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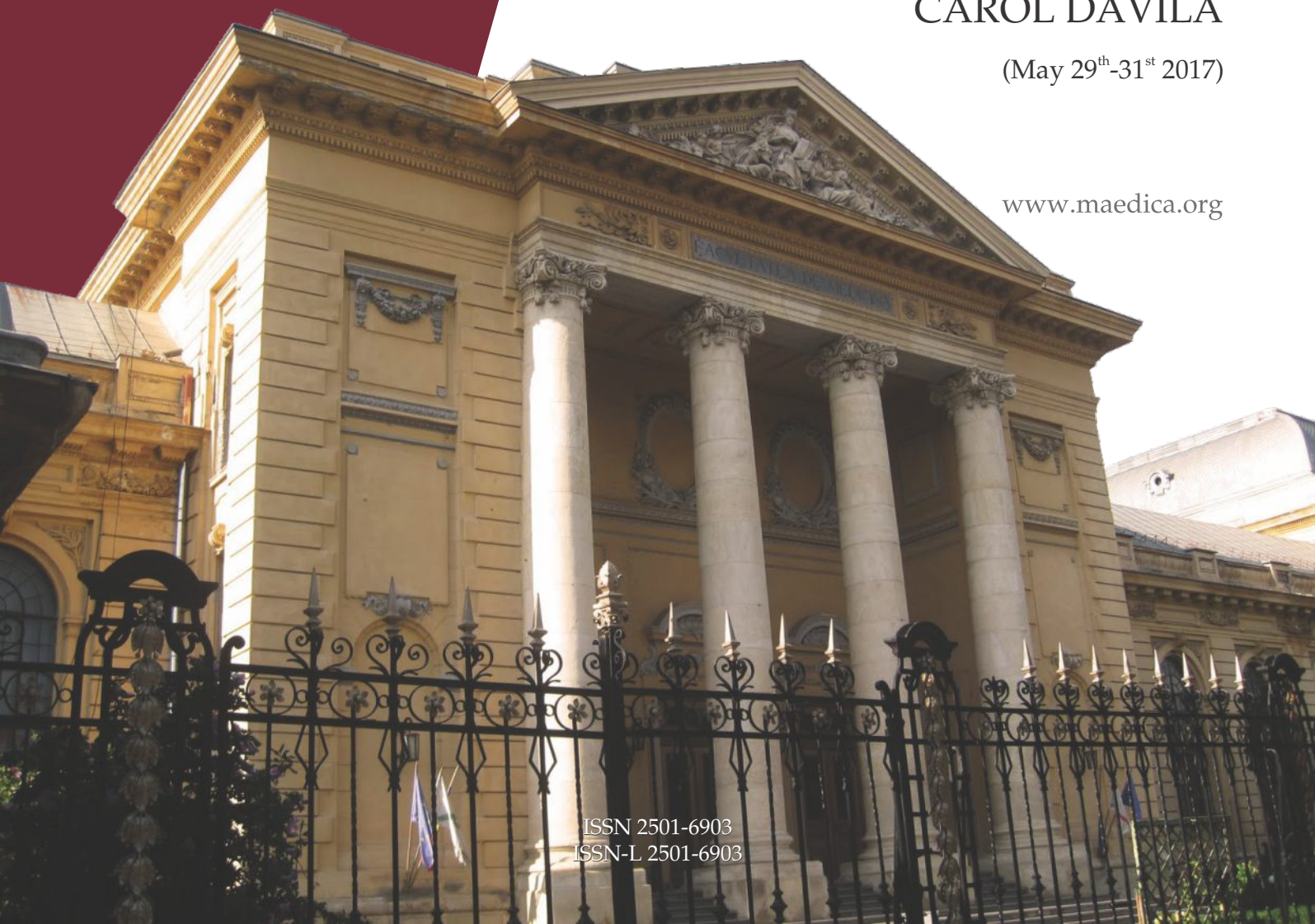

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Abstracts of the posters exposed at the Congress of the University of Medicine and Pharmacy Carol Davila, Bucharest (May 29th-31st 2017)

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SURGICAL SPECIALITIES

(ID 66) Fertility preservation before cancer treatment - a SOS to Romanian hematological cancers

Mihaela Nicoleta Plotogea[1,2], Marina Rodica Antonovici[1,2], Ana Maria Rotaru[2], Oana Ionescu[1], Roxana Bohiltea[1], Elvira Bratila[1], Claudia Mehedintu[1,2]

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Introduction: Cancer diagnosis is lately found frequent among medical conditions in young patients. Fortunately, the survival rate has increased due to aggressive treatments of chemo and radiotherapy, with a high cure rate. The difficult overall recovery of the patients is hampered by a diagnosis as premature ovarian failure, a frequent non-malign complication related to cancer treatment. The infertility diagnosis is taken as hard as the cancer itself by the patients. Not only the lack of fertility preservation, but even the failure to discuss the fertility preservation options before cancer treatment may have negative consequences on women's quality of life, women reporting less regret when informed prior to treatment.

Materials and methods: This research is a part of an ongoing retrospective study started in 2014 and includes a number of 28 women, after signing an informed consent. They were diagnosed with premature ovarian failure following hematologic malignancies, treated with aggressive chemotherapy and radiotherapy (part of bone marrow transplant protocol). They were asked to complete a questionnaire focusing on psychological and physical impact of infertility and related aspects.

Results: Analyzing the data, it appears that no fertility preservation procedures were mentioned and also no gynecological consult was performed to the patients prior to cancer treatment. They were not informed about the probable ovarian damage due to aggressive treatment, up to induced menopause in most of the cases. Patients reported that the infertility and premature menopause diagnosis was unexpected and severely decreased their quality of life and personal relationships. The absence of a treatment also had a negative impact alongside to consequences of urogenital syndrome related to induced menopause.

Conclusions: The challenge for cancer patients is not only during the treatment, as many may believe, but is also after the therapy, when they found themselves in the middle of a life so different from the one before, with other guidelines, concerns, priorities and goals. The failure of fertility preservation affects their life, and it can be an option before the beginning of cancer treatment if only included in the protocol and taken into consideration by both the hematologist and the gynecologist when appropriate.

(ID 93) The dinamics of cervical human papillomavirus infection in conservatively treated women for high- grade cervical intraepithelial neoplasia

Calina Maier, T. Maier, Mihai Mitran, Elvira Bratila

Clinical Hospital of Obstetrics and Gynecology Prof. Dr. Panait Sirbu, Bucharest, Romania

Objectives: The purpose of this study was to assess the dinamics of HPV cervical infection in high-grade CIN (cervical intraepithelial neoplasia) diagnosed women who benefited from conization. Furthermore, we sought to evaluate the correlation between the colposcopic impression using the RCI (Reid Colposcopic Index) and HPV status.

Material and methods: We conducted a prospective cohort study carried out in "Prof. Dr. Panait Sîrbu" Clinical Hospital in Bucharest between november 2013- february 2016. A total of 290 women underwent primary conization for high-grade cervical dysplasia. In all patients colposcopy and HPV genotyping were performed before the intervention. The follow-up protocol consisted in co- testing performed at 12 and 24 months after the procedure, as recommended by ASCCP guidelines. Persistent/recurrent disease was defined as histologically proven CIN during follow-up. All patients were attended in our clinic and signed an informed consent at admission according to the World Medical Association Declaration of Helsinki.

Results: Among 290 women in study, 99.65% were HPV- positive and more than a half (56.4%) had more than one genotype (mixed infection). HPV 16 had the highest prevalence (22.5%) followed by HPV 18 (8.7%) and HPV 53 (9.3%). Out of 80 patients who were HPV- positive at the first follow-up visit, 78.3% had persistent/ recurrent lesions, with HPV 16 having the highest risk of persistence ($p< 0.01$). In addition, age over 40 years, smoking and lack of use of barrier contraception were statistically associated with HPV persistence. Patients who had a lesion with an initial high-grade colposcopic impression (ICR > 6) also presented higher rates of HPV 16 and HPV 18 persistence ($p= 0.03$). Using Kaplan- Meier survival analysis we observed that disease-free intervals are significant higher in patients without HPV positivity at the first and second follow-up visits (27.17 months vs. 26.3 months, $p< 0.01$). On a multivariate logistic regression analysis HPV 16 and HPV 18 persistence were found to be independent predictive factors for persistent/ recurrent cervical disease ($OR= 4.87$ and $OR= 13.06$, respectively, $p< 0.01$).

Conclusions: HPV genotyping allows to identify women at risk for persistent/ recurrent lesions after conservative therapy for cervical dysplasia.

(ID181) Surgical treatment of hallux valgus using fixed-loop cortical suspension system - early results

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Objectives: Hallux valgus is an acquired, irreversible foot deformity identified by a lateral deviation of the hallux and medial deviation of the first metatarsal. There are more than 100 types of surgical procedures described for correction of hallux valgus but they are merely variations and combinations of the same basic techniques. The aim of this study was to assess the short therm results of one type of fixed loop suspension system using radiographic evaluation and measurements in order to determine the reliability and stability of these constructs.

Method: For the purpose of this study a number of 16 cases were selected consisting of 12 patients with bilateral hallus valgus (24 feet) and 4 cases of unilateral abductovalgus (total of 28 feet). All surgeries were performed by the same surgical team using a three incisions surgical approach, capsulotomy and exostosectomy of the medial eminence, tight capsulorrhaphy, reduction of the angles, with subsequent fixation with 2 Mini TightRope® constructs. There was a minimum of 6 months follow-up with the patients, with radiographic evaluation of the metatarsophalangeal angle (HVA) and intermetatarsal angle (IMA) preoperatively, on the first or second day after surgery and at the 6 weeks and 6 months follow-up visit.

Results: The improvement of the IMA at six months was of 5.1°, having lost only 20.3% from the acquired correction and for the HVA after loosing 23.8% of the postoperative correction the difference at six months remained 10.2°. No complications characteristic for this technique, like second metatarsal fracture occurred during follow-up, with a good overall level of patient satisfaction.

Conclusions: Treatment of mild and moderate hallux valgus with a tension wire and button fixation system combined with distal soft tissue procedures represents a promising minimally invasive option which seems to avoid the classical complications associated with osteotomies. The results call for further testing, especially biomechanical testing in a controlled laboratory setting.

(ID 216) Open ureterolysis with omental wrapping of the ureters: a valid option for definitive surgical treatment of ureteral obstruction due to idiopathic retroperitoneal fibrosis

Silviu Stelian Guler-Margaritis[1], C. Baston[1,2], C. Gingu[1,2], B.C. Haineala[1,2], C. Codoiu[1,2], I. Manea[2], Ioanel Sinescu[1,2]

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Introduction: Idiopathic retroperitoneal fibrosis is a rare inflammatory condition, with unclear origin, with some features of an autoimmune disease, leading to fibro-inflammatory tissue development in the retroperitoneum, encasing the great vessels in the inferior lumbar region, often entrapping one or both ureters, leading to various degrees of urinary obstruction and consecutive uremia. Clinical picture is unspecific, and there are no biomarkers with diagnostic value for IRF.

Optimal management strategy for IRF is still to be established, consisting of a combination of medical and/or surgical treatment, with the aim of relieving ureteral obstruction and induce disease regression.

We hereby present the experience of our Center in the surgical treatment of IRF in a ten year interval, on sixteen consecutive patients with IRF and moderate to severe renal impairment.

Methods: Sixteen patients with IRF and ureteral obstruction were treated in our Center in a ten year interval.

After initial minimally invasive surgical desobstruction of affected renal units, we performed open ureterolysis with omental wrapping of the ureters, with surgical biopsy of the mass for definitive diagnosis in fifteen cases.

Results: Success rate was excellent, achieving complete and durable remission of renal insufficiency in 93,3% of cases, after at least 24 months of follow-up (mean 41,6 months).

No major complications of the surgical treatment were recorded, with complete remission of hydronephrosis in all cases after six months, and normal serum creatinine, with stable values after 3 months ($p=0.00$) after treatment until the end of the follow-up.

Conclusions: To date, no clear treatment strategy for IRF is universally accepted, a high degree of subjectivity lying in the hands of the clinician.

Our results prove that, in experienced hands, open ureterolisys and omental wrapping is a valid option for the definitive surgical treatment of IRF, with acceptable morbidity and very good medium-long term outcomes in terms of renal function recovery.

(ID 231) Peripheral vascular access for the elderly. Particularities. Our experience

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Objectives: End Stage Renal Disease is a pathology that is affecting more and more patients, with a deep impact in the socio-economic environment. Its progression is towards chronic dialysis. Due to various comorbidities such as: atherosclerosis, hypertension, autoimmune diseases but especially diabetes mellitus, the number of dialysis dependent patients is on the rise. Considering the increase in the quality of life, life expectancy, and due to the fact that all of this comorbidities benefit from a better understanding and treatment, more and more elderly patients reach the dialysis state of their kidney disease. A functional vascular access represents the life line for these patients. The first choice in creating a vascular access should be an arterio venous fistula and amongst them a radio-cephalic fistula. Our goal is to discuss the main challenges that occur in the management of these patients peripheral vascular access.

Method: a retrospective study was performed for patients above the age of 65, whom underwent an arterio-venous fistula in our clinic during April 2015-March 2017.

Results: We performed 360 arterio-venous fistulas, 96 were performed on elderly patients (26.66%), 15 were radio-cephalic fistulas (15.62% out of all the elderly fistulas). Most frequent comorbidities were: diabetes mellitus, hypertension, anemia, ischemic cardiopathy, chronic heart failure, history of a stroke, chronic anticoagulant treatment. The primary patency was 90% (fistulas that matured accordingly and were used for dialysis) We encountered the following complications: arm edema, ecchymozis, seroma, hematoma, lack of maturation and vascular steel syndrome (2 patients that required the closing of the fistula).

Conclusion: The patient's age at the time of the first hemodialysis doesn't represent a contraindication for creating a peripheral vascular access anymore. Due to the patient's age and his comorbidities (atherosclerosis, diabetes mellitus, exhaustion of vascular capital) fewer radio-cephalic fistulas (recommended as the first vascular access site) can be performed for the elderly, and also an increase in the number of complications occurred. Al these aside, an arterio-venous fistula is still a feasible solution for creating a functional vascular access in the elderly patients that are dependent of chronic hemodialysis.

(ID 138) Hepatitis B in pregnancy: screening, treatment and prevention of transmission - clinical experience & review

Octavia Velicu[1], Roberta Ciobanu[2], Ioan Diaconu[2,3], Monica Cirstoiu[2,4], Claudia Mehedintu[2,5], Elvira Bratila[1,2], Mihai Mitran[1,2]

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Objective: The management of hepatitis B virus (HBV) during pregnancy remains a challenge and involves various aspects of maternal-fetal care.

Our objective is to provide a comprehensive review of the current knowledge regarding pregnancy and HBV infection as well as recent efforts to reduce the rate of mother-to-child transmission (MTCT). We also present the 2016 clinical experience with HBV positive patients.

Method: We analysed data from the 40 HBV positive pregnancies, resulting in 41 live childbirths, in Hospital Panait Sarbu during 2016. A literature review was also conducted examining recent studies devoted to the clinical, therapeutic, and prognostic aspects of HBV infection during pregnancy in order to extrapolate and interpret data that can help physicians in the management of HBV infection in this setting.

Results: In our study group mean maternal age was 30 (± 7) and the majority (54%) were primiparous. Caesarean section was the birth method in 36 (90%) of the cases with 34 (85%) being born at therm. In 7 cases (17.5%) spontaneous membrane rupture occurred. All the new-borns received active immunoprophylaxis (HBV vaccine) and 38 (92.6%) also received passive immunoprophylaxis consisting of the administration of hepatitis B immune globulin (HBIG).

Conclusions: Testing for HBV is recommended in every pregnancy, regardless of previous testing or vaccination. Identification of HBV-positive pregnant women remains the most effective way to prevent HBV transmission to new-borns combined with passive and active prophylaxis at birth.

Breastfeeding is not contraindicated for HBV patients but it is not recommended for women taking antiviral drugs. Finally, there is no clear evidence that elective caesarean section reduces the risk of mother-to-child transmission compared to vaginal delivery.

MEDICAL SPECIALITIES

(ID 122) 3D myocardial deformation, arterial stiffness, and cardiac biomarkers allows early diagnosis and prediction of CHOP-induced cardiotoxicity

Diana Mihalcea, Ramona Bruja, Ana-Maria Vladareanu, Dragos Vinereanu

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Standard CHOP chemotherapy (cyclophosphamide, doxorubicin, vincristin, prednisone) in non-Hodgkin lymphoma (NHL) has risk of cardiotoxicity, with increased morbidity and mortality.

Aim. To define new parameters of 3D LV (left ventricle) deformation, arterial stiffness and biomarkers, for early detection and prediction of cardiotoxicity.

Methods. 77 NHL patients (34 men, 59±15 years), with LVEF >50%, scheduled to receive CHOP, were assessed at baseline, after 3rd cycle, and after treatment completion (doxorubicin cumulative dose of 384±66 mg). 3D echocardiography (3DE) was used to assess LVEF (left ventricle ejection fraction) and systolic deformation: longitudinal, radial, circumferential, and area strain (LS, RS, CS, AS); Complior to measure pulse wave velocity (PWV); and troponin I and NT-proBNP as markers of cardiac injury and high overload, respectively. Cardiotoxicity was defined as a decrease of LVEF<50%, with more than 10% from the baseline value.

Results. At the end of CHOP therapy, 19 patients (group I) developed cardiotoxicity (LVEF=63±2 vs. 49±1, p<0.0001), whereas 56 patients (group II) did not (LVEF=63±3 vs. 55±3, p<0.0001). There was a significant reduction of all LV deformation parameters and a significant increase of arterial stiffness, starting with the 3rd cycle, but group I had greater changes than group II (p<0.001) (Table). Univariate analysis showed a significant correlation between changes of LVEF and changes of LS, CS, RS, AS, PWV, and troponin I after the 3rd cycle (r of 0.64; 0.41; 0.39; 0.43; -0.50; -0.31, all p<0.05). The reduction of LS after the 3rd cycle was the best independent predictor for the decrease of LVEF at the end of treatment (R2=0.387, p=0.001); decrease of LS with more than 21% after the 3rd cycle predicted the development of cardiotoxicity at the end of CHOP therapy (sensitivity 85%, specificity 72%).

Conclusion. 3DE myocardial deformation, arterial stiffness, and cardiac biomarkers are very useful tools to detect early chemotherapy induced cardiotoxicity, and to predict further decline of LVEF in patients with non-Hodgkin lymphoma.

Table. Diagnosis of cardiotoxicity

Parameter	CHOP therapy	Group I	Group II
LS (-%)	Baseline 3rd cycle Final	23.7±1.2 15.3±1.4† 10.8±1.3†	23.6±1.5 19.4±1.6† 17.4±2.2†
CS (-%)	Baseline 3rd cycle Final	22.1±1.2 16.0±1.3† 13.6±1.1†	22.5±1.3 19.4±1.2† 16.9±1.6†
RS (%)	Baseline 3rd cycle Final	62.3±4.8 49.6±3.8† 43.7±5.2†	61.5±4.9 57.5±4.6† 48.5±4.6†
PWV (m/sec)	Baseline 3rd cycle Final	5.4±1.1 8.4±1.6† 9.9±1.5†	5.8±1.4 7.1±1.3 7.9±1.6†
Tn I (ng/ml)	Baseline 3rd cycle Final	0.006±0.001 0.017±0.004 0.082±0.008†	0.002±0.001 0.004±0.002 0.010±0.009†

† p<0.05

(ID 324) Exposure to sevoflurane increases the plasma levels of human endothelial progenitor cells in coronary artery disease patients

Eleonora Bernardini, Ionut Stanca, Dan Corneci, Camelia Stancu, Loredan Niculescu, Mihaela Popescu, Andreea Catarina Popescu, Doina Dimulescu, Adelina Vlad

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Plasma levels and functional properties of endothelial progenitor cells (EPCs) are lowered in patients with coronary artery disease (CAD) and correlate with the efficacy of ischemic tissue regeneration and vessel re-endothelization, while basic science suggest that anesthetic preconditioning (APC) with volatile anesthetics can improve stem cells biology. Hence, we tested whether sevoflurane would increase the mobilization of these angiogenic cells.

Coronary artery disease patients scheduled for angiography were randomized to sevoflurane exposure (1 MAC in 50 % O_2, administered in 2 cycles of 15 minutes interrupted by 10 minutes wash-out; study group, n=16) or to a sham procedure (50% O_2; control group, n = 11). Human plasma EPCs were evaluated by flow-cytometry and by an *in vitro* culture assay before exposure to sevoflurane (baseline) and 24 h afterwards, a time interval that corresponds to the late window of APC protection. Values are means ± SEM, compared by ANOVA. Plasma CD45dim/CD34+/KDR+, CD-45dim/CD34+/KDR+/CD133+ and CD45dim/CD34+/CXCR4+ mononuclear cell populations were increased 1.48 fold (p = 0,006), 1,67 fold (p <0,001) and 1.36 fold (p = 0.005) respectively in sevoflurane treated patients at 24 h postexposure versus baseline, whereas in the control group they exhibited similar levels at both time points. Although without statistical significance, in the culture assay the number of adherent DilAcLDL+/ FITC-UEAI+ cells was slightly higher at 24 h post-exposure versus baseline in the study group (1.14 fold, p >0.05), while in sham-treated patients was observed a discrete lowering of the cultured EPCs at the same time point versus baseline (0.94 fold, p >0.05). In conclusion, the discontinuous sevoflurane administration to CAD patients increases the levels of circulating EPCs. Although preliminary, our results sustain the initiative of using preconditioning protocols with volatile anesthetics during percutaneous coronary intervention, in cardiovascular and non-cardiovascular surgery or for supporting regenerative medicine.

Financial support: research grant PN-II-RU-TE-2012-3-0463, UEFISCDI Romania.

(ID 337) The nutritional effects of *Helicobacter pylori* infection in symptomatic children admitted in a digestive unit

Luiza Bordei, Victoria Hurduc, Varvara Toma, Doina Anca Plesca

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Introduction: *Helicobacter pylori (H. pylori)* infection affects about 30% to two-thirds of human populations and has an significant impact on gastrointestinal system associated with extraintestinal manifestations, which depend on the time of acquisition and of eradication. There are conflicting results regarding the nutritional effects of H pylori infection in children mostly about the reduced bioavailability of essential nutrients with growth impairment.

Objectives: To evaluate the effects of *H. pylori* infection on the nutritional and the iron status of symptomatic children that required a first upper endoscopic evaluation.

Methods: This was a prospective study of 406 symptomatic children (254 girls, age, range 6 months-18 years) mostly with uninvestigated dyspepsia or extradigestive signs suggestive for organic disease, admitted in our digestive endoscopy unit, from January to December 2016. Socioeconomic status, medical and clinical data were analysed. Weight, height, body mass index (BMI) for age and sex were used according to growth charts provided by WHO, 2007. H pylori infection was documented by at least two standard invasive tests. Hematologic parameters and nutritional status were compared in patients with and without H pylori infection. Chi-squared test was used for statistical analysis.

Results: Active *H pylori* infection was documented in mostly of studied patients (251 of 406 children: 61.8%). The socioeconomic status was low in the majority of cases (239 of 406 children: 58.86%). The majority of patients presented normal nutritional status (252 of 406 cases: 62.02%), with a significant proportion of wasting (13.05%) associated with risk to underweight (12.8%) overweight (9.85%) and obesity (2.22%). The stunted was observed only in 3.8% cases. Iron deficiency anaemia was found in 64 of 406 cases (15.76%), most frequently in infected (44 of 251 cases; 17.52%) compared to uninfected children (20 of 155 cases; 12.90%), p= 0.27.

Conclusions: The *H pylori* prevalence rate (61.8%) revealed by our study suggests that this infection remains a semnificative problem in our country. This endoscopic series revealed a coexistence of undernutrition with overnutrition in symptomatic H pylori infected children, but without statistically signification for the both ends of the spectrum of poor nutritional status (p= 0.93, respectively p= 0.24) compared with uninfected ones.

(ID 325) Semiquantitative nailfold videocapillaroscopy assessment in a systemic sclerosis cohort - a pilot study

Ana Maria Gheorghiu, Raida Oneata, Liviu Macovei, Mihaela Milicescu, Mariana Sasu, Marilena Gorga, Mihai Bojinca, Victor Stoica, Carina Mihai

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Background: Nailfold capillaroscopy (NFC) is essential in the evaluation of systemic sclerosis (SSc). Semiquantitative capillaroscopy scoring is a promising tool for assessing disease activity, severity and change in SSc, however there is no consensus over which capillaroscopy abnormalities should be analyzed and how.

Objectives: To investigate the reliability of the qualitative and semiquantitative scoring of NFC assessment between two raters and test-retest for each rater in a SSc cohort.

