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INTERNATIONAL CONGRESS FOR STUDENTS, YOUNG DOCTORS AND PHARMACISTS MARISIENSIS

24th October – 13th December 2020

Târgu Mureș, Romania

BOOK OF ABSTRACTS

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BASIC MEDICAL SCIENCES

FIRST GLANCE AT SCREEN TIME AND SLEEP QUALITY IN MEDICAL STUDENTS

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Background: Sleep quality among students is variable with sleep disturbances being common among young adults from all over the world. In adults, sleep deficit is associated with cognitive impairment, increased risk of metabolic disorders (including obesity, type 2 diabetes), cardiovascular disease and mental disorders. In addition, nowadays, more and more students spend most of their time in front of a screen with various purposes, smartphones and other similar devices being integrated in their daily life. **Objective:** The aim of this study was to analyze the current situation among UMFST Târgu Mureș students regarding their sleep patterns and how the screen time could influence their sleep quality. **Material and methods:** In order to achieve the proposed objectives, we conducted a questionnaire-based survey of students enrolled in UMFST Târgu Mureș. A four-page questionnaire was distributed through social networks. The students were also informed that participation was anonymous and voluntary. **Results:** Out of a total of 127 answers, 76.38% are female, 22.83% are male, 0.79% did not specify. On average, students sleep 7:11 hours ± 1:8 hours on nights before classes and 8:40 hours ± 1:12 hours on free days. Also, most of them drink 1-2 coffees/day 64,57% and no energy drink/day 88,19%, don't take stimulant pills (85,04%) or sleep pills (87,4%). Furthermore, most of them felt tired in the morning at least once (91,13%), sleepy during daytime (94,44%), lectures (88%) or free time (88,8%). Additionally, most of them use devices right before going to bed daily (81,75%) and interact with a device after several minutes (65,6%) after waking up. **Conclusions:** Whether it's socializing, reading, studying or gaming, a great majority of students use screen time above the recommended limit and that might affect their daily performance.

Keywords: sleep quality, sleep pattern, screen time, medical students

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SENSITIVE DETECTION AND MONITORING OF BTK C481S MUTATION USING DROPLET DIGITAL PCR IN CHRONIC LYMPHOCYTIC LEUKEMIA

Tamás László[1], Csaba Bödör[2], Alpár Donát[2]

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Background: Chronic lymphocytic leukemia (CLL) is the most common mature B-cell leukemia in western countries. Besides the widely used chemo-immunotherapy, in the last few years new targeted therapies have become available including the Bruton tyrosine kinase (BTK) inhibitor ibrutinib, which has revolutionized the treatment of refractory/relapsed CLL. Despite the promising clinical results, ibrutinib resistance develops in a subset of patients. In the majority of the cases, ibrutinib resistance emerges in the presence of the mutation(s) affecting the *BTK* gene. The most common *BTK* mutation is the change of the amino acid cysteine to serine, in position 481 (*BTK* C481S). **Objective:** In this study, we examined the reliability of digital droplet PCR in the detection of the *BTK* C481S mutation. Furthermore, we investigated the correlation between the appearance of the mutation during ibrutinib treatment and the emergence of clinical progression due to resistance. **Material and methods:** Serial peripheral blood samples from 70 CLL patients receiving ibrutinib were collected. CLL cell ratio was determined by flow cytometry, followed by genomic DNA isolation from peripheral mononuclear cells. The presence of the *BTK* C481S mutation was detected by droplet digital PCR, using a custom-made mutation specific assay. **Results:** In our patient cohort, the median time from the start of ibrutinib until the first detection of the mutation was 33 months. Forty seven % (33/70) of the patients harboured the *BTK* C481S mutation. The mutation was detectable in 70% (26/37) of the patients showing signs of clinical progression. The mutation was detectable on average 9 months (0-29 months) prior to the first sign of progression. **Conclusions:** Based on our results, *BTK* C481S mutation is often associated with ibrutinib resistance. Droplet digital PCR was proven to be a reliable method in the detection and monitoring of this mutation. Using this high sensitivity method, *BTK* C481S mutation is detectable months before clinical progression.

Keywords: chronic lymphocytic leukemia, droplet digital PCR, ibrutinib, targeted therapy

WHAT TO DO WITH THE SURPLUS CRYOPRESERVED EMBRYOS FROM THE BIOETHICAL POINT OF VIEW

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Background: Infertility has become a major issue for couples wanting to start a family. Fortunatelly, assisted reproduction techniques have given a hope to procreate even when there is a pathology involved. When preparing for an embryo transfer, usually there is more than one embryo that results. The surplus of embryos will be kept frozen until the family decides they no longer need them. **Objective:** The issue that arises is what should we do, from a legal, bioethical and religious point of view, with the surplus of cryopreserved embryos. In this situation, the couple has a few choices: they can either choose to dispose of the embryos by thawing them, donate them for research purposes or to another couple in need, or to simply abandon them. **Material and methods:** This paper is a review of numerous literature publications, legal jurisdictions and religious opinions and that analises the bioethical implications when dealing with surplus embryos. **Results:** There must be taken into consideration the main basic four principles of bioethics: respect for autonomy(the right of freewill), to do no harm(non-maleficence), protect the well-being of a person(beneficence) and rectitude (take into consideration the benefits versus costs). The legislation is also an important factor, considering the Declaration of Human Rights and the Civil and Penal Codes that vary from a country to another. The religious perspective tilts the balance for religious families, which represents a majority of 87% of the Romanian population. Medicine also supports the research of stem cells found in embryos in order to treat incurable diseases, such as diabetes, Down Syndrome or Alzheimer's Disease. **Conclusions:** This article presents various angles of the bioethics of the cryopreserved embryos, creating an overview of this increasingly acute issue for both parents and society.

Keywords: Cryopreserved embryos, Bioethics, Dispose, Stem cells

KNOWLEDGE, ATTITUDES, AND BEHAVIORS REGARDING TOBACCO AND ALTERNATIVE PRODUCTS USE AMONG MEDICAL STUDENTS IN TARGU MURES.

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Background: Smoking among medical students is prevalent in spite of their high level of smoking-related knowledge. **Objective:** The study aimed to assess the knowledge, attitudes, and smoking-related behaviour of medical students in Targu Mures. **Material and methods:** The cross-sectional study included 89 students. Data regarding knowledge, attitudes, and smoking-related behaviour were collected using an online survey during December 2019- August 2020. Descriptive statistics were calculated and student-t or Chi-square tests were applied to compare smokers and non-smokers. **Results:** The mean age of the participants was 23.7 years, 65.2% were females, and 34.8% males. More than half (52.8%) were non-smokers, 33.7% were current smokers, and 13.5% former smokers. The lifetime prevalence of cigarette use, e-cigarette, heat-not-burn products use were 37.1%, 29.0%, and 24.7% respectively. Regular use of cigarettes, e-cigarettes, heat-not-burn products was disclosed by 37.1%, 7.9%, and 10.1% of the respondents, respectively. While comparison tests between current smokers and current non-smokers did not reveal significant differences in terms of smoking-related knowledge ($p=0.066$), significant differences were observed regarding some of the investigated reasons to smoke/not to smoke: smoking helps people cope better with frustrations ($p<0.001$), smoking is pleasurable ($p<0.001$), smoking relieves tension ($p<0.001$), cigarette smoke stinks ($p=0.005$). Health was an important reason to quit/not start smoking for 74.1% of smokers, 90.9% of ex-smokers, and 100.0% of non-smokers. About 11,1% of smokers, and 4.25% of non-smokers were concerned about the money. A very small percentage mentioned family, friends or other reasons, as reasons to quit or not start smoking. **Conclusions:** The majority of the respondents were current non-smokers. Comparison tests revealed significant differences only in terms of reasons to smoke. The most frequently declared reason to quit was health.

Keywords: smoking, tobacco, alternative products, medical students

DELAYED-ONSET MUSCLE SORENESS (DOMS): THE SCIENCE VERSUS URBAN MYTHS

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Background: Delayed-onset muscle soreness is a frecquent event after sustained physical activity. Whether the simptoms were muscle tenderness, impaired mobility or even severe debilitating pain, this discomfort can have a negative impact on daily activities. It is important to understand what DOMS is in order to use the available methods to alleviate the simptoms and protect the muscular tissue from lesions because they may result in more severe conditions. **Objective:** The aim of the present work is to review the available medical literature and to compare the results of an online questionnaire with the best available evidence. **Material and methods:** The online survey that we conducted had a specific set of questions addressed to a number of 150 people in order to assess their beliefs about DOMS and find out what they do to relieve symptoms of DOMS and whether their medical training or sportive experience influence their opinion and knowledge. **Results:** The meta-analysis concluded that "Massage seems to be the most effective method for reducing DOMS and perceived fatigue. Perceived fatigue can be effectively managed using compression techniques, such as compression garments, massage, or water immersion" and that "The most powerful techniques for reducing inflammation were massage and cold exposure". In the survey, the top options chosen by people for ameliorating DOMS were post-exercise stretching (76,2%), massage (63%), sleep (61%), active recovery (53%) and hydration (49,7%). According to this study, post-exercise stretching is not working how it was believed for many decades. **Conclusions:** People who have sports experience have better practical knowledge about dealing with DOMS compared with medical students.

Keywords: Delayed-onset muscle soreness, online survey, massage, stretching

CLINICAL - MEDICAL

A DIAGNOSIS IN REVERSE: USING ULTRASONOGRAPHY IN THE EARLY DIAGNOSIS OF PSORIATIC ARTHRITIS

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Background: Psoriatic arthritis is an autoimmune disease, which generally affects 5-30% of patients with psoriasis, targeting 35-45 year olds. The first symptoms usually appear approximately 10 years later than the psoriatic ones. **Objective:** This paper highlights the importance of ultrasonography in the preliminary diagnosis of psoriatic arthritis. **Material and methods:** Our patient is a 48 year old woman with no prior records of psoriasis, who in June 2018 developed an erythematous, scaly plaque located on the left palm, indicating contact dermatitis. The evolution of the plaque was satisfactory under treatment with cortisone creams, antihistamines and phototherapy, with a complete remission, but upon interruption, the plaque reappeared. After this incident, the patient developed oedema and bilateral metatarsal joint pains. The analyzed samples of CRP, ANA, RF and the anti-CCP antibodies came back negative, but the VSH was 34 mm/h. At this point in time, the patient experienced extensive limited functionality of her feet and dactylitis of the great, 2nd and 3rd toes. Following another rheumatological exam, due to the lack of any modifications on the MRI and x-ray, the diagnosis was seronegative rheumatoid polyarthritis and she was put on 15 mg/week of methotrexate and subsequently 20 mg/week. After this increase, the pain and oedema remitted 30-40%. An ultrasonography of the nail bed and proximal inferior joint showed significant signs of psoriatic arthritis. Later, the medication had to be ceased due to severe digestive intolerability. Immediately after, our patient's plaque relapsed, clearly indicating towards psoriasis vulgaris, confirmed by the cutaneous biopsy. **Results:** Due to the autoimmune nature of our patient's condition, she is currently under treatment with ixekizumab, a form of humanized monoclonal antibody. The patient is presently under complete remission of the cutaneous and articular symptomatology. **Conclusions:** Ultrasonography is key in the early diagnosis of psoriatic arthritis, especially for rare cases where articular signs appear before cutaneous ones.

Keywords: ultrasonography, psoriatic arthritis, autoimmune disease

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INCIDENCE OF GASTRIC PRENEOPLASTIC LESIONS – A RETROSPECTIVE STUDY

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[1]
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Background: With gastric cancer being the fifth most common cancer worldwide and amongst the highest causes of cancer-related deaths, early identification and assessment of the gastric preneoplastic lesions represent crucial elements for a timely diagnosis and a subsequent therapeutic approach. **Objective:** This study aims to identify the incidence of the following gastric preneoplastic lesions : atrophic gastritis, intestinal metaplasia and dysplasia (including foveolar hyperplasia and hyperplastic polyps of the gastric mucosa) in patients who underwent upper digestive endoscopy in 2018 within the Gastroenterology Clinic of the Emergency County Hospital of Târgu Mureș. Additionally, we intend to assess the incidence of Helicobacter Pylori (HP) infection, being the initial step in the carcinogenesis process for the intestinal-type gastric adenocarcinoma. **Material and methods:** In order to conduct this study, we selected 411 patients from the Gastroenterology Clinic upper digestive endoscopy clinical records of 2018, using the following criteria: gender, age, background and histological examination of biopsy results identified as gastric preneoplastic lesions. **Results:** By analysing the data we gathered, we have arrived at the following findings : from all 411 patients, 59,36 % were females while 40,63% were males; 59,61% lived in an urban environment and 40,39% in a rural environment; 51,3% had ages between 60-80 years old. Based on the histological findings, 35,03% of the patients were diagnosed with intestinal metaplasia, 22,87% with atrophic gastritis, 15,8% with foveolar hyperplasia and 9,73% with hyperplastic polyps of the gastric mucosa. Among these patients, 41,6% were also diagnosed with Helicobacter Pylori chronic gastritis. **Conclusions:** From all 411 patients, there was a higher incidence of gastric preneoplastic lesions in female patients, as well as in the age group of 60-80 years old and the patients from an urban environment. Considering these aspects, they require attentive future monitoring, accordingly with the current guidelines. Regarding the HP gastritis patients, antibiotic therapy has been initiated.

Keywords: gastric preneoplastic lesions, incidence, retrospective study

CLENBUTEROL: A SURPRISING CHEST PAIN ETIOLOGY IN A PEDIATRIC PATIENT

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Background: Clenbuterol is a sympathomimetic β2-agonist used as a bronchodilator, but also as a fat loss agent in spite of being on the banned list of substances in most competitions. Its usage can lead to serious side effects such as high blood pressure, chest pain, nausea, tremor and even high-risk arrhythmia. **Objective:** Our objective is to present the case report of a teen bodybuilder who presented to the ER after taking several doses of Clenbuterol. **Material and methods:** A 16-year old patient presented to the Pediatric Emergency Department accusing chest pain, nausea and tremor. Initial findings revealed a prolonged QTc (516 ms), minor ST segment depressions, metabolic acidosis and multiple electrolyte imbalances such as hypokalaemia and hypophosphataemia. **Results:** Although substance exposure was denied initially, the patient later admitted Clenbuterol usage. Troponin tests showed no pathologic values, therefore the medical team requested continuous cardiac monitoring (due to the prolonged QTc) and intravenous electrolyte replacement. Two days later, the symptoms disappeared. The QTc appeared to be in normal range as well as the ph and the electrolytes. The patient was discharged with the recommendation of not using banned substances again. Eventually, the patient did not present any ECG abnormality the next medical checkups. **Conclusions:** As the popularity of bodybuilding increases among teens, doctors should consider pediatric patients also being exposed to steroids and other banned substances abuse, especially in young athletes practicing bodybuilding and other sports requiring strength.

Keywords: clenbuterol, steroids, prolonged Qtc

LEUKOCYTOSIS–PROGNOSTIC FACTOR FOR THE ISCHEMIC STROKE

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Background: Besides the well-known vascular etiology of stroke, there is new emerging data about the importance of immune system in the pathophysiology and outcome of an ischemic stroke. **Objective:** The aim of this study is to identify a correlation between the leukocyte count on admission and the clinical outcome of an ischemic stroke. **Material and methods:** This retrospective study includes patients with leukocytosis on admission and ischemic stroke. Patients with fever, active malignant neoplasms and patients who were treated with corticosteroids were excluded. The neurologic deficit on the release day was quantified by using the modified rankin scale (mRS) and the severity of stroke by using NIHSS. Bad outcome was defined as mRS>2. Patients were divided into four groups by the leukocyte count and different risk factors and comorbidities were assessed and compared between groups. Spearman's correlation test was used to assess the association between leukocyte count and mRS. Multiple logistic regression was used to create a model which could predict the outcome of a stroke. **Results:** A total of 293 patients were included. There was a positive, statistically significant association between leukocyte count on admission and mRS on the release day ($r=0,2$, $p<0,001$) and also between leukocyte count and NIHSS ($r=0,12$, $p=0,03$). Higher leukocyte counts decreased the odds of observing a good outcome and were an independent factor of prognosis for stroke (OR=0,875, $p=0,01$). The model predicted the outcome with a sensitivity of 69% and a specificity of 76%. Patients in higher leukocyte count groups were more likely to have a bad outcome ($p=0,0005$) and renal failure was more frequently found among these patients ($p=0,02$). **Conclusions:** Although many issues contribute to the short- and long-time outcome of an ischemic stroke, leukocyte count on admission can be considered as a predicting factor for the short-time outcome of an ischemic stroke.

