risk case the approach facilitated perfusion restoration while minimizing physiological stress.

Keywords: CLTI, limb salvage, external iliac artery.

CONDUCTION DISTURBANCES - A VERY COMMON COMPLICATION AFTER TAVR: CASE REPORT

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Background: The conduction disturbances are well known complications of Transcatheter Aortic Valve Replacement (TAVR) and affect 31% of patients after TAVR although the procedure is very often performed in patients with severe aortic stenosis and many comorbidities such as: renal failure, obstructive pulmonary disease and arthritis which make them the perfect candidates for TAVR.

Objective: This study aims to present the conduction disturbances that can appear as a complication of TAVR and the dynamic transition between them.

Material and methods: This case report presents an 82-year-old female diagnosed with valvular and ischemic heart disease, severe degenerative aortic stenosis, 80% stenosis of the anterior descending artery, mild mitral regurgitation, 2nd grade hypertension with high cardiovascular risk, NYHA III cardiac insufficiency with low ejection fraction, supraventricular extrasystoles, dyslipidemia, diabetes mellitus, chronic kidney disease and hyperkalemia. She presented at cardiological consultation with dyspnea at gradually decreasing efforts, thoracic pressure, fatiguability and dizziness. The transthoracic echocardiography revealed severe aortic stenosis with a calcified mass, a transvalvular gradient of 78/48 mmHg, an ascending aorta of 38mm and an ejection fraction of 45%. ECG shows left axial deviation and supraventricular extrasystoles, with normal PR and QRS intervals, with no conduction delays. Considering the above mentioned, the cardiological team proceeded TAVR using a Navitor valve.

Results: Postoperative control coronarography revealed a normofunctional aortic valve prothesis, the transthoracic echocardiography revealed a transvalvular gradient of 10/6 mmHg with minimum paravalvular leak and without mechanical complications. The ECG revealed a left bundle branch block (LBBB) that transforms into LBBB and a 2nd grade Mobitz I atrioventricular block and that also transforms into LBBB and atrial flutter. The patient's recovery was favourable without pacemaker implantation and she was discharged in stable sinus rhythm.

Conclusions: Although a very significant percentage of patients develop conduction disturbances after TAVR, many of them recover in six months without a pacemaker implantation.

Keywords: TAVR, LBBB, flutter

EARLY AGGRESSIVE IN-STENT RESTENOSIS UNDER OPTIMAL THERAPY IN A HEMODIALYSIS PATIENT: A PARADOX OF RESIDUAL INFLAMMATORY RISK

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Background: Chronic kidney disease carries an increased residual inflammatory risk, where uremia catalyzes atherosclerosis progression and neointimal proliferation. In-stent restenosis often occurs despite guideline-directed management, with inflammation, platelet reactivity, and procedural factors potentially overlapping.

Objective: To illustrate the multifactorial nature of early in-stent restenosis in a hemodialysis patient under optimal therapy.

Material and methods: A 62-year-old male with end-stage renal disease on hemodialysis, type 2 diabetes, hypertension, prior inferior STEMI (2022) and recurrent NSTEMI (2022, 2023) was admitted in December 2025 for unstable angina with three-vessel disease and multiple in-stent restenoses. Two-stage interventions were performed: a drug-eluting balloon was used for in-stent restenosis of the mid-distal LAD, with bailout implantation of two small-caliber drug-eluting stents (Xience, 2.5 mm) following dissection; subsequently, additional drug-eluting stents (Xience ProS) were placed at the LAD ostium and proximal LCx (V-stenting). Under atorvastatin and alirocumab plus aspirin-clopidogrel, LDL-cholesterol was 36 mg/dL (target <55 mg/dL). Three months later, after a brief clopidogrel interruption for arteriovenous fistula creation, the patient presented with non-ST elevation myocardial infarction; angiography revealed 75–90% in-stent restenosis confined to LAD segments II and III, while all other stents remained patent. C-reactive protein was elevated on admission (19.7 mg/dL), preceding *Enterococcus faecium* bacteremia documented seven days later.

Results: Balloon angioplasty was performed, and surgical revascularization was recommended. Restenosis was segment-specific and developed in a context of multiple potential contributors: residual uremic inflammation, transient DAPT interruption, and possible clopidogrel hyporesponsiveness, although the absence of acute stent thrombosis argues against clinically significant platelet resistance.

Conclusions: Early in-stent restenosis in hemodialysis patients is multifactorial, with inflammatory and pharmacological factors converging. Beyond lipid and platelet control, residual inflammatory risk and platelet reactivity should also be assessed.

Keywords: Chronic kidney disease, Coronary artery disease, Restenosis, Hemodialysis

FROM ISCHEMIC CARDIOMYOPATHY TO MECHANICAL CIRCULATORY SUPPORT: A CASE OF ADVANCED HEART FAILURE REQUIRING LEFT VENTRICULAR ASSIST DEVICE IMPLANTATION

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Background: Despite guideline-directed medical therapy, advanced heart failure with reduced ejection fraction (HFrEF) remains associated with high morbidity and mortality, with left ventricular assist device (LVAD) therapy playing an important role.

Objective: To present the clinical progression, multimodal evaluation, and management of a patient with advanced HFrEF complicated by ventricular arrhythmias, ultimately requiring LVAD implantation.

Material and methods: We report the case of a 66-year-old male with a history of myocardial infarction treated by percutaneous coronary intervention to the left anterior descending artery in 2014. During follow-up, he suffered cardiac arrest due to ventricular fibrillation and was successfully resuscitated, followed by implantation of a single-chamber implantable cardioverter-defibrillator (ICD) in 2016.

Results: The patient presented with progressive dyspnea and reduced exercise tolerance, despite maximal GDMT consistent with NYHA functional class III. NT-proBNP was markedly elevated, and echocardiography showed a dilated left ventricle (LVEDV 267 mL, LVESV 202 mL), severely reduced ejection fraction (30%), mild mechanical dyssynchrony, severe mitral regurgitation, and mildly reduced right ventricular function. During the current year, ECG revealed wide QRS complex (160 ms) with left bundle branch block morphology, fulfilling theoretical criteria for cardiac resynchronization therapy (CRT). However, hemodynamic evaluation demonstrated advanced disease with a cardiac index of 1.79 L/min/m² and INTERMACS profile 3–4. The multidisciplinary Heart Team considered that CRT alone would have a limited probability of meaningful clinical stabilization because of severe hemodynamic compromise and repeated decompensations. Therefore, a HeartMate 3 LVAD was implanted as destination therapy. Postoperatively, the patient required temporary inotropic and vasopressor support and developed a *Klebsiella pneumoniae* infection, which was successfully treated.