Methods: In this pilot study from EUSTAR100 centre, 2 raters assessed the NFC images of 48 consecutive SSc patients. Data were analyzed in 3 ways, qualitatively: (1)'normal'/'abnormal' category, and (2)'early', ‚active', ‚late' scleroderma patterns, and semiquantitatively: (3) by calculating mean scores for capillary loss, disorganization of the microvascular array, giant capillaries, microhaemorrhages and capillary ramifications; combinations of giant capillaries&microhaemorrhages (surrogate for vascular activity) and disorganization & ramifications (surrogate for vascular damage) were also assessed. Inter-rater/intrarater agreement was assessed by Cohen's kappa coefficients for qualitative variables and by intraclass correlation coefficients (ICC) for mean score values of abnormalities.

Results: Interrater reliability ranged from good to excellent agreement for mean score values of abnormalities in all fingers (ICCs=0.745-0.897) and was excellent for activity (ICC=0.923) and damage combinations (ICC=0.918). Qualitative assessment of abnormalities showed weaker interrater agreement than the semiquantitative assessment (kappa <0.7). When scores were assessed in each finger, interrater reliability was good to excellent for mean scores of abnormalities and activity and damage combinations (ICCs=0.781-0.867 for mean scores and 0.713 to 0.856 for combinations), whereas for qualitative assessments interrater reliability was much weaker (kappa<0.7). Intrarater variability was good to excellent for mean scores of abnormalities and activity and damage combinations in all fingers and separate fingers for both raters; for qualitative assessment only one of the raters had good test-retest reliability.

Conclusion: Reliability of NFC assessment is essential in SSc trials/clinical practice to ensure quality of data. This pilot study demonstrates very good reliability between raters of the semiquantitative NFC assessment in a SSc cohort. Combinations of capillaroscopy abnormalities had very good reliability and might be preferred because they are less time consuming.

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(ID 80) The exoskeleton modern theraphy of upper limb rehabilitation skills

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Introduction/Aim: Upper limb disability-consequence of multiple central and peripheral neurological diseases - represent a priority in physical therapy rehabilitation in order to increase the quality of life for children.

Currently, computerized therapy joins classical rehabilitation efforts in order to get results faster motivating the patient to be more involved. Exoskeleton rehabilitation is a system whose difficulty level can be adjusted depending on the patient's driving performance and is based on augmented virtual reality thus wanting to keep a high level of motivation.

There are possible assessments and functional training for all upper limb joints, leading to increase both mobility and coordination, accuracy and stability for little patients.

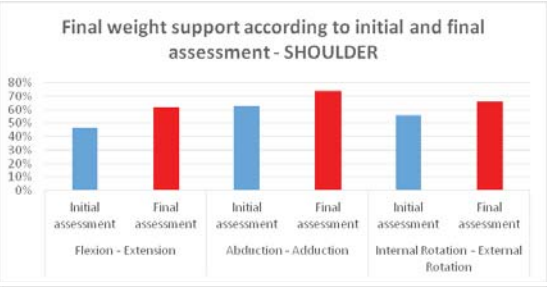
Material and methods: The study has included 10 children in-patients at CNCRNC Dr. Robanescu, aged between: 4-12 years, diagnosed with Cerebral Paralysis.

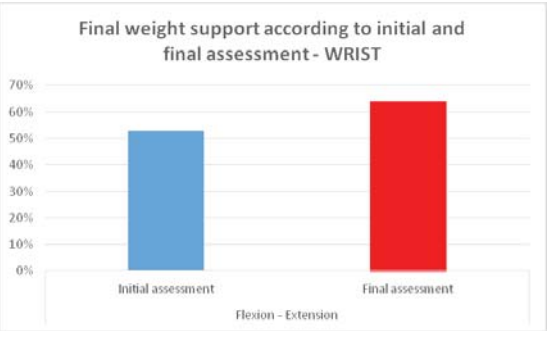
Evaluation was done using computerized instrumentation offered by Armeo software. Patients were evaluated on the first and last day of hospitalization and during the period they were trained with functional exoskeleton, daily for 2 weeks.

It was evaluated the mobility of the shoulder (Flexion-Extension/F-E, Abduction-Adduction/ABD-ADD, Internal Rotation-External Rotation/RI-RE), the mobility of the elbow (F-E, S-P) and the mobility of the wrist (F-E).

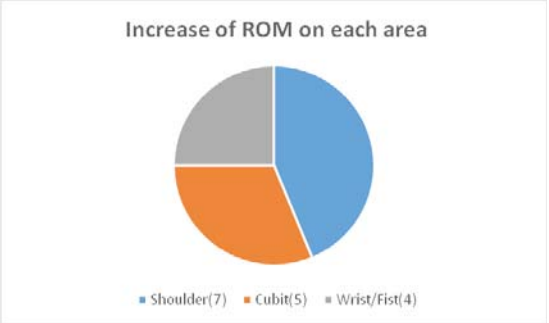
Motivational games were used to increase the global amplitude of the upper limb (i.e. playing with bubbles), to develop the coordination, accuracy and stability (i.e. island game) and to train the supination (i.e. goal-keeper game).

Results:

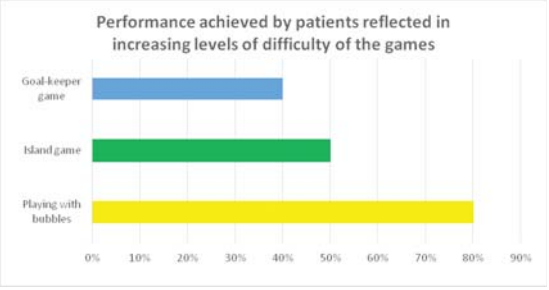




Final assessments recorded the increase of global amplitude for all 10 patients and improvement of coordination, accuracy and stability from easy to medium level.



The most important increase in amplitude -RANGE OF MOTION/ROM- was observed in the shoulder zone.



Conclusions: The exoskeleton computerized method is an effective method to recovery of upper limb disability by automatic evaluation of joint function, by getting better results in a short time, by motivating the patient through feedback provided, by gradual increasing of difficulty of exercises and by monitoring easily the progress.

(ID 382) New insights on oxidative stress in chronic stable atherosclerosis

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Background: Recent research highlighted the role of oxidative stress (OS) and the contribution of the highly proatherogenic hypochlorite anion (OCl) to the early stages of atherosclerotic vascular damage.

Purpose: To assess if OS and OCl contributes to the progression of chronic stable aterosclerosis using a new fluorescent assay capable of selectively detecting OCl.

Method: 39 patients (pt) aged 73±10 years, 22 (56%) men, with carotid atherosclerosis (CA) and/or peripheral artery disease (PAD) were included. Control group comprised 19 healthy volunteers. Ankle brachial pressure index (ABPI) non-complicated atherosclerotic plaques and intima-media thickness (IMT) were recorded. OS level was assessed using a dedicated fluorescent probe-dichlorodihydrofluorescein diacetate (H2DCFDA). OCl detection required the use of two fluorescent probes: hydroxyphenyl and aminophenyl fluorescein.

Results: From the ASC group, 35 patients (90%) had CA, 15(39%) had PAD and 10(26%) had both. The presence of CA and PAD were strongly associated (chi=7.1, $p<0.01$). There was no increase in OS or OCl for an IMT >0.9 mm. Oxidative stress increased in patients with atherosclerotic plaques ($p=0.03$), but not OCl. PAD presence did not influence the total OS or the OCl level.

Conclusions: OS has increased basal levels in patients with atherosclerotic plaques. However, OCl level was not elevated in chronic stable ASC. OS and OCl were not increased in the pre-atherosclerotic intimal hyperplasia phase. The preliminary results results suggest that OCl is not involved in the pre-atherosclerotic phase and may not contribute to the maintenance of the chronic process. Future studies are necessary to determine if OCl is involved in the complicated atheromatous plaque or in the atherotrombosis process.

PRECLINICAL SPECIALITIES

(ID 76) Genotypic and phenotypic characterization of the virulence profile of Staphylococcus aureus isolates from chronic skin ulcers

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Objectives: *Staphylococcus (S.) aureus* represents the most frequent isolate from chronic skin ulcers. Although wound colonization and infection rarely progress towards septicemic events, methicillin resistant S. aureus (MRSA) is a major nosocomial pathogen, frequently reported in severe infections. We aimed to characterize and compare the virulence profiles of S. aureus isolates from patients with chronic wounds of different etiologies, and to establish clinical and microbiological correlations.

Methods: The study was performed on 78 strains of *S. aureus,* isolated from patients diagnosed with chronic skin wounds, mostly of venous etiology (33 strains), arterial ulcers (6), lesions of mixed etiology (8), pressure sores (5), chronic abscesses (14), bullous or pustular chronic diseases (8), paraneoplastic ulcers (2), and non-healing surgical wounds (2). The phenotypic screening included the bacterial adherence to HeLa cells, the expression of eight soluble virulence factors, as well as the ability to develop biofilms in vitro. From the total number of MRSA strains, 24 were screened by PCR for eight virulence genes (bbp, ebpS, fnbA, fnbB, fib, coag, clfA, clfB).

Results: Compared to other sources, microorganisms isolated from chronic venous ulcers (CVU) expressed more exotoxins involved in local invasiveness (caseinase, gelatinase) and less in bacterial dissemination (hemolysins, lipase, lecithinase). Moreover, MRSA isolates showed higher virulence patterns compared to methicillin susceptible bacteria and higher adherence to eukaryotic cells. ClfA (95.8%), clfB (95.8%) codifying bacterial adhesins, and coag (95.8%) involved in the persistence of infection were the most commonly detected virulence genes. fnbA (70.8%) associated with systemic dissemination of infection was present two times more often in isolates from other sources, rather than CVU. All tested strains proved the ability to develop biofilms.

Conclusions: The results suggest the existence of a less virulent profile of *S. aureus* isolates from CVU that could explain the rarity of severe infectious systemic events. Also, the particular virulence profile of the microorganisms, characterized by local invasiveness, bacterial adherence, and biofilm development could explain the persistence of infection and delayed healing of CVU.

(ID 88) Epigenetic markers associate with HIV induced neurocognitive impairment

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Objectives: HIV induced neurocognitive impairment continues to be an important health issue despite successful suppression of viral replication by antiretroviral therapy. One possible explanation for HIV neuropathogenesis implicates the action of epigenetic factors like small non-coding RNA, among them miR-29a previously involved in HIV progression or DNMT1 (DNA methyl-transferase 1) an enzyme responsible for maintenance of DNA methylation patterns. DNMT1 is indirectly down-regulated by miR-29a that targets one transactivator of DNMT1 gene. Both miR-29a and DNMT1 are connected with establishment and progression of diseases like Alzheimer or multiple sclerosis with some mechanisms partially common with HIV induced cognitive decline. We investigated a possible association of miR-29a and DNMT1 with HIV neurocognitive impairment.

Methods: The neurocognitive status of 144 HIV patients was evaluated by a comprehensive testing battery that analyzed 7 cognitive domains (executive functions, verbal, memory, learning, working memory, motor and speed of information processing) and a global deficit score was calculated for each participant (cut off: >0.5).

Expression levels of miR-29a (Life Technologies - TaqMan® Assays) and DNMT1 (Roche - Universal SYBR Green Master) were measured by qPCR in peripheral blood mononuclear cells and normalized against RNU43, a small-nucleolar RNA and two house-keeping genes GAPDH and β-actin.

Results: All patients (median age 24 years, 45.8% males) were long-term infected (median duration of HIV infection: 23.88 years) and treatment-experienced (median time on antiretrovirals: 12.47 years). Neurocognitive impairment was present in 35.4% of the patients.

A significant difference in miR-29a levels was observed in Verbal and Memory areas, impaired patients having a lower miR-29a expression vs. non-impaired ones: 0.79 vs. 1.86, $p=0.01$ and 1.31 vs. 2.03, $p<0.05$, respectively. A negative correlation was found between miR-29a and DNMT1 ($p=0.005$, rho= -0.23). Higher DNMT1 expression levels were recorded among patients with worst global cognitive perfor-

mance (0.009 vs. 0.004, p=0.02); as well as in 3 particular cognitive domains: Verbal (0.01 vs. 0.006, p=0.06), Learning (0.009 vs. 0.005, p=0.04) and Motor (0.009 vs. 0.005, p=0.04).

Conclusions: These data suggest that miR-29a and DNMT1 could represent potential biomarkers of neuroHIV and these findings may improve our understanding of molecular mechanisms involved in HIV cognitive impairment development.

(ID 247) Testing leukocyte subpopulations for the activation of mitogen-activated protein kinase signalling pathway and for oxidative stress responses

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Aim: We tested whether different leukocyte populations can be used as tool to highlight oxidative stress responses in blood related to MAPK, NF-kB and NRF2 signaling pathways.

Methods: Whole blood from healthy volunteers and rheumatoid arthritis patients was harvested in heparin-treated vacutainers, and leukocyte populations were isolated by centrifugation in density gradient and further lysis of red blood cells. Cell fractions, nuclear and cytoplasm, were separated, and proteins were extracted either by centrifugation for soluble proteins, or detergent extraction for membrane proteins. The Luminex multiplex assay was used for MAPK and NF-kB activity assessment, whilst Western blot was performed for NRF2.

Results: 1. Of the tested protocols, sucrose based separation of nuclear and cytoplasmic fractions was the most efficient method; 2. Multiplex testing of the transcription factors ERK, p38 and JNK provided inconclusive results, probably due to the low activity of these factors in resting leukocytes; 3. NRF2 expression was detected only in the cytoplasm and not in the nuclear fraction, hence indicating that the NRF2 pathway was inactive in resting leukocyte populations. This was further confirmed by the lack of heme-oxygenase 1 expression, a target gene of NRF-2.

Conclusions: the whole leukocyte population provided the most visible responses, but not necessarily the most relevant ones. The multiplex assay for detecting MAPK and NF-KB activity is not suitable for investigations in resting cells. Western blot was more sensitive and can be used for evaluation of responses to oxidative stress in leukocyte subpopulations.

Key words: oxidative stress, NRF2, MAPK, NF-kB

Acknowledgments: This work has been partially supported by the European Regional Development Fund, Competitiveness Operational Program 2014-2020, through the grant P_37_732/2016 REDBRAIN and by grant PN 16.22.03.03/2016

(ID 184) Carbapenemase inhibition challenge method: a quick way to check for the presence of carbapenemases - a pilot study on 3 Klebsiella pneumoniae strains

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Institute of Chemistry Ilie Murgulescu, Bucharest, Romania
Institute of Pneumology Marius Nasta, Bucharest, Romania

Objectives: To describe a novel method of rapid identification of carbapenemase activity by inactivating Meropenem and challenging Escherichia coli ATCC 25922 which is used as a highly susceptible growth indicator strain.

Methods: *Escherichia coli* ATCC 25922's minimal inhibitory concentration (MIC) was tested using a modified Mueller-Hinton broth method. Briefly, 2500 μL of bacteria (0.5 McFarland) was tested against varying concentrations of Meropenem suspended in 500 μL of water. Results were interpreted after 24 hours.

Eppendorf tubes containing *Klebsiella pneumoniae* strains with carbapenemase activity (KPC-1, NDM-1, OXA-48) and others with no carbapenemase activity (K. pneumoniae ATCC 700603 and *E.coli* ATCC 25922) were incubated at 37°C with varying concentrations of Meropenem for various lengths of time. After incubation, samples were spun down until a pellet formed and the supernatant (500 μL) was used to challenge 2500 μL *E.coli* ATCC 25922. This culture was followed with nephelometric measurements every half hour.

The statistical analysis was done with R (v3.2.1) and graphs generated in RStudio (v1.0.136) with ggplot2 (v2.1.0). Experiments were carried out in three replicates and Wilcoxon Signed Rank Test with the assumption of independent samples was used to analyse the results.

Results: The modified MIC of *E. coli ATCC25922* was 0.5 μg/mL. This was later used to establish the dose of Meropenem used.

We chose a final Meropenem dose of 0.66 μg/mL and incubation times of 30 minutes and 60 minutes.

In the presence of strains with carbapenemase activity, growth of *Escherichia coli* was not hindered by Meropenem. In controls, the growth indicator was inhibited. At two hours work time, the McFarland indices were significantly different in between the controls.

Conclusions: Carbapenem resistance has direct clinical as well as epidemiological implications. Among the mechanisms implicated in resistance to carbapenems, the presence of a carbapenemase is one of the most worrying global epidemiological features. This test can be performed in any clinical microbiology laboratory, with no extra expense (as opposed to CarbaNP and BlueCarba tests).

(ID 353) Effect of sevoflurane preconditioning in light-induced retinal damage

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Objectives: Phototoxic maculopathy is one of the complications that can occur during prolonged ophthalmologic surgeries. In order to prevent or attenuate it, strategies to protect the retina should be developed. The main purpose of this study is to explore the effect of sevoflurane anesthesic preconditioning on a model of light-induced retinal degeneration in rats and to determine if sevoflurane has neuroprotective role for retinal cells.

Methods: For this experiment we used 10 Wistar rats that were randomly divided into two groups: control and experimental. For both groups we recorded basal electroretinogram (ERG), one day before exposure to photostress. Photostress was achieved by exposure to 20.000 lux illumination for 2 h. Rats in the experimental group were preconditioned with 2% inhalatory concentration of sevoflurane for 1h before exposure to photostress. ERG was performed at 36h, 7 and 14 days after photostress. ERG a- and b-wave latencies and amplitude were analysed and compared between groups.

Results: Sevoflurane had a protective effects on light-induced neuroretinal degeneration proved by significant less variations of the ERG before and after photostress between control and experimental group. A decrease of the ERG potentials at 36h, 7 and 14 days were seen in both groups after light-induced damage. The decrease in ERG amplitude characteristic of retinal degeneration and function loss was found considerably less important in the sevoflurane preconditioned group.

Conclusions: Our results imply that preconditioning with sevoflurane anesthesia offers a certain degree of protection to retinal cells against light damage, preserving retinal function. With the support of this study, therapeutic protocols might be developed and implemented in order to reduce the number of intraoperative lesions caused by light.

(ID 369) Intracellular chloride concentration affects the cellular viability of rat primary hippocampal cell culture exposed to oxygen-glucose deprivation

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Introduction: Ischemic stroke is a major contributor to human death and functional impairment. This condition is mimicked in vitro by oxygen-glucose deprivation (OGD) and is characterized by important alterations in neuronal ionic homeostasis. Recently, considerable attention has been focused on the intracellular Cl- concentration and its modulation by cation–chloride cotransporters Na–K–Cl cotransporter (NKCC-1) and K–Cl cotransporter (KCC2), as they may play an important role in the disruption of ion gradients and subsequent ischemic damage.

In the present study we explore the effect of specific inhibitors such as bumetanide, NKCC-1 inhibitor and DIOA, a KCC2 inhibitor, on primary hippocampal cell cultures exposed to OGD.

Materials and methods: Primary cultures of hippocampal neurons were obtained from postnatal day 0 Wistar rat pups. After 7 days *in vitro,* cell cultures were exposed to increasing durations of OGD conditions: 1 h, 1.5 h, 2 h and 3 h, in order to evaluate the severity of metabolic deprivation. Part of the cell cultures exposed to 2h OGD or control conditions received treatment with either bumetanide (10μM) or DIOA (20μM). Assessment of cellular metabolism and viability was performed using resazurin assay, after 3-hour reoxygenation in a normoglycemic/normoxic medium.

Results: OGD decreased cell viability to 96.83% ($p>0.05$) when compared to control for 1 h exposure, to 92.37% ($p>0.05$) for 1.5 h exposure, to 69.27% ($p<0.001$) for 2 h exposure and to 45.12% ($p<0.001$) for 3 h exposure. Also, for the 2 h OGD exposed cultures, treatment with DIOA further decreased cell viability to 53.43% ($p<0.05$), while bumetanide treatment did not contribute significantly (cell viability 79.16 %).

Conclusions: Both 2 h and 3 h OGD exposures of hippocampal cultures resulted in a significantly metabolic stress, but the 2 h OGD exposure could be more useful for neurotoxicity/neuroprotective studies. Also, DIOA was detrimental to mature neurons under ischaemic conditions, whereas bumetanide had no significant effect, thereby questioning the expressions of NKCC-1 and KCC2 in mature hippocampal neurons. These cotransporters play an important role in the changes of ionic gradients and subsequently in ischemic damage, making their modulation an important method for further neuroprotection studies.

Acknowledgements: This project was supported by Young Researcher grant nr. 5/2014.

PHARMACY

(ID 95) Comparative biological evaluation of 68Ga-NODAGA-NOC for adenocarcinoma and glioblastoma diagnosis

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Objectives: Radiopharmaceuticals are a special class of medicines, containing one or more radioisotopes attached to a specific/ active biomolecule, used for diagnosis and therapy purposes.

They are both characterized from risk related to pharmaceutical and radiological perspective.

Ga-68 compounds are used as radioactive diagnostic agents for Positron Emission Tomography (PET).

PET is a modern nuclear imaging technology that permits evaluation of pharmacokinetic/ pharmacodynamics and toxicity to a specific organ visualization by directly *in vivo* monitoring the radioactivity accumulation.

This work presents the biological evaluation on U87MG and Caco-2 of the radiopharmaceutical candidate 68Ga-NODAGA-NOC, a somatostatin analogue, radiolabeled with Ga-68 entrapped by NODAGA chelator.

Methods: The biological profile consists of investigating *in vitro* binding characteristics of the radiolabeled peptide by auto-radioimmunoassay, performed using Ligand Tracer method on U87 MG and Caco- 2 cell lines, based on real-time quantification of protein - cell receptors interactions.

Results: The biological *in vitro* study of 68Ga-NODAGA-NOC on U87 MG glioblastoma cells show a rapid uptake and a retention of 70% of the radioactivity (decay corrected) up to 85 min.

The uptake trend line of 68Ga-NODAGA-NOC on Caco-2 cells is gradual while the radioactivity (decay corrected) retention is about 35% up to 85 min.

The uptake/retention measurements of 68Ga-NODAGA-NOC on U87 MG cells sugest a superior candidate comparing with other 68Ga-radiolabelled peptides obtained by our research group, such as 68Ga-DOTA-TOC, 68Ga-DOTA-[c(RGD)]2 and 68Ga-NOTA-[c(RGD)]2.

Conclusions: 68Ga-radiolabelled NODAGA-NOC requires supplementary *in vivo* investigations as promising candidate for early detection of glioblastoma and adenocarcinoma. Further investigation are needed by conducting complex preclinical studies, both *in vitro* and *in vivo,* as long as results accurate interpretation is mandatory for the development of efficient and safe radiopharmaceuticals.

(ID 162) Formation of liquid marbles from hydrophobic powders – an experimental approach

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Surface properties are continuously explored. Novel techniques and materials are used in order to discover more applications, with expansion towards understanding innovative phenomena.

This work explored a technique for liquid marbles formation and a method to measure the effective surface tension and contact angle. Liquid marbles, also known as "encapsulated or dry water", consist of hydrophobic powders which encapsulate a drop of liquid transforming it into a completely non-wetting soft solid.

In this study, liquid marbles were obtained using conventional equipment, with liquids exhibiting high surface tension. This paper follows the formation of liquid marbles using a microliter syringe. Drops of water and glycerin were placed and rolled on a dry bed of hydrophobic powder, represented by salicylic acid, as a substrate model. The process was observed using a high speed camera, the surface tension and contact angle were measured with a goniometer CAM 101. The critical surface tension of a liquid allows marble formation, in relation with the nature of the hydrophobic particles.

Our preliminary experiments show that liquid marbles do not form on their own. In order for the outer shell to form, a bulk fluid motion is required. In some cases, the process of liquid marble formation was not fully successful because the powder shell initially began to form, but was not stable and the drop penetrated the powder.

The ultimate aim of this ongoing study was to establish the operational conditions in order to maintain the stability of formed liquid marbles. A model that ensures the surviving of the powder shell was suggested.

Liquid marbles convert a problematic physicochemical property (hydrophobicity) into a particle design advantage. The extraordinary properties, appearance and behavior as fluid-solid spheres, recommend the use of liquid marbles for pharmaceutical formulations and cosmetics, as carriers of substances, microreactors, detectors of water pollutants.

(ID 77) Effect of extraction procedure, solvent and drug-to-solvent ratio on phenolic and carotenoid content from Corni Mas Fructus

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Aim. The purpose of this paper is to establish the influence of operational parameters (solvent, extraction procedure, drug-to-solvent ration) on the extraction of active compounds, from cornelian cherry fruits, in order to develop a technological process for obtaining standardized extracts with high content of pharmacologically active compounds (flavonoids, phenol-carboxylic acids and carotenoids).