Keywords: Ischemic Stroke, Leukocytosis, Outcome, Prognosis

THE EFFICIENCY OF OSTEOANABOLIC TREATMENT IN PATIENTS WITH OSTEOPOROSIS

Madalina- Cerasela Baciu[1], Paul-Gabriel Borodi[1], Maria-Ionela Pașcanu[1], Raluca Monica Pop[1]

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Background: Osteoporosis is a systemic skeletal disease characterized by low bone mineral density (BMD) and microarchitectural deterioration, with subsequent abnormal fragility and high susceptibility to fracture. Teriparatide (Recombinant Human Parathyroid Hormone 1-34) is the first anabolic agent approved for the treatment of severe osteoporosis associated with high risk of fracture. **Objective:** The aim of this study was to assess the efficiency of 24 months Teriparatide therapy in patients prior treated with antiresorptive drugs. **Material and methods:** Our retrospective observational study included 55 osteoporotic women from Clinic of Endocrinology Târgu Mureș who received daily subcutaneous injections of Teriparatide 20 μg during 24 months. Inclusion criteria: women above 50 years old with severe osteoporosis, previously treated with antiresorptive therapy and adequate calcium and vitamin D status (with supplementation if needed). Exclusion criteria: Paget disease, bone metastases, history of malignant bone disease, primary hyperparathyroidism or uncorrected secondary hyperparathyroidism. In order to assess Teriparatide efficiency, paraclinical and laboratory investigations were performed at baseline, at 12 and 24 months. **Results:** Data showed that 87,27 percent of patients were responsive to anabolic treatment with a noteworthy increase in lumbar spine BMD by 9,15 % and 4,13 % for the femoral neck ($p<0.001$). Regarding bone remodeling process, an ascending trend was observed in the first year of treatment for both formation and resorption serum biochemical markers, followed by a gradual decrease to baseline values at 24 months. **Conclusions:** Teriparatide exerts beneficial effects on femoral neck and lumbar spine BMD in most patients with severe osteoporosis, being an effective and safe therapy in reducing the burden of this systemic disease. References: Fumito Yoshiki, Atsushi Nishikawa, Masanori Taketsuna et al, Efficacy and safety of teriparatide in bisphosphonate-pretreated and treatment- naive patients with osteoporosis at high risk of fracture: Post hoc analysis of a prospective observational study, Journal of Orthopaedic Science, 2017, 22: 330-338

Keywords: osteoporosis, osteoanabolic treatment, teriparatide

AN INNOCENT FINDING IN THE PANCREATIC HEAD?

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Background: Solid pseudopapillary tumours represent a rare type of pancreatic tumours and have usually low malignant potential. They befall most frequently on young females, in their third decade of life. These tumors can be visualized in many imaging techniques, such as computed tomography (CT), which can contribute to the differential diagnosis for other pancreatic lesions. **Objective:** This presentation aims to highlight the importance of imaging in the multidisciplinary approach to pancreatic diseases, as well as the difficulties of differential diagnosis, with impact on therapeutic decision. **Material and methods:** We present the case of a 36-year old woman admitted to the emergency room for biliary colic. The initial abdominal ultrasound confirmed the biliary lithiasis, without bile duct dilation, but also revealed a hypoechoic nodule located in the cephalic region of the pancreas. The abdominopelvic CT with intravenous contrast media confirmed the presence of a 30 mm hypodense, well defined lesion, developed in contact with the inferior part of the cephalic region of the pancreas and the third segment of the duodenum. No biliary or pancreatic ducts dilatations were noted. No lymphadenopathies, vascular invasion or distant metastasis were detected. **Results:** The CT report, however, could not differentiate between different types of solid cephalic pancreatic tumor and a duodenal stromal tumor (GIST). The surgical team decided to perform radical pancreaticoduodenectomy, with uneventful postoperative evolution. On the resection specimen, the pathologist identified a solid pseudopapillary neoplasm with perineural invasion G1L0V0Pn1. **Conclusions:** Pseudopapillary tumor is a rare occurrence in the pancreatic pathology, but specific to young women. In this case, the tumor was an incidental finding during a biliary colic, with a non-specific appearance on CT and difficulties to differentiate it from a duodenal GIST or other pancreatic neoplasms. The tumor is amenable to cure, but radical surgical resection is necessary since the malignant potential is decided only by pathological report.

Keywords: pseudopapillary neoplasm, pancreas, differential diagnosis, incidental finding

THE ROLE OF BRAIN RAS AT1 RECEPTORS IN PREMATURE BRAIN AGING

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Background: The brain is considered to be a late target of hypertension, because of the high prevalence of cognitive impairment among hypertensive patients. It was suggested the implication of the brain renin angiotensin system (RAS) as a precondition of early stage hypertension, associated with mild cognitive deficits, i.e. premature brain aging. RAS is a circulating neuro-humoral system regulating blood pressure and the homeostasis of electrolytes through its elements. Numerous studies reveal the presence of RAS in the brain, able to synthesize its components by itself. Angiotensin type I receptors (AT1), are shown to be present in the circumventricular organs, basal ganglia, thalamus. **Objective:** This review aims to present recent findings regarding the implication of the brain as a key point in the development of hypertension and premature brain aging. **Material and methods:** This review comprehends the latest studies on the topic, published in PubMed, Web of Science and Google Scholar from the last 5 years. **Results:** AT1 receptors have been proven to play a key role in the regulation of brain function. Their hyperreactivity is a major early injury factor of endothelial dysfunction and premature brain aging. Moreover, it is also a starting point of the pathological chain of various neuronal disorders, as well as cardiovascular diseases. Under normal conditions, AT1 receptors in RAS expression remain low. Nevertheless, if the inducing factors such as salt diet, high fat diet and inflammation persist, AT1 receptors become repeatedly sensitized, they are overexpressed and high blood pressure is observed. **Conclusions:** There is conclusive evidence for the involvement of AT1 receptors in premature brain aging. Consequently, the administration of Angiotensin Receptor Blockers will decrease the risk of developing hypertension. Therefore, it brings us a step closer to lowering the incidence of hypertension induced complications.

Keywords: Brain aging, AT1 receptors, Cognitive impairment, Hypertension

COMPARISON OF SUCCESSFUL VAGINAL BIRTH AFTER CAESAREAN SECTION BETWEEN FOUR EUROPEAN COUNTRIES

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Background: Within the past two decades the number of caesarean sections significantly increased, mainly due to the raise of elective C-sections. This growth leads to a bigger cohort of women who have a uterine scare, which is a risk factor for intrapartum complications in a further attempt of vaginal birth after caesarean section(VBAC). Succesful VBAC decreases the mothers morbidity, but this must be balanced with the risk of in labour uterine rupture. **Objective:** The aim of this paper is to compare the success rates of having a VBAC among different European countries. **Material and methods:** We compared data from three European Union countries (Ireland, Italy, Germany) with data from our level III Maternity unit, for the same period of time (2years): from January 1st 2018 to December 31st2019. **Results:** The comparison group consisted of 790 patients, of whom 387(49,0%) gave birth in Germany, 145(18,4%) in Italy and 258(32,7%) in Ireland. The overall success rate within this group for VBAC was 74,6%; 75,2% in Germany, 80,7% in Italy and 70,5% in Ireland. During the given time period a total number of 3658 births and 1060 C-sections were recorded in our level III Maternity unit. The total success rate of VBAC in our clinic was 32,5%. It was revealed that women who had already given birth vaginally, a lower birth weight infant, sponatenous rupture of the membranes and a short duration of labour duration were most likely to succed in the attempt of VBAC. Reduced amount of intrapartum interventions, as seen in Italy with 42,5%, lead to a positive delivery. In contrast the rate of C-sections in the women from Germany, Italy and Ireland is 25,3%, while in our clinic the rate is 67,5%. **Conclusions:** The level III Maternity unit in Tgm has a lower success rate for VBAC compared to its fellow European countries. Therefore further investiagation is needed.

Keywords: Vaginal birth, Caesarean section, Vaginal birth after caesarean section, VBAC

CLINICAL - SURGICAL

THE UROLOGIST'S APPROACH TO PLACENTA PERCRETA

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Background: Placenta percreta is one of the lowest incidence placenta adherent disorders, but the most severe one, with an invasion of the bladder's walls by the chorionic villi. The condition often goes unnoticed until it manifests with massive blood loss, putting both the mother and fetus in danger. **Objective:** The aim of this report is to highlight the importance of multidisciplinary surgical management in a pregnant woman with urological symptoms. **Material and methods:** A 34-year-old patient (gravida 2, para 1) was referred to our department during the 27th week of pregnancy due to gross hematuria, after a treated episode of urinary tract infection. The pregnancy was uncomplicated until then, the patient having no previous medical conditions. Due to this accuses and slight anaemia, she is treated for haemorrhagic cystitis. A week later, she returns for dull abdominal pain. The lab values reveal moderate anaemia and ultrasonography shows a mixed echogenic mass, speaking for bladder clots. The patient underwent exploratory cystoscopy for haematuria. The findings were suggestive of hyperaemia of the entire posterior bladder wall, without active bleeding and dilated veins around the bladder triangle. Presenting worsening values of the hematocrit, a second cystoscopy was performed, the new clots were removed and endoscopic haemostasis was needed. Bilateral double J stenting was done in preparation for the surgery. During the operation, a cesarean was decided with concomitant hysterectomy with cystotomy and bladder wall reconstruction. **Results:** The evolution of the patient is favourable at the time of the discharge. **Conclusions:** From a urological point of view, this case adds to the need of broadening the diagnosis' perspective and involves the participation of a wide range of medical specialities. At the end of the day, an early diagnostic means a decreased morbidity and mortality rate and a less aggressive treatment option for a woman of fertile age.

Keywords: placenta percreta, hysterectomy, haemoragic cystitis

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THE ADVANTAGES OF TRANSPERITONEAL LAPAROSCOPIC TOTAL NEPHRECTOMY

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Background: According to the American Cancer Society, more than 58.000 cases of kidney cancer were diagnosed in 2010. Most cancers (92%) are of parenchymal origin; the rest include renal pelvis tumors (urothelial) and Wilms tumors. **Objective:** Given that the two reference interventions in the treatment of renal tumors, performed in Romania are open total nephrectomy (OTN) and transperitoneal laparoscopic total nephrectomy (TLTN), the aim of this study is to compare the two procedures. **Material and methods:** This is a retrospective study performed at the Urology Clinic of Tîrgu-Mureș from January 1, 2018 to December 1, 2019. Data were obtained from patients who underwent TLTN or OTN for the treatment of kidney cancer. We collected and processed the following: information about the origin and age of patients, histopathological diagnosis and TNM classification of tumors, creatinine , preoperative and postoperative haemoblobin, eGFR, ASA score, type of intervention and duration of surgery, as well as hospitalization days. **Results:** The number of patients included in the study is 85, aged between 36 and 80 years, with an average of 61.49 years. According to the results, the average number of hospitalization days for TLTN is 8.09 days, and for OTN is 11.29. The average duration for both TLTN and OTN is 2 hours and 55 minutes. The difference in postoperative hemoglobin values □□□□□□□ to be statistically significant ($p < 0.05$). **Conclusions:** Therefore, the exposed study proves that transperitoneal laparoscopic total nephrectomy is preferable to classical nephrectomy whenever it is technically feasible.

Keywords: transperitoneal laparoscopic total nephrectomy, renal tumors, open total nephrectomy

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EFFICIENCY OF HIRUDOTHERAPY (MEDICAL LEECH THERAPY) IN REPLANTATIONS

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Background: Hirudotherapy is a treatment using medicinal leeches. Hirudo medicinali, have been used to treat

patients for centuries. Currently leeches may be used to assist in the treatment of abscesses, glaucoma, myasthenia gravis and some venous disorders. Medical leeches may also be used in plastic surgery and in some blood circulatory problems. **Objective:** The aim of this paper is to show the usefulness of medicinal leech therapy (Hirudo medicinalis) in replantations. They are used in the treatment of venous congestion or complete outflow obstruction which can occur in replantations, leechs'saliva containing 20 active substances with analgesic, anticoagulant, platelet inhibitor, thrombin and antimicrobial agent. In 2004 FDA approved leeches as a medical device. **Material and methods:** Our study is based on 23 patients (18 men and 5 women) who suffered amputations of fingers and thumb in 19 cases and, in the other 4, the patients suffered complete amputation of the ear auricle. In all ear replantations, we performed the arterioraphy and, just in one case, the venous reconstruction was possible. Even though in 12 cases of digital replantation we managed to perform the venous reconstruction, the leech therapy was necessary and beneficial. The use of leeches started from the second postoperative day in 15 cases and from the third day in the other 8 cases. The therapy was maintained on average 5 days. The patients received antibiotics and continued blood parameters monitoring. **Results:** We didn't record any Aeromonas hydrophila (a gram negatice germ located in the gut of the leech) infection. All the replantation results were good with the survival of the amputated segment. **Conclusions:** Hirudotherapy (leech therapy) plays an essential role in postoperative management of the microsurgical replantations for the management of the venous congestion. It is a cheap, safe, easy to use and beneficial therapy.

Keywords: leech, replantation, venous congestion

BILATERAL DYSGERMINOMA AT A 22 YEAR

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Background: The most common ovarian germ cell tumors are dysgerminomas, which typically occur in patients younger than 25. It accounts 2% of all ovarian cancers and only one third of dysgerminomas behave aggressively. **Objective:** To establish preoperative diagnosis for a palpable abdominal mass with rapid growth and vaginal bleeding for a week. The patient was 22-year-old and declared primary amenorrhea. **Material and methods:** We used tumor markers and IOTA (International Ovarian Tumor Analysis) simple rules on abdominal ultrasound because the woman was virgo. **Results:** Physical examination revealed abdominopelvic mass up to the umbilicus. The ultrasound exam found a right septated solid ovarian mass with a cystic component with thickened septations and prominent flow signal within the septa, suggestive of malignancy. Analyzed tumor markers show an increase in the serum level of Lactate dehydrogenase and Human chorionic gonadotropin, but normal levels of carcinoembryonic antigen and Alpha-fetoprotein. Surgery found bilateral ovarian tumor without ascites. She underwent total abdominal hysterectomy and bilateral salpingo-oophorectomy with bilateral pelvic lymphadenectomy and peritoneal lavage, because frozen section confirmed bilateral dysgerminoma. The stage of disease was pTIIaN0MxL1V1 (involvement of serosa of the uterus and right tube) according with International Federation of Gynecology and Obstetrics (FIGO) staging 2014. After surgery, computer tomography revealed lung metastases. **Conclusions:** Our case had an unusual symptom genital bleeding, because of a vaginal metastasis. If the patient would have been investigated for amenorrhea, the tumors could have been identified in an earlier stage. The next step in the management is chemotherapy. This type of tumor is curable 75% at all stages of disease, but this patient has a poor prognosis. The risk for recurrence is increasesd in the first 2-3 years after treatment.

Keywords: dysgerminoma, diagnosis, metastases

MYOMECTOMY DURING CAESARIAN SECTION – YES OR NO

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Background: The literature tends to underestimate the prevalence of fibroids in pregnancy and to overestimate the complications attributed to them. The presence of uterine fibroids is also a reason for an increase in operative deliveries. There are many controverses regarding myomectomy in the same time with caesarian section (CS), because of the risk of haemorrhage. **Objective:** We analyzed the maternal prognosis in pregnant women with

myoma, admitted to a tertiary level maternity hospital and the opportunity to perform myomectomy at birth. **Material and methods:** The prospective study January 2017 - June 2019 included 57 patients with fibroids in pregnancy (0.75% of all births). We apreciated the bleeding during CS using the value of haemoglobin before and after birth. **Results:** The age range was between 25-45 years. 68% of fibroids were diagnosed in the third trimester. Most often the fibroid had the maximum growth in the last trimester of pregnancy. 49 patients from the study (92%) delivered by CS. Regarding indication for surgical delivery, only 19 cases (38.76%) had fibroma paevia, 1 case was with giant myoma 18cm and 1 woman had 7 myomas. Comparing with another study from our clinic from 2012, when the rate of myomectomy was 4.82%, in the last two years the rate increased at 24.48% during C-sections. Ante- and postpartum haemoglobin showed a decrease of 1.76g% for the group without myomectomy and 2.95g% for those with myomectomy. Though the operative time was double for the patients with miomectomy, there was no significant difference in the length of hospital stay. **Conclusions:** 40-45% women were between 30-34 years. Nulliparity plays an important role in the ethiology of fibroids - 68.28%. Decission of myomectomy can be a challenge and must be done for selected cases. With careful case selection, myomectomy during CS is safe and improves subsequent pregnancy outcomes.