Conclusions: This case illustrates the progression of ischemic cardiomyopathy toward advanced HFrEF requiring long-term MCS. Prompt consideration of LVAD implantation can significantly improve functional status and may be life-saving even in elderly patients.

Keywords: heart failure, ischemic cardiomyopathy, ventricular arrhythmias, left ventricular assist device

RECURRENT ACUTE CORONARY SYNDROMES IN A YOUNG PATIENT WITH ISOLATED MARKEDLY ELEVATED LIPOPROTEIN(A): A CASE REPORT

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Background: Elevated lipoprotein(a) [Lp(a)] is a recognized cardiovascular risk-enhancing factor, and ESC/EAS guidance now supports measuring Lp(a) at least once in every adult's lifetime, with particular attention to younger patients with premature ASCVD or no other identifiable risk factors. In recurrent acute coronary syndrome (ACS), markedly elevated Lp(a) may explain residual risk despite otherwise favorable risk profiles.

Objective: We aimed to highlight recurrent ACS in a young patient in whom the only identifiable risk factor was very high Lp(a), underscoring the need for early recognition and intensified secondary prevention.

Material and methods: A 42-year-old patient presented with recurrent ACS over a 26-month period, requiring 4 hospitalizations and 3 coronary interventions. The patient had no history of hypertension, diabetes mellitus, smoking, obesity, or known familial hypercholesterolemia. Laboratory testing revealed an Lp(a) level of 186 mg/dL, while LDL-cholesterol was 78 mg/dL under treatment. Transthoracic echocardiography showed a left ventricular ejection fraction of 48% with inferolateral hypokinesia. Coronary angiography demonstrated premature multivessel coronary artery disease with recurrent culprit lesions and diffuse atherosclerotic burden.

Results: The patient was treated with guideline-directed medical therapy, including dual antiplatelet therapy, high-intensity statin treatment, and a PCSK9 inhibitor was added. During 12 months of follow-up, no further ACS events occurred. Functional capacity improved from CCS class III to class I, and left ventricular ejection fraction remained stable at 50% on repeat echocardiography.

Conclusions: This case suggests that very high Lp(a) may represent an important contributing factor to recurrent ACS in a young patient without conventional risk factors. Routine Lp(a) testing in cases of premature or recurrent ASCVD remains valuable, as early identification can help refine risk stratification and guide more tailored secondary prevention strategies.

Keywords: lipoprotein(a), acute coronary syndrome, premature atherosclerosis, recurrent myocardial infarction, young patient

DO ATHLETES RECOVER DIFFERENTLY? THE IMPACT OF MUSCLE REHAB STATUS ON FUNCTION AFTER ACL RECONSTRUCTION

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Background: Recovery following anterior cruciate ligament reconstruction (ACLR) is a multifactorial process, contingent not only on the biological integration and ligamentization of the graft but also on restoration of neuromuscular control, a process involving the active neutralization of arthrogenic muscle inhibition.

Objective: The present study investigates the impact of the pre-lesional athletic profile on muscle performance dynamics, assessing the extent to which baseline functional status modulates the efficiency and magnitude of adaptive processes during rehabilitation stages.

Material and methods: The research included a cohort of 85 post-ACLR subjects, stratified into two groups: athletes (n=42) and non-athletes (n=43). Subjects were longitudinally monitored during the intermediate and late phases of rehabilitation (weeks 12–20) using computerized isokinetic dynamometry (Easy Torque). The analysis quantified Peak Torque and relative strength (normalized to body mass) for the perigenicular musculature and pelvic stabilizers, evaluating progression rates under a uniformly applied recovery protocol.

Results: The data indicate a qualitative asymmetry in the strength profile favoring the athletes, who recorded superior values across all parameters ($p < 0.05$). The robustness of the adductors and abductors strength in the athletic group underscores a superior biomechanical control capacity of the lower kinetic chain. Despite similar progression dynamics between groups, contractile quality was significantly more pronounced in athletes, indicating more efficient motor unit recruitment, reflective of enhanced muscle memory and neurophysiological reserve.

Conclusions: This study reveals that restoring muscle symmetry does not imply homogenization of functional capacity between athletes and non-athletes; the former maintain a morphofunctional advantage, particularly in lumbopelvic stability and contractile quality. These results support the necessity of a therapeutic approach that integrates neuromotor control mechanisms and monitoring of the entire kinetic chain, essential elements for a safe return to pre-injury activity levels.

Keywords: ACLR Rehab, Arthrogenic muscle inhibition, Neuromuscular control

QUALITY OF LIFE IN CHRONIC LIMB-THREATENING ISCHEMIA PATIENTS: A SYSTEMATIC REVIEW OF RISK FACTORS AND TREATMENT OUTCOMES

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Background: The final stage of Peripheral Artery Disease (PAD), known as Chronic Limb-Threatening Ischemia (CLTI), is clinically characterized by rest pain and tissue loss, including ulcers and gangrene. Due to reduced mobility and repeated interventions or the need for amputation, these patients have a low Quality of Life (QoL) compared to the general population.

Objective: This systematic review aims to identify risk factors associated with impaired QoL in CLTI patients.

Material and methods: A systematic literature search was conducted in PubMed in accordance with PRISMA guidelines, using the terms “quality of life,” “risk factors,” and “chronic limb-threatening ischemia.” The search identified 74 records. After applying a free full-text availability filter, 42 articles underwent title and abstract screening, of which 18 were selected for full-text eligibility assessment. Ultimately, 10 studies met the inclusion criteria and were incorporated into the final analysis. Studies were excluded if they did not evaluate quality of life, included populations without CLTI, or were review articles or editorials. This work was supported by the George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureș, Romania, through research grant no. 170/2/09.01.2024.