Material and methods. The cornelian cherry were purchased from a local market in Bucharest, in September, 2016. The solvent influence was established by extraction with absolute ethanol and 50% ethanol (v/v). The extraction procedure influence was assessed using maceration, sonication and refluxation. For the variable drug-to-solvent ratio, the fruits were extracted using 1:10, 1:20 and 1:30 drug-to-solvent ratio. The quantitative determination of flavonoids, phenol-carboxylic acids and carotenoids were assessed using spectrophotometric methods, employing a Jasco V-530 spectrophotometer. The results were expressed as g% active principles/ 100 g of raw material, based on previously established calibration curves (rutin, linearity range: 5.0-35.0 μg/mL, R2 = 0.9998, n = 11; chlorogenic acid, linearity range: 0.0113-0.0527 mg/mL, R2 = 0.9998, n = 6; β-caroten, linearity range: 2.0-10.0μg/mL, R2 = 0.9990, n = 9).

Results. Extraction with 50% (v/v) ethanol gives higher quantity of active compounds (77.03 mg% rutin, 322.24 mg% chlorogenic acids, 76.95 mg% β-caroten) than with absolute ethanol (55.04 mg% rutin, 188.15 mg% chlorogenic acids, 16.13 mg% β-caroten). By refluxation the quantity of phenolic compounds and carotenoids (78.47 mg% rutin, 403.14 mg% chlorogenic acids, 90.49 mg% β-caroten) is slightly similar to maceration (97.42 mg% rutin, 390.16 mg% chlorogenic acids, 57.59 mg% β-caroten). Sonication provides low quantity of active compounds (20.70 mg% rutin, 73.21 mg% chlorogenic acids, 36.89 mg% β-caroten). This fact indicate that higher temperature (refluxation) and prolonged time of contact (maceration) have higher impact on active principles extraction than stirring (sonication). The optim drug-to-solvent ratio that gives extracts with high content of polyphenols and carotenoids is 1:10 (110.43 mg% rutin, 391.64 mg% chlorogenic acids, 91.56 mg% β-caroten).

Conclusion. The selected technological parameters in order to obtain extracts with high antioxidant activity are: hydroethanolic mixture (50:50 v/v), refluxation, drug-to-solvent ratio of 1:10.

(ID 58) Lychnis Flos-Cuculi (Ragged Robin) - chemical composition and antioxidant activity

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Development of herbal products as a source of active substances with antioxidant activity is an area of great interest, due to oxidative stress role in the pathology of numerous diseases.

Objective. The aim of our study was the determination of chemical composition and antioxidant activity (*in vitro*) of Lychnis flos-cuculi (ragged robin) aerial parts.

Material and methods. The herbal product was harvested in June 2016, from Morareşti (Arges district, Romania) and freeze-dried. Qualitative (specific chemical reactions, thin layer chromatography = TLC) and quantitative assays were performed on hydroalcoholic (50% ethanol) and aqueous dry exacts, in order to determine the influence of solvent type upon chemical composition and antioxidant capacity (ferric reducing power, scavenger activity towards ABTS free radical). Quantitative assays consisted in determination of total phenolic content (g% tannic acid), phenolcarboxlyic acids (g% chlorogenic acid), anthocyanidins (g% cyanidin chloride) and flavones (g% rutin).

Results. Both dry extracts are a source of flavones, phenolcarboxylic acids, antocyanidins and saponins. Chemical reactions for phenolic compounds identification were more evident for the hydroalcoholic extract, whereas the reaction for saponins was more intense for the aqueous dry extract. TLC analysis revealed the presence of luteolin, chlorogenic acid and oleanolic acid in both analysed extracts. The highest content of total polyphenols (5.09 g%), flavones (0.36 g%), phenolcarboxylic acids (1.68 g%) and anthocyanidins (0.10 g%) was found for the hydroethanolic dry extract. Both extracts have a similar ferric reducing power, however the scavenger activity upon ABTS free radical was higher for the aqueous extract (EC50 = 0.15 mg/mL vs. EC50 = 0.29 mg/mL).

Conclusions. The solvent type is a key factor that influences both chemical composition and antioxidant activity of ragged robin aerial parts. From our point of view both dry extracts are a source of bioactive compounds and might be used in therapeutics, for their antioxidant activity.

(ID 57) New synthesis in the diphenylsulphonamides compounds with pharmacological properties

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Objectives: Nowadays the synthesis of new molecules is very important. We are looking for new drugs with new pharmacological activities or better efficiency and lower side effects. We can use radicals that have been studied for pharmacological actions and introduce them in new structures in order to obtain new derivatives with improved pharmacokinetic and toxicological profile.

It is known that the ureido radical has many therapeutical properties: antimicrobial, anticonvulsant, antiinflamatory, antidepressant, antiproliferative, antiviral, antiulcerogenic. On the other part, the sulphonamide group has antimicrobial and hypoglycemic activity. In recent studies, new pharmacological properties were researched and assigned for derivatives of sulphonamides: inhibition of matrix metalloproteinases (involved in chronic obstructive pulmonary disease, ulcer, asthma and cancer) antidepressant effect (more active than imipramine for some compounds), inhibition of fibrillogenesis and oligomer formation, free radical scavenging and modulation of cholinesterase activity (properties that can be used in the treatment of Alzheimer's disease), inhibitors of carbonic anhydrases.

Method: The new ureido-substituted diphenylsulphonamides were obtained treating the 4-(benzensulfonamido)benzoyl azide with halogen substituted aromatic amines in anhydrous dioxane.

Results: We obtained halogeno-substituted compounds (Cl, Br, I) in order to improve the pharmacological effect, using a new synthesis path, starting from the azide. This new substances contain three important moieties that could determine a potential pharmacological effect: halogens, urea and sulphonamide group. The derivatives' structures were characterized by IR, 1H-RMN, 13C-RMN and elemental analysis. In the future we intend to test the compounds' pharmacological activity.

Conclusions: In this article we present a new method of obtaining new sulphonamides derivatives with halogens and ureide structures, using as a starting point of synthesis an azide.

(ID 238) The activity of ABCB1 transporter on the N2A neuroblastoma cell line

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Objectives: In this study we aimed to investigate the ABCB1 transport activity and to assess the modulatory effect of glutathione (GSH, at physiological concentration), after exposure to central nervous system active (CNS) drugs which are intended to inhibit the efflux pump which is directly involved in multidrug resistance.

Materials and methods: there were used 105 cells/mL murine N2a neuroblastoma cell suspensions and solutions of quinidine (Q), fluoxetine (F), lithium (Li), risperidone (R), thioridazine (T) and valproic acid (V): 12.5 μM, 25 μM, 50 μM,100 μM and 200 μM prepared in culture medium. The cells were incubated with the drugs in temporal dynamics (t=0,15,30,60 minutes). Quinidine was used as a classical inhibitory agent of the ABCB1 tranporter, not for its pharmacological effect. There were performed the trypan blue cytotoxicity test and the calcein inhibition test. In the next step it was added GSH, at physiological concentration (10 mM). After all the procedures were performed, the fluorescence intensities for all samples were recorded.

Results: The studied drugs have shown no cytotoxic effect and the calcein test revealed the strongest inhibition effect for risperidone and thioridazine. After adding glutathione in the system, the greatest inhibition process was registered for lithium.

Conclusions: None of the studied drugs have shown cytotoxic effects and the physiological concentration of GSH antagonized the inhibition effect of ABCB1 transporter, exerted by risperidone and thioridazine.

(ID91) Highly agressive mucinous endometrial adenocarcinoma

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Objectives: Mucinous adenocarcinoma is an uncommon type of endometrial adenocarcinoma, accounting less than 1% of endometrial carcinomas. It is mostly categorized as a low-grade tumor that is typically less aggressive. Mucinous adenocarcinoma occurs more frequently in postmenopausal or perimenopausal women, affecting both nulliparous and multiparous ones. There are some cases linked to KRAS gene mutations. Although precursor lesions are unknown, some researchers demonstrated the association between mucinous metaplasia and mucinous adenocarcinomas. We report the case of a 53 years old patient, with menometrorrhagia, uterine tumor with unpredictable evolution, HPV 18 positive cervical lesion and complex atypical hyperplasia on a previous biopsy.

Method: Endometrial biopsy was performed. Under the microscope, the sample showed a complex atypical endometrial hyperplasia, which is an indication for total hysterectomy with bilateral anexectomy. The next step to be taken was histopathological specimen examination which indicated an aggressive, stage FIGO IIIC, mucinous endometrial carcinoma. Further, we used imunohistochemestry and special stains which confirmed our previous findings.

Results: The microscopic examination revealed a well differentiated endometrial mucinous carcinoma (G2), which invaded more than half of the total thickness of the wall of the uterus, the endocervix and the cervical stroma, but without parametrial, salpingean or ovarian invasion. We identified relatively frequent lymphovascular tumor emboli in the blood vessels of the cervical stroma. Two lymph nodes presented malignant tumoral invasion. The rest of them presented marked sinus histiocytosis, hyalinisations and dystrophic calcifications. The immunohistochemical tests and special stainings sustained the initial histopathological diagnosis of endometrial mucinous carcinoma.

Conclusions: Although mucinous adenocarcinoma is characterized by low invasiveness, the peculiarity of this care lies in the unusual aggressiveness of the tumor, indicated by the histopathological examination. Imunohistochemestry tests and special stains confirm the initial histopatological diagnosis. Most relapses occur after 3 years of treatment. Frequent monitoring once every 3-4 months during the first 2 years by clinical examination and gynaecological examination every 6 months are the best follow-up choices. Further inquiries can be made if clinically necessary.

(ID 219) Assessing students' and resident physicians' satisfaction toward the curricula of the Faculty of Medicine within the University of Medicine and Pharmacy Carol Davila Bucharest

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Objectives: 1. Assessing the students and resident physicians' satisfaction toward the curricula of the Faculty of Medicine within the University of Medicine and Pharmacy "Carol Davila" Bucharest; 2. Evaluating whether the difference in satisfaction between these two groups is statistically significant.

Methodology: For evaluating the satisfaction toward the curricula of the Faculty of Medicine within the University of Medicine and Pharmacy "Carol Davila" Bucharest, we conducted a study from January to July 2016. The data was collected by conducting a satisfaction questionnaire on 182 participants. There were 110 student participants and 72 resident physician participants. The students interviewed were in their 6th year of study at the University of Medicine and Pharmacy "Carol Davila" Bucharest – Faculty of Medicine and the resident physicians were all graduates of the University of Medicine and Pharmacy "Carol Davila" Bucharest – Faculty of Medicine.

The satisfaction questionnaire consisted in 46 questions which evaluated the satisfaction toward the structure of the curricula, the courses, the practical work and the examination process. Each answer was adjusted to a 1 to 5 scale, where a score of 1 stands for total dissatisfaction while a score of 5 stands for complete satisfaction. The data was statistically tested by using the Chi-Square and Fisher's Exact Tests.

Results:

Parameter	Students' average score	Resident physicians' average score
Satisfaction toward the general structure of the curricula	2.54	2.80
Satisfaction toward the importance of the curricula	3.97	3.61
General satisfaction toward courses	2.45	2.69
Practicability of concepts taught during courses	1.85	1.86
Evaluation of courses regarding information updating	2.98	2.94

General satisfaction toward practical work	2.55	2.81
Practicability of concepts taught during practical work sessions	4.45	3.97
Satisfaction regarding the involvement in clinical exam	3.95	4.00
Satisfaction toward the examination process	2.57	2.69

Conclusions: Resident physicians are more satisfied than the students regarding the structure of the curricula but the observed difference was not statistically significant (p-value>0.01).

Resident physicians are more satisfied than the students regarding the courses and the observed difference was statistically significant (p-value=0.0002).

Resident physicians are more satisfied than the students regarding the practical work and the observed difference was statistically significant (p-value= 0.00001).

Resident physicians are more satisfied than the students regarding the examination process but the observed difference was not statistically significant (p-value=0.06).

(ID 374) The influence of HLA-BW4 haplotype in evolution AFTER HSCT

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Background: Continuing to study haplotypes of patients like ligands for inhibitories and activatories donors KIR allele in HSCT,it is an evidence that haplotypes can be protective or not against postHSCT complication,like ligand or not.

Aims: Haplotype HLA-BW4 is described in literature like ,,bad,, haplotype.We try to demonstrate the influence of this haplotype at patients with acute leukemia after HSCT.

Methods: Eighteen pairs patients-donors are evaluated:patients with acute leukemia,lymphoblastic and nonlymphoblastic and their genoidentics donors. Eleven patients have HLA-BW4 haplotype,seven HLA-BW6(absence of HLABW4) Following the impact of inhibitory KIR3DL1 and activatory KIR3DS1 on survival and complication development,we proved the protective effect of absence of HLA-BW4 haplotype,HLA-BW6 ,respectively.The source of HSCT was PBSC.The method used was PCR-SSP (Innotrain DIAGNOSTIK GMBH,Dynal BIOTECH PEL-FREEZE)The complications like graft versus host disease acute and chronic,relapse,TMA and the recovery with leucocytes and thrombocytes are followed.

Results: Absence of HLA-BW4 haplotype (HLA-BW6, respectively) is protective for both types of leukemia, the patients survival is 100% in presence of KIR3DS1 (activatory allele) and with statistical significance (sig<0,05) and 83% in presence of KIR3DL1 (inhibitory allele)Is protective against relapse, TMA, aGVHD, leucocytes and thromboytes recovery, with statistical significance in presence of KIR3DS4, and also in presence of KIR3DL1 is protective against aGVHD, TMA and relapse, also thrombocytes recovery, without statistical significance.

Conclusion: Absence of HLA-BW4 improve survival and protect against most complication at patients with acute leukemia and related donors with 100% allele match,in presence of both types of KIR alleles and confirme the ”missing ” ligand theory.

(ID 347) M-health usage survey: how and why are used mobile health applications by young population?

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Objective. The research focus on the some key issue regarding the behaviour of young population related with the use of M-health applications. The mobile health, or M-health, is a domain from E-health which aims to use mobile technology and smartphones in order to colect, analyze, stock and transmit health related information from various sources – personal entries, sensors or other biomedical systems.

Methods. An observational descriptive research was performed using a trasnversal approache, in the sample being inluded young population. The survey was conducted in two different years, 2014 and 2016, using the same tool for collecting the data – a questionnaire with predefined answers. The questionnaire was distributed on social media and email channels to population of interest. The results were centralized and processed using descriptive and analytical methods. For testing of the statistical differences between groups the Fischer test was used.

Results. The survey included 151 respondents in the sample questioned in 2014 and 72 respondents in the sample questioned in 2016. It was recorder a higher proportion of internet use on the phone for the group surveyed in 2016 (65% compared with 92%), the differences having statistical significance (p< 0.5). The frequency of use of the m-health applications is rather monthly, followed by weekly frequency. The most useful considered applications were the ones regarding medical information (30%), monitoring of physical training (22%) and the period calculator/calendar (21%). We have not found statistically significant differences between the manners of use of m health applications by gender.

Conclusions. Young smartphone users are interested in mobile health application, especially those focused on providing support for a healthy lifestyle. Respondents consider that health applications can be used by patients in monitoring their medical conditions and they have the potential to improve quality of life for those patients.

(ID 345) Knowledge about rare diseases among medical students

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Introduction. The development of research in the field of rare diseases and an adequate health care for this category of patients is possible only with a medical staff trained in this domain.

Objectives. The aim of this study is to evaluate the knowledge level regarding rare diseases among medicine students. The specific objectives are 1) to evaluate the information of the medicine student about rare diseases; 2) to analyze the training needs in this domain and 3) to identify the students' perception regarding the improvement of research and care of rare diseases.

Methods. The cross-sectional survey was developed between October 1st 2015 and June 30th 2016, on a population of 893 medicine students from the University of Medicine and Pharmacy Carol Davila Bucharest. The tool used in this study was a self-administrated questionnaire with 24 items, divided in 4 parts (socio-demographic data, knowledge regarding rare diseases, training requirements in this field and strategies to improve the research and treatment of these diseases). The statistical analysis included intergroup comparisons (based on gender and the level of scientific activity) using SPSS 22.0.

Results. Only 10% of the students knew the definition and the prevalence of rare diseases, without difference by gender ($p=0.630$). Regarding the clinical aspects and treatment of rare diseases over 80% of the students answered correctly. A part of medical students were included in research activity groups, with a higher proportion in male ($p=0.046$). The students involved in numerous scientific activities, had a higher number of correct answers ($p<0,001$). The importance of creating in Romania a rare disease registry have emphasized by 88% of the respondents. There were differences regarding the structure of this registry, because the female students wanted a national registry ($p=0.007$). About 2/3 of the students considered as necessary the introduction of a course regarding rare diseases.

Conclusions. The level of knowledge about the prevalence of rare diseases among medical students is low but they have a high level of clinical knowledge in this field. It is necessary to organize training sessions during medical school and also after in order to gain a better understanding of this field.

(ID 286) Monitoring living cell response to electroporation using digital holographic microscopy

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Aim: Cell electroporation represents one of the most promising biotechnological platforms of the moment, opening great perspectives in cancer treatment, immunotherapy and genetic therapy fields. Controlled electric pulse trains are delivered to cells and tissues increasing the cell membrane permeability to various (otherwise non-permeant) small molecules, drugs, proteins and nucleic acids. The cellular and molecular changes due to membrane permeabilization and consecutive recovery require however a better understanding. In our study we aimed to monitor the optical and shape-related properties of cultured cells exposed to trains of electric pulses used in electrochemotherapy. The refractive index (RI) was proved to be a parameter with high biological signification, being related to the cell content, cell division rate and membrane permeability.

Method: Digital Holographic Microscopy (DHM) is a modern interferometric technique that provides, after one single exposure and without chemicals, information about optical and geometrical characteristics of transparent biological samples, being adequate for monitoring the dynamics of living cells. We used an off-axis DHM set-up (HeNe laser operating at 632.8 nm). The decoupling procedure (cells bathing either in mannitol-based or in cell culture media) allowed to calculate RI and cell thickness, while information about cell shape was obtained from 3D reconstructed quantitative phase images. B16F10 cells were exposed to trains of bipolar rectangular pulses (1 kV/cm, 100 microseconds, 1 kHz, ELECTRO cell B10, Betatech).

Results: RI and cell height were calculated in a specifically defined area using the decoupling procedure and global cell parameters (projected area A, averaged optical phase shift OPS and dry mass DM) were monitored for 10 min. At 2 s after pulse delivery, the cell height increased by 33%, RI dropped by 1.2%, the latter recovering and reaching the controls value after about 4min. The biphasic evolution of cellular A and OPS, while DM remained unchanged, have been discussed by solutes dynamics through the electropermeabilized cell membrane.

Conclusions: Electroporated cells presented a biphasic behavior of the optical and shape related parameters that correlate with the post pulse membrane repair processes and water/extracellular liquids transmembrane exchange. The DHM-based method opens a broader perspective in understanding the cellular and molecular changes induced by electroporation.

(ID 62) Lamellar bone formation within the coronary atherosclerotic plaques: an unexpected discovery in case of a sudden death

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Objective: Heterotopic ossification on atherosclerotic plaques is an uncommon finding of coronary segments. The mechanism of metaplastic bone formation seems to be closely related to the components of atherosclerotic lesions: neovascularization, cells of the vascular wall. We present an interesting case of sudden death in which autopsy revealed presence of trabecular bone within the coronary atherosclerotic plaques.

Method: A 61-year-old female without any prior known medical history was found dead at home. A full autopsy was performed at Institute of Forensic Medicine of Tirgu-Mures. Both external and internal autopsy observations were evaluated.

Results: Autopsy examination identified acute pulmonary edema and coronary thrombosis on the background of severe coronary atherosclerosis. Routine histopathological examination revealed more than 80% luminal obstruction of the coronary segment due to an atherosclerotic plaque with significantly calcification and luminal thrombus. At the periphery of the atherosclerotic plaque, mature lamellar bone formation and marrow spaces were seen.

Conclusion: Even though dystrophic calcification has been recognized as a common component of the atherosclerotic lesions, the presence of metaplastic bone tissue may be found. The pathway of this condition's mechanism seems to be related to an increased expression of several bone-related proteins in atherosclerotic plaque with calcification.

(ID 240) Heterocellular connections during skeletal muscle regeneration

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Objectives: In adult skeletal muscle, regeneration is supported by the activation, proliferation, and fusion of myogenic precursors, the satellite cells. The myogenic process is judiciously regulated by various signals supplied by the stromal compartment. During first stages of skeletal muscle regeneration, macrophages represent the most prominent interstitial cell population. Besides their phagocytic activity, they deliver a vast array of soluble and membrane-bound regulatory molecules. Our morphological study aimed to analyse the distribution of such invading myeloid cells and their cellular connections during skeletal muscle regeneration in a mouse model of crush injury.

Methods: We used an animal model that mimics acute muscle contusion injury. Samples were harvested at different time-points starting 24h post-injury and up to 5 days. They were analysed by light and transmission electron microscopy and 3D visualization by laser scanning microscopy.

Results: Our ultrastructural analysis revealed a new type of interaction between macrophages and myogenic cells, by direct heterocellular connections such as molecular and adhaerens contacts in all stages of adult myogenesis from satellite cell activation to myoblast fusion and myotubes growth.

Conclusion: In addition to physical association, such interaction pattern might reveal a potentially new type of regulatory mechanism for the myogenic process. Decoding the mechanism of stem cell regulation upon injury during normal regeneration opens a promising perspective for improving skeletal muscle healing after extensive trauma or in diseased muscle.

(ID 180) Fibromuscular dysplasia: a mystery of vascular medicine

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Objectives: Fibromuscular dysplasia (FMD) is a rare non-atherosclerotic, non-inflammatory arterial disease. Renal involvement occurs in 60-75% of FMD cases, causing some degree of vascular stenosis, occlusion, or aneurysm. The etiology of FMD is unknown, although various hormonal and mechanical factors have been suggested.

In this paper we assess the rare complications of renal FMD in a 79 years old male patient who presented with severe gross hematuria and after an imagistic evaluation that revealed two dilated intrarenal vessels, complete right nephrectomy was performed.

Methods: Surgical specimen was grossly examined and processed in the pathology department according to the classical method. Hematoxylin eosin and van Gieson colored slides were examined under the microscope.

Results: Grossly, the kidney presents an area of pale atrophic renal parenchyma and dilated pelvis. Also, there is a cystic mass in the upper pole of 30/30 mm possibly without a major clinical significance as the cyst shows a fibrotic wall and adjacent chronic pyelonephritis. On sectioning, two intrarenal dilated vessels with clots are observed. At microscopic examination features of renal artery FMD associated with intrarenal arterial aneurysms are observed. The clots occupying the aneurysmal lumina proved to be thrombotic and leading to an area of renal microinfarction.

Conclusions: Histopathological examination of the presented case allows us to see the rare interchained evolution of FMD complications. We consider this case particularly interesting because we emphasize the utmost importance of a comprehensive histopathological assessment, in order to establish an accurate diagnosis and ensure the best possible outcome for the patient.

(ID 63) Extensive hemorrhagic necrosis of the right atrial auricle: an unexpected pathological finding in an autopsy case

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Objective: Atrial infarction is a rare subtle clinical entity. Most of them are diagnosed during the autopsy, usually located in the right atrium and related to atherosclerosis. Arrhythmias and pulmonary embolism are frequently associated complications. We present an interesting case of sudden death in which autopsy revealed an extensive hemorrhagic infarction of the right atrial appendage.

Method: A 60-year-old male without cardiac history was found dead on the street, with no response to cardio-pulmonary resuscitation. A full autopsy was performed at Institute of Forensic Medicine of Tirgu Mures. Both external and internal autopsy observations were evaluated.

Results: On gross examination, left asymmetric myocardial hypertrophy, severe coronary atherosclerosis of the circumflex artery and acute pulmonary edema were identified. The full thickness of the right atrial auricle was intensely hemorrhagic. On microscopy, severe fibrosis of the left ventricle and massive acute pulmonary edema were reported. A high degree of coronary luminal obstruction (95%) was seen due to an atherosclerotic plaque with significant calcification. The examination of the right atrial auricle revealed an extensive hemorrhagic necrosis of the entire wall, without inflammation.

Conclusion: The necrosis of the right atrial appendage is an uncommon lesion. The high variability in its prevalence may be given by an inconstantly evaluation of the entire atrial wall during autopsies. It could be related to the arteriosclerotic heart disease, but other pathogenic mechanisms could be involved.

(ID 70) Anti-cancer effects of curcumin in breast and epidermoid cancer cell lines

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Objectives: Curcumin, a polyphenolic compound derived from Curcuma longa roots, was shown to have anticancer activities. Our main objectives of the study were: to evaluate the effect of curcumin on cell cycle progression, colony formation, viability and mitochondrial membrane depolarization in different cancer cell lines (MCF-7, SK-BR-3 and A-431).