Keywords: pregnancy, uterine fibroma, myomectomy

A GAME OF HIDE AND SEEK: TWO PRIMARY TESTICULAR CANCERS IN AN OTHERWISE HEALTHY PATIENT

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Background: Testicular cancers are classified based on their cell of origin: seminomatous, nonseminomatous, Leydig, Sertoli, choriocarcinoma, embryonal, teratoma, and yolk-sac derivatives. **Objective:** Our aim in this case is to illustrate the possibility of the coexistence of two different germinal tumors which had a slow and asymptomatic evolution in a young patient. Another particularity of this case resides in an apparently normal clinical and Magnetic Resonance Imaging (MRI) exam for the left testicle, in which only echographically we were able to observe both lesions. **Material and methods:** We present the case of a 34-year-old man without any significant pathologic medical history, who was admitted in the Urology Clinic for vaguely persistent right testicular pain. The echography raised the suspicion of a bilateral testicular tumor. The abdominopelvic MRI only confirmed the right tumoral lesion. Laboratory tests indicated high levels of specific tumoral markers (lactate dehydrogenase, betta human chorionic gonadotropin, alfa fetoprotein). The medical team opted for bilateral radical orchiectomy with good postoperative evolution. The patient also sustained chemotherapy. **Results:** The MRI showed, besides testicular lesions, many interaorticocave, lateroaortic and retrocrural distended ganglia, most of them being under one centimetre. After surgery, the pathological exam of the testicular excisional pieces revealed two types of tumors. In the right testicle, they identified an encapsulated nodular 7.1/6.1/5.4 centimetre lesion containing squamous cell epithelium, glandular tissue, and also areas of muscular, hyaline and myxomatous tissues, suggesting mature teratoma. The left testicle revealed a monomorphic proliferation of cells about 3.2/2.8/1.7 centimetre, organised in clusters, with fibrous septa and low lymphoid infiltrate, exposing the diagnostic of seminomatous testicular tumor. **Conclusions:** Testicular tumors are relatively rare, with germ cell tumors being the most common subtype in about 95% of the cases. With recent advances in diagnosis there are still exceptions regarding the identification of some testicular tumors, as it was the case in this patient's pathology.

Keywords: testicular teratoma, seminomatous testicular tumor, echography, radical bilateral orchiectomy

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MULTIPLE PELVIC PATHOLOGIES: UTERINE LEIOMYOMAS, PELVIC INFLAMMATORY DISEASE, SALPINGITIS, POLYCYSTIC OVARIAN SYNDROME, SUSPECTED OVARIAN CANCER- A CASE REPORT

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Background: Ob-gyn and general surgeons face a growing number of patients with multiple pelvic pathologies. Associated pathologies make a total hysterectomy with bilateral salpingo-oophorectomy a challenging task for the surgeons. **Objective:** A completely performed pelvic surgery, with the excision of all the tumors, in a case with suspected ovarian cancer leads, in the long run, to a cancer free patient and also to an improved quality of life. **Material and methods:**

The paper presents a case of an 45 years old woman with multiple pelvic pathologies: uterine leiomyomas, pelvic inflammatory disease, salpingitis, polycystic ovaries, suspected ovarian cancer. A hysterectomy with bilateral salpingo-oophorectomy is performed. We proceed by freeing the ovaries contained in the adhesion processes with the sigmoid colon and cecum. We detach the adherent fallopian tubes that are sticked to the uterine body, with inflamed walls. We also perform the complete removal of the multiple tumor bodies formed in the supporting membranes located on both sides of the uterus. En bloc pelvic resection is performed with total removal of the cervix, while attempting to preserve the vagina as much as possible due to a tumor of the cervix that bulges into it. **Results:** The postoperative course was without incidents or accidents. The patient was discharged on the 7th day without any complications. **Conclusions:** Earlier treatment, more thorough follow-ups on patients with leiomyomas and annual pap smear are essential. These factors radically reduce the danger for the patient and the difficulty of the surgery.

Keywords: Cancer, Hysterectomy, Tumors, Resection

THE EFFICIENCY OF NEGATIVE PRESURE THERAPY IN THE MANAGEMENT OF WOUNDS OF DIFFERENT ETIOLOGIES

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Background: Negative-pressure wound therapy is a therapeutic technique using a suction pump, tubing and a dressing to remove excess exudate and promote healing in acute or chronic wounds. **Objective:** The study aim is to evaluate the results obtained by using negative pressure therapy on soft tissue lesions of different etiologies, highlighting the advantages of this technique, among which: shortening the healing time, decreasing the concentration of germs in the wound, analysis of secretions from the container, decreasing the need of the surgical toilet of the wounds. **Material and methods:** Our study is based on 28 patients with wounds: 12 cases with infections of the leg, 13 cases with injuries to the hand, fist and forearm and other 3 cases with septic arthritis of the fist. In all of the cases, we applied negative pressure therapy immediately after surgical debridement of the lesions and its maintenance until the appearance of granulation tissue, with the elimination of devitalized tissues. Surgical treatment was continued by applying a split free skin graft. **Results:** In all cases, the negative pressure allowed reduction of the healing time with the formation of a good quality granulation wound bed, protecting the noble elements exposed to the lesions, avoiding the risk of repeated anesthesia. Also, the comfort of the patients was increased and the complications were reduced to a single case that showed a perilesional allergic reaction requiring a short-term discontinuation of treatment. **Conclusions:** NPTW treatment is a first-line solution in the treatment of infected skin wounds, its application accelerating the healing process with the necessary reduction of surgical grooming and dressings, actively eliminating necrotic tissues.

Keywords: negative pressure, granulation wound, infection

PHYSIOTHERAPY

THE EFFICIENCY OF PHYSIOTHERAPY AND HYDROTHERAPY REHABILITATION PROGRAMS ON PATIENTS WITH TRAUMATIC SHOULDER PATHOLOGIES

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Background: Traumatic shoulder injuries include many pathologies, such as proximal humerus fracture, acromioclavicular dislocation, glenohumeral dislocations, SLAP lesions, rotator cuff ruptures, and many others. These pathologies are frequent on both non-athlete and high-performance athletes. **Objective:** Our primary goal in this research was to highlight the importance and the role of hydrotherapy and physical therapy exercises on patients with traumatic shoulder pathologies and to compare the outcomes of both rehabilitation means included. **Material and methods:** This research was conducted in both public and private rehabilitation institutions. Twenty subjects from Kinetica Rehabilitation Clinic and the Laboratory of Physical Medicine and Balneology of the Emergency Clinical Hospital of Targu Mureș, aged between 34 and 71, were assessed on the first and last day of treatment. Initial and final evaluations included active and passive range of motion assessment, muscle strength assessment, visual analog scale, and Shoulder Pain and Disability Index (SPADI). Our subjects were divided into two groups. One group underwent an everyday physiotherapy program, and the other followed an everyday hydrotherapy exercise program. Outcomes from both groups were compared through statistical-mathematical processing methods and the graphic method. **Results:** During a three-week rehabilitation program, both groups managed to regain their active range of motion on all movements of flexion, extension, abduction, internal and external rotations.Also, the pain and the disability index, assessed through both VAS and SPADI, improved significantly. **Conclusions:** Our study demonstrates the effectiveness of both physiotherapy and hydrotherapy exercise programs on patients with traumatic shoulder pathologies. Significant improvement was obtained on the active range of motion and strength rehabilitation and the pain and disability.

Keywords: rehabilitation, shoulder, physiotherapy, hydrotherapy

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THE ROLE OF PRE-OPERATIVE PHYSIOTHERAPY PROGRAMS IN PATIENTS WITH COMPLETE RUPTURE OF THE ANTERIOR CRUCIATE LIGAMENT

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Background: The complete rupture of the anterior cruciate ligament represents the interruption of the ligament's continuity, which is a resistant band formed of collagen fibers, ensuring the knee's stability, the prevention of abnormal or excessive amplitude movements, and restraints to anterior tibial displacement. **Objective:** This research's main objective was to show the importance of the pre-operative physiotherapy programs in patients with ACL complete rupture to regain their active range of motion (AROM) and relieve post-operative pain after the reconstruction of the anterior cruciate ligament. **Material and methods:** Our research included 20 subjects, aged between 21 and 45, with a complete rupture of the ACL, patients from the Fizionova Rehabilitation Clinic of Targu Mures. All the subjects followed six weeks of physiotherapy after the reconstruction of the ACL, and half of them also followed a pre-operative physiotherapy program for six weeks. **Results:** The intervention group, which followed a six-week pre-operative physiotherapy program, obtained faster and better results in both pain relief and active range of motion assessments than the group of the subjects who only underwent a post-operative rehabilitation program. The statistical-mathematical results will be presented at the Marisiensis International Congress. **Conclusions:** The pre-operative physiotherapy program led to regaining a better functionality of the affected knee after the ACL reconstruction. Our final assessment highlighted that aspects such as AROM, functionality, and pain level are significantly improved when the subjects perform a pre-operative physiotherapy rehabilitation program.

Keywords: ACL, AROM, rehabilitation, reconstruction

SHORT – TERM EFFECTS OF KINESIOLOGY TAPING ON PATIENTS WITH NON SPECIFIC LOW BACK PAIN

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Background: The kynesiology taping method is a therapeutic techinique that is used to facilitate the body's natural healing process while is providing support and stability to muscles and joints without restricting the body's range of motion. **Objective:** The hypothesis from which we started this research was that kinesiology taping reduces significantly the pain intensity and the disability of people with non specific low back pain. **Material and methods:** The present study aims to record the differences between patients who underwent physiotherapy sessions and patients who underwent physiotherapy sessions and also benefit of kinesiolgy tape applications, and to compare the results obtained from questionnaires submitted by patients and from direct measurements. In this research we used the following methods: the bibliographic study method, the observation method, the questionnaire method, the measurement and recording method, the statistical-mathematical processing method, and the graphic method. The study was conducted over a period of nine weeks in one private rehabilitation institution, in Târgu Mureș, Romania, on a total of 16 patients. The intervention group consisted of 8 patients and so did the control group. For the initial and final evaluation we used the Visual Analogue Scale and the Oswestry Low Back Pain Disability Questionnaire. **Results:** The short term effects recorded in a 10 days period shows that the intensity of the pain and the disability significantly improved in both intervention and control group. This improvement was significantly higher in the intervention group, which benefited of kinesiogy tape applications. **Conclusions:** A first general conclusion that emerges from our investigation, such as an interpretation and analysis of recorded results is that our hypothesis from which we started was confirmed, as it follows: Statistically significant differences occurred between the outcomes of the rehabilitation programs when the kinesiology tape is used.

Keywords: low back pain, kinesiology tape, rehabilitation

POSTER - SURGICAL

SURGICAL MANAGEMENT OF FISSURED HEMORRHAGIC SPLENIC CYST

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Background: Splenic cysts are classified in primary and secondary cysts. The primary one is divided into parasitic and non-parasitic due to an infestation. The secondary cysts are in most cases post-traumatic. We can correlate the symptoms tot the size of the cyst even though they are often asymptomatic, common symptoms are abdominal fullness and discomfort, early satiety, shortness of breath, pleuritic chest pain etc. Hemorrhagic splenic cysts are rare lesions with many origins such as hematoma, spontaneous bleeding or excited, injury and infarct. **Objective:** The aim of this study is to present the surgical management of a fissured hemorrhagic splenic cyst. **Material and methods:** We present the case of a 23 years old patient admitted in Surgery Clinic 1 of the Emergency Clinical County Hospital of Târgu Mureș. On admission he complains of pain in the left hypochondrium and fatigue. Based on clinical and paraclinical examination a splenic rupture is suspected. **Results:** After a proper preoperative preparation an exploratory laparotomy is performed. During the exploration of the peritoneal cavity a gigantic splenic cyst is discovered with a fissure at the upper pole and multiple adhesions between the cyst and omentum, splenomegaly and adhesions in splenic hilum. Adhesolysis, splenectomy using LigaSureTM Impact, without puncturing the cyst and drainage of the splenic fosa was performed. The postoperative evolution was uneventful with the discharge of the patient in the 5th postoperative day. **Conclusions:** Even that the etiology of the cyst is unknown the only curative treatment in this case was splenectomy.

Keywords: splenic cyst, splenectomy, hemorrhage

FROM RECURRENT INFECTIONS TO BLADDER CARCINOMA

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Background: Squamous differentiation in urothelial carcinoma of the bladder occurs in up to 17% of cases and is thought to be an unfavourable prognostic factor, present in advanced and invasive types of carcinoma with relapsing tendencies. **Objective:** The aim of this report is to raise awareness of the relation between remittent urinary tract infection and the susceptibility to develop urothelial carcinoma. **Material and methods:** We bring to your attention the case of a 62-year-old male patient with extensive history of urological pathologies. In 2000, he had a traumatic injury that resulted in multiple anterior urethral strictures, that would progress through years with every transurethral intervention, due to mucosa damage. In 2004, the patient had an endoscopic resection for periurethral adenoma and treatment for the E. Coli UTI. In 2006, he was treated with direct vision internal urethrotomy and was scheduled for periodical dilatations. The patient continued the treatment for the UTI and for the inguinal hernia was referred to the General Surgery department. In 2013, an end-to end urethroplasty was performed providing the best functional outcomes. Two years later, a litholapaxy was performed for a urethral calculus and the bladder showed pseudomembranous cystitis (squamous metaplastic changes). After the intervention, the patient developed hematuria with clots, subsidiary anaemia and bladder rupture that was solved endoscopically. A month later, he resumed the treatment for urosepsis and severe anaemia. In 2017, during the lithotripsy for bladder calculi, a polypoid lesion was observed along the posterior wall. **Results:** The histopathological examination revealed a urothelial carcinoma with squamous differentiation and calcification (T2N0M0), for which radical cystectomy with bladder cuff excision was prefered. During the three year follow-up, the patient's evolution was favourable. **Conclusions:** This case adds to the controversy on whether UTI is a risk factor for developing bladder cancer and if the diagnosis is delayed due to the unspecific obstruction symptoms.

Keywords: urothelial carcinoma, UTI, radical cystectomy

MALIGNANT TUMOR OF THE SIGMOID COLON

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Background: "Tubulo-maker" carcinoma with moderate differentiation, ulcerations, colon wall invasion until muscular layer and extension spots in the subserous. Stroma with necrosis fragments, low reactive inflammation poorly represented. **Objective:** The aim of this study is to present the surgical management of a malignant tumor of the sigmoid colon. **Material and methods:** We present the case of a 73 old patient suffering by bowel obstruction and hospitalized urgently at the Emergency Clinical County Hospital of Brasov. Based on clinical and paraclinical examinations a stenotic sigmoid tumor is suspected. Under general anesthesia a segmental colon resection with distal blunt at 20 cm is performed. **Results:** The postoperative evolution is favorable, all damaged tissue was removed and we reconstruct the way from viable pats, the intestinal transit works through the colostomy bag, the patient is afebrile and the wound is clean. **Conclusions:** After the surgical intervention the etiology that caused the obstruction of the bowel lumen was found. Based on the histopathological examination was colonic adenocarcinoma, a malignant tumor.