Results: This review encompassed 7,323 patients with CLTI, with a mean age of 71.7 years. QoL was assessed using validated instruments, including VasculQoL, EQ-5D, SF-12, and WHOQOL-BREF. The factors most consistently associated with poorer QoL were female sex, smoking, impaired mobility, and opioid use. Evidence regarding the relationship between disease severity, as measured by the Wound, Ischemia, and foot Infection (WIFI) classification, and QoL was inconsistent. Revascularization was associated with significant improvements across all QoL domains, with benefits sustained over time. No significant differences in QoL outcomes were observed between surgical and endovascular approaches.

Conclusions: Patients with CLTI experience markedly impaired QoL, which improves following treatment but rarely returns to levels observed in the general population.

Keywords: PAD, CLTI, vascular surgery, Quality of Life, risk factors.

ELEVATED LEUKOCYTE–GLUCOSE INDEX IS ASSOCIATED WITH THE PRESENCE OF VARICOSE ULCERS IN PATIENTS WITH CHRONIC VENOUS INSUFFICIENCY

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Background: Chronic venous insufficiency (CVI) is a highly prevalent vascular disorder worldwide, frequently associated in advanced stages with venous ulcer formation. Risk factors include advanced age, prolonged standing, obesity, and female sex. Recent studies suggest that malnutrition may contribute to disease progression and may be associated with decreased venous wall tonicity. The leukocyte–glucose index (LGI), derived from leukocyte count and serum glucose levels, has been proposed and validated in cardiovascular diseases, with predictive value for disease severity and outcomes..

Objective: The objective of this study was to evaluate the role of LGI in patients with CVI and varicose ulcers.

Material and methods: This retrospective descriptive study included patients with CVI admitted for surgical treatment to the Department of Vascular Surgery, Emergency Clinical County Hospital, Târgu Mureş, between 2019 and 2025. Clinical, demographic, and laboratory data were retrieved from electronic records. LGI was calculated at admission. Patients were divided according to the presence of venous ulcers. The study was supported by a research grant from the “George Emil Palade” University of Medicine, Pharmacy, Science, and Technology of Târgu Mureş (no. 170/2/09.01.2024).

Results: A total of 710 patients were included, mean age 54.02±13.17 years, 62.1% female. Patients with venous ulcers were older, more frequently male, and had higher rates of hypertension and chronic obstructive pulmonary disease (p<0.05). They also showed higher leukocyte, neutrophil, monocyte counts, and LGI values (p<0.001). ROC analysis identified an LGI cut-off of 0.78 (62.1% sensitivity, 73.8% specificity, AUC 0.684). Elevated LGI was significantly associated with venous ulcers (OR 2.21, p<0.001).

Conclusions: CVI is common, but venous ulcers indicate more advanced disease. Elevated LGI may reflect increased inflammatory and metabolic burden and could serve as a simple biomarker for risk stratification and earlier intervention.

Keywords: chronic venous insufficiency, CVI, varicose vein, venous ulcers, vascular surgery.

POST-TRAUMATIC EXTERNAL NASAL VALVE COLLAPSE: RECONSTRUCTION USING AUTOLOGOUS COSTAL CARTILAGE GRAFTS

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Background: External nasal valve collapse in a post-traumatic context is an important cause of nasal airway obstruction, resulting from compromise of the lateral cartilaginous support. This structure plays a key role in regulating nasal airflow, and its damage leads to persistent functional and aesthetic impairment. Severe trauma may require surgical reconstruction to restore nasal valve competence and airway patency.

Objective: The primary objective of this study is to present a case of post-traumatic external nasal valve collapse and to highlight the surgical management using autologous costal cartilage grafts for functional and structural restoration.

Material and methods: A 64-year-old patient was admitted to the County Emergency Clinical Hospital of Târgu Mureș with persistent nasal obstruction and structural nasal deformity following trauma. Clinical examination revealed bilateral external nasal valve collapse, more pronounced on the right side, exacerbated during deep inspiration. The Cottle maneuver was positive, indicating improvement in airflow with lateral nasal wall support.

Surgical reconstruction was performed under general anesthesia via an open approach with an inverted V-shaped transcolumellar incision. Dissection and elevation of soft tissue flaps allowed access to the nasal framework. Reconstruction included placement of autologous costal cartilage grafts harvested from the right sixth rib: two alar batten grafts for the right side, one alar batten graft for the left side, and a septal stabilization graft.

Results: The postoperative period was favorable, with no signs of infection or local complications. Nasal airflow was improved, and structural support of the nasal valve was restored. The patient was discharged with appropriate postoperative recommendations.

Conclusions: Reconstruction of external nasal valve collapse requires precise restoration of nasal structural support. Autologous costal cartilage grafts provide durable reinforcement in extensive defects and significantly improve functional outcomes. Careful evaluation and individualized surgical planning are essential for optimal results.

Keywords: nasal valve collapse, costal cartilage graft, nasal reconstruction

THE USE OF STRUCTURED BONE GRAFT IN PATIENTS WITH LACK OF BONE SUBSTANCE

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Background: The management of massive posttraumatic segmental bone defects remains a major challenge in orthopedic surgery. Although autografts represent the biological standard of reference, their use is limited by the insufficient volume available and the morbidity associated with the donor site. Nonvascularized structural bone allografts represent a viable alternative, providing adequate mechanical support without the disadvantages of autologous harvesting.

Objective: To evaluate the efficacy of structural bone allograft in the reconstruction of massive segmental bone defects, analyze the clinical and imaging evolution and identify associated complications and risk factors.

Material and methods: We present a series of three cases with high-energy trauma, resulting in massive loss of distal femoral segmental bone substance (>5 cm). The treatment followed a staged protocol: the first stage included radical debridement and temporary stabilization with an external fixator, followed, after confirmation of the absence of infection, by definitive reconstruction with structural bone allograft combined with intramedullary fixation.

Results: The staged algorithm ensured effective contamination control and a favorable environment for graft integration. One patient achieved complete graft integration and resumption of supported walking four months postoperatively. A second patient developed pseudarthrosis, requiring total segmental knee arthroplasty two years postoperatively. The third case evolved favorably without major complications. In all cases, the allograft provided adequate mechanical support and facilitated, where necessary, conversion to arthroplasty.