Materials and methods: MCF-7, SK-BR-3 and A-431 cell lines were grown according to their specifications. Flow cytometry technique was used to analyze viability, cell cycle progression (PI/RNase staining), and mitochondrial membrane potential (JC-1 staining). The ability of curcumin to inhibit colony formation was investigated by clonogenic assay. The concentrations of curcumin during treatments varied from 0.1-100 μM and the incubation time was optimized for each assay.

Results: Administration of curcumin in culture for 72 h blocked the cell cycle progression of MCF-7 and A-431 cancer cells in G2/M phase, while for SK-BR-3 cells the cell cycle was blocked less efficiently in S phase. 48 h curcumin treatment reduced clonogenic survival for all cancer cells tested, with EC50 values in the low micromolar range. Viability was assayed after 48 h treatments and curcumin reduced the viability of the three cell lines tested with similar EC50 values. At the same treatment concentrations and times, curcumin induced mitochondrial membrane depolarization which was well correlated with the death-inducing effect of the same concentrations in the case of MCF-7 and SK-BR-3 cells (Pearson r coefficients of 0.96 and 0.97, respectively), while in the A-431 cell line the correlation was weaker (Pearson r coefficient of 0.78) due to the higher efficiency of the compound in inducing mitochondrial membrane depolarization in this cell line.

Conclusions: Curcumin displayed anti-cancer effects in mammary and epidermoid cancer cell lines indicating that it might be a useful therapeutic agent against these types of malignancies.

(ID 273) Natural killer cells from tumour-bearing mice – phenotypic characteristics

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Introduction: Natural killer (NK) cells are crucial for immune defense against tumour cells and pathogens. The recent findings on NK cell activation in cancer patients indicate that several important parameters, such as tumour capacity to modulate NK function and phenotype of NK cells require consideration for the choice of a NK-based therapy. In this study, we show in a melanoma-bearing mouse model that NK cells from the spleen are reduced as percentage and have other phenotypic characteristics than NK cells from the healthy mouse.

Methods: We used C57BL/6 mice, 8-10 weeks old. Melanoma was induced by subcutaneous inoculation of B16F10 cells. Normal values were established in healthy, age-matched mice. After 21 days spleens were havested and immediately used for assessing the flow cytometry analyses of NK cells. Stained cells were analyzed with a FACSCanto II flow cytometer using DIVA software.

Results: Experimental data show a statistically significant reduction of the percentage of NK cells in melanoma-bearing mice in comparison with healthy animals. The immunophenotype of NK-cells shows an active phenotype in tumour-bearing mice. The immunophenotype of NK-cells indicated increased expression of lymphocyte activation markers such as CD25 and CD11b. Analysis of NK cell subsets, defined by the differential expression of a combination of CD27 and CD11b, indicated a significant difference in the distribution of NK cell subsets with the mature subset being dominant in the healthy mice. Also, we have found that NK cells from melanoma-bearing mice express less CD122, the IL-2/IL-15Rβ chain, at their surface. This may explain why these cells have a limited capacity to proliferate in comparison to spleen NK cells from healthy mice.

Conclusions: Our study has provided new insights into NK cell phenotype in tumors and new approaches to cancer immunotherapy.

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(ID 373) Study on muscle protective effects of some dietary compounds in a model of obese high fat diet Wistar rats

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Obesity is associated with ectopic fat, insulin resistance, and with a deregulated glucose and lipid metabolism of the skeletal muscle.

Objective: The aim of this study was to compare in a high-fat diet model (HFD) of Wistar rats, the effects of three different dietary supplements on the skeletal muscle pAKT (serine/threonine-specific protein kinase B) expression correlated with histopathological examination.

Methods: Female Wistar rats were raised for 9 weeks (?) on a high caloric HFD (30%) and divided in three groups (n=6) according to the dietary supplement associated to the fat diet, namely: Cod oil fish (EPA and DHA 0.1 g/kg), Nigella Sativa oil (0.1 g/kg), and Sea Buckthorn fruit 1g/kg. Histopathological methods (haematoxylin-eosin colour) and immunohistochemistry (using pAkt antibody) examination of the soleus muscle were performed in treated rats versus two different control groups raised either with HFD without treatment (control 1), or with a standard diet (control 2).

Results: In muscle samples from control 1, sarcomeres were not visible and hyalinosis, dilacerations, oedema, hyperaemia and modified cell were present. In the groups treated with either fish oil or with Nigella Sativa oil, dilacerations, inflammation and hyalinosis were still present. In the group treated with Sea Buckthorn, sarcomeres were visible and hyperaemia was isolated. The concentration of pAkt protein was variable: 5.7% in the obese group, 23.22 % in the standard group, 21.22% in the Sea Buckthorn group, 10.3% in the Nigella Sativa oil group and 27.28% in the fish oil group ($p<0.05$).

Conclusion: The Sea Buckthorn fruit had the most important protective effect on muscle histopthological morphology and the fish oil significantly improved insulin sensitivity.

(ID 336) Distribution of Candida species involved in the etiology of fungal vaginitis

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Objectives: Vaginal candidiasis represents one of the important and frequent diseases of the female genital tract. The specialized literature describes genital pathology where Candida albicans predominates, in contrast with the prevalence of non-albicans species isolated from invasive infection. Our study aims to establish the incidence of the fungal etiology in female gynecological pathology and the distribution of isolated Candida species.

Methods: Between 01.12.2016 – 28.02.2017 were processed a number of 2,128 vaginal samples. These were collected on the E-Swab system with Amies transport medium, liquid which allows bacterial and fungal cultures and provides pathological product stability for 48 hours at room temperature. The samples were processed on the day of harvest by microscopic examination and seeded on Sabouraud medium with chloramphenicol with subsequent incubation, 48 hour at 30°C. Pozitive culture were identified as genus and species by the automated method – mass spectrometry.

Results: Out of the total of 2.128 samples 1.525 (72%) were negative and 603 were positive (28%) for Candida spp. The corelation between the fungi presence on the smear and their growth in culture was 100%. The distribution of the percentage of isolated Candida species was the following: C. albicans 83.25%, C. glabrata 7.46%, C. krusei 2.48%, C. kefyr 2.15%, C. parapsilosis 1.32%, C. tropicalis 0.33%, C. dubliniensis 0.16%, C. guilliermondii 0.16%, and C. lusitaniae 0.16%.

Conclusions: In our area, the main fungus involved in the etiology of vaginal mycosis remains C. albicans, the involvement of other non-albicans species being uch more reduced, below 3%, except C. glabrata. Laboratory diagnostic is the only one to establishe with certainty the etiology. Genus and species identification is essential in interpreting of the testing sensitivity to antifungal medical drugs, respectively in choosing the right treatment. Data of our study are consistent with those described in the specialized literature.

(ID 46) Imaging aspects and histopathological correlations in mucinous and serous cystadenomas of the pancreas

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Objectives: To present and illustrate the specific magnetic resonance (MRI) and computed tomography (CT) aspects of mucinous and serous cysts in correlation with the histopathological characteristics of pancreatic cystic lesions.

Methods: We review all cases with pancreatic cystic lesions explored by cross sectional imaging methods in the last year, from which we have selected two cases one with mucinous and the other with serous pancreatic cystadenoma, highlighting imaging (MRI and CT) aspects that suggest a specific type of cystic mass.

Results: We present the case of a 57 years old female who had a multiloculated pancreatic cystic lesion with non-enhancing thin septae and a polilobulated external contour, localized in the cephalo-istmic region of the pancreas. The CT aspect was characteristic for a serous cystadenoma, a benign mass of the pancreas. The cyst was surgically removed and the histopathological examination showed a multilocular cystic mass, while the microscopic examination confirmed the imaging diagnosis - microcystic serous cystadenoma. Perilesional tissue presented chronic inflammatory lesions (chronic pancreatitis). The second case is a 42 years old female who was evaluated by both CT and MRI. The CT showed a large round-oval cystic lesion in the tail of the pancreas, with mass effect on the surrounding structures. The MRI showed that the lesion had a fluid content and a multilocular aspect with septae in the postero-inferior portion of the lesion. Also there was no visible communication with the Wirsung duct. The aspect was characteristic for a mucinous cystadenoma. Echo-endoscopy was performed at first, and a fine needle aspirate was obtained, the histopathological examination confirming the imaging diagnosis. The cystic mass was removed surgically and the histopathological examination of the specimen supported the previous data.

Conclusions: Even though the histopathological examination remains the gold standard for establishing the specific type of pancreatic mass, the age and gender of the patient, the location and imaging features of the cystic mass can accurately predict the histological type of cyst. Presented cases highlight the fact that imaging aspects can be revealing for the diagnosis, suggesting the probable histopathological type of mass.

(ID 375) The synergic renoprotective effect of fish oil and nanoparticles charged with vitamin E in the obese high fat diet Wistar rats

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Introduction. Obesity is associated with tissue lipomatosis and inflammation. Fish oil has antiinflammatory effects and nanoparticles charged with vitamin E deliver the antioxidant vitamin E to the tissues.

The aim of this study is to evaluate the renal effects of nanoparticles charged with vitamin E (nano E, 1 mg/kg body) when they are given together with fish oil (EPA and DHA 0.1 g/kg), in the obese high fat diet Wistar rats.

Materials & method. Young 20 Wistar male rats were fed with a high caloric/fat diet for 4 weeks and then, for 21 days, they continued with the high caloric/fat diet and they were divided in 4 groups according to the treatment associated to the diet: group F took fish oil, group N received nano E charged particles, group B took both treatments, and group O didn't take any treatment. Ureea, creatinine and cystatin were measured in the serum by using spectrophotometry and nephelometry respectively.

Results. The O group had tubulonephrosis, hyperemia, periglomerular inflammation with lymphocytes and macrophages. In group F hyperemia and vacuolization of the mesangial cells without inflammation were described. In group N, hyperemia with inflammation was present, while in group B normal architecture of the kidney without inflammation was observed. Ureea and creatinine were similar between groups, but cystatin was lower in the B versus O group (0.18 vs 0.10 mg/L, $p<0.05$).

In conclusion, the fish oil and nanoparticles charged with vitamin E had synergic renoprotective effect in the obese high fat diet Wistar rats.

(ID 29) Gianotti-Crosti syndrome at a glance

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Objectives: Gianotti-Crosti syndrome represents a self-limiting affliction, characterized by a papular or papulo-vesicular exanthema of the face and limbs, which appears following a viral infection. GCS has a low incidence (0.13%), and generally affects individuals aged 3 months to 15 years (most often children of one to four years). Viral agents involved in GCS pathogenesis are hepatitis C virus (HCV), Epstein-Barr Virus (EBV), and less common Adenovirus, Citomegalovirus, Enterovirus, immune-deficiency virus, measles virus and Parainfluenzae virus. Our objective was to discuss the recent data on the diagnosis and treatment of GCS, as well as novel views on its associated factors and viral extension to other age groups.

Methods: A systematic literature search was computed by four independent investigators using the MEDLINE database, PubMed, and Google Scholar search services with the following keywords and word combinations: Gianotti-Crosti syndrome, HCV, EBV, immunomodulation, bacterial infections, GCS treatment, GCS guidelines, and GCS pathophysiology. Inclusion criteria incorporated relevant articles in English, published in between 1st January 2011 and 1st February 2017, that addressed GCS as their main theme (pathophysiology, diagnosis and treatment). The exclusion criteria were unavailability of any full article, unclear presentation, non-relevant studies and reports of different languages other than English. The common features were assembled into this present review.

Results and conclusions: According to updated studies, EBV has replaced HCV as the most common cause of GCS and recent data view a type IV hypersensitivity reaction as the pathophysiological mechanism involved in GCS pathogenesis. Atopic dermatitis is commonly associated with GCS, suggesting an immune pathway in the development of this disorder. Viral infections rank as the first cause of GCS worldwide. However, GCS is also associated with post-vaccinal immunomodulatory reactions (to polio, measles+mumps +rubella, diphtheria+tetanus+ pertussis, varicella and bacillus Calmette-Guerin vaccines) and several bacterial infections, especially with intracellular agents (Neisseria meningitidis, Mycoplasma pneumoniae, Bartonella henselae, Borrelia burgdorferi).

(ID 185) Serotonin receptor subtypes responsible for calcium influx in primary cultures from rat dorsal root ganglia

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Objective: Serotonin (5-HT) is an important inflammatory mediator of both pain and itch. The mechanisms through which 5-HT activates primary sensory neurons are not completely established. The aim of our study was to identify the specific 5-HT receptor subtypes functionally expressed in the rat dorsal root ganglion (DRG) neurons.

Methods: We used calcium microfluorimetry and pharmacological tools to investigate the action of 5-HT in primary cultures of rat sensory neurons. DRGs were dissected out from adult Wistar rats and dissociated neurons were cultured on glass coverslips. After 24 h, the cells were loaded with Calcium Green-1 AM and imaged while being chemically stimulated using a fast-exchange superfusion system.

Results: Based on their kinetics we classified the responses to 5-HT (50 μM) as transient and sustained. Most of the 5-HT-sensitive neurons had only transient responses and were positive for Isolectin-B4 binding. The transient responses were also elicited by the 5-HT3 agonist SR 57227 (1-10 μM), and were completely inhibited by the 5-HT3 antagonist granisetron (1 μM).

On the other hand, the non-selective agonist 5-Carboxamidotryptamine (5-CT, 50 μM) induced only sustained responses solely in the neurons that were sensitive to 5-HT. The same kind of responses were elicited by the 5-HT1A and 5-HT7 agonist 8-OH-DPAT (10 μM). The 5-HT1A receptor antagonist WAY-100.635 (100 nM) was able to irreversibly inhibit the sustained responses evoked by 5-HT. Recently reported activators or inhibitors of 5-HT receptors from mouse DRG neurons, LY344864 (a 5-HT1F agonist), LP44 (a 5-HT7 agonist) and SB269970 (a 5-HT7 antagonist) had no effects on rat neurons.

Conclusions: Taken together, our results show that 5-HT3 ion channel mediates only the transient responses. These seem to be amplified by action potentials and the opening of Cav channels.

The sustained responses are likely mediated by the 5-HT1A metabotropic receptor. This is supported by the inhibitory effect of WAY-100.635 and by the calcium influx elicited by 8-OH-DPAT and 5-CT.

(ID 310) Family planning among women of childbearing age

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Family planning gives women the opportunity to determine the number of children they want and their birth right moment. The main way of achieving this is contraception. There is a wide range of contraceptive methods and women are generally counselled to choose the most appropriate method, and to use it correctly.

Aim: The aim of this paper was to assess the practice of women of childbearing age in using contraception, in relation to their medical or non-medical background.

Methods: This is an observational descriptive study, in transversal approach. Target population was represented by a group of 824 females of childbearing age (15 – 49), with (70.6%) or without (29.4%) education in the medical field, median age of 23 and 25 years, in medical and non-medical groups respectively, non-symmetrical distribution, $p<0.001$, Mann Whitney U). The subjects were selected using the snow ball method among female students of the "Carol Davila" University of Medicine and Pharmacy, and among patients admitted to different hospitals in Bucharest, between 1st of October 2016-15 March 2017. A specific questionnaire with five domains was used for data collection.

Results: 67.4% of our responders were using a contraception method at the study time, with no significant difference between groups (68% and 65.7% in medical and non-medical groups respectively, $p=0.515$, Chi2 test). Most common method was represented by condoms, used in similar proportion in the two groups (69.4% and 61.6% in medical and non-medical groups respectively, $p=0.076$, Chi2 test). Contraceptive pills were used by 21.2% and 18.9% of the responders from the two groups ($p=0.536$) and natural methods by 10.6 and 14.5% respectively ($p=0.201$).

Conclusions: With all the limitations induced by the method of selection, which does not allow generalization, our study showed that medical background did not influence the family planning behaviour in women of childbearing age. This result is even more important in the context of a national health program for family planning. This program is continuously implemented by the Ministry of Health for many years and students are eligible to receive free contraception.

(ID 366) Advantages and limits of different methods of humerus fracture treatment related to hospital utilization indicators and expenditures

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Introduction. Surgical treatment, either internal fixation or humeral head replacement, is being increasingly used for humerus fractures. This has substantially contributed to the increased treatment costs for upper limb fractures.

Objectives. The aim of this study is to evaluate the advantages and limitations of orthopedic treatment versus surgical treatment of humerus fractures. The specific objectives are: 1) Comparison of hospital utilization indicators for orthopedic treatment versus surgery and 2) Comparative evaluation of the costs of the orthopedic treatment versus surgical treatment.

Methods. The descriptive study included 121 patients diagnosed with humerus fractures, treated in the Orthopedics Clinic of the University Emergency Hospital Bucharest between 01.01.2009 - 31.12.2011, divided into two groups, those with orthopedic treatments (47 patients) and those with surgical treatments (74 patients). The two groups were compared based on the following variables: average length of stay, number of rehabilitation sessions, hospital expenditures, number of days of immobilization and sick leave days.

Results. Patients with orthopedic treatments remained in hospital less than a day by comparison with those with surgical treatment that had an average length of stay of 2.33 days. Orthopedic treated patients needed 10 rehabilitation sessions by comparison with surgical patients that needed only 4 sessions. The hospital expenditures for surgical patients were around 10 times higher than for orthopedic treated patients. All patients with orthopedic treatments were immobilized between 1 and 6 weeks by comparison with those with surgical treatment that were not immobilized. The two groups differed also from the point of view of sick leave days (21 days for surgical treated patients and 53.78 days for orthopedic treated patients).

Conclusions. Even the hospital expenditures for surgical treated patients is much higher than for orthopedic treated patients, the rehabilitation is easier and the recovery is faster in terms in sick leave days.

(ID 160) Ovarian endometrial adenofibroma of the ovary associated with endometrial atypical hyperplasia and stump - a case report

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Objective: Endometrial adenofibromas are rare tumors with only few reported cases. The median age of appearance is 57 years with the mean size of the tumor about 10 cm in diameter. They are composed of a thick stroma in which endometrial type glands proliferate.

Atypical hyperplasia is a precursor for endometrioid carcinoma with marked cytological atypia superimposed on endometrial hyperplasia.

Uterine smooth muscle tumors that cannot be diagnosed as benign or malignant are designated smooth muscle tumors of uncertain malignant potential-STUMP. Nuclear atypia, absence of tumor cell necrosis and <10 mitotic figures per 10 HPF define such proliferations.

Methods: A 48-year-old woman presented to the emergency room with lower abdominal pain, nausea and metrorrhagia. The abdominal ultrasound revealed multiple uterine wall nodules and bilateral ovarian cysts measuring 8/7 cm in the right side and 7/6 cm in the left side. CA125 marker was elevated (43.89 U/ml). The pacient underwent hysterectomy with bilateral adenexectomy.

Results: Gross examination revealed ovarian cysts and uterine nodules round, ferm and rubbery, white to tan with a whorled pattern on cross sectional view.

Histologically: left ovary had 1 mm proliferation of branching tubular glands lined by columnar epithelium arranged in a dense, fibrotic stroma. Small lesions of 3 mm composed of crowded glands with marked nuclear atypia were found in the endometrial tissue. Ovarian cysts and uterine nodules showed intersecting bundles of elongated smooth muscle cells with cigar-shaped nuclei. There were foci of atypical smooth muscle cells with moderate to severe nuclear atypia, 2 mitotic figures/10 HPF, and no tumor cell necrosis.

Conclusion: Endometrial adenofibromas may be associated with estrogen secretion and endometrial hyperplasia. Although CA125 was false positive, our patient had an increased risk of malignant transformation over time. Hysterectomy with bilateral adenexectomy was the first line treatment followed by secondary long term clinical monitoring.

(ID 388) Candidial vaginitis – Multiannual statistical data analysis in Romania

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Objectives. The assessment of the incidence of Candida vulvovaginitis in population, at the level of entire country, as demostrated by the raw data provided by epidemiological and statistics services of Romanian statistic unit of the Public Health Ministry. The vulvovaginal Candida infections are the most frequent fungal infections thats manifest not only in immunodepressed and immunocompromised women patients. The public heath services registrations from many countries showed a develpment of those infections and that about 75% of women have in their anamnezis almost one infection in their life.In Romania the statistics are registered by public health auuthorities, by hospitals and by general medicine family practitioners.

Material and methods. The study consists in data analysis provided by the official Statistics Unit of Public Health Ministry, and was analysed by statistical methods and programs of data analysis like ANNOVA modeling, Microsoft Excell program analysis facilities for desciptive statistics (standard deviation, average, incidence) the Levene test, Fisher test, Brown Forsythe test and others. The tests results were compared and analysed, and interpreted for determinaton of Candida infections incidence and frequency in Romania. The data analysed are from the years 2008-2014.

Results. In our study, we practically analysed the data from official statistical registrated cases. The study shown that between ages of 15-24 y old provide the most of the cases of vulvovaginal candidiasis, with tendency of lowering incidence at the group ages of 25-34, and the tendency continues to the following group ages. The groups of elderly are practically the less infected patients regarding the incidence of vulvo vaginal candidiasis.

Conclusions. Our multiannual study showed a procent thats is very variable between 9 and 21 % from the total Candida infected patients. The right statistic from the total cases of women infections with candida, shown a procent of vuvlvovaginal candidiasis of 17.8-35.4% most between 19-24 y.o.The general procent of the incidence in population of this infection in the frame of the total infection types with this fungal pathogen, did not differ very much from the other countries authorities and epidemiological studies from all over the world.

(ID 84) Aggressive angiomyxoma of the deltoid region: a case report

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Purpose: Aggressive angiomyxomas are rare tumors, almost always found in the genital and inguinal region in women, although they can also occur in men. They are slowly-growing, locally aggressive, with a widely recognized potential for local recurrences, although very few cases of metastases have been described. We report the case of a 55 years old patient presenting with an aggressive angiomyxoma which was uncommonly located in the deltoid area.

Materials and methods: The tumor was excised and then histologically analyzed. Macroscopically, the mass was 9/7/5 cm, poorly delimited from the adjacent tissue and gelatinous upon sectioning. Microscopically, the bland-appearing myofibroblastic tumor is composed of scanty spindled and stellate cells in loose stromal matrix with collagen fibrils and prominent vasculature, including thick walled vessels. Immunohistochemical analysis was used in order to establish the diagnosis, such tumors being positive for vimentin, desmin, smooth muscle actin (SMA) and muscle specific actin (MSA) and CD34, while negative for S100 protein and cytokeratin expression. Ki 67 proliferation marker was positive in about 5% of the tumoral cells.

Conclusions: Although the deltoid region location is exceedingly rare for aggressive angiomyxomas, the patient's mass exhibited all macro- and microscopical characteristics of such a tumor. The definitive diagnosis is sometimes difficult even after histopathological examination, immunohistochemical tests being essential in such cases.

(ID 28) Old and new in fibrolamellar hepatocellular carcinoma

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Objectives: Fibrolamellar hepatocellular carcinoma (FL-HCC) is a malignant tumour affecting the liver, which has been considered a subtype of hepatocellular carcinoma (HCC) until recently. Advancements in the diagnosis of FL-HCC, with focus on the molecular basis of the disease, have provided new insights regarding the cause of this frequent type of cancer in the pediatric age group and in patients below the age of thirty: a deletion occurring on chromosome 19 that leads to the expression of a chimeric protein in the cancerous tissue. Our objective was to discuss the recent data on the diagnosis and treatment of FL-HCC, as well as novel views on its tumor biology and pathogenesis, and to provide arguments regarding the recognition of FL-HCC as a distinct clinical entity rather than a histological variant of „classic" HCC.

Methods: A systematic literature search was computed by four independent investigators using the MEDLINE database, PubMed, and Google Scholar search services with the following keywords and word combinations: fibrolamellar hepatocarcinoma, fibrolamellar hepatocellular carcinoma, FL-HCC, FL-HCC treatment, FL-HCC guidelines, and FL-HCC pathophysiology. Inclusion criteria incorporated relevant articles in English, published in between 1st January 2011 and 1st February 2017, that addressed FL-HCC as their main theme (pathophysiology, diagnosis and treatment). The exclusion criteria were unavailability of any full article, unclear presentation, non-relevant studies and reports of different languages other than English. The common features were assembled into this present review.

Results and conclusions: The cause of FL-HCC is a deletion mutation that results in the fusion of two genes, one encoding a heat shock protein belonging to the Hsp40 family (DNAJB1), and the other responsible for the catalytic domain of protein-kinase A (PRKACA). The major strides regarding the mechanism of FL-HCC tumorigenesis sustain the recognition of this tumour as a clinical entity of its own and allow for meaningful translation of scientific knowledge from bench to bedside. Taking into consideration the aspects that differentiate FL-HCC from HCC (occurrence in the absence of liver cirrhosis, the affected age group and histological pattern), the aforementioned discovery leads the way of recognizing FL-HCC as a distinct clinical entity.