Keywords: adenocarcinoma, necrosis, sigmoid, tumor

MANAGEMENT OF ACUTE HYDROCEPHALUS IN A PATIENT WITH PINEAL REGION TUMOR

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Background: Neoplasms of the pineal region are infrequent and range from the slow-growing pineocytoma (grade I), to the aggressive, fast-growing pineoblastoma (grade IV). The pineal parenchymal and papillary pineal tumors occupy intermediary differentiation. Regarding the secondary complications caused by pineal region tumors, particularly hydrocephalus, the optimal management remains controversial. Usually, the microsurgical resection is performed before ventriculoperitoneal shunting, except for emergency situations, where an acute hydrocephalus arises. **Objective:** Our purpose is to present the management of an acute obstructive hydrocephalus secondary to pineal region tumors. **Material and methods:** A 61-year-old female admitted to the emergency department with progressive headache, nausea and vomiting. The CT scan revealed an expansive lesion in the pineal region with secondary obstructive hydrocephalus and fourth ventricle compression. On neurological exam, the GCS was 8, the patient exhibited Parinaud's syndrome and anisocoria. Under general anesthesia with orotracheal intubation, a ventriculoperitoneal shunt was placed in the frontal horn of the right lateral ventricle, in order to decrease the intracranial pressure. The MRI imaging revealed a pineal region tumor of 2.6/2.2 cm with cystic component, therefore, a supracerebellar infratentorial craniotomy was performed with a maximum safe resection. The patient was placed in the sitting position beneficial to the gravity-assisted cerebellar retraction ensuring a clear operative corridor. A preoperative echocardiography excluded the presence of a patent foramen ovale for the avoidance of air embolism. **Results:** The postoperative CT scan disclosed a minimal hemorrhagic collection in the tumor bed, a normal appearance of the subarachnoid cisterns, an intact midline and the VP shunt in the right LV. **Conclusions:** CSF diversion by VP shunting is imperative as a lifesaving procedure if an acute hydrocephalus occurs, even though the tumor removal is the first step indicated by the protocol.

Keywords: pineal region tumor;, ventriculoperitoneal shunt;, hydrocephalus;, supracerebellar infratentorial approach

THE CLINICAL IMPORTANCE OF A PERSISTENT MEDIAN ARTERY IN FOREARM TRAUMA

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Background: The median artery is the main vascular axis during the embryonic development but usually devolves to form the commitans nervi median artery towards the second month of embryonic life. According to various studies, the persistent median artery (PMA) may be seen in around 1.1% - 15% of cases. The presence of a PMA is associated with anatomical variants of the median nerve such as a bifid median nerve at the level of the carpal tunnel in around 9-19% of cases. **Objective:** Our objective is to highlight the clinical significance of a PMA and associated median nerve variants. **Material and methods:** We report the case of a 43-year-old patient admitted in the emergency department with a deep cut in the distal third of the left forearm. Lesions to the flexor digitorum superficialis tendons (II-IV), flexor pollicis longus tendon, flexor carpi radialis tendon, flexor carpi ulnaris tendon and partial lesions to the flexor digitorum profundus tendons were presents. A sectioned PMA was observed along with the sectioned median nerve and ulnar artery. Thorough wound debridment and lavage was performed, the wound edges were regularized and the affected tendons were sutured. An arterioraphy was conducted on the PMA and ulnar artery and a neuroraphy was performed on the median nerve. **Results:** The outcome of the patient is favorable due to an early recognition of the structures, including the PMA, and avoidance of a severe hemorrhaging. **Conclusions:** The PMA is a rare and important anatomical variant that can have important clinical connotations in the case of a forearm traumatism or in an apparent healthy state by contributing to the pathogenesis of some conditions such as carpal tunnel syndrome. Furthermore, a PMA is associated with several median nerves variants as seen in this case, fact that contributes to the unpredictability of outcome.

Keywords: Persistent median artery, Forearm traumatism, median nerve

LAPAROSCOPIC CERCLAGE DURING PREGNANCY

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Background: Cervical incompetence is characterized by painless cervical dilation in the second or early in the third trimester, with prolapsed membranes and expulsion of an immature fetus. This condition associates a high rate of prematurity induced mortality and morbidity.. An effective treatment of cervical incompetence is the cervical cerclage which can be performed transvaginally or transabdominally. This consists in the placement of a suture in order to increase the tensile strength of the cervix. **Objective:** The objective of this presentation is to report the case of a 29 years old female patient with a history of cervical incompetence that was successfully treated by laparoscopic cerclage. **Material and methods:** We present the case of a 29 years old female patient with a 9 week pregnancy. She had a history of 2 previous miscarriages at 18 and 20 weeks of gestation due to cervical incompetence. At speculum examination, the presence of a totally dilacerated cervix was noticed. We considered the local conditions inadequate for the performance of the transvaginal cerclage. Therefore, the treatment plan was to perform a laparoscopic cerclage. A full inspection of the peritoneal cavity was performed. The anterior leaf of the broad ligament was coagulated and cut in order to gain access to the paravesical fosse. The cerclage tape was introduced under visual control. Thus, the vascularization of the uterus was not impaired by the placement of the tape. The tape was secured by intracorporeal knots, and covered with peritoneum **Results:** The patient recovered well after surgery and was discharged the second day after the procedure. The pregnancy continued uneventful and the patient delivered at term by elective cesarean section a healthy 3350 grams baby **Conclusions:** Cervical cerclage placed via laparoscopy either during or before pregnancy is safe and effective, with a better therapeutic effect and outcome than second trimester transvaginal cerclage placement

Keywords: pregnancy, cerclage,, cervical incompetence, laparoscopy

SURGICAL MANAGEMENT OF A COMPLETE FOREARM AMPUTATION

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Background: In any upper limb trauma, the time elapsed form the moment of the accident until the establishment of the treatment is very important for the preservation of the tissue viability. In the case of amputation due to crushing injuries, it is crucial that a meticulous evaluation is executed in order to be able to establish the most effective surgical management. **Objective:** The purpose of this study is to present the surgical management of a traumatism through crushing with amputation 1/3 medium right forearm. **Material and methods:** We are presenting you the case of a 49 year old man who is hospitalised in an emergency regime, following a work accident with the diagnosis reminded above. Subsequently, in the Plastic Surgery department it is practiced: the preparation of the amputated segment, dissection, exploration, muscular fasciectomy flexor and extensor muscles, opening of the carpal tunnel, eschilectomy, bone modelation level F1 finger II, first incisions on polar and dorsal face, arteriography A. Ulnar, A., Radial, neurorrhaphy N. Median, N. Ulnar, venography dorsal and solar veins, myorrhaphy, lavage, homeostasis. The suture is realised with fixed fibres and waiting fibres, the bandage is applied and it is immobilised. **Results:** The result is a favourable one, at the end of the intervention we observe fingers with present capillary pulse, with active bleeding when puncturing. The patient is discharged from the hospital after 20 days . **Conclusions:** In the view of the healing and recovery following these types of lesions both the thorough preparatory evaluation as well as the discharge recommendations are highly important for obtaining a good result, such as the surgical management to be as effective as possible.

Keywords: upper limb, trauma, reimplantation, amputation

SURGICAL MANAGEMENT OF GASTRIC CANCER

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Background: Gastric cancer is a biologically aggressive tumor which is often incurable if detected in the symptomatic phase. The main risk factor studied for gastric cancer is diet. A diet rich in preserves, spices and smokes increases the concentration of nitrites, and in contact with gallbladder acids they form mutagenic compounds. **Objective:** The aim of this study is to present the surgical management of gastric neoplasm. **Material and methods:** We present the case of a 70 years old patient admitted in Surgery Clinic 1 of the Emergency Clinical County Hospital of Târgu Mureș. On admission he complains of weight loss(about 10 kg in 2 months), pain in the left iliac fossa with irradiation in the left hypochondrium and fecal incontinence. Upper digestive endoscopy reveals an irregular infiltrative formation with a stenotic character located at the level of the great gastric curvature and the angulus. **Results:** After a proper preoperative preparation an exploratory laparotomy is performed. Adhesolysis and superior polar gastrectomy 4/5 are performed with D1 lymphadenectomy in block with termino-terminal gastro-duodenal anastomosis type PEAN. The postoperative evolution was uneventful with the discharge of the patient in the 7th postoperative day. **Conclusions:** Superior polar gastrectomy with PEAN anastomosis is feasible and it is respecting the oncological principles.

Keywords: gastric cancer, superior polar gastrectomy, Pean anastomosis

STROKE DO NOT DISCRIMINATE-BETTER TO PREVENT THAN REGRET

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Background: Stroke represent the 3rd cause of death after heart disease and cancer. Ischemic stroke represent functional and anatomical abnormality of brain tissue, caused by sudden interruption or decrease in arterial perfusion causing necrosis. **Objective:** The importance of early diagnosis and treatment of cerebral artery occlusion, concidering the harmful consequences of this disease. **Material and methods:** A 36-year-old male

patient presenting with left hemiparesis and motor aphasia. The patient, alcoholic, heavy smoker, pancreatic pseudocyst surgery which was performed 5 years ago, suffered a series of AIT and he did not consider it necessary to go to the doctor, culminating in a straight sylvian stroke. The Doppler echography showed an occlusion of the right internal carotid artery and a 55% stenosis of the left internal carotid artery. After 2 months the patient came back to emergency department presenting vertigo and syncope. Doppler ultrasounds is repeated and showed an occlusion at the right internal carotid artery and a 80-90% stenosis of the left internal carotid artery. The patient is hospitalized on the vascular surgery department for specialized treatment. Endovascular thrombectomy on the left internal carotid artery with INVOS system under general anesthesia was performed obtaining complete revascularization of the brain. The "INVOS" it's a system that monitors directly the cerebral perfusion and the Willis polygon, using sensors. **Results:** The postinterventional evolution of the patient was favorable. The drainage tube was suppressed in 24 hours. At discharge, the patient received cholesterol-lowering and double antiplatelet medications. **Conclusions:** A stroke is a medical emergency, and prompt treatment is crucial. "FAST" is an acronym used as a mnemonic to help in detecting a stroke: F-facial drooping; A-arm weakness; S-speech difficulties; T-time to call emergency services. Doppler echocardiography is the gold-standard tool for diagnosis and treatment planning. Endovascular thrombectomy with INVOS system is the main treatment modality with high cure rates.

Keywords: stroke, Willis polygon, endovascular, F.A.S.T

OPEN LATERAL SUBTALAR JOINT DISLOCATION ASSOCIATED WITH TALAR EXTRUSION AND THE RUPTURE OF THE POSTERIOR TIBIAL ARTERY: A CASE REPORT

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Background: Subtalar dislocations are a simultaneous dislocation of the talocalcaneal and talonavicular joints. They are very rare injuries, representing approximately 1% of all dislocations. Most injuries occur in young patients, with a higher ratio in men than women (6:1). The main causes are traffic accidents, falling from heights, or accidents in the sports practice.There are four types of subtalar dislocation: medial (80-85%), lateral (15-20%), anterior and posterior (1.5-2.5%). Lateral dislocation is associated with osteochondral fractures of the talus and calcaneus and with open injuries. **Objective:** The aim is to report an open lateral subtalar joint dislocation, with extrusion of the talus which is a very rare consequence of trauma. **Material and methods:** A 66-year-old woman was brought to the emergency room with trauma to the right ankle after falling from a ladder. The right talus was fully dislocated from all of its articulating surfaces and was protruding through the skin. **Results:** The investigations showed a lateral subtalar joint dislocation of the right leg and the rupture of the posterior tibial artery. For wound cleaning there were used topical antiseptics and triple antibiotic therapy was administered. Orthopedic management consisted of open reduction and percutaneous Kirschner wire fixation. The posterior tibial artery was repaired by a vascular surgeon with sutures and ligation of surrounding venous vessels, the reparation was confirmed by an angiogram. The wound was complicated by skin loss and was managed by the plastic surgery department. **Conclusions:** This is a very rare case with the association of lateral subtalar joint dislocation, talar extrusion, and the rupture of the posterior tibial artery. Dislocations of the open lateral subtalar joints are challenging lesions with various complications that may require long-term treatment and with the worse prognosis of all four types of dislocations.

Keywords: Joint dislocation, Trauma, Orthopedy

DIGITAL BLOCK TRANSPLANTATION IN MANGLING HAND INJURY

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Background: Mangled injuries of the hand have an immense functional impact in global function of the upper limb and patient life quality. "The metacarpal hand" results from amputation of all fingers at a proximal level, with or without thumb amputation, resulting in a severe functional deficit and hand deformity. **Objective:** This paper intends to highlight both the complexity and benefits of digital block transplantation of 2nd and 3rd toes in surgical treatment of the "metacarpal hand" due to a severe mangling injury of the hand. **Material and methods:** We

present the case of a young man who came to the Plastic Surgery Department with a complex crush and avulsion injury of the right hand by agriculture machinery. During the injury, all long fingers were amputated, without the possibility of finger replantation. An emergency decompression fasciotomy was performed, followed by complete debridement of devitalized tissue. The informed consent of the patient was obtained and delayed reconstruction scheduled. A digital block transplantation of 2nd and 3rd toes of the left foot was performed in the place of the 3-4 fingers together with a free flow-through anterolateral thigh flap in order to achieve a strong and stable tripodal pinch between thumb and transferred fingers, while maintaining the length and obtaining an optimal soft tissue coverage of the stump with less vascular anastomosis. Early hand therapy was initiated in order to preserve the function of the upper limb and integrate transferred fingers functionally. **Results:** The patient made an early recovery but still required long-term kinetotherapy, retaining a strong grasp, sensitivity, prehension and fine movement ability. **Conclusions:** Although esthetic and functional deficit is always present following major finger amputation, digital block transplantation allows patients to retain mobility, strength and sensitivity in the injured hand, results that cannot be achieved with any prostetic.

Keywords: toe-to-hand transplantation,, metacarpal hand,, mangled hand

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WHEN IT BECOMES HARD TO TELL THEM APART: SMALL BOWEL ADENOCARCINOMA AND CROHN'S DISEASE

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Background: The malignancies of the small bowel account for a very small percentage of gastrointestinal cancers, with adenocarcinoma representing less than 1/3 of small bowel malignancies. Small bowel adenocarcinoma is considered a challenge due to its high mortality and nonspecific presentation, but also due to a poor response to conventional chemotherapy and lack of targeted treatment. **Objective:** We present the case of a 70-year-old patient admitted in an acute setting for surgical treatment and postoperative management. **Material and methods:** A 70-year-old male patient known with chronic conditions such as gastroesophageal reflux disease, hepatic steatosis and secondary anemia presented to the Emergency Department of "Sf. Spridon" County Clinical Emergency Hospital Iași with abdominal pain, nausea, vomiting, bloating and constipation for approximately 72 hours. An immediate surgical intervention was performed, with laparotomy revealing an area of stenosis located in the ileum, about 50 cm from the ileocecal valve. Thickening of the wall and hemorrhagic serosa with deposits involving an additional 1.3m of the small bowel were observed. Segmental resection was performed, with ileostomy and appropriate drainage. Considering the clinical context and intraoperative aspect of the ileum a diagnosis of Crohn's disease was made. **Results:** Postoperative evolution was favorable. Surprisingly, the pathological examination reported an adenocarcinoma NOS of the ileum, low-grade, pT3N2Mx, with lymphovascular invasion and significant acute inflammatory exudate. Extensive ulceration associated with massive edema of the adjacent mucosa was also noted. **Conclusions:** While some small bowel adenocarcinoma risk factors have been identified, the reasons behind its rarity and silent clinical course remain unclear, with most patients presenting in an acute context, with intestinal obstruction or perforation. The intraoperative aspect of surgical specimens can be misleading, especially since there is a known association between Crohn's disease and this type of malignancy. Management of the patient should always be guided in accordance with the pathological report.