Conclusions: Nonvascularized structural bone allografts combined with intramedullary fixation represent an effective option for the reconstruction of massive posttraumatic segmental bone defects, allowing restoration of limb length and providing the necessary structural support. Long-term risks, including bone resorption and pseudarthrosis, require rigorous clinical monitoring and imaging.

Keywords: Structural bone allograft; Intramedullary nail; Open fracture; High-energy trauma; Bone reconstruction.

IMPACT OF THE COVID-19 PANDEMIC ON WORKLOAD FOR CAROTID STENOSIS TREATMENT IN THE VASCULAR SURGERY DEPARTMENT OF A TERTIARY UNIVERSITY HOSPITAL

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Background: The COVID-19 pandemic significantly burdened global healthcare, disrupting chronic disease management and elective surgical interventions, including carotid stenosis (CS). Hospital restructuring and pandemic-related restrictions delayed CS screening and intervention, creating a potential backlog of cases.

Objective: This study aims to examine the impact of the COVID-19 pandemic on the workload for carotid stenosis treatment in the vascular surgery department of a tertiary university hospital.

Material and methods: All patients diagnosed with carotid stenosis and admitted to the Vascular Surgery Department of the Emergency County Clinical Hospital of Târgu Mureş were included in this study. Demographic characteristics and comorbidity data were extracted from the institutional electronic hospital database. Patients were stratified according to the COVID-19 period into three groups: pre-pandemic (2019), pandemic (2020–2021), and post-pandemic (2022–2025).

Results: A total of 574 patients with CS were admitted during the study period (mean age, 67.5±8.3 years; 381 [66.4%] male). Annual case volume peaked in 2024 (n=137), followed by 2025 (n=100), 2022 (n=98), 2023 (n=84), 2021 (n=71), and 2019 (n=45), with the lowest number recorded in 2020 (n=39). Overall, 221 patients (38.5%) were from the hospital's home county. In the pre-pandemic period, 45 patients were admitted during the department's first year of activity. Mean annual admissions during the pandemic period were 55, increasing substantially to 92.8 in the post-pandemic period. Patients treated in the post-pandemic period were significantly older than those treated earlier (p=0.017). Although case volume increased markedly during the post-pandemic period, no significant differences were observed in sex distribution or geographic referral patterns between study periods.

Conclusions: This study demonstrates a substantial shift in CS workload. After a decline in 2020, activity showed a pronounced upward trend, reaching its peak in 2024. In the post-pandemic period, mean annual admissions nearly doubled, reflecting rapid recovery and increased surgical volume within the vascular surgery department.

Keywords: carotid stenosis, COVID-19

MINIMALLY INVASIVE ENDOSCOPIC AORTIC VALVE REPLACEMENT (MICLATS) – FIRST CASE PERFORMED AT OUR CENTER

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Background: Minimally invasive aortic valve replacement (MICLATS) represents a modern alternative to median sternotomy, offering reduced surgical trauma, faster recovery, and superior aesthetic outcomes, while maintaining procedural safety and efficacy.

Objective: To present the first case of minimally invasive endoscopic aortic valve replacement performed at our center.

Material and methods: We present the case of a 63-year-old patient with severe aortic stenosis and moderate aortic regurgitation, with multiple comorbidities (arterial hypertension, type II diabetes, dyslipidemia, obesity, carotid artery disease, mixed dementia). Preoperative echocardiography revealed a transaortic gradient of 77/46 mmHg and preserved left ventricular function (EF 60%).

The procedure was performed through a right subaxillary minithoracotomy, under cardiopulmonary bypass via femoral peripheral cannulation, using an endoscopic-assisted technique. Following the establishment of myocardial protection and cardiac arrest, the severely calcified native aortic valve was excised, followed by implantation of a biological prosthesis (EPIC PLUS, size 25) in the anatomical position, using the Cor-Knot device

-to facilitate rapid suture securing and to optimize the operative times. Prosthesis functionality was confirmed by intraoperative echocardiographic assessment.

Results: The procedure was completed successfully, with correct positioning and performance of the prosthesis (postoperative gradient 27/17 mmHg), through a 5 cm incision. The postoperative course was marked by non-surgical complications in the context of the patient's comorbidities and neurological status: right pleural effusion requiring reintervention, paroxysmal atrial fibrillation, and neurocognitive disturbances. The patient was discharged in stable hemodynamic and respiratory condition.

Conclusions: Minimally invasive aortic valve replacement is a safe and effective technique with excellent surgical outcomes. Postoperative complications were predominantly attributable to the associated pathology rather than the surgical technique itself. The implementation of this method represents an important step in the development of minimally invasive endoscopic cardiac surgery at our center.

Keywords: aortic stenosis, minimally invasive endoscopic cardiac surgery, minithoracotomy, Cor-Knot.

CLINICAL DIAGNOSIS OF MORTON'S NEUROMA IN THE ABSENCE OF HIGH-RESOLUTION IMAGING: CHALLENGES AND THERAPEUTIC SOLUTIONS – CASE REPORT

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Background: Morton's neuroma is a common condition of the forefoot, characterized by perineural fibrosis of the common plantar digital nerve rather than a true tumor, most frequently located in the second and third intermetatarsal spaces. It occurs secondary to repetitive microtrauma and mechanical compression, leading to metatarsalgia and neuropathic manifestations. Although magnetic resonance imaging (MRI) is considered the gold standard, the diagnosis is primarily clinical, based on patient history and the exclusion of other etiologies. In practice, the condition is often underdiagnosed or misdiagnosed, particularly as spinal pathology, highlighting the need for a rigorous diagnostic algorithm.

Objective: A 37-year-old female presented with persistent pain in the left forefoot, with neuropathic characteristics. Symptoms included mechanical pain exacerbated by walking and pressure, described as a burning sensation. The evaluation required multidisciplinary consultations (rheumatology, neurosurgery, neurology, orthopedics). Initial radiological investigations of the forefoot did not reveal any traumatic lesions. A lumbar MRI was subsequently performed to exclude L5–S1 radiculopathy, showing only disc protrusion without disco-radicular conflict. The differential diagnosis included forefoot contusion, inflammatory arthritis, peripheral circulatory insufficiency, lumbar radiculopathy, and Freiberg's disease. Ultimately, after excluding other diagnoses and performing a forefoot MRI, a definitive diagnosis of Morton's neuroma was established.