(ID 340) Trans-resveratrol supplemented maternal diet has a neuroprotective effect in perinatal asphyxia in rat

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Objective. Trans-resveratrol (tRESV) is a polyphenol with known antioxidant propreties wich playes protective roles in some neurological disorders, but little is known about its effect as maternal diet supplement in atenuating brain damage after perinatal asphyxia. The aims of this study is to investigate the implications of maternal tRESV in the immature brain vulnerability in perinatal asphyxia.

Material and methods. We used a postnatal day 6 rats (n=16) which were exposed to a 90-minute asphyxia episode (9% oxygen, 20% carbon dioxide in nitrogen) at 37°C. The pups came from females which were given either standard diet (n=8) or tRESV supplemented diet. In order to clinically assess the magnitude of brain damage by seizure activity, we counted the loss of righting reflexes for 2 hours after asphyxia exposure. Moreover, 24 hours after exposure we assessed by RT-PCR the hippocampal levels of some small noncoding RNAs (microRNAs), as epigenetic markers for hippocampal vulnerability to asphyxia: miR124, miR132, mir134, miR146, mir15a.

Results. Clinical assessment revealed that pups exposed to asphyxia whose mothers received tRESV supplemented diet shown a decreased seizure activity when compared to pups exposed to asphyxia whose mothers received standard diet. Also, the levels of miR15a and miR132 were significantly down-regulated in maternal tRESV supplemented group exposed to asphyxia as compared to standard diet asphyxia group.

Discussion. tRESV supplemented maternal diet has an important role in brain mechanisms secondary to asphyxia reducing the seizure burden and improving at epigenetic level processes like neuronal tolerance to ischemia, neuronal growth and maturation.

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(ID 214) The consequences of cerebral arterial myogenic tone and reactivity alteration - a network analysis

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An adequate myogenic tone in various segments of cerebral arterial circulation and its gradient from proximal to distal circulation are a functional necessity. The highest level in the myogenic tone is in parenchymal arterioles ensuring protection to the delicate blood-brain barrier and representing the basis of functional hyperemia required for sustained neuronal activity. Myogenic tone augmentation in the proximal part of cerebral arteries determines a decrease in cerebral blood flow. The aim of this paper was an analysis of the signaling systems that contribute to the alteration of myogenic tone, along with the identification of therapeutic targets.

Materials and methods: This paper is based on the search and exploitation of available network builders and analyzers, with the implementation of recent literature data from PubMed regarding the states that modify myogenic tone in cerebral arterial circulation. These tools and data were used to build a new model of signaling system with the identification of nodes as potential therapeutic targets with the lowest possible off-target effects.

Results: Arterial myogenic tone and reactivity are an intrinsic feature of arterial smooth muscle cells ensuring an increased contractile force when transmural pressure elevates in order to maintain blood flow (autoregulation). Myogenic response has efficacy limits. The initiation of myogenic response is ensured by mechanochemical sensors-transducers, such as GPCRs coupled to G□q/11, the participation of AT1R, P2Y4 and P2Y6, CysLTR1 that are activated mechanically without the action of specific ligands. The myogenic reactivity is initiated by the release of Ca2+ from SR and through voltage sensitive L and T-type calcium channels influx determined by membrane depolarization through TRPC6 and TRPM4 channels. Myogenic tone maintenance is achieved by increasing Ca2+sensitivity. In SAH, cardiac failure, diabetes mellitus, advanced ages a change in normal myogenic tone is followed by devastating neurological effects. The signaling pathways in these states are therefore analyzed and graphically represented.

Conclusions: A good knowledge on the signaling pathways that modify myogenic tone is the guaranty for an efficacious therapeutic intervention. In SAH, during DCI 20-HETE is involved. In chronic cardiac failure S1P is important in changing the altered myogenic tone of proximal cerebral arteries.

(ID 76) Genotypic and phenotypic characterization of the virulence profile of Staphylococcus aureus isolates from chronic skin ulcers

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Objectives: *Staphylococcus (S.) aureus* represents the most frequent isolate from chronic skin ulcers. Although wound colonization and infection rarely progress towards septicemic events, methicillin resistant *S. aureus* (MRSA) is a major nosocomial pathogen, frequently reported in severe infections. We aimed to characterize and compare the virulence profiles of S. aureus isolates from patients with chronic wounds of different etiologies, and to establish clinical and microbiological correlations.

Methods: The study was performed on 78 strains of *S. aureus,* isolated from patients diagnosed with chronic skin wounds, mostly of venous etiology (33 strains), arterial ulcers (6), lesions of mixed etiology (8), pressure sores (5), chronic abscesses (14), bullous or pustular chronic diseases (8), paraneoplastic ulcers (2), and non-healing surgical wounds (2). The phenotypic screening included the bacterial adherence to HeLa cells, the expression of eight soluble virulence factors, as well as the ability to develop biofilms in vitro. From the total number of MRSA strains, 24 were screened by PCR for eight virulence genes (bbp, ebpS, fnbA, fnbB, fib, coag, clfA, clfB).

Results: Compared to other sources, microorganisms isolated from chronic venous ulcers (CVU) expressed more exotoxins involved in local invasiveness (caseinase, gelatinase) and less in bacterial dissemination (hemolysins, lipase, lecithinase). Moreover, MRSA isolates showed higher virulence patterns compared to methicillin susceptible bacteria and higher adherence to eukaryotic cells. ClfA (95.8%), clfB (95.8%) codifying bacterial adhesins, and coag (95.8%) involved in the persistence of infection were the most commonly detected virulence genes. fnbA (70.8%) associated with systemic dissemination of infection was present two times more often in isolates from other sources, rather than CVU. All tested strains proved the ability to develop biofilms.

Conclusions: The results suggest the existence of a less virulent profile of *S. aureus* isolates from CVU that could explain the rarity of severe infectious systemic events. Also, the particular virulence profile of the microorganisms, characterized by local invasiveness, bacterial adherence, and biofilm development could explain the persistence of infection and delayed healing of CVU.

(ID 182) The importance of a National Reference Center for the detection of carbapenemase-producing Enterobacteriaceae (CPE) - a few examples

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Objectives: Carbapenemase production is one of the most important mechanisms of carbapenem-resistance in Enterobacteriaceae. Our country lacks continuous surveillance of these pathogens, making no difference between carbapenemase-producing strains that may cause epidemics and other types of carbapenem resistance. We want to describe the activity of the National Reference Center for Antibiotic Resistance (NCR) in Paris, France by giving examples of interesting antibiograms that could be easily misinterpreted in the absence of such a Center.

Methods: Strains received at the NCR in 2015, were surveyed for the presence of a carbapenemase. In brief, the screening methodology comprises: culture on UriSelect 4 on the day of strain arrival, then, at 24 hours, a CarbaNP test and an antibiogram are performed, including on Muller-Hinton with added cloxacillin. After 48 hours, the production of carbapenemase was confirmed through PCR, if the result of the CarbaNP test and the phenotypic aspect of the antibiogram were conclusive for this mechanism of resistance. If the phenotypic aspect indicated a mechanism different from the production of carbapenemase, the analysis stopped.

Results: Of the 2801 strains sent to the NCR, we chose cases ranging from the most frequent to combination resistance mechanisms (graphic representation enclosed). To this effect, we present the patterns found in Klebsiella pneumoniae with, among others, a newly discovered OXA-like variant, two phenotypically identical strains of NMD and VIM and a strain harboring a combination of OXA-like and NDM enzymes and the particular case of an Enterobacter cloacae with impermeability and overexpressed cephalosporinase. A positive CarbaNP test combined with the typical phenotypic aspect on the antibiogram certified the presence of a carbapenemase and indicated a certain Ambler class. However, PCR and genome sequencing were the only ones able to differentiate the specific type of carbapenemase.

Conclusion: Carbapenemase-producing Enterobacteriaceae are a global threat. In 2015 our country has reported 24.7% carbapenem-resistance in Klebsiella pneumoniae and the few studies made in Romania all show that OXA-48 is the most frequently found carbapenemase in our country. Future studies, potentially with the NCR in Paris, may give us a better view on the real situation in our country.

(ID 326) The evaluation of bone density and sanogenic factors in Down syndrome versus sedentary adults

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Objective: Down syndrome is a disorder whose incidence has gradually increased in recent years and therefore requires special attention by long-term implications of medical, social and family.

The complexity of the pathophysiological mechanisms involved in impaired bone changes justifies a detailed analysis of clinical and biological characteristics of these patients.

This study aims to research the frequency and variability of osteoporosis in Down syndrome population and to identify the most important risk factors in the groups studied.

Methods: Study included 104 subjects 18-45 years old, bot gender, divided in three groups: 44 - Down syndrome, 36 - healthy sedentary adults and 24 - control group. Ages of participants in the study were homogeneous, with no significant differences between the 3 groups and were

Bone densitometry was performed in all cases, using Sahara Bone Densitometer. In addition, next parameters were studied: family history of osteoporosis, body mass index (BMI), fractures history, dairy consumption, daily exercise, downtime in personal history, sunlight exposure, changes of the spine.

The results were reported in terms of quantitative score that compares the values obtained with the reference values for the population studied with the same sex, age and ethnicity. We used t test to define the differences between the average results obtained from the three groups of patients.

Results: Evaluation of risk factors examined groups showed a significantly higher BMI in the groups of sedentary and patients with Down syndrome compared to controls. BMI was found to be increased (>25) at 50% in the group with disabilities to 33% and 44% respectively in the control and lands. We do not found significant differences regarding family history of osteoporosis, the existence of previous fractures, dairy consumption, downtime in personal history.

Bone densitometry revealed a significant reduction of bone density and sedentary persons with disabilities in the control, in both sexes and overall ($p<0.01$).

Although sedentary group had lower bone density values compared with the group with Down syndrome, these changes were not statistically significant.

Conclusion: Risk factors identified as significant in our study were exercise and sun exposure. They varied significantly between control and groups of sedentary and Down syndrome. Although sedentary group had a lower bone density values compared with the group with Down syndrome, these changes were not statistically significant.

(ID 327) Who is responsible for communicating public health information? An application to pandemic preparedness

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Objectives: Public health information should be effective communicated and appropriately interpreted by the society. Pandemic preparedness and response requires special attention from every country and must include communication strategies, designed to reflect the need of the community. We aimed to assess the current information sources on public health in Romania, as well as citizens' expectations from professionals and authorities.

Method: We conducted a cross-sectional study, including people from all regions of the country who had an equal distribution in gender and age. We applied the questionnaire during a direct interview with the citizens. Data were analyzed and processed using Epi Info 7.1.4.0.

Results: Most of the participants, 90.20% (95%CI: 78.59%-96.74%), have heard about the existence of the measles epidemic in Romania. However, only 38.00% (95%CI: 24.64%-52.83%) have heard about the tetanus case reports in our country. More than three quarters of the informed people on this topic (76.19%, 95%CI: 62.08%-90.30%) had acquired the news through the use of mass media or from their friends and family. Regarding the responsibility to communicate public health information, 96.07% (95%CI: 94.98%-97.16%) of the interviewed people agreed that health professionals and national authorities, should commit to disseminate accurate news, including in cases of epidemics or pandemics.

Most of the people involved in the study (74.51%, 95%CI: 60.37%-85.67%), believe that the best way to provide information in times of pandemics/epidemics is the clear one-way communication from public health authorities to the citizens, while only 5.88% (95%CI: 1.23%-16.24%) would prefer the dialogue through other platforms, such as social media. Moreover, 90.19% of the participants (95%CI: 87.47%-92.91%) consider that public health authorities should devote more resources to collect information (questions, opinions, worries) from citizens during pandemics threats, in order to involve the community in the decision-making process.

Conclusions: Learning from the deficiencies of the past pandemic preparedness, health authorities should develop better communication methods for the future threats. Any public health emergency response should be treated as a dynamic process of sharing and responding to information, in which citizens play an active role. Also, the news should be conveyed with transparency to the public, in order to gain trust and reliability.

(ID 281) The importance of Western blot technique in Toxocariasis serological diagnosis

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Objectives: Toxocariasis is an important public health problem; seroprevalence studies have shown that this disease is more frequent among children from socio-economically disadvantaged populations. Toxocariasis manifests in humans in a variety of clinical syndromes, but in some cases can be asymptomatic. A relatively constant characteristic is the elevated eosinophils level. The aim of this study was to test the correspondence between the results of ELISA and Western blot in the diagnosis of Toxocariasis.

Method: The study included 63 patients with Toxocariasis diagnosis, tested in Colentina Parasitology Clinic and 3 other laboratories from Bucharest. We analysed the characteristics of patients regarding their risk factors, symptoms, results of complete blood count and immunoassays performed, as well as their evolution. The data were analysed using Epi Info (version 7.1.5.2).

Results: The patients were aged between 21 and 80 years old and 79.37% came from the urban area. In what concerns the risk factors, 63.49% had a dog or a cat. Regarding the clinical manifestations: 77.78% (95%CI: 65.54%-87.28%) had pruritus, 46.03% (95%CI: 33.39%-59.06%) dermographism, 26.98% (95%CI: 16.57%-39.65%) cough, 22.22% (95%CI: 12.72%-34.46%) fever, 61.90% (95%CI: 48.80%-73.85%) myalgia, and a small number of patients had adenopathy, headache, sleepiness, irascibility and paraesthesia. Of the patients with available data, 5% (95%CI: 1.04%-13.92%) had leucocytosis, 61.67% (95%CI: 48.21%-73.93%) had elevated eosinophils level and 69.64% (95%CI: 55.90%-81.22%) had elevated level of total IgE. The results of ELISA indicated one undetermined case (95%CI: 0.04%-8.80%), 19.67% (95%CI: 10.60%-31.84%) positive cases and 78.69% (95%CI: 66.32%-88.14%) of the cases as negative, while the Western blot assay indicated all the cases as positives.

Conclusions: The results show that the majority of patients had risk factors, and regarding the clinical manifestations, the symptoms were very diverse. The laboratory results indicated eosinophilia in more than half of the patients. In what concerns the immunoassays, a large number of cases were indicated as negative using ELISA assay, while they were positive in Western blot. The increased percentage of missed positive cases using only ELISA, underlines the importance of using Western blot in the diagnosis of Toxocariasis.

(ID 121) Using microcalorimetric thermograms to describe the growth patterns of Candida albicans

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Objective: We performed a study regarding the growth patterns of a Candida albicans strain using microcalorimetry. This dimorphic fungus is a common member of the human gastro-intestinal flora but could determine mild infections. However immunocompromised patients may experience systemic candidemia with important morbidity and mortality. C. albicans could form biofilms on the surface of implantable medical devices. Thus the correct and swift diagnostic is most important.

Method: We used a non-invasive method that measures the temperature delivered by the growing microorganisms. Microcalorimetry, due to great improvement of the calorimetric mechanisms, could detect micro and nanothermic alterations. Using microcalorimetry we can study the behavior of fungal populations in different culture media. This is possible due to their active metabolism that produces exothermal biochemical reactions.

Results: Using two microcalorimeters and a lyophilized strain of Candida albicans we performed over 30 different tests to see their development in different conditions. On the solid medium we obtained isolated colonies which we used to inoculate future liquid medium for the experiments. From the liquid Sabouraud (Sab)1000μl were centrifuged. The remaining material was diluted with 300μl Sab and then using a spectrophotometer we measured the turbidity using McFarland standards (IMF). Then the inoculated medium was introduced in a special cell of the microcalorimeter for 24-48 hours. We performed tests using different quantities of the inoculated medium (200μl, 400μl, 600μl, 800μl) at 5 different temperatures (26°C, 30°C, 34°C, 37°C and 40°C).

Conclusions: The microcalorimetry method could be powerful if correctly used and can help the clinician in collaboration with laboratory colleagues to detect the fungus faster and more precise as in the classical microbiological method. If using classical methods we need for final identification 72-96 hours, using microcalorimetry we could obtain a complete thermogram in 24-48 hours depending on different factors previously described.

(ID 20) The importance of microbiological diagnosis in supporting the recommendations of guidelines regarding the antibiotic susceptibility of germs involved

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Objectives: In infective endocarditis, for a favourable evolution, the patient needs to receive the right antibiotic. In the present study we tried to evaluate the susceptibility of the germs to the antibiotics recommended in most of the speciality guidelines.

Method: We included in the study 102 patients admitted for infective endocarditis. We excluded 17, for incomplete data and studied the medical records of the remaining patients regarding their age, symptoms, comorbidities, predisposing factors, temperature, laboratory results, aetiology and antibiotic susceptibility.

Results: The patients were aged between 31 and 89 years old and the majority had multiple comorbidities. In 62.07% of the patients the blood cultures were positive; the most frequent identified germs were *Staphylococcus aureus, Streptococcus gallolyticus* and *Enterococcus* spp. In what concerns the antibiotic susceptibility of the identified germs the highest resistance was observed for the following antibiotics: of the 31 isolates tested to penicillin 58.06% (95%CI:39.08%-75.45%) were susceptible, of the 21 tested to oxacillin 61.90% (95%CI:38.44%-81.89%) were resistant, of the 35 isolates tested to erythromycin almost half were resistant (48.57%, 95%CI:31.38%-66.01%), of the 31 isolates tested to tetracycline 48.39% were susceptible (95%CI:30.15%-66.94%), of the 12 isolates tested for amoxicillin almost all were susceptible (91.67%, 95%CI:61.52%-99.79%), of the 6 isolates tested for ceftriaxone 66.67% were resistant (95%CI:22.28%-95.67%), of the 31 isolates tested for gentamycin 25.81% were resistant (95%CI:11.86%-44.61%) and of the 39 isolates tested for vancomycin almost all were susceptible (97.44%, 95%CI:86.52%-99.94%).

Conclusions: The most important resistance for the tested antibiotics was observed in penicillin, oxacillin, erythromycin, ceftriaxone and tetracycline, where approximately half of the tested isolates were resistant to the mentioned antibiotics. Moreover, this is of a greater importance for antibiotics like penicillin, ceftriaxone and oxacillin, which are included in most of the speciality guidelines for the treatment of the infective endocarditis. These results underline the importance of following the recommendations of guidelines like the ones issued by the *European Society of Cardiology,* available on the *European Society of Clinical Microbiology and Infectious Diseases* site, in order to avoid the increase of isolates resistant to antibiotics, but also the significance of the collaboration between clinic and laboratory.

(ID 287) Prolactinomas: bioclinical and imaging correlations

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Objectives: To present the main imaging features of prolactinomas using Magnetic Resonance Imaging (MRI). To demonstrate the correlations between the clinical setting, bloodwork and morphological data of prolactinomas. To present the main differential diagnosis of pituitary and parasellar tumors. To underline potential challenges in establishing a correct diagnosis.

Method: A number of 19 patients, all female, with elevated serum prolactin levels have been examined between January 2015 and December 2016 on a 1.5T Magnetic Resonance Machine with a pituitary-dedicated scanning protocol including contrast media administration. Imaging findings were correlated with the clinical setting, presence of symptoms and evolution.

Results: Twelve patients demonstrated adenomas with typical imaging features: nodules with variable sizes, less (n=9) or more (n=3) than 10 mm, with hyperintense T2 weighted-imaging (WI) signal and delayed enhancement in dynamic contrast administration. Four patients showed atypical nodular lesions with hypo/isointensity in T2 WI, two of these showing contrast uptake homogeneous to the rest of the gland, and the other two having increased contrast media uptake in most dynamic phases. Three patients had no abnormal findings identifiable by MRI. No significant correlation was found between nodule size and serum prolactin values. The relation between signal intensity, contrast uptake behavior and bioclinical parameters was described.

Conclusions: Prolactinomas are a relatively common benign type of pituitary tumor, but with severe implications regarding fertility and clinical setting. While symptoms are usually the determinant in further investigating this pathology, MRI has some limits in conclusively identifying the morphological substrate, as presented in this study. A pattern of morphological imaging parameters may suggest particular series of bioclinical manifestations, and may help in providing an accurate diagnosis.

(ID 319) Is base impedance an efficient hemodynamic parameter to evaluate volemic changes in pregnant women?

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Introduction: Pregnancy is associated with specific hemodynamic changes which are continuously evaluated to identify specific changes in placental syndromes as preeclampsia. Impedance cardiography is a controversial noninvasive technique that evaluates hemodynamic profile in medical field with recent applicability in obstetrics.

Material and methods: We performed a prospective study that included healthy women in all trimesters of pregnancy. We evaluated their hemodynamic profile using impedance cardiography technique. This report refers only on base impedance parameter changes.

Results: Our study included a number of 141 healthy pregnant women. We evaluated the base impedance in each trimester of pregnancy. We observed that base impedance decrease in the second trimester of pregnancy compared with the first trimester of pregnancy ($Z= -7{,}105$, $p<0{,}0001$) and the third trimester of pregnancy ($Z= -5.378$, $p<0.0001$). The base increased after delivery ($Z= -4.603$, $p<0.0001$). Base impedance values were correlated with cardiac output changes in the same pacients. The mean values decreased during pregnancy from 58.47 Ohm to 42.8 Ohm.

Conclusion: Impedance cardiography offered the extensive hemodynamic profile of pregnancy in healthy woman through multiple parameters: cardiac output, systemic vascular resistance, ventricular ejection time or base impedance. Base impedance parameter can define the pregnancy hemodynamic profile.

(ID 140) Clinical significance of salivary testosterone and 17-β estradiol in systemic lupus erythematosus patients

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Objective: Saliva is a remarkable diagnostic fluid being used for monitoring a wide range of local and systemic diseases. Meanwhile, sexual hormones have been found to interfere with the normal immune response, often being co-factors to the installation of autoimmune diseases. The main aim of our study is to measure salivary levels of testosterone (T2) and 17-β estradiol (E2) in systemic lupus erythematosus patients (SLE) and compare them with those of non-SLE control subjects in order to evaluate the role played by sex hormones in the pathogenesis of SLE.

Method: Our research included 45 SLE patients fulfilling the Systemic Lupus Collaborating Clinics (SLICC) SLE's criteria, 10 healthy subjects and 15 patients with other autoimmune diseases. Salivary T2 and E2 levels were determined using ELISA kits.

Results: Salivary E2 levels in female SLE patients were significantly increased only comparing to vasculitis female patients [median (quartile 1; 3) 7.0 (4.3 – 32.3) pg/mL vs 3.9 (3.3 – 4.6) pg/mL, $p=0.04$]. Meanwhile, positive correlations have been found between salivary E2 levels and several clinical parameters such as age at inclusion ($r=0.357$) and duration of corticosteroid treatment ($r=0.331$). Moreover, E2 salivary level was identified as an independent predictor of the lupus renal nephritis. Regarding T2, salivary levels were found to be significantly lower in SLE female patients compared to both male and female controls [median (quartile 1; 3) 18.1 (11.5 – 72.8) pg/mL vs 218.4 (68.5 – 269.0) pg/mL, $p=0.004$, respectively vs 78.3 (40.9 – 230.4) pg/mL, $p=0.05$]. Furthermore, T2 and E2 salivary levels correlate.

Conclusions: The positive correlations between E2 salivary levels and clinical parameters, as well as the lower salivary T2 levels in SLE female patients versus the healthy subjects and the positive correlation between E2 and T2 salivary levels promote the use of saliva as a monitoring fluid for hormonal activity in SLE.

(ID 291) Retrospective study on *Helicobacter Pilory* and *Helicobacter Heilmannii* infection

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Objective: Helicobacter infection represents a major public health problem, because its high prevalence and its relationship with development of gastric adenocarcinoma and MALT-lymphoma. We evaluated and compared two groups of patients, the first diagnosed with one of the most frequent species of *Helicobacter – pylori,* and the second diagnosed with Heilmannii, which represents only 1% of all human Helicobacter infection.

Method: We performed a retrospective study on a group of 64 patient diagnosed with Helicobacter gastritis, divided in two subgroups, numeric equally: A (patients with *Helicobacter pylori*) and B (patients with *Helicobacter Heilmannii*), which were analyzed and compared, using Sydney System.

Results: Distribution on sex and age revealed a predominance of male patients in both groups and an early diagnosis in Heilmannii group (the youngest diagnosed patient: 15 years-old - group B; 27 years-old –group A; the mean age at diagnosis: 47.03 years – group B; 53.53 years – group A).

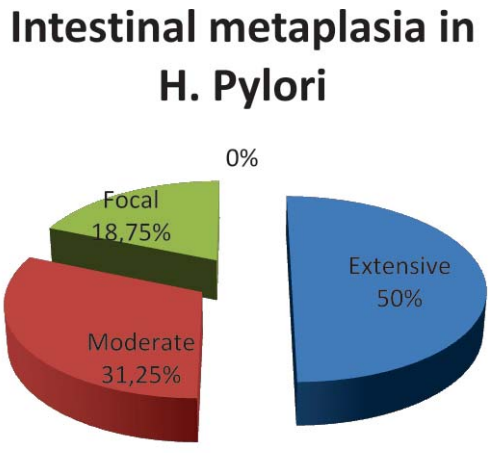
The majority of patients in both groups had moderate chronic inflammation (75% - group A, 68.75% - group B) with moderate activity (46.87 – group A; 56.25% - group B).