Keywords: small bowel adenocarcinoma, Crohn's disease, laparotomy

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DIAGNOSTIC CHALLENGES IN SYNCHRONOUS COLORECTAL CARCINOMAS

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Background: Synchronous colorectal carcinoma (sCRC) is a rare type of colorectal malignancy occurring in approximately 3% of patients with colorectal cancer. For diagnosis, each tumor must be distinct and must present a clear aspect of malignancy. Furthermore, we need to exclude the probability of one being a metastasis of the other and should diagnose the synchronous lesions simultaneously or within 6 months. **Objective:** The aim of this

report is to highlight the importance of differentiating synchronous CRC from solitary CRC. **Material and methods:** The patient is a 76 years old male, admitted in the ER for diffuse abdominal pains, absent intestinal transit in the last 48 hours, with a history of alternating episodes of constipation and diarrhea along with chronic hypertension. The CT exam showed multiple air fluid levels along the loops of the small intestine and ascending colon, hepatic flexure with thickened stenotic wall with adjoining fat blending and regional lymphadenopathy. The patient underwent surgery and two tumoral mases were found, one in the hepatic flexure and the other in the transverse colon. An extended right hemicolectomy and lymphadenectomy was performed, circumferential margins were cleared and the probe was sent to pathology for further examination. **Results:** Although sCRC is prone to develop in the left colon, our patient defied the odds by presenting the tumors in the hepatic flexure and transverse colon. Otherwise, compared with solitary colorectal cancer, the synchronous one is more commonly seen in male patients and the mean age is usually slightly higher, our patient fitting the profile. **Conclusions:** Certain risk factors, such as old age, male sex, comorbidity with hypertension must be taken into consideration when suspecting sCRC and a thorough surgical examination should be carried out in order to avoid the possibility of accessory lesions being overlooked and not resected.

Keywords: synchronous colorectal carcinoma, solitary colorectal carcinoma, hepatic flexure, transverse colon

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DIFFICULT FACE RECONSTRUCTION USING SPECIFIC PLASTIC SURGERY TECHNIQUES

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Background: The traumatic lesions of the soft tissues involving the face and scalp require a meticulous evaluation and adequate treatment in order to avoid potential sequalae psychologic, cosmetic, or functional.In order to avoid these and to achieve improved cosmetic results, facial trauma requires general principles of plastic surgery, including, but not limited to scrupulous decontamination, debridement and lavage, atraumatic tissue handling and thorough consideration of the different skin closure techniques. **Objective:** The aim of this paper is to present an overview of the treatment of a complex trauma involving the face and the scalp in a young male patient. **Material and methods:** A 28- year-old man presented to the emergency room with severe facial trauma inflicted by falling from a higher level. The lesions include: left hemiface injury extending to the temporal and zygomatic areas and involving the skin and the underlying soft tissue, quasi amputation of the left ear lobe, depressed intra-articular fracture of the temporo- mandibular joint and laceration of the auriculotemporal nerve and of the superficial temporal artery and vein. In the plastic surgery department the patient has undergone 4 surgeries, each one with different purposes. The main objectives included covering the injured areas with skin grafts, local rotation flaps and repositioning of the auricle and reconstruction of the external auditory meatus. **Results:** During the hospitalization, uneventful healing of the wounds was noticed with primary healing of the flaps and skin grafts, normal capillary refill time. **Conclusions:** Because of the paucity of biologic resources damaged temporal and facial artery we were unable to perform a free autologous tissue transfer. Overall, the reconstruction is aesthetically pleasing, the reconstruction of the ear was successful and the hearing function was saved. Due to these procedures their results, social reintegration and general quality of live have not been negatively influenced.

Keywords: face injury, skin grafts, flaps, plastic surgery techniques

POSTER - NON - SURGICAL

CCTA DIAGNOSIS OF MYOCARDIAL BRIDGING IN A YOUNG PATIENT WITH CHEST PAIN – CASE REPORT

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Background: A common congenital anomaly of the coronary arteries is known as the myocardial bridging, where a segment of the coronary artery most frequently the mid-part of the left anterior descending artery (LAD) tunnels inside a part of myocardium. Most patients are asymptomatic, as filling of the coronary arteries is mainly taking place during diastole, being more important than systole, where myocardial contraction leads to obstruction of the tunneled segment. Still, some patients can present with angina, spasms or ST depressing during exercise the likelihood of ischemia being more increased with the depth of the tunnelled segment. **Objective:** This case report aims to highlight the importance of Coronary Computed Tomography Angiography (CCTA) investigation for the evaluation of chest pain in young patients with low to moderate risks of an underlying cardiovascular disease. **Material and methods:** We report the case of a 36-year old male patient without a significant medical history who presented with exertional chest pain. The performed ECG on clinical examination showed a ST depression in anterior leads, cardiac enzymes were negative, due to which a CCTA was performed. **Results:** CCTA revealed LAD diving into the myocardium at 3mm, for a length of 25mm before resurfacing distally in the epicardial fat, leading to the diagnosis of myocardial bridging. Due to his young age and the absence of any suspicious atherosclerotic plaques on CCTA, no interventional therapy was necessary. Instead, oral beta blocker medication was initiated, aiming to slow the heart rate, therefore prolonging diastole to improve the coronary blood flow and preventing further exertional angina attacks. Additionally, volume loading was performed, decreasing the likelihood of LAD compression in the tunnelled segment. **Conclusions:** This case report underlines the important diagnostic value of CCTA as being a non-invasive procedure, to depict myocardial bridging as a cause of chest pain in young adults.

Keywords: myocardial briding, CCTA, exertional chest pain, radiology

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MYASTHENIC SYNDROME SECONDARY TO HIV INFECTION - A CASE REPORT FROM MÉXICO

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Background: The pathological mechanisms of the association between HIV and secondary myasthenic syndrome are still unknown (just a few studies published until now), so the treatment is quite challenging. **Objective:** The main objective is to outline the treatment in cases of secondary myasthenic syndrome associated with HIV: Male patient with myasthenic syndrome (Osserman IIB) could be treated with only antiretroviral therapy, because it was secondary to HIV infection. **Material and methods:** We present the case of a male patient, aged 46, admitted to the hospital of Toluca, Mexico (March 2015) with sudden weight loss, malaise of legs, left palpebral ptosis and diplopia. An EMG suggested the diagnosis of MG, a Western Blot test revealed HIV type 2 with reactive HIV-antibodies and Ab-Ag reaction. Pyridostigmine (30mg/6h), Azathioprine (50 mg TB/day) and Prednisone (50mg/day) were introduced, afterwards antiretroviral therapy: TRUVADA (Emtricitabine + Tenofovir) and STOCRIM (Efavirenz) each 1x/day. With antiretroviral therapy, all myasthenic symptoms vanished and did not reappear after tapering off Pyridostigmine and Azathioprine. **Results:** Proteins produced by HIV may block the postsynaptic acetylcholine receptors at the motor-end plate by binding to it, leading to the prevention of ACh influx into the postsynaptic muscle cell and impaired muscle contraction. Therefore, the antiretroviral medication deactivates those HIV proteins and reverses this process. The fact that the patient didn't respond well to immunotherapy and medication normally used in MG (Pyridostigmine), moreover the complete disappearance of the myasthenic symptoms after antiretroviral therapy, supports the thesis. **Conclusions:** This report gives a new perspective of how myasthenic syndrome can be triggered by HIV proteins binding to the site at the acetylcholine receptor with blocking effect and how antiretroviral therapy would be able to reverse this process. It is crucial to consider this association for differential diagnosis when determining the cause of myasthenic syndrome in patients in order to optimize and shorten their treatment.

Keywords: Myasthenic syndrome, HIV type 2, Rare association, México

SELEGILINE-A POTENTIAL ANTI-AGING AND NEUROLOGICAL PROTECTOR

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Background: The use of Selegiline as a neuroprotector that prolongs the quality of life in while keeping the brain aging under control and reduces increasing neurological diseases. Studies of MAO-B inhibitors appeared more than 50 years ago.In 1960 Joseph Knoll created this promising substance who claims to treat Parkinson's disease, Alzheimer's disease, major depressive disorder and at the same time it acts anti-aging. **Objective:** The purpose of this review is to summarize pharmacological effects as well as the physiological properties of this prophylactic drug that acts on everything throughout life. **Material and methods:** Analysis of data from the scientific literature suggests that converting Selegiline in amphetamine and methamphetamine enhances performance, slows down the aging, creating an anti-apoptotic and neuroprotective effect. **Results:** Joseph Knoll 's notion, founded on two longitudinal studies conducted on adult rats indicates that for keeping the central catecholaminergic system active from the beginning of life until death, by administering relatively small amounts of substance during post-developmental life contributes to maintenance sexual as well as cerebral performance, improving memory and learning, at the same time prolonging life. Other studies indicate that both acute and chronic administration of the drug produces significant reduction in size of the infarct area in experimental ischemia studies. It has been shown in patients with early Parkinson's disease that early administration of Selegiline (10 mg/day) postpones levodopa treatment significantly compared to their colleagues who were treated with placebo.Studies also show that for the patients with moderate-severe Alzheimer's disease, Selegiline delays the progression of the disease significantly as measured on the evaluation scale for psychiatric and dementia assessment. **Conclusions:** A review of the literature indicates that together, these experimental studies classify selegiline as a neuroprotective substance on dopaminergic neurons.We conclude, based on current evidence, that the use of selegiline is associated with a reduction in the progression of neurological diseases and brain aging.

Keywords: neuroprotective, anti-aging, Parkinson, Alzheimer

THE CURIOUS CASE OF AN INFECTIVE ENDOCARDITIS – CASE PRESENTATION

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Background: Infective endocarditis (IE) is defined as the infectious inflammation of the endocardium, which usually affects the heart valves. IE occurs in 5 in 100000 individuals and the main cause includes staphylococci and streptococci infection. **Objective:** The aim of this paper is to present a case of infective endocarditis with a curious debut. **Material and methods:** 41-year old patient, with a history of anxiety, is admitted accusing, for the last two months, dyspnoea at low effort (progressively accentuated). The clinical examination revealed cyanosis of the extremities of the upper limb, Janeway lesions and the fact that the patient recently self-removed two of his teeth. The suspicion of IE arises, and its followed by further investigation. The electrocardiogram showed the presence of an incomplete right branch block, erythrocyte sedimentation rate 90 mm/h (2-10 mm/h), serum complement C3 85.7 mg/dl (90-180 mg/dl), serum complement C4 6.8 mg/dl (10-40 mg/dl) and the blood culture were negative. Cardiac echography and trans-oesophageal echocardiography (TEE) confirmed the presence of a formation with high mobility on the anterior cusp of the mitral valve (14/12 mm), a formation with moderate mobility on the posterior cusp of the mitral valve (9 mm), severe mitral insufficiency, left ventricular systolic function preserved (ejection fraction 60%, 65-75%) and a normal sized ascending aorta. **Results:** The patient presented one major clinical criteria (evidence of endocardial involvement) and two minor criteria (predisposing factor and Janeway lesions), therefore according to the Dukes' Criteria for Infective Endocarditis and the clinical judgement, the IE diagnosis was established. The recommended treatment for this condition included antibiotics and hepatoprotective medication. **Conclusions:** IE can lead to severe complications such as cardiac insufficiency, aortic and mitral regurgitation, "kissing mitral vegetation" phenomenon, embolic manifestation and renal insufficiency, therefore, even if IE is a quite rare pathology, it should always be taken into consideration to prevent the before-mentioned complications.

Keywords: infective endocarditis, Janeway lesions, staphylococci, Dukes' Criteria

CLINICAL PRESENTATION OF HYPERTENSIVE CRISIS AS ACUTE PULMONARY OEDEMA

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Background: Acute pulmonary oedema (APO) is a medical emergency caused by the excessive accumulation of interstitial fluid which invades into the lungs' alveoli, leading to an episode of severe dyspnoea. The main causes of APO includes left ventricular failure, mitral valve disease and hypertensive crisis. **Objective:** The aim of this paper is to present the case of a patient who suffered from an APO episode and to raise awareness about this condition. **Material and methods:** The patient is an 83-year-old female, with a history of hypertension, myocardial infarction (5 years prior) who underwent ilio-femoral bypass surgery. She was admitted accusing dyspnoea (gradually increasing over the last few days) associated with orthopnoea. The blood pressure value was 175/100 mmHg and the oxygen saturation 84%, which required assisted ventilation with continuous positive airway pressure (CPAP). Clinical and paraclinical exams followed. **Results:** The clinical exam revealed lower limb oedema and basal bilateral crepitant rales. Electrocardiography showed left ventricular hypertrophy and T wave abnormalities. Cardiac echography revealed mitral insufficiency, tricuspid insufficiency, left ventricular hypertrophy associated with dyskinesias and a severe reduction of the ejection fraction (20%). The chest radiography showed bilateral basal pleurisy and a few ground-glass opacifications on the superior lobe of the right lung. The N-terminal pro-brain natriuretic peptide was 19350 pg/mL (<738 pg/mL) while the International Normalized Ratio was 6.99 (1.5 □ 1.9). The APO on the background of a hypertensive crisis diagnosis was established and specific treatment was recommended (oxygen, CPAP to reduce interstitial oedema, diuretics such as spironolactone, nitroglycerin, et alia.) **Conclusions:** Acute pulmonary oedema is a serious and life-threatening complication in a matter of heart diseases. The prompt call for help and early diagnosis has a major impact in reducing the mortality risk.

Keywords: APO, CPAP, hypertension crisis

MYCOPLASMA PNEUMONIA – ASSOCIATED ARTHRITIS, AN UNDERDIAGNOSED PATHOLOGY IN SMALL CHILDREN – A CASE REPORT

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Background: Mycoplasma Pneumoniae (MP) is an atypical bacterium that causes respiratory tract infections, but extrapulmonary manifestations MP-related arthritis is one of the least common extrapulmonary manifestations in children and therefore it is usually overlooked. The few reports on MP induced arthritis stated an incidence ranging between 0.9% and 2.1%. **Objective:** Our objective is to emphasize the difficulty of diagnosing MP-associated arthritis in a small child with arthritis due to MP infection. **Material and methods:** A 2-year old female patient was admitted in the pediatric clinic for prolonged fever with the onset 2 weeks before the admission, for which the general practitioner recommended antibiotic establishing the diagnosis of acute pharyngitis, but the fever persisted being referred to a pediatrician. During the administration, she developed a generalized rash and difficulties of head movement. **Results:** The clinical exam revealed hyperemia of the pharynx, hypertrophy of the tonsils, with crypts, and limitations of active and passive movements of the head and neck, but no pain. The laboratory tests showed leukocytosis with neutrophilia, elevated inflammatory markers and liver cytolisis. The chest radiography revealed the diagnosis of pneumonia. The fever persisted for approximately 2 weeks despite the wide-spectrum antibiotics, associating also gait difficulties and pain in the right hip and ankle. We established the diagnosis of MP-related arthritis based on the positive serology (IgM anti-MP >200 U/ml). The gait difficulties continued for more than 5 months disappearing completely once the IgM was close to the normal value (28 U/ml). **Conclusions:** Our case emphasizes once more the importance of MP related extrapulmonary manifestations in infants even in the absence of respiratory symptoms.

Keywords: Mycoplasma pneumoniae, Pneumonia, Arthritis, Child

MRI EVALUATION OF POSTERIOR FOSSA ARACHNOID CYST – CASE REPORT AND LITERATURE REVIEW

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Background: Arachnoid cysts are CSF filled lesions formed by the arachnoid membrane. They can appear intracranial, like suprasellar, quadrigeminal, temporal, intraventricular, interhemispheric, convexity and posterior fossa or along the spinal cord. Most of the cyst are congenital but in rare cases they can be acquired post-haemorrhagic or post-infections. The complains can range from asymptomatic to dizziness, headache, nausea, vomiting. In some cases, compression on the spinal cord or brain can lead to paralysis, hypoesthesia, dysesthesia, weakness, ataxia and seizures. Often other disorders of the CNS are associated, such as Dandy-Walker malformation, hydrocephalus or Arnold-Chiari malformations. Therefore, related disorders should be taken into consideration in case of arachnoid cyst to find the proper diagnosis and treatment. **Objective:** The aim of our study is to highlight the importance of advanced radiological studies such as magnetic resonance imaging (MRI) in the diagnosis of arachnoid cysts which are often accompanied by long persistent nonspecific symptoms. **Material and methods:** We report the case of a 40-year-old man, with a history of intermittent headaches and imbalance ongoing for 2 years. The neurological examination showed no signs for neurological or sensory deficiency indicating further examination including imaging evaluation of the brain. **Results:** MRI demonstrates a large right sided extra-axial well circumscribed mass lesion located in the posterior fossa, with dimensions of 42/83/90 mm (ap/ll/cc), characterized by CSF intensity signal and thin wall. The membrane of the cyst is bulging to the left of the midline, associating also mass effect with compression of the right cerebellar lobe and remodelling of the skull. **Conclusions:** Arachnoid cyst present with unspecific symptoms, therefore, beside a precise history and neurological examination imaging MRI evaluation is crucial in diagnosis. Surgical intervention for arachnoid cysts still remains controversial, in this case the treatment was conservative with re-evaluation of the cyst.