Material and methods: Conservative treatment was initiated, consisting of footwear modification, the use of plantar orthoses to offload pressure, and physiokinetotherapy. Pharmacological treatment with neurotrophic agents and neuromodulators was added for pain control. Subsequently, a local corticosteroid injection was performed. The literature also describes other therapeutic options, such as radiofrequency ablation or botulinum toxin, with variable efficacy. Surgical treatment remains reserved for refractory cases.

Results: This case highlights the risk of diagnostic error due to overinterpretation of lumbar changes, which may mimic peripheral symptomatology. Differential diagnosis includes plantar plate injuries, stress fractures, Freiberg's disease, among others. Careful clinical evaluation remains essential.

Conclusions: Morton's neuroma should be suspected in cases of neuropathic metatarsalgia. Accurate diagnosis and exclusion of associated pathologies allow for appropriate treatment and avoidance of unnecessary investigations.

Keywords: Morton's neuroma, metatarsalgia, differential diagnosis.

WHEN A TRIVIAL FALL CAUSES A COMPLEX FRACTURE: SPIRAL FRACTURE OF THE FEMORAL DIAPHYSIS IN AN ELDERLY PATIENT

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Background: In elderly patients, low-energy trauma most frequently causes proximal femoral fractures. However, bone fragility can lead to atypical fracture patterns, including spiral diaphyseal fractures, which can raise diagnostic and therapeutic management issues.

Objective: Presentation of a case of spiral fracture of the femoral diaphysis occurring after minor trauma and highlighting the importance of early surgical stabilization.

Material and methods: We present the case of a 78-year-old patient, without high-energy trauma, admitted after a fall from the same level, complaining of intense pain and functional impairment in the left lower limb. The clinical examination revealed deformity and limited mobility, and the imaging evaluation (X-ray) confirmed the diagnosis. Surgical treatment was decided.

Results: Imaging exploration revealed a spiral fracture located in the proximal third of the left femoral diaphysis, an unusual pattern in the context of a low-energy mechanism. Closed reduction and intramedullary nailing were performed under intraoperative imaging control. The obtained stability allowed for the early mobilization of the patient. The postoperative evolution was favorable, under analgesic, anticoagulant treatment, and prophylaxis of complications, without immediate adverse events.

Conclusions: Spiral femoral diaphyseal fractures can also occur in the context of minor traumas in elderly patients, against a background of bone fragility. The correct diagnosis and rapid surgical stabilization thru intramedullary osteosynthesis are essential for reducing complications and early resumption of mobilization.

Keywords: femoral fracture; spiral fracture; low-energy trauma; elderly patient; intramedullary osteosynthesis

RADICAL SURGICAL MANAGEMENT OF TERMINAL SEQUELAE OF UROGENITAL TUBERCULOSIS IN A SINGLE FUNCTIONAL KIDNEY: FROM NEPHROURETERECTOMY TO BRICKER-TYPE URINARY DIVERSION

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Background: Urogenital Tuberculosis, despite medical treatment, urogenital tuberculosis can leave irreversible, mutilating sequelae in the urinary system. We present a 68-year-old patient with urogenital tuberculosis sequelae, including bilateral hydronephrosis and microcystic scarring (<50 ml), resulting in severe functional insufficiency. The case is characterized by a shrunken, sclerosed kidney, contributing only 4% to global renal function (as per scintigraphy), with the patient relying on the functional right kidney as the sole kidney.

Objective: This paper aims to analyze the surgical management and clinical course of a patient with terminal sequelae of urogenital and osseous tuberculosis, characterized by non-functional microcystic scarring, a single functional kidney, and urinary infections with multidrug-resistant pathogens.

Material and methods: During the hospitalization period (June 16-30, 2023), preoperative evaluation included renal scintigraphy (RS 4%), biochemical tests (creatinine 1.91 mg/dL, urea 83 mg/dL), and urine cultures, identifying multidrug-resistant strains (*Klebsiella pneumoniae* ESBL and *Morganella morganii* XDR). The surgical procedure included left nephroureterectomy, radical cystoprostatectomy, and Bricker-type urinary diversion (uretero-ileostomy).

Results: Postoperative recovery was favorable, with the patient receiving targeted antibiotic therapy (Meropenem, Ciprofloxacin) and analgesic/anticoagulant support. Inflammatory markers showed a significant systemic response (PCR 25.64 mg/dL, fibrinogen 770.50 mg/dL), though renal function remained stable (postoperative creatinine 1.54 mg/dL). The patient was discharged in stable hemodynamic condition, with a healing wound, removed drains, and a strict protocol for diuresis monitoring and ureteral stent follow-up.

Conclusions: The radical surgical approach with Bricker-type urinary diversion offers an optimal therapeutic solution in post-tuberculous microcystic scarring, even in fragile patients. Effective infection control and renal function monitoring are key to long-term success in managing extrapulmonary tuberculosis sequelae.

Keywords: Urogenital Tuberculosis; Bricker Diversion; Single Functional Kidney; Multidrug-resistant bacteria.

LAPAROSCOPIC MANAGEMENT OF A STENOTIC SIGMOID ADENOCARCINOMA WITH MINIMAL CLINICAL SYMPTOMS: A CASE REPORT

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Background: Colorectal cancer is a common condition with typically slow progression and variable clinical presentation. The correlation between symptoms, laboratory tumor markers, and local tumor extent may be inconsistent, potentially leading to delayed diagnosis and therapeutic challenges.

Objective: We present a case of moderately differentiated sigmoid adenocarcinoma with significant stenotic behavior despite minimal clinical symptoms, and we highlight the laparoscopic surgical approach used in its management.