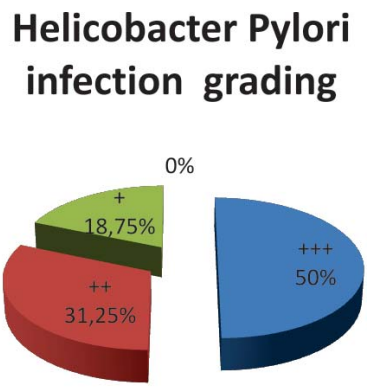
Severe chronic inflammation occurred only in Helicobacter heilmannii infection (28.12%), while *Helicobacter pylori* determined more cases of severe acute inflammation (34.37% versus 9.37% in group B).

6.25% of cases were inactive gastritis in both subgroups.

We noticed one case (3.12%) of atrophy in group A and none in group B.

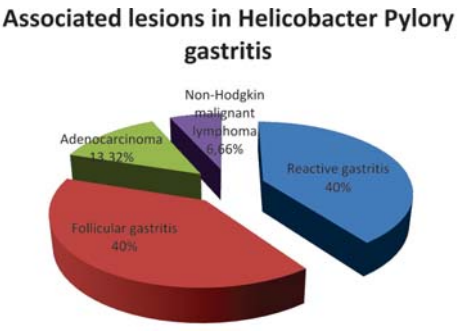
Intestinal metaplasia occurred in 100% cases of *Helicobacter pylori* (71.87% was moderate) and it was absent in *Helicobacter Heilmannii* infection.

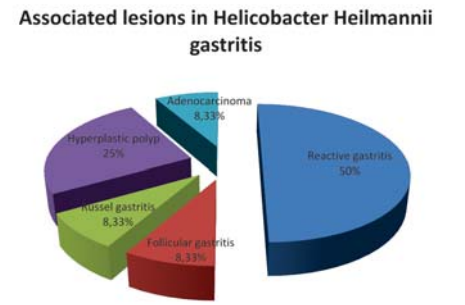


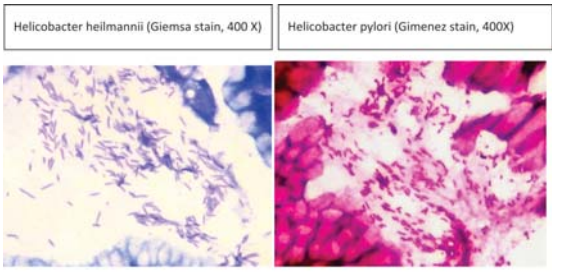


One patient, infected with both species of Helicobacter, had moderate chronic gastritis with moderate activity.

We evaluated the associated lesions and noticed that reactive gastritis, follicular gastritis and adenocarcinoma were diagnosed in both groups.







Conclusion: This retrospective study analised a group of 32 patients with *Helicobacter heilmannii* (which is a rare infection) and compared it with a similar group of patients diagnosed with Helicobacter pylory. *Helicobacter pylori* determined more cases of severe acute inflammation. Also, this study revealed an association between Helicobater gastritis and other types of gastritis or gastric malignancies.

(ID 242) Bacterial growth microcalorimetric metabolicfingerprint analysis

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Background and objectives: Microcalorimetry is an emerging technique with great potential in bacterial growth caracterisation using new concepts as bacterial growth microcalorimetric fingerprint. This caracterisation is based on the capture of heat generated by the complex metabolic processes taking place during bacterial growth over time using very sensitive thermal instruments (microcalorimeters). The recorded thermograms are shaped by many factors including bacterial species, initial bacterial population density and ambiental factors (temperature, glucose and other nutrient concentratio, pH, CO_2, O_2). The study objective is to perform a complex multidimensional metabolic analysis of bacterial growth using microcalorimetry by modifying some of these environmental factors.

Method: Growth thermograms from 3 bacterial species (*Escherichia Coli, Klebsiella Pneumoniae* and *Pseudomonas aeruginosa*) with different available oxygen (sample volumes of 400, 600 and 800 μL) and glucose (100%, 25% and 0% of TSB stock concentration) were analysed. All microcalorimetric experiments were performed starting from ambient temperature. Thermogram shapes, trends and thermal growth values were used to characterise the influence of the metabolic environmental factors on the three bacterial species.

Results: The thermogram shapes were different among species, making the method suitablefor bacterial discrimination and the shapes were altered by environmental factors. The trends showed a similar behavior of all three species in relation with the available glucose and oxygen concentration (ie the more oxygen and glucose available, more heat was generated). Thermal growth values (latency time, maximum peaks values were different among species and were altered by environmental factors). Complex 3D mappings of metabolic activity could be generated to characterise the metabolic activity.

Conclusions: Microcalorimetry ia a promising method for complex metabolic analysis of the bacterial growth and can bring new insights into the bacterial virulence, environmental adaptation and chemoresistance mechanisms, providing new scientific information that can be used in clinical practice.

(ID 252) Screening of oral carriage of *Candida* spp. in dental students

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Objectives: The purpose of the present study was to investigate the frequency of the oropharyngeal candidal carriage in healthy young people, and in addition, to identify the Candida isolates at species level.

Method: Pharyngeal swab samples were collected during the first semester of 2013, from a number of 112 healthy students, in the second year of study at the Faculty of Dentistry of the University of Medicine and Pharmacy "Carol Davila" - Bucharest. None of the subjects received antibiotic or antifungal treatment during the previous 3 months. All the samples were cultured on Sabouraud agar with gentamicin and chloramphenicol and chromID Candida agar (BioMérieux, France). The species identification was performed according to the colony color on chromogenic agar, the interpretation of germ tube test and ID 32 C system (BioMérieux, France).

Results: Ten Candida strains were isolated on both media from 10 subjects. Eight of the isolates developed blue colonies on the chromogenic agar, produced germ tubes and were identified as C. albicans by the ID 32 C system too. The other strains were identified as C. glabrata and C. krusei, respectively.

Conclusions: The rate of oropharyngeal candidal carriage was rather low (less of 10%) in this student group. As expected, C. albicans predominated among the yeast isolates. However, it is worth mentioning the intrinsic fluconazole resistance of the other identified species.

[This study belongs to the internal research plan of the Chair of Microbiology, Faculty of Dentistry, in collaboration with the head of the Chair of Epidemiology, Faculty of Medicine, U.M.F. "Carol Davila" - Bucharest].

(ID 278) Aspects of oral health-related behavior between dental and medical students in Bucharest

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Aim: To assess the differences in oral self-care between dental and medical students from University of Medicine and Pharmacy "Carol Davila" Bucharest.

Materials and methods: A self-administered questionnaire based on a modified version of the Hiroshima University-Dental Behavioural Inventory (HU-DBI) was completed anonymously, during faculty hours among 218 subjects, divided in two groups: 107 dental (61.7% females, mean age 22 ±2.92) students (before studying preventive dentistry curriculum) and 111 medical (39.6% males, mean age 20 ±0.66) students. The data collection was conducted during the first semester of academic year 2013-2014. The response rate was 81% for the dental students and 74% for the medical students. The data were analyzed using descriptive statistics and chi-square test. Statistical significance was based on probability values of less than 0.05.

Results: Although 96.3% (n=210) of all students had been to a dentist before, the medical students frequently went to the dentist only for emergency treatment (66.7% vs. 17.8%, $p<0.001$). Tooth brushing twice per day and respectively, daily flossing was significantly higher for dental students (90.7% vs. 73.9%, $p=0.001$ and respectively 47.7% vs. 16.2%, $p<0.001$), although the dentist never offered them tooth brushing instructions (34.6% vs. 57.7%, $p=0.001$). Also, medical students executed tooth brushing with strong strokes more frequently than dental students (39.6% vs. 22.4%, p=0,006). On the other hand, smoking habit was much more frequent among medical students (45.9% vs. 27.1%, $p=0.004$), exceeding half pack a day (30.6% vs. 19.6%), however, this was not statistically significant ($p=0.061$).

Conclusions: The study indicated that both dental and medical students need to improve their behavior toward prevention and personal oral care and further research is needed to clinically assess the oral health of the students of our university.

(ID 298) Report of a rare case of an intrasinus impacted upper third maxillary molar

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The ectopic eruption of teeth in the maxillary sinus (intrasinus teeth) is rare and thus the literature is poor in specific information. The presence of an infected tooth in the maxillary sinus can lead to sinusitis, which makes mandatory the removal of the tooth. At a CBCT exam such an intrasinus impacted upper third molar was found. The left upper third molar showed total impaction in the left maxillary sinus above the second upper molar, its roots being fused in a single compact one. The impaction was an almost horizontal buccolingual one, the crown of the third upper molar facing the postero-lateral wall of the maxillary sinus floor and the root being directed towards the inferior nasal meatus. The angle between the tooth axis and the horizontal plane was 17.29°. The impacted tooth was closely related to periapical radiolucencies of the buccal roots of the second upper molar. The close relation with the greater palatine canal was noted. The periapical inflammation below the crown of the impacted wisdom tooth is so able of spreading and infecting the dental follicular sac and the maxillary sinus. Extraction of such impacted upper third molar should avoid establishing oroantral fistulae and damaging the neurovascular content of the greater palatine canal.

(ID 159) Dento-facial manifestations in incontinentia pigmenti: case report

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Objectives: Incontinentia Pigmenti, also known as Bloch Sulzberger syndrome, is a rare X linked dominant ectodermal dysplasia, reported primarily in females. Early diagnosis, at birth or shortly after, is usually based on pathognomonic signs: erythematous eruption with linear vesiculation, followed by hypertrophic and verrucous lesions, predominantly localized on the torso. The third stage is characterised by macules, streaks and splashes of brown to slate-gray pigmentation. In addition to skin signs, this disease also affects other keratinized structures (hair, nails), eyes, central nervous system and dental structures. Regarding the phenotypic expression, oral manifestations play an important role, the characteristic dental anomalies being represented by agenesis and pegged teeth. The present report aims to emphasize the specific dento- maxillary mainfestations of Incontinentia Pigmenti in the light of orthodontic implications.

Method: The current paper describes the case of a 13 year old patient, presented at the Department of Orthodontics and Dental-facial Orthopedics, Faculty of Dentistry, University of Medicine and Pharmacy „Carol Davila", Bucharest, diagnosed with Incontinentia Pigmenti. The data obtained from the patients history was corroborated with clinical and complementary examinations.

Results: The patients semiology is characteristic for the general condition. In this regard, in the upper jaw there were observed: multiple anodontia, conical shaped dental crowns, as well as dental malpositions, hence influencing the dental occlusion. Intraoral aspects also involve the facial appearance, being affected the facial proportionality and profile.

Conclusion: Incontinentia Pigmenti is a genetic disorder with low incidence among the general population, but when encountered, it may sometimes express major impact on both dental and facial aesthetics, thus requiring an integrated interdisciplinary treatment.

(ID 377) Prosthetic rehabilitation to one patient with type II diabetes

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Objective: The type II diabetes patients can be sometime a challenge for dental treatment because there are well-known contraindications for these patients like implant treatment, partial removable dental prosthesis (RDP) with retentions on natural teeth and fixed dental prosthesis (FPD) on natural abutments which are already affected by periodontal chronic disease. The purpose of this study: to present a successful prosthetic rehabilitation with FPD and RDP to a 58 years old type II diabetes patient.

Method: A detailed treatment plan is based on: extractions for all periodontal affected teeth and crest remodeling, maintaining only periodontal unaffected teeth even these are migrate or rotate, endodontic treatments and choosing special retentors type for partial RDP combined with carefully balanced weight of metallic infrastructure. Also only stable final occlusion can offer a long time period maintaining prosthetics.

Results: Masticatory, fonatory and esthetic functions are very well reestablished and masticatory comfort is evident. Periodontal and marginal gingival tissues are healthy, after surgical and FPD restoration stages.

Conclusions: Pre-prosthetic planning and treatments, and final balance occlusion are mandatory for achieving best dental prosthetic result for type II diabetes patients.

(ID 149) The antioxidant effects of PLGA nanoparticles loaded with vitamin E in obese wistar rats

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Nanoparticles (NPs), of lipidic and polymeric nature, loaded with antioxidants have shown vast potential in cancer prevention, detection and augmenting of existing treatments. NPs such as PLGA (poly-lactic-co-glycolic acid) have raised a substantial interest due to their possible medical applications. PLGA is one of the most successfully used synthetic biodegradable polymers in the medical field being approved by the *US Food and Drugs Administration* and *European Medicine Agency*. Obesity, one of the largest public health problems worldwide, especially in industrialized countries, has been strongly correlated with systemic oxidative stress in humans and animal models.

The aim of our study was to test the antioxidant effects of NPs PLGA loaded with vitamin E an important hydrophobic antioxidant in obese rats.

Materials and methods: Ten obese rats were divided in 2 groups as follows: 5 rats were used as the control group and 5 rats received PLGA-vitamin E at a concentration of 50mg/kg body weight. The NPs were administrated orally using a feeding canula, and rats were sacrificed at 6 hours. Oxidative stress biomarkers such as glutathione (GSH), malondialdehyde (MDA) and advanced human oxidation protein products (AOPP), were detected in liver tissue homogenates.

Results and Discussions: Liver cell lysate revealed statistically decreased levels of MDA and AOPP and statistically increased levels for GSH ($p<0.01$) at the group of obese rats treated with PLGA-vitamin E. The results of our study revealed important modifications in oxidative stress status in liver lysate of obese rats which received PLGA loaded with vitamin E. The NPs PLGA may present future beneficial applications in the biomedical field.

(ID 354) Enhancement of solubility and dissolution characteristics of Nebivolol by solid dispersion technique

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Objectives: Nebivolol (NEB) is a cardioselective third-generation β–blocker widely used for the treatment of hypertension. However, some of its main drawbacks are related to poor solubility and bioavailability. The main objective of the present study was to investigate the possibility of improving the solubility and dissolution profile of NEB by using the solid dispersion (SD) technique.

Methods: The nebivolol SDs were prepared in 1:1, 1:3, 1:5 and 1:9 drug: polymer ratios by fusion method, using PEG 6000, PEG 4000 and Poloxamer 407 as carriers. All the SDs were evaluated for drug content, phase solubility, in vitro dissolution rate and interaction between drug and carriers by means of different spectral techniques. The dissolution behavior was studied in both 0.01N HCl and pH 6.8 phosphate buffer solutions, using USP Apparatus 1 (75 rpm). Quantitative analysis of the amount of drug released was performed using a validated HPLC method, with UV detection at 282 nm.

Results: The results confirmed obtaining of SDs of low crystallinity, and no drug-matrix interaction was identified. The uniformity of drug content was found for all SDs. NEB solubility was increased significantly as compared to pure drug and drug: polymer physical mixtures. The in vitro drug release rate was influenced by the drug–polymer composition, with Poloxamer 407 dispersions exhibiting faster dissolution than PEG 6000 and PEG 4000 ones. However, addition of a surface active agent (Tween80) in the polymeric matrix resulted in significant increase of the NEB dissolution rate, resulting in 85% release of the active substance within 15 minutes from the PEG 6000 matrix. A linear relationship between drug: polymer ratio and area under the dissolution curve was established. By fitting NEB release profiles to different kinetic model equation it was found that SDs exhibited fickian diffusional characteristics and best fitted to Higuchi model.

Conclusions: The formulations were able to improve the physicochemical characteristics of NEB. Poloxamer 407 and PEG 6000 + Tween80 SDs presented a marked increase in cumulative percentage release in comparison with commercial NEB tablet formulations and may provide valuable alternative to the conventional formulations.

(ID 199) Synthesis, characterization and antimicrobial evaluation of new compounds with 4-(Phenylsulfonyl)phenyl Moiety from Oxazol-5(4H)-ones and Oxazoles class

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Objectives: Heterocyclic compounds containing 1,3-oxazol-5(4H)-one and 1,3-oxazole rings are important targets in synthetic and medicinal chemistry, because of their applications as biologically active compounds. Thus, some 1,3-oxazol-5(4H)-ones have been reported to present antimicrobial, antitumor, antiviral activities. The 1,3-oxazole nucleus is an important pharmacophore in various anti-inflammatory (Oxaprozin, Romazarit, Ditazol, Isamoxole), analgesic (Oxaprozin), antimicrobial (Sulfamoxole, Sulfaguanole), muscle relaxant (Azumolene) drugs. Further, diphenylsulfone derivatives (Dapsone, Amidapsone, Acedapsone, Promanide, Solasulphone, Sulfoxone, Diuciphone) possess antibacterial, antiviral, anti-tuberculosis and antioxidant activities. The incorporation of diphenylsulfone moiety into various heterocyclic systems was found to increase their pharmacological properties. Therefore, there is considerable interest to synthesize new compounds from class of 1,3-oxazol-5(4H)-ones and of 1,3-oxazoles which contain 4-(phenylsulfonyl)phenyl moiety in 2 position with the aim to obtain potent biologically active compounds. The new compounds have been screened for their in vitro antimicrobial activity.

Methods: By Steiger N-acylation of phenylalanine with 4-(phenylsulfonyl)benzoyl chloride afforded 3-phenyl-2-[4-(phenylsulfonyl)benzamido]propanoic acid. This compound underwent intramolecular cyclization, in the presence of N-methylmorpholine and ethyl chloroformate or of acetic anhydride, to the corresponding saturated azlactone. Acylaminoacylation of dry toluene with 4-benzyl-2-[4-(phenylsulfonyl)phenyl] oxazol-5(4H)-one or 3-phenyl-2-[4-(phenylsulfonyl) benzamido]propanoyl chloride in the presence of anhydrous aluminum chloride led to N-(1-oxo-3-phenyl-1-p-tolylpropan-2-yl)-4-(phenylsulfonyl)benzamide. This intermediate was heterocyclized under the action of phosphorus oxychloride or of concentrated sulfuric

acid to the corresponding 4-benzyl-2-[4-(phenylsulfonyl)phenyl]-5-p-tolyloxazole. The structure of new compounds was confirmed by different physico-chemical and spectral methods (FT-IR, UV-Vis, MS, 1H- and 13C-NMR). Also the purity of new compounds was evaluated by RP-HPLC. The *in vitro* testing of the antimicrobial activity of four compounds against several bacterial and fungal strains was performed using the broth microdilution method, in order to detect the minimum inhibitory concentrations (MIC).

Results: Five new compounds were synthesized and characterized in order to evaluate their antimicrobial activity. The preliminary results indicated that 3-phenyl-2-[4-(phenylsulfonyl)benzamido]propanoic acid has inhibitory effect against *E. coli ATCC 25922* (MIC = 28,1 μg/mL) and *C. albicans 128* (MIC = 14 μg/mL) and 4-benzyl-2-[4-(phenylsulfonyl)phenyl]oxazol-5(4H)-one, against *S. aureus 1694* and *S. epidermidis 756* (MIC = 56,2 μg/mL).

Conclusions: We described synthesis, characterization and antimicrobial evaluation of five new compounds possessing the 4-(phenylsulfonyl)phenyl moiety. Some of these compounds exhibited moderately antimicrobial activity.

(ID 349) The antimicrobial activity of *Thymus Vulgaris* and *Origanum Syriacum* essential oils

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Objectives. The study evaluated the antimicrobial activity of *Thymus vulgaris* essential oil (29.74% thymol) and *Origanum syriacum* essential oil (66.64% carvacrol) on standard and human wild type strains of *Staphylococcus aureus, Streptococcus pneumoniae* and *Candida albicans* prelevated from the oral cavity.

Matherials and Methods. The antimicrobial activity was determined using the disc diffusion method (CLSI). The antimicrobial activity of the essential oils was determined using both standard strains and wild type strains: *Staphylococcus aureus ATCC 25923, Streptococcus pneumoniae ATCC 6305* and *Candida albicans ATCC 10231*. The wild type strains were isolated from human oral cavity.

Results. *Thymus vulgaris* essential oil (29.74% thymol) and *Origanum syriacum* essential oil (66.64% carvacrol) demonstrated a strong antibacterial activity. The inhibitory activities were similar and in some cases higher than the control antibiotics in both standard and wild type strains used in the study. The main components responsible for the antimicrobial effects are thymol and carvacrol, both being present in high concentrations in the studied essential oils.

Conclusions. Both *Thymus vulgaris* and *Origanum syriacum* essential oils obtained by us can be incorporated in different pharmaceutical formula for treating oral cavity infections.

(ID 165) Collagen - polyvinilic alcohol - indometacin composites as smart wound dressings

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Objectives: The aim of this study is to design, develop and evaluate new composites based on polymers (collagen and polyvinilic alcohol) for tissue regeneration and indomethacin as anti-inflammatory drug in order to be used for wound healing.

Methods: Type I fibrillar collagen in form of gel with different concentrations of polyvinilic alcohol and collagen, and the same concentration of indomethacin were mixed together in order to prepare composite gels. The obtained gels were crosslinked with glutaraldehyde for hydrogels preparation. The hydrogels were characterized by rheological analysis. By freeze-drying of hydrogels during 48 hours the spongious forms (matrices) were obtained. The matrices were characterized by scanning electron microscopy (SEM), water absorption, FT-IR spectroscopy and enzymatic degradation by collagenase solution. The release kinetics of indomethacin from matrices was performed using a sandwich device adapted to a dissolution equipment.

Results: The hydrogels showed a non-newtonian behaviour with shear-thinning. The viscosity of gels decreased with polyvinilic alcohol concentration increase. The SEM images showed a porous structure with interconnected pores. Collagen sponges present a structure with pore sizes between 20 and 200 μm, which became more and more compact with polyvinilic alcohol addition. The FT-IR showed interactions between collagen and polyvinilic alcohol. The enzymatic degradation indicated that the most stable matrix is the one with collagen:polyvinilic alcohol, 50:50, the other ones being degradable in time. The kinetic data of indomethacin release from matrices were fitted with Power law model and highlighted a biphasic release of drug. Such kinetic profiles are followed in skin wound healing for which important aspects are inflammation and local pain.

Conclusions: The complex results of physical-chemical, biopharmaceutical and biological characterization of the designed composites recommend these formulations as drug delivery systems with potential applications in the treatment of skin wounds.

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(ID 85) News concerning antifungal Thiourea derivatives synthesis

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Objectives: Infectious diseases caused by fungi remain a major world health problem due to rapid development of resistance to antifungal drugs. Candida species cause infections to a significant number of patients and the ratio of sepsis episodes with fungal etiology has grown. Among Candida species, *Candida albicans* is the most common identified species which is involved in invasive candidiasis.

The necessity of effective therapy has stimulated research into the synthesis of novel antifungal molecules.

Due to the important properties presented by thiourea derivatives, including antifungal activity, in this study we synthesized seven new thioureas derived from 2-thiopheneacetic acid and we characterized their physical properties (melting point, solubility) and antifungal activity against *Candida albicans ATCC-26790* standard strain in order to identify the most active compound.

Method: The compounds are resulting from a 2-step synthesis, finally being prepared by the reaction of 2-thienyl-isothiocyanate with various primary aromatic amines. They are characterized by their spectral (NMR, IR) properties.

The antifungal activity of these thiourea derivatives was evaluated by using both qualitative and quantitative assays methods, allowing to establish the Minimal Inhibitory Concentration (MIC) and the Minimal Biofilm Eradication Concentration (MBEC) values.

Results: We synthesized and analysed seven new thioureas derived from 2-thiopheneacetic acid, which were characterized by phisico-chemical and spectral methods.

Our results showed that some of the synthesized compounds exhibited a moderate activity against *Candida albicans ATCC-26790* standard strain.

Conclusion: The new thiourea derivatives could represent an option for the development of novel antimicrobial and anti-biofilm formation agents against fungal strains resistant to current medication. An ideal approach will include a combination of anti-biofilm molecules, with an anti-pathogenic effect, active at sub-inhibitory concentrations to reduce the risk of developing resistance and with low toxicity for the host cells.

(ID 86) Development and validation of a HPLC method for the determination of cefaclor and piroxicam from novel soft gelatine capsules

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Objective: The aim of this study was to establish the amount of two crude substances in a novel dose-fixe combination form: cefaclor and piroxicam (in a ratio 12.5:1), by performing a simple, accurate, precise and rapid HPLC method.

Materials and methods: The analysis was performed using a Waters chromatographic system, equipped with a C18 Gold Hypersil column (150x4 mm, 5 μm), a Jasco DG-980-50 3-line degasser and an UV Waters 486 detector. All substances (cefaclor, piroxicam and metoclopramide as internal standard) and reagents (acetonitrile, methanol, trifluoroacetic acid) were of analytical grade, purchased from Sigma Aldrich and Merck Co. A Millipore water system was used in order to obtain the purified water.