Keywords: Arachnoid cyst, hydrocephalus, Arnold-Chiari malformation, Dandy-Walker malformation

ANATOMICAL-IMAGING KNEE CORRELATIONS ILLUSTRATED BY DISSECTION AND MAGNETIC RESONANCE IMAGING

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Background: Thorough knowledge of the anatomical structures that make up the knee is essential to provide an accurate diagnosis and a precise clinical decision. High sensitivity and specificity investigations such as MRI facilitate clinical examination and help establish an accurate diagnosis. **Objective:** To illustrate the importance of radiological diagnosis in knee diseases, element complemented by dissection images. **Material and methods:** We used MRI images of the knee joint performed in the sequences T1, T2, Proton density and the sagittal, coronal and axial sections. Patients were examined using a GE SIGNA LX 1.5T MRI device. I also performed a detailed dissection of the knee on a corpse, in the anatomy and embriology department of my college. The structures highlighted in this dissection are to be compared with the anatomical elements noted on the MRI images. **Results:** We highlighted the anatomical aspect of the cruciate ligaments, the upper and lower knee bursae, the menisci, including their disposition, insisting on the particularities of the free medial margin, as well as the disposition of the anterior and posterior meniscal horns. The collateral ligaments are represented differently, since both the MRI images and the dissection images easily show that the lateral CL is much more strongly structured. The tendon of the quadriceps femoris muscle and the patellar tendon maintain the patella in a permanent tension. Any traumatic or degenerative injury at this level results in a rapid accumulation of fluid in the prerotullian space and in the retropatellar bursa. **Conclusions:** The dissections illustrated all the details of the knee structures. The accuracy of these dissection images was completed with the MRI imaging study .We also illustrated with MRI the important anatomical dependence of the structures located outside the knee joint.

Keywords: Knee MRI, Anatomy Learning, Knee Diagnosis

PROLACTIN PRODUCING ADENOMA

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Background: A prolactinoma is a benign (noncancerous) tumor of the pituitary gland that produces a hormone called prolactin (PRL) and it is the most frequently type of functioning pituitary tumor. Based on its size, the tumor can be: microprolactinoma (<10mm) or macroprolactinoma (>10mm). The women are experiencing amenorrhea, galactorrhea and hypogonadism, which are caused by too much prolactin in the blood (hyperprolactinemia). The symptoms that are caused by mass effect are: headaches, vision changes-visual field deficits, blurred vision, decreased visual acuity. **Objective:** The purpose of this paper is to present a case of a microprolactinoma **Material and methods:** We present a case of a 35 year-old woman who came to our hospital accusing galactorrhea and amenorrhea (infertility). Dosing the hormones was the first step where the levels of prolactin were very high: 45 µg/L (10-25 µg/L). After that, a head MRI was required to confirm our suspicion. A tumoral mass was found on the anterior lobe of the pituitary gland (Ø4mm). **Results:** Based on its dimension, location and the high level of PRL the diagnosis of microprolactinoma was set. As no surgical treatment is needed, Cabergoline is administered (dopamine agonist D2) 2 doses/ week each with 0.5-1mg which after few days PRL levels as well as the dimensions of the adenoma will decrease. **Conclusions:** The clinical course of this patient was pretty simple; usually patients with microprolactinoma generally have an excellent prognosis, but macroprolactinomas often require surgical treatment otherwise they continue to grow and lead to other complications.

Keywords: Microadenoma, galactorrhea, amenoree, PRL

A NOT SO POPULAR VIRUS: CHIKUNGUNYA, CASE REPORT

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Background: With 3 million infections every year and a nonexistent vaccine, chikungunya virus is made known by its transmission: mosquitoes. The patients are experiencing fever and arthralgia, also stiffness and a rash can appear. **Objective:** The aim of this presentation is to made this virus known to travel enjoyers. **Material and methods:** A 38-year-old male presented at Sukraraj Tropical and Infectious Disease Hospital, Nepal, with chief complaints of severe retroorbital pain and a sore throat. Also mild fever, headache, muscular pain, and joint pain of the limbs were present. No skin rush. On physical examination, the following systems presented insignificant changes: respiratory, cardiovascular, gastrointestinal and nervous. Ten days ago, he had travelled to Dhading district, Nepal. The blood tests result showed a raised value of leukocytes (10.000/mm3), a raised count of neutrophils (83%) and lymfocytes (75%), and a normal value of eosinophils (2%). The values of hemoglobin and platelets were within the normal ranges. Also, a blood culture and a serological test were made for malaria parasite. The results were negative. The next step was to perform an immunochromatographic test for dengue virus and another one for chikungunya virus. The first mentioned was found negative, while the test for the IgM antibody to CHIKV was positive. The patient was diagnosed with chikungunya virus, based on clinical appearance, laboratory results and the travel history to Dhanding district. The patient received treatment with azithromycin (NSAID) and an antihistamine, and it recovered completely. **Results:** The patient was diagnosed with chikungunya virus, based on clinical appearance, laboratory results and the travel history to Dhanding district. The patient received treatment with azithromycin (NSAID) and antihistaminic drugs, following a successful recovery. **Conclusions:** Because there is no vaccine for this specific virus, prevention is important, so people should be aware before travelling by inquiring the endemic areas.

Keywords: chikungunya, virus, mosquitoes

TUBERCULOUS PERICARDITIS, AN INCIDENTAL FINDING IN A YOUNG PATIENT WITH SPASTIC QUADRIPLEGIA: A CASE REPORT

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Background: Tuberculous pericarditis caused by Mycobacterium tuberculosis is a rare lesion that is found in approximately 1% of all autopsied cases of tuberculosis and in 1% to 2% of instances of pulmonary tuberculosis. The frequency of this disease is higher among older people and immunocompromised patients. **Objective:** The aim is to present a case of tuberculous pericarditis in a young man with previously known congenital diseases. **Material and methods:** The case reveals a 24-year-old man, who died suddenly at home. He was previously known with congenital encephalopathic disease and with spastic quadriplegia. To establish the cause of death, a full autopsy was performed at the Institute of Forensic Medicine of Târgu-Mureș, Romania. Both external and internal autopsy observations were evaluated. **Results:** On macroscopic evaluation of lungs, multiple bilateral foci of condensation, whitish, imprecisely circumscribed, without evidence of normal lung parenchyma were seen. Discrete hydrocephalus and no macroscopic changes in the heart tissue were seen. On microscopy, necrotizing granulomatous inflammation, composed of epithelioid histiocytes surrounding a central necrotic zone, and accompanied by a variable number of multinucleated giant cells and lymphocytes were observed. The granulomas were associated with extensive acute pneumonic areas and fibrinous pleuritis. The examination of heart tissue revealed a relative thick, fibrous pericardium with the presence of small granulomas consisting of epithelioid cells, lymphocytes and few multinucleated giant cells. **Conclusions:** This rare case of tuberculous pericarditis makes us aware of the existence of this lesion, which can be discovered only by a more detailed examination, especially in the elderly and immunocompromised young people.

Keywords: tuberculous pericarditis, congenital diseases, morphopathology

BEHÇET'S DISEASE AND ACTIVE B HEPATITIS: DIAGNOSTIC AND THERAPEUTIC CHALLENGES

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Background: Behçet's disease (BD) is a rare systemic variable vessel vasculitis of unknown aetiology characterised by a broad spectrum of skin, mucosa, gastrointestinal, vascular, ocular, neurological and articular manifestations. **Objective:** We present the diagnostic approach and monitoring of a young woman who was admitted to the rheumatology department with a clinical picture focused on cutaneous-mucosal changes associated with ophthalmological and neurological manifestations. **Material and methods:** A 34-year-old patient presented with recurrent oral and genital ulcers, ocular symptoms, erythema nodosum, bilateral ankle swelling accompanied significant fatigue. Imaging studies (X-rays, ultrasonography) in addition to extensive immunological profile including total ANA, p- and c-ANCA, as well as complement levels were done; furthermore, the routine evaluation revealed HBsAg positivity, while subsequent hepatitis B serological profile accounted for active B hepatitis. A diagnosis of BD was established and required a complex therapeutic approach, while severe ocular damage was detected at further investigations. We started systemic glucocorticoids along with immunosuppressive medications with a dramatic improvement in chorioretinitis, erythema nodosum, and recurrent oral ulcers, with a little impact on neurological symptoms. Besides, brain MRI showed ventricular asymmetry and partial thrombosis of the left transverse sinus, without changes in the cerebral parenchyma guiding oral anticoagulation. **Results:** Once the diagnosis of BS was established based on specific clinical and lab investigations, glucocorticoids and immunosuppressive drugs were prescribed according to the type and severity of organ involvement. The association of active HVB infection needing anti-viral therapy and cerebral transverse sinus thrombosis with subsequent reassessments remained the main challenges in our patient; a multidisciplinary approach is necessary for optimal care. **Conclusions:** BS is a multifaceted immune-mediated vasculitis, with a challenging diagnosis and management. The presence of comorbidities as well as systemic complications that require early detection and control to preserve the patient's quality of life and avoiding morbidity.

Keywords: Behcet's disease, chorioretinitis, hepatitis B, orificial aphthosis

ULCER VERSUS NON-ULCER ACUTE UPPER GASTROINTESTINAL BLEEDING- PROGNOSTIC FACTORS AND COMPARATIVE OUTCOMES.

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Background: The commonest causes of acute upper gastrointestinal bleeding (UGBI) are peptic ulcers, variceal hemorrhage and gastric cancers, with significant geographical variation in incidence, associated with an eagling population and increased use of gastrotoxic medication. **Objective:** Evaluate acute UGIB, identify risk factors, appreciate the difference in bleeding severity and baseline characteristics, between ulcer and non-ulcer lesions. **Material and methods:** A total of 297 patients with UGIB between 2017-2018, who came to the Gastroenterology department of SCJU Mures, were included.Demographical data, endoscopy findings, medication, past medical conditions, were registered for statistical analysis. **Results:** We included 195 patients with ulcer-related bleeding- the study group and 102 non-ulcer bleeding- the control, with a similar mean (66.86 vs. 68.82 years old p=0.368).No important differences regarding demographical data's were found.Glasgow-Blatchford score(GBS) was calculated for each group at admission (12.29 vs 12.79).In the ulcer group, a GBS > 15 points was associated with a statistical significant risk for severe endoscopic lesions, with endoscopic hemostasis required(p=0.0001; OR:4.59).A higher odds of in-hospital mortality (p=0.021; OR:3.22) was associated with the ulcer-related bleeding.History of partial gastrectomy was a significant risk (p=0.030) factor for severe lesion, in both groups.A total of 128 patients, from both groups, received gastrotoxic drugs, with a GBS>13, associated with higher odds for blood transfusion (p=0.016; OR:2.91) due to severe anemia.A double antithrombotic therapy (aspirin and oral anticoagulants) had a higher risk of severe endoscopic lesion development, with the need for endoscopic hemostasis in ulcer bleeding group (p=0.034).No significant differences regarding lesion severity scores were noticed between antivitamin K and NOACs in either group. **Conclusions:** Patients with ulcer-related gastrointestinal bleeding have worse outcomes than those with non-ulcer lesions, with higher odds for in-hospital mortality. No differences in severity scores and prognosis were noticed between different types of oral anticoagulants in both groups.

Keywords: gastrointestinal bleeding, NVUGIB, ulcer

THE IMPACT OF MRI INVESTIGATION IN A PATIENT WITH NONSPECIFIC BACK PAIN PRESENTING ALL THREE TYPES OF MODIC CHANGES

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Background: Degenerative intervertebral disc disease is assumed to be associated with vertebral endplate changes, stimulation of nociceptors beneath the damaged endplate produce the pain. Modic classification subdivides three radiologic patterns of degenerative and inflammatory processes at the vertebral endplate, it is suggested that modic changes are three different stages of one pathological process. Modic type I represents inflammatory changes with bone marrow edema, Modic type II represents bone marrow replacement by fat and Modic type III represents reactive sclerosis. **Objective:** The aim of this paper is to emphasize how Modic changes contribute to nonspecific back pain and the role of MRI investigation for those degenerative processes. **Material and methods:** We report the case of a 55-year old female patient investigated for nonspecific back pain, more intense on the cervical and dorsal region, irradiating to the right flank. **Results:** MRI investigation of the spine showed a reduced cervical lordosis and dorsal scoliosis, multiple disc protrusion (cervical, thoracal and lumbar) among with degenerative Modic changes type 1 at the level C7-T1, type 2 at the level C5-C6, C6-C7 and type 3 at the level L5- S1. Without significant nervous compression back pain was attributed to the degenerative changes. The patient received a conservative treatment, therapeutic exercises, education for posture and MRI follow-up to control the dynamic of Modic changes. **Conclusions:** Modic changes can only be diagnosed on MRI making it to a crucial diagnostic tool for nonspecific back pain. The presence of all three classes of modic degenerative changes in one patien is uncommon. Studies suggest that there is a strong correlation between back pain and Modic changes, especially type I.

Keywords: Modic- changes, Back- pain, MRI investigation

MRI IMAGING IN A WOMAN WITH GIANT OVARIAN MUCINOUS CYSTADENOMA- CASE REPORT

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Background: An ovarian mucinous cystadenoma is a benign tumor of epithelial origin, with a peak incidence in women aged 30 to 50. It accounts for up to 20-25% of all benign ovarian tumors and 80% of all mucinous ovarian tumors. MRI is the commonest imaging diagnostic tool for mucinous cystadenoma, illustrating its cystic content often multilocular, with irregular septa included. **Objective:** The aim of our study is to emphasize the role of MRI in the diagnosis of ovarian lesions by showing specific characteristics of cystic lesions evocative in the differential diagnosis **Material and methods:** A 53-years-old female patient presented with abdominal pain and increasing abdominal contours in the last year. Regarding the patient history, she had a total hysterectomy and left adnexectomy for leiomyoma 10 years ago. The abdominal clinical examination revealed a large mass, extending from the pubic to epigastric region and both flanks, leading to the indication of abdominal and pelvic MRI. **Results:** The protocol included multiplanar native sequences, followed by contrast administration. Findings included a giant hyperintense T2 cystic mass, with dimensions of 112/188/210mm (ap/ll/cc) and with a septum in the upper left part. It occupied the pelvic area, extending cranially in the umbilical and epigastric region and laterally in the flanks, more on the right side, repelling surrounding structures. The diagnosis was followed by laparotomy, decompression of the lesion with aspiration and total excision of the cystic lesion. The cyst weighed around 7kg and histopathologic examination confirmed the final diagnosis of a mucinous cystadenoma without atypia of the right ovary. **Conclusions:** MRI is essential for many diagnostic questions due to its ability to highlight distinct components and tissue types due to their different signal intensities. Although there are other imaging methods such as CT, MRI dominates due to its non- irradiating character and superior special resolution.

Keywords: MRI imaging, mucinous cystadenoma, ovary

MRI SEQUENCES AND CONTRAST DYNAMICS IN THE DIAGNOSIS OF FOCAL NODULAR HYPERPLASIA – CASE REPORT

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Background: Focal Nodular Hyperplasia (FNH) is the second most frequent benign liver tumour often discovered in middle-aged women. It is an unspecific hyperplasia in response to vascular malformation, typically asymptomatic, which usually do not require treatment. **Objective:** The aim of this paper is to emphasize the role of MRI in the diagnosis of benign liver lesions by showing characteristics of FNH lesions evocative in the differential diagnosis. **Material and methods:** We report the case of a 35-year old female patient investigated for abdominal pain with a history of a right mastectomy for breast cancer, followed by reconstruction with an implant. The abdominal clinical and ultrasound examination revealed an isoechoic mass with displaced peripheral vasculature on colour Doppler and a central hyperechoic area indicating an MRI examination. **Results:** MRI investigation of the abdomen was performed in multiplanar sequences native T1W, T2W, without and with fat saturation, followed by post-contrast T1W. MRI showed a liver mass in segments VII and VIII, with dimensions of 92/77/66mm (ap/ll/cc), isointense to the liver on T1WI and T2WI with intense arterial enhancement and isointense signal in portal phase. The lesion presents a centre scar which is hypointense on T1W, hyperintense on T2W without contrast enhancement in the arterial phase but with hypersignal in the delayed phase. Other findings include a splenic cyst. The MRI imaging findings are consistent for focal nodular hyperplasia. The lesion was surgically removed, and the pathological diagnosis was FNH. **Conclusions:** MRI sequences and contrast enhancement dynamics have the ability to highlight distinct signal intensities in the arterial, portal venous and delayed phase. It is essential for accurate imaging of FNH to prevent unnecessary intervention. Other imaging methods such as CT and ultrasound can be used but MRI dominates because it provides adequate visualization of vascular structures, excellent soft tissue contrast and its free of ionizing radiation.