Material and methods: A 57-year-old female patient, with no significant personal or family history, presented with minimal digestive symptoms, consisting of intermittent diarrhea alternating with formed stools and scant rectal bleeding, initially attributed to hemorrhoidal disease. Imaging studies, colonoscopy with biopsy, and histopathological examination revealed a moderately differentiated adenocarcinoma of the sigmoid colon without lymphovascular invasion on biopsy. The tumor marker Carcinoembryonic Antigen was elevated (~10 ng/mL). Laparoscopic surgery was performed under general anesthesia. Intraoperatively, a stenotic tumor located approximately 25 cm from the anal verge was identified. A segmental sigmoid resection was carried out using a medial-to-lateral approach, with vascular ligation at origin, respecting oncologic principles. Adequate margins (10 cm proximal, 5 cm distal) were achieved, and bowel continuity was restored with a latero-lateral mechanical colorectal anastomosis. The specimen was placed in an Endobag and retrieved through a Pfannenstiel incision.

Results: The surgical procedure was successfully completed. The postoperative course was favorable, with early return of bowel function, and the patient is currently being prepared for discharge.

Conclusions: This case highlights the lack of correlation between minimal clinical symptoms and significant local tumor impact. Even moderately differentiated adenocarcinomas may present with marked stenotic features. The laparoscopic approach remains a safe and effective option in experienced hands.

Keywords: Colorectal cancer, sigmoid adenocarcinoma, stenotic tumor, Carcinoembryonic Antigen (CEA), laparoscopic surgery

SURGICAL MANAGEMENT OF FEMOROPOPLITEAL BYPASS OBSTRUCTION

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Background: Atherosclerosis is a chronic systemic disease associated with multiple complications. It may manifest as advanced peripheral arterial disease, which is associated with increased morbidity and a significant risk of limb amputation. Re-occlusion of peripheral arterial bypass grafts and multilevel arterial occlusions significantly increase the complexity of therapeutic decision-making and revascularization procedures.

Objective: To present a case of multilevel arterial occlusions associated with occlusion of a previous femoropopliteal bypass, successfully treated by complex surgical revascularization.

Material and methods: We report the case of a 64-year-old male patient with multiple cardiovascular risk factors, including hypertension, type 2 diabetes mellitus, dyslipidemia, chronic smoking, and ischemic heart disease, with a history of left femoropopliteal bypass performed in 2020. The patient was admitted for severe intermittent claudication (walking distance of approximately 10 meters) associated with a left calcaneal ulcer. Clinical examination revealed absence of femoral and distal pulses in the left lower limb. Imaging studies confirmed occlusion of the left external iliac artery, left common femoral artery, and profunda femoris artery, as well as occlusion of the previous femoropopliteal bypass graft.

Surgical management consisted of left pararectal laparotomy, arterial exploration, profunda femoris endarterectomy, and left iliofemoral bypass using a 7-mm Dacron graft. To obtain adequate exposure of the origin of the profunda femoris artery, prosthetotomy of the previous femoropopliteal bypass graft was performed, followed by exploration of the proximal anastomotic region.

Results: Postoperatively, the patient showed a favorable clinical evolution without surgical wound complications. The femoral pulse was palpable, and distal Doppler signals were present, indicating restoration of arterial perfusion. The patient was discharged in stable condition with a warm and viable lower limb.

Conclusions: Early diagnosis and appropriate surgical management are essential for limb salvage and improved clinical outcomes, particularly in patients with advanced peripheral arterial disease and multiple associated cardiovascular risk factors.

Keywords: Peripheral Arterial Disease; Severe Limb Ischemia; Revascularization; Iliofemoral Bypass; Femoropopliteal Bypass

MANAGEMENT OF OBSTRUCTIVE SIGMOID COLON CANCER BY RECTOSIGMOID RESECTION

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Background: Colorectal cancer is one of the leading causes of cancer-related mortality, with the sigmoid colon being frequently affected. Due to its anatomical configuration and narrow lumen, tumors in this segment frequently present with obstructive symptoms, often requiring surgical treatment.

Objective: To describe the clinical presentation, surgical treatment, and postoperative evolution of a patient with stenosing sigmoid colon cancer. Additionally, to highlight the importance of timely surgical intervention and appropriate operative strategy in achieving favorable outcomes.

Material and methods: A 57-year-old patient with no significant past medical history, diagnosed with a partially stenosing malignant sigmoid colon tumor with serosal invasion and mesenteric lymphadenopathy, underwent rectosigmoid resection with colorectal anastomosis. During exploratory laparotomy under general anesthesia, a 10 cm circumferential sigmoid mass with extension to the serosal layer was identified, together with multiple mesenteric lymph nodes. A rectosigmoid resection was performed, followed by an end-to-end colorectal anastomosis using a double-layer technique. Pelvic drainage was placed at the end of the procedure, and the surgical specimen was sent for histopathological examination.

Results: The postoperative course was favorable, the patient remaining stable and without early surgical complications. Recovery was uneventful, with good general condition, adequate pain control, and preserved functional status. The patient was alert, cooperative, and in good spirits during the immediate postoperative period.

Conclusions: This case highlights that timely surgical management with primary colorectal anastomosis can be successfully performed in selected patients with locally advanced sigmoid colon cancer, even in the presence of partial stenosis and regional lymphadenopathy. The favorable early postoperative outcome demonstrates the role of suitable surgical treatment in improving immediate recovery and supporting optimal oncologic management.

Keywords: sigmoid colon cancer, colorectal anastomosis, lymphadenopathy

RECURRENT HIATAL HERNIA ASSOCIATED WITH SEGMENTAL PNEUMATOSIS CYSTOIDES INTESTINALIS: A RARE SURGICAL CHALLENGE

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Background: Pneumatosis cystoides intestinalis (PCI) is a rare clinical entity characterized by the presence of gas-filled cysts within the intestinal wall. While often idiopathic, its association with recurrent hiatal hernia and complex postoperative adhesions can significantly complicate the clinical course.

Objective: This case report aims to highlight a complex presentation of recurrent hiatal hernia associated with segmental terminal ileal pneumatosis, emphasizing the necessity for meticulous intraoperative exploration.

Material and methods: A 51-year-old female, with a surgical history of laparoscopic Nissen fundoplication (July 2024), presented in November 2025 with postprandial nausea, bloating, and a palpable mass at the prior incision site. Laboratory findings upon readmission revealed a significant inflammatory response with a C-reactive protein (CRP) level of 100.4 mg/L and mild leukocytosis ($10.41 \times 10^3/\mu\text{L}$). An exploratory laparotomy was performed.