Results and discussion: An important aspect of the simultaneous quantification of the two drugs is the molar ratio of the substances and thus the range that confirms the linearity should be different (LOQ for piroxicam is 0.08 μg/mL and ULOQ for cefaclor is 100 μg/mL). Also, the polarity obvious different of the two analytes underlines the necessity of using a steep gradient for the mobile phase: the elution begins with a 80% aqueous solvent (suitable for the elution of cefaclor and the internal standard) and after 2.5 minutes, the organic amount of the mobile phase increases by 30% (chromatographic conditions suitable for the elution of piroxicam), in the end a ratio of 50 50% is reached for the two components of the eluent.

The HPLC method was investigated for accuracy, precision, selectivity linearity, in order to be validated. The response function of the detector for the investigated concentrations range proved linear. The analytical method was linear over the concentration chosen, the correlation coefficient being 0.99974 for cefaclor and 0.99983 for piroxicam. The bias›s values % per level of concentration were in the range [-4.02 ÷ 8.8%]. The results were within the limits of admissibility, the relative standard deviation was generally below 0.5%.

Conclusions: The method proved to be linear (r2 >0.99), precise (RSD<2%), accurate, selective, and precise, proving to be appropriate for the routine drug quality control analysis.

(ID 126) Clinical pharmacy study regarding the pharmacotherapy of patients with stroke admitted to a hospital for chronic diseases

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Objectives: A clinical pharmacy study on stroke pharmacotherapy and assessment of the need for clinical pharmacist intervention, in collaboration with the physician, to optimize therapeutic schemes.

Method: The study included 10 patients who had suffered a stroke, all admitted for recovery to a hospital for chronic diseases. The period of hospitalization varied between 11 and 19 days, the patients were hospitalized for 2 to 4 times at an interval of 3 to 6 months.

After obtaining the opinion of the hospital ethics committee, we accessed the observation files of the patients regarding health evolution and medication received in hospital or at home.

We followed up on patients according to scales Barthel, ADL and IADL existing records. We noted the possible side effects and drug interactions that may occur.

Results: The number of drugs administered depends on several factors including the severity of stroke or other associated pathologies. It is mandatory a close monitoring of possible interactions that may occur due to polymedication.

Regarding specific medication for stroke, all patients received at least one neurotonic/neurotrophic to improve the altered general state, of which piracetam is found in all patients. As antithrombotic medication, aspirin or clopidogrel were found in the patient's treatment regimen. Maintaining normal blood pressure is an essential element for patients who have suffered a stroke. This is achieved mainly through ACE inhibitors (70%), ARBs (20%), calcium channel blockers (40%), beta blockers (20%), and diuretics (20%). In order to reduce post stroke installed spasticity, central muscle relaxants are used, mostly baclofen (60%).

We noted the need for collaboration of the physician with a clinical pharmacist in some cases, mainly because of increased risk of falls and fracture: combination of drugs with high risk of miorelaxation, sedation and hypotension - ex. baclofen (the dose provided greater than the SPC), metoprolol 50 mg/day and midazolam 7.5 mg in the evening.

Conclusions: We consider appropriate the intervention of a clinical pharmacist for advice on drug treatment. This would be useful as a clinical pharmacist could agree with the physician for a dosing regimen to minimize potential side effects.

(ID 106) Evaluation the thermostability of polyphenols and the antioxidant activity in spinach leaves (*Spinacia Oleracea L.*)

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Spinach (*Spinacia oleracea L.*) is a well-known culinary herb. Fresh, quickly boiled and frozen leaves are used for cooking. Previous pharmacological reports have also shown therapeutic values (diuretic, hypoglicemic, hypocholesterolemic and antimicrobial activity). Flavonoids, polyphenolcarboxilic acids, tannins and other phenolic derivatives may be involved. On the other hand, the thermolability of vegetal polyphenols is well-known.

This study is a comparative phytochemical research, on four different samples of spinach leaves (similar to that are used in culinary) in view to evidence possible differences in terms of the content of polyphenols, which may predict a possible pharmacological variability.

Material and methods. The raw material consisted of fresh spinach leaves which is distributed in a supermarket in Bucharest. According to the label, the origin of the leaves is Romania. The following four samples was used: fresh leaves; quickly boiled leaves (deeped in hot water for 10 minutes); frozen leaves (kept for 6 months at -200C); leaves which are quickly boiled and afterthat are frozed.

For pol yphenols analysis, specific reactions and spectrophotometric assays of flavonoids (based on the chelating reaction with aluminum chloride) and total polyphenols (using Folin-Ciocâlteu reagent) have been used. Calibration curves of rutin (linearity range: 5-35 μg/mL, R2 = 0.9997, n = 11) and tannic acid (linearity range: 2.04-9.18 μg/mL, R2 = 0.9994, n = 8), respectively, were used to calculate the active substances contents. Antioxidant activity (expressed as EC50) was evaluated by means of DPPH radical scavenging capacity.

Results. Flavonoids, tannins and saponins were identified in all four samples. Fresh leaves have the highest contents of flavonoids and total polyphenols. When the leaves were boiled, the content of flavonoids not greatly decreased, but the content of total polyphenols significantly decreased. After freezing, the content of flavonoids significantly decreased, but the content of polyphenols had a smaller decrease. Fresh leaves have the best antioxidant activity.

Conclusions. Active principles which were identified may explain (theoretically) therapeutic properties: diuretic (due to flavonoids, saponins), astringent, antimicrobial and hypoglicemic (tannins), antioxidant (polyphenols).

In the diet should be consumed fresh leaves, as they provide the maximum intake of polyphenols (well-known vegetal antioxidants).

(ID 67) Researches regarding obtaining herbal extracts with antitumor activity

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Objective. The aim of our study was the phytochemical characterization and toxicological profile establishment of dry extracts, obtained from indigenous *Chelidonium majus* (greater celandine), *Medicago sativa* (alfalfa) aerial parts and *Berberis vulgaris* (barberry) bark.

Methods. Pharmacognostic analysis was used for qualitative (general and specific chemical reactions, HPLC) and quantitative (spectrophotometric determinations and HPLC) assays of active substances. Spectrophotometric assays aimed at determination of total phenolic content (expressed as tannic acid equivalents), flavones (expressed as rutin equivalents) and phenolcarboxylic acids (expressed as chlorogenic acid equivalents). Scavenger activity towards ABTS, DPPH free radicals and ferric reducing power were used for antioxidant capacity evaluation. The toxicological profile was determined based on Daphnia magna assay (the invertebrates were selected from a parthenogenetically culture from 2012 maintained at "Carol Davila" University, Bucharest, Romania, Department of Pharmaceutical Botany and Cell Biology). Statistic analysis was performed using Microsoft Office (Excel programme).

Results. Greater celandine dry extract has a high content of total polyphenols (8.33 g%), flavones (1.53 g%) and phenolcarboxylic acids (1.52 g%). According to our spectrophotometric results, *Berberidis extractum* has the highest content of total polyphenols (14.95 g%), whereas Medicaginis extractum is a rich source of flavones (1.46 g%). HPLC analysis revealed the presence of berberin in all analysed extracts, moreover barberry dry extract also contains apigenin and ferulic acid. *Barberry extract* has the best antioxidant activity, irrespective of methods (EC50 = 54.8 mg/mL – DPPH assay; EC50 = 0.28 mg/mL – ferring reducing power; EC50 = 60.04 mg/mL – ABTS assay). Regarding the toxicological profile, the lethality upon *Daphnia magna* intervertebrates decreased as follows – barberry extract > greater celandine extract > alfalfa extract. The standard reference, berberine, induced a high toxicity at great concentrations 340 and 170 μg/mL.

Conclusions. The extracts are a source of active substances with potential antitumor activity. Further analysis, regarding the citotoxicity will be performed in vitro, on different cancer lines (HeLa, HepG2, MCF-7), in order to establish the molecular mechanisms involved in the overall antitumor activity.

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(ID 82) Synthesis and study of new antimicrobial *Thiourea* derivatives

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Objectives: Infectious diseases caused by bacteria and fungi remain a major worldwide health problem due to the risk of resistance elicited by the existing anti-infectious drugs.

In this regard, a series of new compounds bearing both fluorine and thiourea moiety has been synthesized, characterized by IR, NMR and CHNS analyses and antimicrobial assays.

Method: The new thioureides have been obtained by condensation of 2-((4-ethylphenoxy)methyl)benzoyl isothiocyanate with various primary aromatic amines in anhydrous acetone.

They were characterized by their solubility, melting point, elemental analysis, infrared and nucleic magnetic resonance spectral studies.

The reaction progress and the purity of the compounds was investigated by thin layer chromatography.

The antimicrobial activities were determined against ATCC reference microbial strains: bacteria Gram-positive (*Staphylococcus aureus ATCC 25923, Enterococcus faecalis ATCC 29212, Bacillus subtilis ATCC 6633*), bacteria Gram- negative (*Escherichia coli ATCC 25922, Pseudomonas aeruginosa ATCC 27853*), and fungus (*Candida albicans ATCC 10231*).

The *in vitro* qualitative screening of the antimicrobial activity was carried out by an adapted agar disk diffusion technique and by the quantitative assay allowing to establish the minimum inhibitory concentrations value (μg/ mL), based on liquid medium two- fold micro-dilutions and performed in 96 multi- well plates.

Results: The new compounds were synthesized in good yields and the structures were confirmed by spectroscopic and elemental analyses data.

The largest spectrum of antibacterial activity, including Gram-negative (*E. coli, P. aeruginosa*) and Gram-positive (*E. faecalis*) strains was correlated with the presence of one fluorine atom as substituent on the phenyl ring. The isomeric substitution with three fluorine atoms was correlated with the presence of antifungal activity, but did not improve the antibacterial activity of the tested compounds, as compared with the substitution of one fluorine atom by the trifluoromethyl group. The 2-((4-ethylphenoxy)methyl)-N-(2,3,4-trifluorophenylcarbamothioyl)benzamide derivative exhibited the best antibacterial activity, while 2-((4-ethylphenoxy)methyl)-N-(2,4,6-trifluorophenylcarbamothioyl) benzamide the most intensive antifungal effect.

Conclusions: The new fluorinated thioureides were synthesized, characterized and screened for *in vitro* antibacterial and antifungal activities. The position of fluorine or trifluoromethyl substituents on the phenyl ring significantly influenced the anti-infectious activity of the tested compounds.

(ID 293) Computational studies regarding structural characterization of novel Al(III), Ga(III), In(III) complexes and their interaction with transferrin

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Objectives: Transferrin (Tf) is involved in transportation of metal ions throughout the organism (mainly Fe(III)). Moreover, cancer cells express high levels of Tf receptors, making Tf a potential drug carrier for targeted delivery into tumor cells. Al(III) and Ga(III) in plasma are mostly bound to the iron-transport protein Tf. The three metal complexes with the general formula ML3·nH2O (M: Al(III), Ga(III), In(III); L = deprotonated 5-hydroxyfllavone) have been proven to interact with Tf using spectrofluorimetric measurements. In order to predict a possible binding mode with Tf for these complexes, the interaction with the protein was analyzed by means of molecular docking. Geometry optimizations for the complexes were performed using quantum mechanical calculations based on density functional theory methods included in Gaussian 09.

Methods: Full geometry optimizations of the complexes were carried out using the DFT method in Gaussian09 software package, with Becke-3-Lee-Yang-Parr (B3LYP) supplemented with the standard 6-31G(d) (for H, C, O atoms) and LANL2DZ (for the metal atom) basis sets. The Tf X-ray crystal structure was retrieved from the RCSB Protein Data Bank (PDB). The interaction of the complexes with Tf was modelled using the AutoDock 4.2.6 (in AutodockTools) software package. The results were visualized using PyMOL 1.8 software.

Results: All the docking poses were clusterized on the basis of their disposition, and the clusters populated with at least 80 docking poses were analyzed. The preffered binding pockets were evaluated. The amino acid residues involved are varied; however, those of lysines, glutamic acid and cysteines feature prominently.

Conclusions: The DFT studies have confirmed the octahedrical surrounding of the trivalent metal ion by three deprotonated molecules of ligand. The molecular docking studies have confirmed the strong interaction of the three complexes with transferrin and the proximity of the binding sites to the tryptophan residues in the protein structure, which supports the experimental data.

(ID 81) Development of new N-(2-dialkylaminoethyl) benzanilides in order to be used in the treatment of chronic wounds

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Objectives: Skin disorders are an important public health problem, giving particular attention to the treatment of wounds and especially their microbial infection prevention. Our studies showed that this class of N-(2-dialkylaminoethyl) benzanilides offers proven antimicrobial molecules, potential candidates to be used in the treatment of chronic wounds, incorporated in hydrogels. The objective of this study was the synthesis, physicochemical characterization and to determine the cytotoxicity of some original benzanilides upon adipose-derived stem cells (h-ASCs) in order to identify the least toxic candidate for further studies.

Method: The original N-(2-dialkylaminoethyl) benzanilides (hydrochlorides) were obtained as a result of the alkylation reaction of certain aromatic amines with N-(2-chloroethyl)-N,N-dialkylamine hydrochloride, followed by the reaction of intermediary compounds with different aromatic acid chlorides. The resulted amides were turned into hydrochlorides by treating them with an etheric HCl solution.

The original synthesized compounds were analyzed in terms of physicochemical and spectral properties (IR, NMR) to confirm the structure of synthesized molecules.

The toxicity of the new compounds was investigated in terms of DL50 identification on human adipose derived stem cells (hASCs). Next, a 3D culture system was developed and validated in terms of biocompatibility for its prospective as wound dressing. These systems consist in a silk-fibroin scaffold loaded with hASCs and compounds.

Results: We synthesized and analyzed N-(2-dimethylaminoethyl)-N-(3-trifluoromethylphenyl)-4-bromobenzamide (hydrochloride) and N-(2-diethylaminoethyl)-N-(2,6-dimethylphenyl)-4-fluoro-3-(trifluoromethyl) benzamide (hydrochloride).

We determined using the MTT and Live/Dead assays the LD50 of the tested compounds. Furthermore, we showed that the hASCs morphology remains unaltered in contact with the compounds loaded 3D scaffolds as compared with the unloaded scaffolds only.

Conclusions: The synthesized and tested compounds have a favorable molecular structure for antimicrobial and local anaesthetic profile, essential characteristics for a substance which will be incorporated in a dressing wound. Based on their high value of DL50 on hASCs, these benzanilides are selected for further *in vitro* 3D studies.

(ID 127) Fatty acid amides with potential in the overweight treatment

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Obesity and overweight have reached epidemic proportions globally. The effective success of prevention or treatment of obesity might rely on therapies that control the energy metabolism and help the subject to regain a proper feeding behavior. Oleamides or oleic acid amides are a group of lipid mediators enzymatically biosynthesized in the body in response to many physiological and pathological stimuli.

Objective. The study aims to demonstrate the therapeutic potential of some oleic acid amides in the overweight treatment by modulation of feeding behavior and weight loss.

Materials and methods. The oleic acid amides were synthesized within the Department for Bioactive Substances Synthesis and Pharmaceutical Technologies from the National Institute for Chemical and Pharmaceutical Research and Development, Bucharest. Albino Swiss mice were purchased from the Animal Biobase of U.M.F. "Carol Davila", Bucharest. The animals were i.p. treated daily with oleic acid amides analogues for 10 days. The animal body weights and food-intakes were daily monitored. The oleic acid amides analogues concentration used for the study are molar equivalent with the therapeutic dose recommended for i.p. administration of oleoylethanolamide (5mg/Kg bw).

Results. The treatment with the oleic acid amides analogues demonstrated a optimistic effect comparing to oleoylethanolamide treated group. The body weight and food-intake were slightly decreased comparing to the control group.

Conclusion. The oleic acid amides analogues synthesized demonstrate the potential use of these molecules in overweight treatment.

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(ID 197) Antimicrobial screening of some extracts from *Fallopia Adans.* species (Polygonaceae)

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Objective: *Fallopia Adans* is a plant genus which contains approximately 15 species. *Fallopia convolvulus* (L.) *Á. Löve* and *Fallopia dumetorum* (L.) *Holub* (syn. *Polygonum dumetorum* L.) are native to Europe, and *Fallopia aubertii* (F. aubertii) (L. Henry) *Holub* (syn. *Fallopia baldschuanica* (Regel) Holub) is a subspontaneous species introduced from Central Asia as an ornamental plant. Recent research on the Fallopia genus showed that all species contain phenolic acids, flavonoids, stilbenes and anthraqinones. The species are used in traditional medicine for their anthelmintic, purgative and anti-inflammatory properties. In our previous works we identified several phenolic compounds such as chlorogenic, gallic and caffeic acids, hyperoside and izoquercitrin. Several studies showed that chlorogenic acid induced antimicrobial activity against Shigella dysenteria and Streptococcus pneumoniae, caffeic acid and its esters demonstrated antimicrobial effect against Escherichia coli, Klebsiella pneumoniae and Clostridium botulinum, whereas flavonoids extracted from species of Hypericum were bactericide against Bacillus subtilis.

Method: In the present work we performed an antimicrobial screening of several extracts from *F. aubertii, F. convolvulus* and *F. dumetorum* extracts against *E. faecalis, S. aureus 6538, S. aureus 25923* and *S. epidermidis 12228*. The extracts were obtained using ethanol and water mixture, followed by concentration and lyophilization. The total phenolic content was evaluated using Folin Ciocalteu spectrophotometric method. The extracts were tested at three concentrations using the semi-quantitative method based on diffusion (Kirby-Bauer method).

Results: The higher total phenolic content was found in *F. aubertii* extracts, followed by *F. convolvulus* and *F. dumetorum*. Among the tested extracts, only the extracts obtained from *F. aubertii* were active against all strains. The activity was lower compared to ampillicin used as standard.

Conclusion: Our work presents preliminary results regarding the antimicrobial activity of some extracts obtained from Fallopia species. *F. aubertii* was the only active species against the tested strains. Further studies are needed in order to decipher the mechanism of activity and the compounds responsible for this effect.

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(ID 152) Synthesis, characterization, crystal structure and toxicity evaluation of metal complexes with Schiff base derived from 3-formyl-6-methylchromone

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Objectives: Schiff bases are significant intermediaries for the synthesis of some bioactive compounds. These organic compounds have received considerable attention since the discovery of their antibacterial antifungal, antiinflammatory, analgesic anticonvulsant, anti-HIV, antiviral and anticancer properties. Transition metal complexes with Schiff base ligands are important class of compounds in medicinal and pharmaceutical field and show a variety of biological applications. The paper describes the synthesis, characterization and biological activity of some Cu(II), Co(II), Zn(II), Cd(II), Pd(II) and Pt(II) complexes with 4-amino-2,3-dimethyl-1-phenyl-3-pyrazolin-5-one with 3-formyl-6-methylchromone.

Methods: The Schiff base ligand (HL) was obtained by refluxing in ethanol an equimolar amount of 3-formyl-6-methyl-chromone with 4-amino-2,3-dimethyl-1-phenyl-3-pyrazolin-5-one. Metal complexes were synthesized using ligand HL and different metal salts. The structures of the complexes have been established by IR, 1H NMR, 13C NMR, UV-Vis, FAB, EPR, mass spectroscopy, elemental and thermal analysis, magnetic susceptibility measurements and molar electric conductivity. In addition, the structure of palladium complex was determined by single-crystal X-ray diffraction. The ligand HL, metal complexes, and the corresponding salts were tested for their toxicity using Daphnia magna bioassay an method in accordance with the new regulations on reducing the number of vertebrate animals in toxicology testing. LC50 of each compound were evaluated at 24 and 48h.

Results: The physical-chemical analysis confirmed the composition and structures of the newly obtained complex. The coordination ability of the Schiff base HL has been proved in complexation reaction with Cu(II), Co(II), Zn(II), Cd(II), Pd(II) and Pt(II) ions. In all the complexes, HL acts as a mononegative tridentate ligand (ONO), except for palladium complex where the ligand coordinates in a mononegative bidentate manner (ON).

Almost all new structures showed a significant lower toxicity compared to synthesis precursors. The Zn (II) complex showed a slightly higher toxicity than the ligand.

Conclusions: The study make an important contribution to the diversification of the metal complexes with Schiff base, with low toxicity and potential biological activity.

(ID 289) The quality control of some solid oral formulation with diosmin and hesperidin available on the Romanian pharmaceutical market by HPLC analysis

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Objectives: Diosmin and hesperidin are bioflavonoids considered to be vascular-protecting agents used to treat chronic venous insufficiency, hemorrhoids, lymphedema, and varicose veins. As flavonoids they also exhibit anti-inflammatory, free-radical scavenging and antimutagenic properties. Diosmin was first introduced as a therapeutic agent in 1969. In Europe, formulation containing diosmin and hesperidin are available as a prescription medicine but also as a nutritional supplement. The aim of this study was the quality control of some solid oral formulations with diosmin and hesperidin, by high performance liquid chromatography.

Methods: A reversed phase HPLC method with UV detection at λ=275 nm was used. The mobile phase consists of acetonitrile: glacial acetic acid : methanol : water in a ratio of 2:6:28:66 (v:v:v:v), with a flow rate of 1.5 mL/min and a column temperature of 40°C. Injection volume was 10 μL and an ODS chromatographic column (100 mm length x4.6 mm i.d.), with 5 μm particle size was used.

Results: Four similar oral formulation with 450 mg diosmin and 50 mg hesperidin available on the Romanian pharmaceutical market registered as dietary supplements or drugs, were analyzed. The identification of diosmin and hesperidin was checked. For the assay of diosmin in tablets, external standard method was used and all the four drug products were analyzed in triplicate. The content of diosmin was in the range of 95 – 105% (99.04%, 104.78%, 102.83%, 103.61%), in line with the requirements of current European Pharmacopoeia for all the analyzed formulations.

Conclusions: European Pharmacopoeia quality standard regarding the diosmin content are fulfilled by both the drug products and the dietary supplements tested in the present study, available on the Romanian pharmaceutical market.

(ID 60) Pharmacognostical researches regarding indigenous *Ganoderma lucidum* mushroom

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Ganoderma lucidum is an inedible mushroom, used for thousands of years in traditional Asian medicines. According to scientific literature Ganoderma has a variety of therapeutic effects: antitumoral, immunomodulator, antioxidant, hepatoprotective, antihyperglycemic, cholesterol-lowering, angiogenesis inhibitor, antimicrobial and others. *Ganoderma lucidum* harvested from spontaneous flora of Romania has not been used in therapeutics yet.

Objectives: determination of botanical characteristics, evaluation of chemical fingerprints, quantification of the main chemical compounds and evaluation of the antioxidant activity of indigenous *Ganoderma lucidum* (Curtis) *P. Karst* (the lingzhi or reishi mushroom).

Material and methods. The material consists of basidiocarps of *G. lucidum* harvested in August 2015, from forests of Moraresti, Arges County (500 m altitude), Romania. For the identity determination and quality assessment, the pharmacognostic analysis was applied. For quantitative analysis spectrophotometric and chromatographic methods were used. The content of polyphenols was determined by Folin–Ciocalteu method. The antioxidant activity was assessed using reducing power assay and scavenger activity of DPPH (2,2-diphenyl-1-picrylhydrazyl) free radical.

Results. The macroscopic examination confirmed the identity of the raw material. The microscopic examination revealed the presence of hyphaes with specific basidiospores (a double-walled) and hymenium with basidies in different stages of evolution. Triterpenes, sterols, monosaccharides, polysaccharides, nonalkaloid compounds were identified by specific chemical reactions. By thin-layer chromatography one can note the presence of several spots corresponding to compounds with sterols/ triterpenes behavior. In the course of our investigation we obtained a moderate content of polyphenols (0.18 g% expressed as tannic acid). The antioxidant activity of the extracts (EC50 = 14.48 mg/mL – reducing power assay and EC50 = 12.16 mg/mL- DPPH assay) can be correlated with the presence of phenolic compounds or with germanium derivatives (that are mentioned by scientific literature). However, the antioxidant activity is lower compared to ascorbic acid (EC50 = 0.02 mg/mL – reducing power assay and EC50 = 0.53 mg/mL – DPPH method).

Conclusion. The indigenous and spontaneous mushroom *Ganoderma lucidum* harvested from Romania is a potential source of biological active compounds.

(ID 147) Synergistic effect of newly synthesized dibenzothiepines and clinically used antibiotics against Gram positive and Gram negative bacteria

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Objectives: The aim of this work was to investigate a possible synergistic effect between newly synthesized dibenzothiepine derivatives and commonly used antibiotics, against different Gram negative and Gram positive bacteria.