Keywords: MRI Sequences, Contrast Dynamics, Focal Nodular Hyperplasia

THE ROLE OF MRI IN THE DIAGNOSIS OF VERTEBRAL HEMANGIOMAS - CASE REPORT

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Background: Vertebral hemangioma describes a pathology characterized by enlarged spaces of the vasculature inside the vertebral bodies. It´s considered as the most frequent benign vertebral neoplasm. Being nearly always asymptomatic, in few cases those hemangiomas may become symptomatic, usually with back pain, and rarely complicated with vertebral body collapsing or intruding into the neural canal. **Objective:** The aim of this abstract is to emphasize the role of MRI in back pain investigation and vertebral hemangioma diagnosis due to the diverse data offered by multiplanar sequences. **Material and methods:** We report the case of a 66-year old female patient presenting with back pain, more intense in dorsal region, irradiating in the right flank and right lower limb. The family history and a gastrointestinal consult were not significant and also a neurology clinical evaluation did not identify any motor or sensation deficits. A thoracic spine MRI was indicated. **Results:** The MRI protocol included T1, T2 and STIR sequences in sagittal, coronal, axial planes Findings included well defined lesions, hyperintense T1 and T2, located in the thoracic vertebral bodies T4, T8, T9, T11, T12, with variable dimensions, maximum at level T9 occupying all the vertebral body, extending in the right pedicle. Imaging abnormalities are consistent for vertebral hemangiomas. The thoracic intervertebral discs had normal signal and shape. The cervical discs were moderate dehydrated with minimal protrusions associated but without nervous compression. For the moment, a conservatory treatment, therapeutic exercises and MRI follow-up were recommended. **Conclusions:** In most of the cases presenting with back pain irradiating in the lower limbs, disc herniations are identified as the cause of the symptoms. Although a common pathology, vertebral hemangiomas are rarely sympthomatic. Based on its ability to evaluate different tissue characteristics, MRI can identify variable etiologies of back pain, making it the most important tool used in vertebral and spinal imaging.

Keywords: Vertebral hemangioma, Back pain, MRI investigations

THERAPEUTIC CHALLENGE IN A PATIENT WITH SYSTEMIC SCLEROSIS

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Background: Considered a heterogeneous and complex autoimmune rheumatic condition with partially elucidated pathobiology, systemic sclerosis (SSc) remains a diagnostic and therapeutic challenge in routine practice. **Objective:** To identify the systemic implications as well as management issues associated with multiple complications related to the disease and/or treatment in patients with SSc. **Material and methods:** A 45-year-old male presented in the outpatient department with a complex clinical picture comprising Raynaud's phenomenon, diffuse skin thickening, bilateral and symmetrical polyarticular involvement of the small joints of the hand with significant disability and dysphagia. Routine evaluation revealed a moderate inflammatory syndrome, high serum muscle enzymes, ANA positivity with anti-Scl70 specificity, and low complement level. Furthermore, a complex imaging approach was done (high resolution lung CT, echocardiography, eso-gastric barium test, hand ultrasound, videocapillaroscopy) validating the diagnosis of diffuse cutaneous SSc. Pathogenic (Methotrexate) and symptomatic (vasodilators, proton pomp inhibitors, prokinetics) drugs were initiated with a close follow-up of disease activity and severity, visceral damage and treatment response. **Results:** Despite a multifaceted therapeutic approach tightly optimized according to the disease activity and type of manifestation, a wide spectrum of systemic complications was reported over 1.5 years of follow-up, ranging from erosive hand arthritis, myositis, gastrointestinal involvement and honey-combing lung fibrosis with secondary pulmonary hypertension to life-threatening cardio-vascular disease with atrial flutter requiring ablation, valvular damage and cardiac failure. As expected, the outcome was fatal. **Conclusions:** Diffuse anti-Scl70 positive SSc with negative prognostic factors (concomitant onset of peripheral vasculopathy and skin involvement, male, high anti-topoisomerase 1 antibodies) is typically characterized by a rapidly progressive evolution despite early diagnosis and adequate management.

Keywords: Systemic sclerosis, Raynaud's phenomenon, inflammatory syndrome, vasculopathy

ATRIAL SEPTA DEFECT INCIDENTAL FINDING IN A COVID-19 PATIENT – CASE REPORT

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Background: SARS-COV-2 is a RNA virus leading to Covid-19, which is characterized by fever, fatigue, dry cough, myalgia, headache or gastrointestinal symptoms like nausea, vomiting and diarrhea. Often people are asymptomatic, therefore only carriers. An ASD is a congenital noncyanotic heart disease, in which there is an abnormal communication between the two atria at the level of the intra-atrial septum causing a left to right shunt, thus, many patients can be asymptomatic. **Objective:** Our aim is to emphasize the advantages related to the CT examination. It is an important screening tool, because it can detect specific Covid-19 related pulmonary changes. While in ASD echography is still gold-standard, CT can offer a precise morphological assessment, plus complimentary information about other thoracic associated abnormalities. **Material and methods:** We report a case of 69 year old woman, who presented in July 2020 in the ER of the Emergency County Hospital Targu Mures with fever, dyspnea and fatigue. She didn't present significant medical history, but on clinical evaluation and lab tests her PCR for Covid-19 was positive and due to her respiratory symptoms, a CECT was indicated. **Results:** On CT ground glass areas were visible, located predominantly basal and posterior with subpleural distributions associating condensation in the posterior segment of right inferior lobe. Moreover, an ASD ostium secundum with dimensions of 12/5 mm was found. Right cavities were of normal dimensions. A specific treatment for COVID- 19 was initiated and she showed complete remission of symptoms. During that time her ASD was not treated surgically. **Conclusions:** Our case highlights the broad depictions that CT can bring, being a non-invasive imaging examination. Beside the Covid-19 pulmonary changes which correlate directly with the clinical severity of the disease, CT is also able to evaluate the other thoracic structures, in our case ASD as an incidentaloma.

Keywords: Radiology, CT, Covid-19, ASD

ABERRANT ORIGIN OF THE RIGHT CORONARY ARTERY FROM THE LEFT CORONARY SINUS WITH A MALIGNANT COURSE IN A MIDDLE-AGED PATIENT PRESENTING WITH MYOCARDIAL INFARCTION WITHOUT ST-SEGMENT PERSISTENT ELEVATION

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Background: Anomalous origin of the right coronary artery from the left coronary sinus is a uncommon congenital disorder and its association with subsequent interarterial coursing (between the pulmonary trunk and the aorta) defines the malignant variant, which can lead to significant morbidity. **Objective:** The purpose of this case report is to underline the importance of accurate assesment for further management guidance of a patient with myocardial infarction without ST-segment persistent elevation undergoing coronarography that incidentally detected an aberrant origin. **Material and methods:** We report a case of a 53-year-old man with a history of hyperlipidemia that presented in the emergency room complaining of persistent chest pain. The patient also reported intermitent chest pressure that began ten days ago, worsened by hicking. On admition, blood pressure was 136/95 mmHg with a heart rate of 92bpm . The ECG showed negative T wave in DIII and 1mm ST-segment elevation in V1 with positive cardiac enzymes which suggested acute non ST-elevation myocardial infarction. Consequently, early inasive coronarography showed a distal LAD thrombus with extension to septal branch and TIMI 3 flow along with the description of an aberrant origin of the right coronary artery from the left coronary sinus. Medical treatment with dual antiplatlet therapy and anticoagulation was fallowed. A computed tomography was performed revealing a interarterial course. Afer one month on medical treatment the coronarography showed complete resolution of the trombus .As the patient was previously asymptomatic , a Bruce protocol treadmil test was performed to rule out ischemia due to dynamic compression of the vassel during exercise. **Results:** DAPT and anticoagulation resulted in thrombs dissolution. The coronary anomaly was conservatively managed with further avoidance of strenous exercise. **Conclusions:** In middle-aged asymptomatic pacients newly detected with ACAOS and a negative stress testing for ischemia may be treated conservatory, regardless of the malignant or benign course of the anomalous vessel.

Keywords: aberrant origin of the right coronary artery, myocardial infarction without persistent ST-segmen, CCTA

DETECTION OF HIDDEN MOSAICISM IN TURNER SYNDROME

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Background: Turner syndrome is a condition transmitted genetically and defines phenotypic females who have one X chromosome and complete or partial absence of the second X chromosome. The karyotype in TS ranges from 45,X formula to forms of mosaicism in which there is a regular 46,XX or 46,XY cell line, and an abnormal second (or third) cell line. **Objective:** We present the case of a 13 years old patient admitted in the endocrinology department for a short stature investigation. **Material and methods:** The clinic examination reveals a narrow palate, broad neck, broad chest (shield chest), distant nipples, and low implanted hair. Height 132cm (-3.14SD), W 34 kg, BMI 20 kg/m2. Blood test: normal hormonal profile (GH, IGF1, TSH, fT4) , hypergonadotrophic, hypogonadism (FSH 98.7uUI/ml, Estradiol < 20pg/ml). The clinical suspicion for Turner syndrome was confirmed by classic karyotype analysis. The patient received treatment with rGH and estradiol in progressive doses for secondary sexual characteristics development. After two years of treatment, micronized progesterone was added. When the patient was 18 years old, virilization syndrome with acne and hirsutism was noticed, and Y chromosome material by the FISH technique was searched. **Results:** The result was (46,X,del(x)(q13)/45x). It corresponds with Turner syndrome with mixed gonadal dysgenesis, abnormally gonads containing both abnormal female cells (45X) and abnormal male cells (46Xinv(Y)). Bilateral gonadectomy is required due to the risk of gonadoblastoma. **Conclusions:** Karyotype has to be performed at any girl with hypostature and/ or with primary ovarian failure. Hidden Y-chromosome mosaicism should be carried out in any Turner syndrome with virilizing signs; prophylactic gonadectomy is recommended in case of positive results due to the risk of gonadoblastoma.

Keywords: Turner, mosaicism, karyotype

MRCP EVALUATION OF POSTCHOLECYSTECTOMY SYNDROME – CASE REPORT

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Background: Post-cholecystectomy syndrome (PCS) comprises a group of abdominal symptoms including upper abdominal pain and dyspepsia, preexisting and/or reoccurring after cholecystectomy. Between 5 and 40% of patients who underwent cholecystectomy display symptoms at some point. About 50% of these cases are due to biliary causes (eg. remnant calculus, choledochal cyst, dysmotility, biliary injury), while the remaining 50% are due to non-biliary causes and may be caused by a functional gastrointestinal disorder (eg. functional dyspepsia). **Objective:** Magnetic resonance cholangiopancreatography (MRCP) is used as a reliable imaging tool and non-invasive alternative to direct cholangiography for the evaluation of the biliary tract in patients with suspected PCS and is capable to provide a road map for tailoring the interventional treatment. **Material and methods:** We report about the case of a 74-year-old male patient presenting with abdominal pain, occasionally severe, which is located in the right hypochondrium. The patient underwent laparoscopic cholecystectomy for similar complaints three months ago. On clinical examination, a positive Murphy sign was observed, and the ultrasound showed a cystic dilatation, which indicated an MRCP. **Results:** The MRCP protocol indicated multiple sequences, native and after contrast administration. MRCP depicted a dilated bile duct (12mm) with calculus (8mm) and a slight dilation of the cystic duct, common hepatic duct, and left-hepatic and intrahepatic duct. These MRCP findings are consistent for common bile duct remnant calculus causing PCS. **Conclusions:** MRCP is a dependable method for identifying biliary causes of PCS and offers a precise assessment of the type and size of the abnormality, thereby the therapy can be adjusted to the patient's individual needs, and the clinical outcome is improved. Its main limitation in appraising PCS is the evaluation of sphincter of Oddi deformation (SOD). For this reason, secretin-enhanced MRCP is investigated to further improve the diagnostic performance of MRCP.

Keywords: Magnetic resonance cholangiopancreatography, Post-cholecystectomy syndrome, MRCP, PCS

THE ROLE OF MRI IN THE DIAGNOSIS OF MS – A CASE REPORT FROM ROMANIA

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Background: Multiple sclerosis (MS) is the most common auto-immune-mediated inflammatory disease of the CNS resulting in demyelination of the white matter. Symptoms are variable including optic neuritis among commonly present motor and sensitive deficits. **Objective:** The aim of this case report is to emphasize the particular role of MRI, as being one of the most important medical tools in establishing the diagnosis of MS. **Material and methods:** We report the case of a 26 y.o. male who presented in 2018 with decreased visual acuity in the left eye for 1 day, fatigue and weakness in the lower limb for 2 weeks. No past medical or family history is reported but he is a heavy smoker. Tests for autoimmune disorders and borreliosis were negative. Ophthalmological and neurology consults indicated MRI of the brain, orbits and spine. **Results:** MRI revealed around 40 demyelinating lesions with cerebral (periventricular, cortical, juxtacortical, infratentorial), brainstem and spinal (cervical, dorsal, lumbar) distributin. Two frontal lesions were active enhancing contrast. Retrobulbar optic neuritis with swollen retrobulbar intra-orbital left optic nerve (4,6mm left and 4,2mm right side) with increased T2 signal but no gadolinium enhancement was visible. In this case MRI findings were consistent for the diagnosis of MS with retrobulbar optic neuritis onset. Patient received corticoid and Betaferon therapy for ophthalmological and neurological symptoms. Visual loss was recovered in 5 days and he did not experience new episodes in the last 2 years. **Conclusions:** Few pathologies causing optic neuritis show MRI abnormalities. This case report shows the importance of MRI due to its ability to identify demyelinating lesions and optic neuritis and confirming the diagnosis of MS. It is crucial to consider the association between MRI and clinical findings in order to initiate treatment and optimize it to seek remission of the symptoms and prevent further relapses.

Keywords: MRI, Diagnosis, Multiple Sclerosis, Case report

ASSESSMENT OF TRAUMATIC INJURY IN FORENSIC MEDICINE- A RETROSPECTIVE STUDY

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Background: Traumatology represents an important branch of forensic medicine. One of the main concerns of mechanical traumatology is the study of the effects traumatic agents have on the human body as well as the diversity of lesions these agents can produce. **Objective:** The main purpose is to establish the correlation between the mechanism of injury and the severity of the lesions. **Material and methods:** The study is a descriptive retrospective analysis of forensic reports from the Institute of Legal Medicine of Târgu-Mureș, over a period of half a year (2018). The sample is made out of 551 cases which presented positive lesions on clinical examination. The paper is based on findings which are documented in a detailed report that consists of identification data, background, context, classification of lesions by location on the victim body, the mechanism of injury, as well as the severity of lesions. The data was analysed with Microsoft Excel and SPSS (20,statistics data editor). **Results:** The collected data shows that traumatic injuries are positive in 68,97% males and 31,03% females, the majority of them between 21-30 years (23,77%). Furthermore, the rural environment has a higher prevalence of cases (53,72%), both in males and females. The most common types of lesions are: abrasions (32,83%), bruises (28,26%), hematomas (10,74%), wounds (6,66%). In the majority of cases, the mechanism of injury was direct hits with a blunt hard body (51%). Heteroagression and car accidents are known to produce the majority of lesions. The amount of days of medical care required by the victims was between 1-10 days. **Conclusions:** Based on these results, the objective clinical examination involves a high responsibility according to the severity of the lesions, providing objective data to help the judicial process.