Results: Intraoperative exploration identified a recurrent hiatal hernia, an incisional hernia, and an extensive adhesional syndrome. Notably, a 60 cm segment of the terminal ileum, located approximately 30 cm from the ileocecal valve, exhibited marked pneumatosis. The surgical intervention included adhesiolysis, hiatal hernia repair (cruroplasty), and a segmental resection of approximately 80 cm of the affected ileum with a side-to-side manual anastomosis. The postoperative recovery was favorable, with restored intestinal transit and hospital discharge on the 7th day.

Conclusions: Recurrent hiatal hernia may coexist with rare intestinal pathologies such as pneumatosis. This case underscores that persistent gastrointestinal symptoms in a postoperative context require a high index of suspicion and may necessitate segmental bowel resection when intestinal wall integrity is compromised.

Keywords: pneumatosis cystoides intestinalis, recurrent hiatal hernia, terminal ileum resection, small bowel surgery, postoperative complications

SURGICAL MANAGEMENT OF EARLY-STAGE LUMINAL A BREAST CANCER: A DUAL-TRACER APPROACH FOR SENTINEL NODE MAPPING

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Background: Breast-conserving surgery (BCS) combined with sentinel lymph node biopsy (SLNB) is the standard treatment for early-stage breast cancer. Identifying the sentinel node accurately is vital for regional staging, especially when factors like body mass index or tumor location make mapping difficult.

Objective: To present the surgical management of a 45-year-old patient with early-stage invasive breast carcinoma, using a dual-tracer technique for sentinel node detection.

Material and methods: A 45-year-old patient had a 13 mm BIRADS 5 nodule in the left breast. A biopsy confirmed a Grade 1 (G1) invasive carcinoma (NST). The molecular profile was Luminal A (ER 100%, PR 95%, HER2-negative, Ki67 5%). Surgery included an extended sectoral resection followed by a lymph node biopsy. For the biopsy, we used a dual-tracer method: Technetium-99m (Tc-99m) radiocolloid and Indocyanine Green (ICG) fluorescence.

Results: The dual-tracer approach allowed us to find two sentinel lymph nodes (Regions I and II). Both the ICG and the gamma probe showed the same results, making the excision precise. Final pathology confirmed a G1 invasive carcinoma with clear (R0) margins. The axillary evaluation identified a micrometastasis in the first sentinel node (less than 50% of the node), which was considered a negative status for further axillary dissection. The patient was discharged after three days of hospitalization; this surgical technique significantly shortens the hospital stay and allows for a very fast recovery.

Conclusions: Combining radioisotope (Tc-99m) and fluorescence (ICG) provides high sensitivity for finding sentinel nodes. This dual approach ensures accurate staging for Luminal A cases, avoiding unnecessary axillary surgery while maintaining medical precision.

Keywords: Breast Cancer, Luminal A, Sentinel Lymph Node Biopsy, Technetium-99m, Indocyanine Green.

RECONSTRUCTION OF A POST-BURN KNEE DEFECT WITH EXPOSED COLLATERAL LIGAMENT: A CASE REPORT

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Background: Rotation flaps are frequently used in reconstructive surgery for complex soft tissue defects, especially when bone, tendons, or ligaments are exposed. Compared with skin grafts alone, they provide better vascularization, reduce wound tension, and ensure more stable coverage. They are useful in burn patients, where tissue loss may limit simpler reconstructive options.

Objective: This paper highlights the usefulness of rotation flaps in the treatment of deep post-burn defects with exposed structures.

Material and methods: We present the case of an 85-year-old female patient admitted to the Emergency Department of Targu Mures County Emergency Clinical Hospital with third-degree burns involving the lateral side of the arm, dorsal aspect of forearm and hand, lateral side of thigh and knee. The total burned surface area was approximately 10%. Initial treatment included excision of nonviable tissue followed by split-thickness skin grafting. Grafts were harvested from the medial left thigh and anterior right thigh. On the lateral left thigh, necrotic tissue was excised and the defect was closed with sutures. During postoperative evolution, marginal necrosis appeared and the graft over the knee became lysed. Further debridement exposed the collateral ligament. A rotation flap from the posterolateral region of the calf was then transposed to cover the knee. The dog-ear portion was temporarily preserved to maintain vascularity. The secondary calf defect was covered with a graft from the posterior right thigh, while the remaining thigh defect was grafted using skin from the lateral right thigh.

Results: Postoperative evolution was favorable, with clean wounds, viable grafts, and a well-vascularized flap without signs of necrosis. Stable coverage of the exposed ligament was achieved, followed by progressive healing of all reconstructed areas.

Conclusions: Rotation flaps remain a reliable option for complex post-burn defects when grafting alone is insufficient, providing durable coverage, preserved vascularity, and good healing outcomes.

Keywords: rotation flap, burn injury, skin graft, knee defect, reconstruction

STERNAL DEHISCENCE MANAGEMENT USING THE CLAW™ FIXATION SYSTEM FOLLOWING TOTAL MEDIAN STERNOTOMY: A CASE REPORT

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Background: Sternal dehiscence is a severe postoperative complication following cardiac surgery, frequently associated with mediastinitis and mechanical chest wall instability. This pathology, characterized by the separation of the sternal osteotomy edges, occurs with an incidence of 0.5% to 8.5%. Predisposing factors include advanced age, chronic obstructive pulmonary disease (COPD), obesity, and diabetes mellitus.

Objective: This case report presents the use of the Claw™ fixation system in managing complex sternal dehiscence following the failure of conventional primary closure techniques, such as the Robicsek procedure, which inherently complicates subsequent chest wall reconstruction.

Material and methods: We report the case of a 72-year-old female, status post coronary artery bypass grafting for triple-vessel disease, presenting with sternal instability, pronounced sternal movement, dyspnea, resting chest pain and significant decline in quality of life, secondary to wire cerclage failure. Stabilization was achieved using the Claw™ fixation system, which consists of two-part clips of varying dimensions secured with specialized instrumentation. Following rigid fixation, the reconstruction was reinforced with pectoralis major muscle flaps. The procedure concluded with anatomical layered closure and the placement of Redon suction drains.

Results: Immediate restoration of chest wall stability was achieved. The postoperative course was uneventful; Redon drains were removed on postoperative day (POD) 4. The surgical site demonstrated primary healing without infection. At the 6-week follow-up, clinical and radiographic assessments confirmed robust sternal union, accompanied by significant resolution of thoracic pain and improvement in pulmonary mechanics.

Conclusions: The Claw™ fixation system provides a superior therapeutic alternative to conventional cerclage methods in cases of refractory sternal dehiscence. By providing rigid structural fixation, this system facilitates osteosynthesis and allows for rapid functional recovery, particularly in the setting of complex defects.

Keywords: Sternal dehiscence, Rigid fixation, Claw™ system, Sternal osteosynthesis, Chest wall stabilization

SUBTROCHANTERIC FRACTURES ON PATHOLOGICAL BONE: A CASE REPORT

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Background: Subtrochanteric fractures on pathological bone in elderly patients represent a major challenge and they are often associated with multiple comorbidities, which increase the chance of complications. Given these factors, proper surgical planning and preoperative care are vital to achieve desirable outcomes.

Objective: This case aims to highlight the approach to a complex subtrochanteric fracture in a patient with a medical history of pathological bone.

Material and methods: We present the case of a 68-year-old female patient who presented with acute functional impairment of the right limb. The medical history indicates an incomplete fracture of the greater trochanter within the past 2 months, suggesting structural bone vulnerability. Additionally, the presence of comorbidities, such as right hip osteoarthritis, hypertension, hyperlipidemia, and chronic peripheral venous insufficiency, made a significant contribution to the difficulty and progression of the case. During the hospital admission, previously chronic treatment with Roteas was ceased, and a new prophylactic regimen was initiated using Clexane, analgesics, and anti-inflammatories. Surgical treatment was initiated with open reduction and internal fixation of the fracture using a cephalomedullary nail, obtaining stable alignment. In addition, a biopsy was taken and sent for histopathological examination.

Results: The surgery went as planned, and the patient was actively mobilized at the bedside and ambulated with a walking aid as tolerated. Postoperative treatment included further thromboprophylaxis, active rehabilitation, and analgesics. An oncologic consult was deemed necessary.

Conclusions: In cases of suspected pathological fracture, surgical stabilization must be tailored to address both biomechanical demands and the prevention of malignant spread, guaranteeing the best possible quality of life for the patient.

Keywords: incomplete fracture, comorbidities, cephalomedullary nail, biopsy

WHEN SURGERY MUST WAIT: MANAGING FRACTURES IN A THROMBOCYTOPENIC PATIENT

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Background: Patients with thrombocytopenia represent a significant challenge in orthopedic treatment due to the tremendous risk of intraoperative and postoperative bleeding. Optimizing the hematological status is essential to ensure a safe procedure.

Objective: This case highlights the importance of periprocedural care of a thrombocytopenic patient with tibial and fibular fractures. It emphasizes the need to delay surgical intervention under such conditions to achieve favorable outcomes.

Material and methods: We present the case of a 49-year-old patient who was admitted to the emergency room with a tibial and fibular fracture. A series of blood tests, including hematological monitoring and coagulation parameters, was performed to evaluate the patient's status. Most of them revealed signs of notable thrombocytopenia. Considering these, the preoperative management became a more extensive process involving numerous transfusions to ensure the patient's safety. The following 12 days consisted of repeated platelet transfusions to reach a safe platelet threshold for the surgery. A satisfactory level was achieved and the patient underwent surgery.

Results: Intraoperatively, the risk of hemorrhage no longer posed a major problem. The fracture was successfully reduced and stabilized, resulting in an uneventful postoperative course with favorable wound healing.

Conclusions: Surgery is delayed in patients with thrombocytopenia to improve hematological status and reduce the risk of hemorrhage. Favorable outcomes depend on adequate transfusion support and close clinical observation.

Keywords: thrombocytopenia, periprocedural care, platelet transfusions

FLEXIBLE URETEROSCOPY IN THE TREATMENT OF URETERAL LITHIASIS IN A PATIENT WITH A SOLITARY KIDNEY: A CASE REPORT

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Background: Despite the availability of several therapeutic options for ureteral lithiasis, flexible ureteroscopy (f-URS) remains a preferred strategy, due to the precision of laser lithotripsy and a favorable safety profile.

Objective: This case report assesses the safety and efficacy of Flexible Ureteroscopy as a minimally invasive therapeutic modality for ureteral lithiasis, highlighting its role in optimizing patient recovery and mitigating postoperative morbidity.

Material and methods: We present the case of a 49-year-old female patient with a history of left nephrectomy, who presented to the emergency department with right renal colic associated with nausea. A computed tomography (CT) scan performed at admission revealed an 8 mm right ureteral calculus located in the lumbar ureteral segment, with a density of 1500 Hounsfield units (HU). The obstruction resulted in grade II ureterohydronephrosis, associated with mild perirenal and periureteral fat stranding. Emergency intervention was performed, involving the placement of a JJ ureteral stent, which resulted in the migration of the calculus into the pelvicalyceal system (lower calyx). After a 3-month interval, the patient was re-evaluated in the Urology department. A follow-up CT scan confirmed the presence of the 8 mm calculus in the lower calyx and incidentally revealed an 8 mm cortical angiomyolipoma, with no signs of pelvicalyceal dilation. Given the solitary kidney status and the persistence of lithiasis, a minimally invasive flexible ureteroscopy (f-URS) and laser lithotripsy were performed.

Results: Post-operative JJ ureteral stent placement was elected to ensure continuous drainage and prevent acute complications that could compromise renal function. The subsequent clinical course was favorable, with significant improvement, allowing for hospital discharge.

Conclusions: Flexible ureteroscopy was selected for this patient's therapeutic management, as it facilitates a post-procedural stone-free status, preserves renal function, and minimizes postoperative morbidity through a minimally invasive approach.

Keywords: Flexible Ureteroscopy, Solitary Kidney, Ureteral Lithiasis

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