Keywords: Forensic medicine, traumatology, injuries

PROGNOSTIC FACTORS IN THE EVOLUTION OF DIABETIC ARTERIOPATHY

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Background: Diabetic arteriopathy is an important part of vascular pathology, characterized by socio-medical impact, the severity and prognosis of these diseases and multiple etiopathogenic aspects. Arteriopathy is a consequence of the progression of diabetic disease, influenced by a multitude of modifiable and non-modifiable factors. **Objective:** The present paper aims to follow the factors that influence the evolution of diabetic arteriopathy: obesity, arterial hypertension, dyslipidemia, the lack of physical activity, smoking, alcohol consumption, age, diet. **Material and methods:** The present study is an observational clinical study, performed over a period of 6 months, under the guidance of Dr. Fulop Eugen, during which we followed a group of 31 patients hospitalized at the Emergency County Clinical Hospital of Targu Mures, on the Internal Medicine section II, diagnosed with diabetic arteriopathy. General data were taken in the form of a questionnaire-based survey but also from clinical observation sheets, the results of biological examinations and paraclinical examinations of hospitalized patients. **Results:** Of the 31 patients, 10 are women and 21 men, aged between 51 and 70 years. Of the subjects included in the study 12,9% had diabetes type 1 and 87,1% diabetes type 2, both categories under treatment with insulin or oral antidiabetics, depending on the type of diabetes. Also, all subjects had the level of glycated hemoglobin between 6,5% and 8,1%. According to the staging, 74,19% of the subjects overweight, 93,54% of them have dyslipidemia, 87,09% have drug-controlled hypertension, 61,29% of them are chronic tobacco users, and all subjects have confirmed occasional alcohol consumption and lack of regular physical activity. **Conclusions:** A series of irregularities in the patients' lifestyle were identified, which led to the change of the monitored parameters, and implicitly to the unfavorable evolution of diabetes towards its dreaded complication, namely, diabetic arteriopathy.

Keywords: Diabetes, Arteriopathy, Chronic Disease, Lower limb disease

CAN YOU TRULY RECOGNIZE A BROKEN HEART? STRESS CARDIOMYOPATHY - A CASE REPORT

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Background: Takotsubo cardiomyopathy (often referred to as broken heart syndrome) is an important condition for the emergency physician to consider. It mimics the symptoms of an acute coronary event with changes on electrocardiogram and echocardiogram, elevated enzyme levels but without obstructive coronary artery disease, following emotional or physical trauma. FoCUS cardiac ultrasound is an examination perfomed by an operator who is usually responsible for immediate decision-making and treatment and is proper trained in this specific examination. **Objective:** The purpose of this case report is to outline the importance of FoCUS ultrasound as a routine practice of the emergency physician in order to timely diagnose and treat life threatening cardiovascular emergencies. **Material and methods:** We present a 70-year-old Caucasian female who was transferred to the Emergency Unit of Târgu Mureș for intermitent chest pain, radiating in the left upper limb of 10 hours duration, following intense emotional stress. Medical history revealed anterior myocardial infarction, stress cardiomyopathy, chronic heart failure and stage II hypertension. Paraclinical investigations showed: EKG (Sinus rhythm with biphasic T waves in leads V4-V6 and negative T waves in leads V1-V3 upon arrival at our emergency unit), FoCUS ultrasound (apical akinesis with apical left ventricular thrombus and severe anterior wall hypokinesis with LV function with EF assesed at 35%). Cardiac biomarkers (hs-Troponine=869ng/L, CK-MB=16.4ng/dL, BNP=1122pg/L) and normal blood work-up. The patient was addmited to Cardiology for further investigations and treatment. **Results:** Cardiac angiogram showed clean coronary arteries. Later on follow-up showed significant improvement with severe hypokinesis of the interventricular septum but with good apical kinetics and global EF of 40%. **Conclusions:** All physicians should be properly trained in FoCUS ultrasound, especially emergency physicians, in order to obtain key life-saving answers.

Keywords: cardiomyopathy, stress, FoCUS, emergency

AN EMERGENCY FIRST CLASS TREATMENT FOR A YOUNG PATIENT WITH VENTRICULAR TACHYCARDIA – A CASE REPORT

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Background: The overall clinical picture, treatment of those with a dysrhythmia and clear instability is empirical and assumes the rhythm is the cause, whereas stable patients can be approached in a more systematic and thoughtful manner to identify the cause and choose the most appropriate therapy. Polymorphyc ventricular tachycardia is seen with varying QRS morphologies and suggests more severe underline disease. VT is prevalent in both ischemic and non ischemic cardiomyopathy. **Objective:** The purpose of this case report is to increase awarness among emergency physicians regarding ventricular dysrhytmias in young patients with recent major cardiac events. **Material and methods:** We present a 50-year-old male patient who was transferred from Emergency Department of Odorheiu Secuiesc Hospital to the Emergency Unit of Târgu Mureș for unsustained polymorphic ventricular tachycardia non-responsive to the baseline antiarrythmic treatment-Amiodarone. The primary complaint of the patient at the transferring unit was intermitent retrosternal chest pain radiating at the base of the neck which started 2 days before seeking for treatment. Upon arrival the patient was hemodinamically stable without significant complaints. Medical history revealed recent extended myocardial infarction localised in the postero-infero-lateral area. Paraclinical investigations showed: EKG (unsustained polymorphic ventricular tachycardia), Echocardiography (FEVS 40% with hypokinetic postero-infero-lateral left ventricular wall), Cardiac biomarkers (hs-Troponine=410ng/L, CK-MB=2.13ng/dL) and normal range blood work-up. In addition to the Cordarone treatment, we administrated Mg2SO4 (1,25g I.V.) and Lidocaine(2x100mg I.V.). The arrythmia being treated, the patient was addmited to Cardiology for further investigations. **Results:** During hospitalization the patient underwent coronarography which revealed no significant changes in coronary arterial system. Throughout coronarography the patient presented sustained polymorphic ventricular tachycardia treated with Lidocaine (200mg I.V.). **Conclusions:** Finding the cause of ventricular dysrhytmias can be very challenging. As shown in our case, the main cause of polymorphyc ventricular dysrhytmias can be extended myocardial ischemia.

Keywords: ventricular tachycardia, dysrhytmia, myocardial ischemia

UNCOMMON CASE OF CONGENITAL ADRENAL HYPERPLASIA – IMPORTANCE OF A METICULOUS DIFFERENTIAL DIAGNOSIS

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Background: Mutations in the CYP17A1 gene lead to a rare form of congenital adrenal hyperplasia (CAH) due to the impaired 17alpha-hydroxylase/17,20-lyase activity. Clinically the disease is manifested by hypertension with hypokalemia due to the excess of deoxycorticosterone (DOC), an intermediate precursor in the adrenal steroidogenesis with a potent mineralocorticoid activity. Additionally, the lack of sex steroids leads to sexual infantilism. **Objective:** The following case report is aimed to highlight the importance of a meticulous and comprehensive diagnosis with consideration of CAH. **Material and methods:** A phenotypically female patient was initially diagnosed at 18 years with androgen insensitivity syndrome since she presented primary amenorrhea with incomplete female internal genitalia and a 46 XY karyotype. At 23 years she was admitted in the intensive care unit for hypertensive crisis and severe hypokalemia, therefore, primary hyperaldosteronism was suspected. Further laboratory investigations displayed increased DOC (>100 ng/dL) and corticosterone (>5000 ng/dL) values with a low morning cortisol level, suppressed aldosterone, elevated adrenocorticotropic hormone and very low sex steroids with high gonadotropins. A performed computed tomography revealed bilateral adrenal hyperplasia and the presence of intraabdominal testicles. Genetic testing confirmed the CYP17A1 gene mutation. **Results:** Bilateral gonadectomy was performed to remove the intraabdominal testicles. Medical therapy included glucocorticoid replacement therapy to suppress the mineralocorticoid excess and sex steroids (estrogens) to restore desired secondary sexual characteristics for a female development. The management of hypertension included spironolactone as a mineralocorticoid antagonist. **Conclusions:** 17alpha-hydroxylase/17,20-lyase deficiency represents an uncommon form of CAH. Unlike other subtypes it manifests by low levels of sex steroids

and increased mineralocorticoids which lead to sexual infantilism with hypertension and hypokalemia. Acute adrenal failure is rarely seen on the patients because the excess of corticosterone has glucocorticoid activity as well. Moreover, there is no need for mineralocorticoid replacement since the homeostasis of potassium and sodium is maintained by deoxycorticosterone.

Keywords: congenital adrenal hyperplasia, endocrinology, CYP17A1

HARD TIMES FOR AN EQUESTRIAN BLUNT TRAUMA – CASE REPORT

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Background: Major trauma is a condition that needs immediate and efficient multidisciplinary management. Identifying intra-abdominal injuries can be challenging. Signs and symptoms may be subtle or absent at initial presentation. Patients who sustain major trauma may develop a bleeding diathesis which results in defective clotting and platelet function. **Objective:** The purpose of this case report was to present the mortality patterns in a major trauma patient as observed in the emergency department. **Material and methods:** A 20-year-old woman was brought by county ambulance service at the emergency department of the Emergency County Clinical Hospital of Târgu-Mureș. The presenting complaint was abdominal pain due to a horse kick, that took place an hour before calling the ambulance. Upon physical examination we observed diffuse abdominal pain, localized at the right hypochondrial and lumber region. During the anamnesis, the patient was hemodynamically stable. Laboratory investigations revealed- Normal Complete Blood Count (WBCs=9.18*103/μL, RBCs=4.13*106/μL, Hb=13.5g/dL) Prolonged Prothrombin Time (18.7s), INR (1.62)- Hepatic Cytolysis (GOT=214U/L, GPT=174U/L). Thoracoabdominal CT with IV contrast detected- Grade IV AAST Renal Injury (Laceration of the right kidney, affecting over 50% of the renal parenchyma, perirenal hemorrhage with active extravasation) Laceration of the VI segment of the liver Free fluid collection (approximately 25 HU) localized perihepatic and in the Douglas pouch. The repeated Hb count was lower (12.4g/dL, 2 hours from the injury). **Results:** The patient was transferred at the urology clinic as the indication for surgical intervention was absolute. **Conclusions:** Although the trimodal pattern of trauma deaths is controversial, the first two peaks are still sustainable to be taken into consideration. Trauma and polytrauma symptoms may appear delayed, as the mortality increases from seconds to minutes (peak I- immediate death) and from minutes to hours (peak II- early death).

Keywords: Blunt trauma, equestrian injury, trauma management

112; WHAT IS YOUR EMERGENCY? – HELLP – CASE REPORT

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Background: HELLP syndrome remains a challenge to the scientific community. Characterized by high mortality and morbidity rates, is a clinical condition that leads to hemolysis, elevated liver enzymes and low platelets. It is considered a particularly severe form of preeclampsia. **Objective:** This case report aims to highlight the key steps in providing prehospital emergency care while transferring a postpartum young female suffering the consequences of HELLP syndrome. **Material and methods:** Mobile Intensive Care Unit received a call for an interhospital transfer of an unstable patient. A 27-year-old pregnant female with unmonitored pregnancy at 33 weeks presented at the transferring facility with severe diffuse abdominal pain, headache, and hypertension. Laboratory investigations revealed: Prolonged Prothrombin Time (28,1s), INR (1.75) count: (WBCs=22.5*103/μL, RBCs=2.24*106/μL, Hb=6.6/dL, PLT=115*103/μL)-Liver enzymes: (GOT=79U/L, GPT=21U/L), Urea (68.8mg/dL), Creatinine (2.5mg/dL). The patient was diagnosed with HELLP syndrome and premature separation of the normally implanted placenta, resulting dead fetus antepartum. Furthermore, she underwent emergency C-section and subtotal hysterectomy due to utero-placentar apoplexy with an estimated 3000ml blood loss. Upon transfer team arrival the patient was bleeding at the surgical wound site, had an 500ml urine output and 200ml blood

drainage output of the Douglas pouch. During transport (approximately 40min), the patient became hemodynamically unstable (BP:88/57 mmHg, HR: 99bpm, RR:33bpm). As the indications of hemorrhagic shock were clear we initiated prompt treatment (1g of tranexamic acid IV, 500ml Gelofusin, 500ml NSS, 50µg Fentanyl and blood tranfusion 350ml, 0-). The patient condition ameliorated significantly**Results:** During hospitalization, the patient received 2 blood units, FFP and Novoseven, which resulted in PLT count normalization. **Conclusions:** Interhospital transfer of critically ill patients is a common part of their care. The patient should be adequately resuscitated and stabilized to the maximum extent possible without wasting undue time, as in our case initiating treatment with blood transfusion during the transport.

Keywords: patient transfer, inter-hospital transfer, HELLP syndrome

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CASE REPORT - THE ROLE OF MRI IN THE DIAGNOSIS OF SPINAL INTRADURAL EXTRAMEDULLARY MENINGIOMA

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Background: Spinal meningiomas are one of the most common intradural extramedullary tumors. Usually meningiomas are located in the brain and less frequently in the spine. Development is common in the thoracic area and occasionally; the cervical and lumbar areas, with higher incidence among females. Symptoms derive from spinal cord compression and are usually represented by back pain and motor deficits. MRI has an important role in diagnosics due to the typical location and imaging findings. **Objective:** The aim of our poster is to highlight the role of MRI in the diagnosis of spinal intradural extramedullary meningioma (SIEM) basted on its Ability to depict specific imaging characteristics by using several multiplanar sequences. **Material and methods:** We present the case of a 53-year-old female who presented weakness in the lower limbs and dorsal pain irradiating from the right lower back. Neurology consult identified motor deficit and indicates a spinal MRI examination. **Results:** Protocol included T1,T2,STIR multiplanar sequences, followed by contrast administration. Findings depict a mass located antero-laterally in the subdural extramedullary space at T10 , with dimensions of 10/15/16mm(ap/ll/cc), hypointense T1,T2, with edema on STIR sequence and intense contrast enhancement. The lesion presents wide dural insertion consistent for dural tail sign and associates medullary compression with displacement to the left. No foraminal extension is depicted. Imaging aspect highly consistent for SIEM. Treatment consisted of complete removal of tumor, Simpson I and histology confirmed the diagnosis. At 4 months MRI re-evaluation findings consisted of infiltration of the subcutaneous fatty tissue adjacent to surgical incision, without any contrast enhancement areas indicating recurrence. **Conclusions:** Among imagining methods MRI has the best spatial resolution for soft tissues making it a useful tool in spinal evaluation. Due to its ability to depict different tissue characteristics it represents a reliable method in intradural extramedullary meningiomas diagnosis.

Keywords: spinal intradural extramedullary meningioma, mri, Simpson 1, T1, T2, STIR sequences

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ATLAS OF THE HUMAN RETINA AND TUBULIN POLYMERIZATION PROMOTING PROTEIN (TPPP) USING ELECTRON MICROSCOPY IMAGING

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Background: In a previous study about TPPP, electron microscopy probes were prepared in order to identify the localization of TPPP in the human retina. The resulted publication, however, did not detail the presence of TPPP on transmission electron microscopy (TEM) captions. **Objective:** The aim was a detailed analysis of TEM images in order to establish an atlas with the constituents of the human retina, in relation to the localization of TPPP.
Material and methods: We used previously collected TEM images of one human retina. The retina sample was specifically prepared using immunogold staining technique that labelled TPPP in the retina. Cellular constituents were identified according to reference material provided by Dowling et al. (1966). A picture editing software (Photoshop version 22.0.0) was used to merge several individual images to obtain larger retinal areas. **Results:** Several layers and cells were identified on the TEM pictures: outer plexiform layer (OPL), inner plexiform layer (IPL), retinal nerve fiber layer (RNFL), amacrine cells, bipolar cells and ganglion cells. By merging several images, it was possible to identify a photoreceptor rod and a Müller cell. Furthermore, the identification of synaptic connections between a bipolar cell, an amacrine cell and a ganglion cell, a so called dyad connection, was

accomplished. TPPP was present in the OPL, INL, RNFL and in the amacrine and ganglion cells in the nucleus, cytoplasm, perikaryon and neuronal boutons. **Conclusions:** With the detailed analysis of TEM captions an atlas with the constituents of the human retina could be established. Additionally a new localization of TPPP was identified in the ganglion cells and retinal nerve fiber layer.

Keywords: Tubulin Polymerization Promoting Protein, Retina, transmission electron microscopy

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