Antibiotics are the most imperative weapons in combating bacterial infections. However the escalating levels of drug resistance render it indispensable to explore new drugs with lower risk of developing resistance. There is evidence in the literature that certain non-antibiotic compounds, alone or in combination with conventional antibiotics may play a useful role in the management of specific bacterial infections produced by bacterial strains resistant to conventional antibiotics.

In our previous works we reported the anti-pathogenic potential of some newly synthesized dibenzothiepine compounds with tricyclic 6.7.6 structure. These observations prompted us to investigate whether dibenzothiepines are able to augment the activity of different antibiotics when tested in combination.

Methods: The new dibenzothepine derivatives were obtained in a five step synthesis. The structures were confirmed by IR and NMR spectroscopic and elemental analyses. Reference microbial strains used in this study were obtained from the Microbial Culture Collection of Cantacuzino National Institute of Research and Development for Microbiology and Immunology and powders of antibiotics were obtained from pharmaceutical companies. Representative compounds from each class of antibiotics were selected. Evaluation of the synergistic activity between newly synthesized dibenzothiepine derivatives and antibiotics was performed by disk diffusion assay.

Results: The newly synthesized dibenzothiepine derivatives were analyzed in terms of physicochemical and spectral properties and have been found to act synergically with the majority of conventional antibiotics belonging to different classes.

Conclusions: These results recommend these molecules with tricyclic structure for further studies, for developing novel compounds which can interfere with the growth of certain bacterial strains and also lead to reversal of resistance in multiple drug resistant pathogens.

(ID 170) The antioxidant effect of Gerovital H3 - a preliminary study

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Objectives: The aim of this study was to assess the antioxidant effect of Gerovital H3 (GH3), an original procaine-based product developed by Ana Aslan, on both mitochondrial preparations and serum proteins and lipoproteins. Considering that oxidative stress is linked to aging and several metabolic diseases, the anti-aging properties of Gerovital may be attributed, at least in part, to an antioxidant effect.

Materials and methods: For this experiment, two types of biological samples were used: a mitochondrial suspension and serum concentrates. The mitochondrial suspension was prepared from rat liver (0.3 mg protein/mL) and the serum concentrates were obtained following centrifugation on Amicon Ultra - 10k Centrifugal Filter Units 10,000 NMWL Millipore from three patients from the NIGG "Ana Aslan" Bucharest. Th selected patients were with different metabolic characteristics: a diabetic, a dyslipidemic and a control patient. We tested different concentrations of Gerovital in comparison to procaine 2% (main component of GH3). Sample peroxidation was measured using the previously tested method with Amplex Red. Fluorescence was recorded as relative fluorescence units (RFU), using λexc=544nm and λems=585nm.

Results: On serum samples, GH3 determined an important decrease of the fluorescent signal (-64.19 to -82.30%, depending on concentration), with similar results for procaine (-57.22 to -81.57%), this decrease revealing an antioxidant effect. On the mitochondrial samples, Gerovital and procaine had similar effects (-32.35 to -81.53 % and -40.91 to -83.66%, respectively).

The inhibitory effects rise with concentration increase, for both tested solutions, in both serum and mitochondrial samples. To evaluate the dynamics of the recorded RFU values, we calculated the reduction in fluorescent signals of samples between lowest and highest concentrations of tested compound. We found that Gerovital and procaine determined a similar RFU decrease in serum (46.95% and 57.8%, respectively) or mitochondrial samples (72.70% and 72.35%, respectively).

Conclusion: These preliminary results indicate that Gerovital exerts a protective role against cellular and systemic oxidative stress. The observed antioxidant action may be part of its anti-aging effect, pointing to a possible use of this drug in metabolic maladies frequently found in elderly patients, but which seem to affect younger and younger individuals nowadays.

(ID 208) Anticancer screening of indigene *Ranunculaceae* species

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Objectives: *Ranunculaceae* species are widespread across the Northern Hemisphere. *Anemone, Ranunculus* and *Consolida* are widespread over the temperate regions, including Romania. Several studies revealed a promising therapeutic profile of these species. Among the therapeutic activities, the anticancer activity is the most promising of all. The main constituents of these species are ranunculosides, volatile lactones which are responsible of antitumor and antimicrobial properties. Ranunculin is found in all plant parts and by enzymatic hydrolysis leads to protoanemonin which presents high toxicity if ingested or comes in contact with the skin. Protoanemonin leads by dimerisation to anemonin which is a non-toxic compound. The aim of the present work is to evaluate the anticancer and toxicity of medicinal species belonging to Ranunculaceae family.

Material and methods: Extracts from aerial and underground parts of the plant species were prepared using water ethanol and mixture of water and ethanol. The extracts were tested using a GC-MS method in order to identify protoanemonin. The toxicity was evaluated using Daphnia magna bioassay by computing the LC50 values. The MCF7 (breast cancer), Caco-2 (colon carcinoma) and HeLa (cervical cancer) human tumour cancer cell lines were exposed to four concentrations of plant extracts and MTT assay was performed on.

Results: Protoanemonin was found only in the *Anemone* extracts. All extracts were toxic for the crustacean *Daphnia magna*. Among all extracts, aqueous *Anemone* rhizomes extracts from exhibited the highest toxicity, being followed by *Ranunculus* and *Consolida* extracts. Extracts from aerial parts of *Anemone* showed good activity against all tested cell lines, whereas the cytotoxicity induced by *Consolida* and *Ranunculus* extracts was lower than 50%.

Conclusion: In the present work we obtained and evaluate the toxicity on *Daphnia magna* and the cytotoxic effect on three cancer cell lines of various extracts from *Ranunculaceae* plant species. Our research demonstrated important biological effects induced especially by *Anemone* extracts, thus proving the existence of a specific interaction between the extracts and the biological targets.

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(ID 40) Contrast-enhanced ultrasound with SonoVue could accurately assess the renal microvascular damage in arterial hypertension

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Aim: Renal damage in arterial hypertension (HT) is a major predictive factor for future cardiovascular events and mortality. Early changes of renal microvasculature are difficult to identify by current diagnostic methods. The aim of our study was to assess the renal microcirculation damage in HT using dynamic contrast-enhanced ultrasound (DCE-US).

Material and methods: 108 patients with HT grade 1-3 including 34 with diabetes (DM) and 11 with chronic kidney disease (CKD), age=61.95±10.96, males=40.7% and 21 healthy adults were investigated by DCE-US with sulphur hexafluoride. After intravenous administration of 1.2 ml contrast agent, the images were recorded for 3 minutes. Renal microcirculation changes were evaluated in vascular phases: early cortical phase, late cortical phase and medullar phase. Time-intensity curves (TIC) parameters: Arriving Time (AT), Time to Peak (TP), Peak Intensity (PI), Area Under the Curve (AUC) and Mean Transit Time (MTT) were calculated using Contrast Dynamics software.

Results: DCE-US derived-parameters in renal vascular phases were progressively prolonged according to the grade of HT, more accentuated in DM and CKD. AT in HT group was 16.79±4.47 seconds, in DM 21.44±14.10 seconds and in CKD 17.27±3.72 seconds vs. healthy 9.95±1.56 seconds. PI and AUC were correlated with the grade of HT and comorbidities. No side effects were noted.

Conclusions: DCE-US is a non-invasive, reliable, simple and safe method to evaluate renal microcirculation damage in HT. AT, PI and AUC accurately assess the renal microvasculature impairment in all grades of HT and associated comorbidities.

(ID 217) Headache: a misleading symptom

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Objectives: Female, 47 years old, without cardiovascular risk factors, without pathological personal history presents to the emergency department with anterior chest pain, irradiated at the neckline, onset 3 hours before the moment of statement, accompanied by irradiant headache. The patient has been presented occasional headaches for the last two years.

Methods: Physical examination: patient conscious, cooperative, normal weight, no motor deficits, without stiff neck, right systolic blood pressure = 70 mmHg, left systolic blood pressure = 120 mmHg, ventricular rate 80/minute, regularly heart rate with early beats, Mediastinal diastolic murmur, systolic murmur at the left carotid artery, with no signs of systemic or pulmonary congestion.

Electrocardiogram: sinus rhythm of 80/minute, isolated ventricular extra systoles with a tendency of systematization.

Biohumoral: normochromic normocytic mild anemia, stationary; Troponin I presented positive turn; D-dimer was negative and constant.

Chest X ray: normal size heart, slightly dilated aorta.

Corroborating all data one can suspect acute aortic pathology. Transthoracic echocardiography performed: non-expanded, hypertrophied, with a correct kinetics left ventricle; slightly dilated left atrium; aortic root and ascending aorta aneurysm (53 mm), complicated by aneurysm dissection, extended to the right common carotid artery, bicuspid aortic with anterior and posterior disposed cusps, with severe aortic regurgitation by the anterior cusp; pulmonary hypertension with low probability; free pericardium.

Chest CT scanning (with dye) confirms dilatation of the ascending aorta (50 mm) with defective filling within the ascending aorta.

Results and conclusion: The final diagnosis is: Acute ascending aorta dissection with progression on the right common carotid artery; Bicuspid aortic; Severe aortic regurgitation.

The patient was transferred to a cardiovascular surgery service, where one can detect the overlapped progression of dissection fold at the right coronary artery level.

Prosthetic aortic valvar and vascular and bypass on the right common carotid artery and the right coronary artery are performed.

Postoperative evolution was favorable.

The feature of this case lies in the detection of congenital heart malformation (Bicuspid aortic) at the age of 47, already accompanied by complications: aneurysm of the aortic root and the ascending aorta with dissection and severe regurgitation.

Setting rapid correct diagnosis and successful complex cardiovascular surgery led to life saving.

(ID 75) Tachycardia-dependent paroxysmal atrioventricular block - treat the tachycardia or the bradycardia?

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Introduction: Paroxysmal atrioventricular block (PAVB) is defined as the sudden and unexpected repetitive block of the atrial impulse conduction to the ventricles. PAVB is an important etiology of syncope due to delayed emergence of an adequate escape rhythm. The main cause of PAVB is the increased rate of the atrial input to the atrioventricular (AV) conduction system, that is, TD-PAVB.

Case report: We present the case of a 75 years old woman who presented to the emergency department after 2 syncopal episodes over the previous week. Medical history revealed arterial hypertension treated with an ACE inhibitor. The ECG upon admission revealed alternance of sinus rhythm with narrow QRS complex and a heart rate of 75 bpm with a supraventricular tachyarrythmia with 2:1 AV block, narrow QRS and a heart rate of 150 bpm and the sudden onset of AV block with significant ventricular pauses. Initial echocardiographic evaluation revealed regional systolic dysfunction, but cardiac necrosis markers were repeatedly normal. We performed a coronary angiogram who revealed normal epicardial coronary arteries, then a temporary transvenous pacemaker was placed and the patient was started on amiodarone. During i.v. amiodarone loading the patient repeated frequent supraventricular tachyarrythmias with episodes of PAVB and pacemaker activity due to lack of an adequate escape rhythm. We then decided to implant a permanent VVI pacemaker. After the implant the patient maintained sinus rhythm, but developed persistent complete left bundle branch block.

Conclusions: The therapeutical dilemma of the case was if the paroxysmal AV block is a functional phenomenon due to repetitive concealed conduction during atrial tachyarrythmia, requiring antiarrythmic theraphy, or a conduction system disease, requiring antibradycardia pacing. The fact that the patient developed complete left bundle branch block after pacemaker insertion confirmed the existence of infrahissian conduction system disease and the appropriateness of the therapeutical attitude.

(ID 288) Metabolic syndrome in a patient with chronic psoriasis: case report

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Introduction. Recent studies have proposed the idea of an association between psoriasis (a chronic skin disorder) and metabolic syndrome (MS), which promotes a systemic inflammatory state. MS can influence the evolution of the cutaneous lesions in psoriasis.

Methods. We report the case of a 68-year-old patient who presented with typical lesions of psoriasis, with a prolonged evolution over the last months. He was diagnosed with chronic psoriasis a few years ago and he underwent local treatment with high potency topical corticosteroids, keratolytic agents and phototherapy with a poor response and without a complete disappearance of the lesions. Psoriasis Area Severity Index (PASI) was 9.4. Moreover, the patient had a personal history of type 2 diabetes mellitus, arterial hypertension, ischemic cardiac disease, grade 1 obesity (body mass index of 31 kg/m^2, large waist circumference), vocal cords carcinoma (excised in 2014) and squamous cell carcinoma of the nose (excised in 2012).

Results. Blood test results were consistent with metabolic syndrome (hypertriglyceridemia, low HDL cholesterol level, hyperglycemia, elevated glycosylated hemoglobin). Moreover, elevated hepatic enzymes were found. In the case of our patient, even thought a systemic treatment would have been the most appropriate therapeutic option, the presence of multiple associated comorbidities represented a contraindication for systemic drugs. The patient was referred to internal medicine department for evaluation and treatment and he was advised to lose weight. He is expected to return for a follow-up visit, in order to reconsider the therapeutic options.

Conclusion. Metabolic syndrome may interfere with the clinical course and therapeutic options in patients with chronic psoriasis.

(ID 68) Rasterstereography – modern method for real-time monitoring of idiopathic scoliosis treatment

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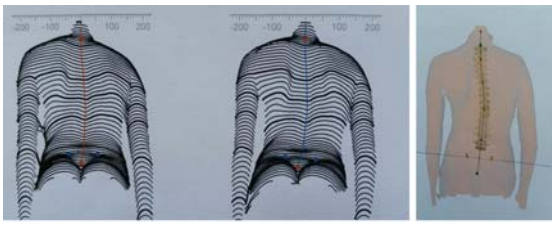
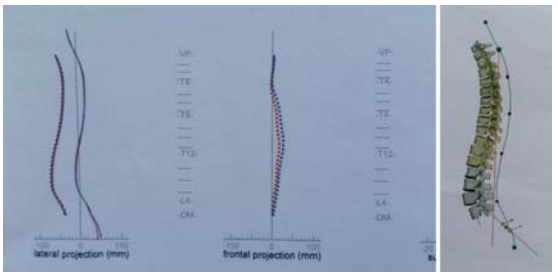
Introduction: Rasterstereography accuracy is an investigation made by a non-irradiation device which projects white lines on the body using triangulation and photogrammetric concept, in order to measure the back surface and to provide a three-dimensional reconstruction of the back and spine.

Although radiography remains the „gold standard" in scoliosis assessments, rasterstereography significantly reduce the need for otherwise indispensable radiographs. Another practical use, in fact the scope of this study is to verify the results of conservative treatment of idiopathic scoliosis.

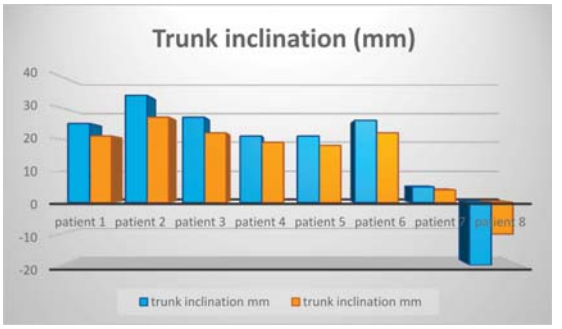
Material and method: The study included 8 children (6 girls, 2 boys) diagnosed with idiopathic scoliosis, aged between 13-14 years, in-patients at CNCRNC Dr. Nicolae Robanescu, enrolled in a physical therapy program and bracing treatment according with their disease. Rasterstereography was made at the begining and the end of the hospitalization following: trunk inclination, trunk imbalance, pelvic imbalance, pelvic torsion, lateral deviation of spine from symmetry line in the frontal plane.



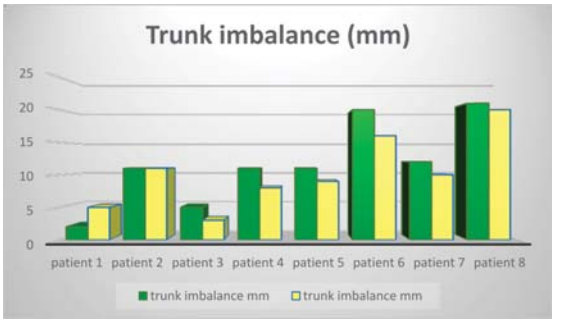
Rasterstereography



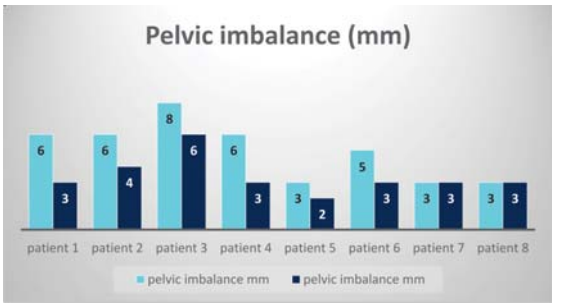
Results:



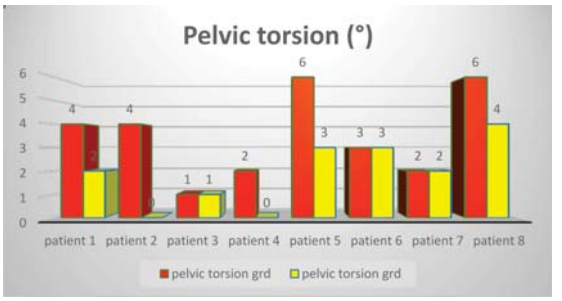
Trunk inclination was corrected at all patients.



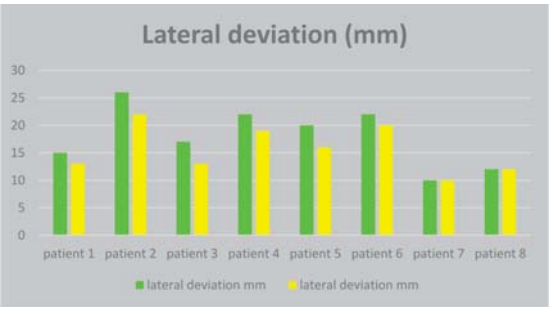
Trunk imbalance was corrected at 87.5% patients.



Pelvic imbalance was corrected at 75%.



Pelvic torsion was corrected at 62.5%.



Lateral deviation of spine was corrected at 75%.

Conclusion: Rasterstereography gives graphical, analytical and clinical informations about the posture and the pelvis. It is a way to compare the results provided by rasterstereography at the begining and the end of the hospitalization, with an immediate reproduction of the data on the screen, giving a real time feedback to the therapist and to the patient.

(ID 135) Early diagnostic of the progressive multifocal leukoencephalopathy – clinical and imagistic consideration

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Progressive multifocal leukoencephalopathy (PML) is rare form of subacute viral encephalitis, determined by the JC virus in patients with a chronic induced immunosuppression. Though it was initially described in patients with oncohaematologic diseases, most of the published reported cases are in known HIV-infected patients. In this paper, we report three cases in our clinical experience, with PML developed in three different pathologic conditions where the diagnosis was very early due to the recognition of the initial brain MRI changes suggesting this etiology. One case was a female patient treated more than 2 years with a monoclonal antibody (natalizumab) for an active form of multiple sclerosis, another was another female patient treated for 10 years with mycophenolate mofetil after kidney transplantation, and the third case is a male patient without a known immunosuppressive state who developed a clinico-imagistic picture suggestive for PML, who on this occasion was diagnosed with a previously unknown HIV infection. In all cases the key element for the early diagnostic of PML was the suggestive MRI changes, followed by specific detection of anti-JC antibodies and finally confirmed by the presence of JC DNA in CSF. The early diagnosis based on the brain MRI suggestive changes and its importance resides in the fact that in different background disorders it allows therapeutic measures which limit the evolution of PML pathology (which otherwise is lethal) as in the multiple sclerosis cases, or allow the diagnosis of the basic condition of the patients, inducing chronic immunosuppression and the initiation of the specific treatment. Our discussion emphasizes the importance of the recognition of the early MRI signs for this rare condition and the need of a differential diagnostic workup.

(ID 71) Diagnostic difficulties in a case of megaloblastic anemia

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Introduction: Megaloblastic anemia is a type of hyporegenerative macrocytic anemia, characterized by asynchronism in nucleo-cytoplasmic maturation, with nuclear dysmaturity, secondary to impaired DNA synthesis. This process may affect all three hematopoietic cell lines, causing anemia, thrombocytopenia and leukopenia to varying extents. In childhood, that is most frequently associated with vitamin B12 or folic acid deficiency.

Case report: A 3 year 5 months old girl, with significant personal history of cerebral palsy secondary to ischemic stroke after herpetic encephalitis, being treated with Valproate, was admitted with eyelid and palmoplantar edema, disturbance of the respiratory rhythm and perioral cyanosis. The child, known with swallowing disorders, was fed orally, with inadequate quantities of exclusive vegetable food.

Physical examination revealed an underweight child, with spastic quadriplegia and severe neurodevelopment delay, pallor, circumoral cyanosis, facial petechiae, perioral dermitis, dry skin, with furfuraceous desquamation, erosive nappy erythema, coarseness of hair, nail dystrophy, eyelid and palmoplantar edema, difficulty in feeding, moderate respiratory distress, tachypnea, oxygen desaturation, symmetric breath sounds, multiple crackles, tachycardia, high blood pressure, oliguria, no seizure during examination. Laboratory tests showed hyporegenerative macrocytic anemia, thrombocytopenia, severe inflammatory syndrome, elevated serum ferritin, hypoproteinemia, hypofibrinogenemia, hepatic cytolysis, high BUN, dyselectrolytemia. We presumed the diagnosis of MODS secondary to sepsis and started medical treatment with oxygen, antibiotic, antimycotic, diuretic and anticonvulsant agents, together with transfusion therapy, partial parenteral and enteral nutrition. However, despite of clinical and laboratory improvement in patient condition, macrocytic anemia and thrombocytopenia persisted. We excluded the most common central causes of bicytopenia, by assessing the bone marrow status, characterized by mild hypocellularity, macrothrombocytes. Peripheral smear also showed macrovalocytes, erythroid anisocytosis and poikilocytosis. B12 vitamin level was normal with very low values of serum folate. Considering the patient history (inadequate dietary, valproate treatment), clinical examination, investigations and good response to folate therapy, we formulated the diagnosis of megaloblastic anemia.

Conclusion: In a pediatric patient with severe neurological disorder, the diagnosis of pancytopenia may be difficult, having different causes, both acquired (infectious, nutritional, toxic) and constitutional. Megaloblastic anemia secondary to dietary deficiency must be considered, being a reversible cause of medullar failure.

(ID 280) Screening of oral carriage of *Candida* spp. in dental students

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Objectives: The purpose of the present study was to investigate the frequency of the oropharyngeal candidal carriage in healthy young people, and in addition, to identify the *Candida* isolates at species level.

Method: Pharyngeal swab samples were collected during the first semester of 2013, from a number of 112 healthy students, in the second year of study at the Faculty of Dentistry of the University of Medicine and Pharmacy "Carol Davila" - Bucharest. None of the subjects received antibiotic or antifungal treatment during the previous 3 months. All the samples were cultured on Sabouraud agar with gentamicin and chloramphenicol and chromID Candida agar (BioMérieux, France). The species identification was performed according to the colony color on chromogenic agar, the interpretation of germ tube test and ID 32 C system (BioMérieux, France).

Results: Ten *Candida* strains were isolated on both media from 10 subjects. Eight of the isolates developed blue colonies on the chromogenic agar, produced germ tubes and were identified as *C. albicans* by the ID 32 C system too. The other strains were identified as C. glabrata and *C. krusei,* respectively.

Conclusions: The rate of oropharyngeal candidal carriage was rather low (less of 10%) in this student group. As expected, *C. albicans* predominated among the yeast isolates. However, it is worth mentioning the intrinsic fluconazole resistance of the other identified species. [This study belongs to the internal research plan of the Chair of Microbiology, Faculty of Dentistry, in collaboration with the head of the Chair of Epidemiology, Faculty of Medicine, U.M.F. "Carol Davila" - Bucharest].

(ID 204) Empathy and systemizing quotients according to envisioned profession in Romanian students

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Introduced by Baron-Cohen in the early 2000s, the empathizing and systematizing quotients (EQ and SQ) have been used to quantify specific personality traits as predicting factors for various psychiatric pathologies. However, they could also be regarded as interesting tools for the assessment of behavioral tendencies in the general population.

In this context, the aim of this study was to verify the existence of correlations between these quotients and the desired profession in a sample of Romanian students.

For this purpose, 611 students (aged 18 to 55, 474 females) from 14 universities completed the EQ questionnaire. 586 of them also completed the SQ (457 females). The data were analyzed using Excel and SPSS 20.0. The distribution of the continuous data was checked using the Shapiro-Wilk test and parametric analysis was conducted for $p>0.05$.

There were differences in the EQ according to the declared chosen profession ($F(608, 10)=1.85$, $p=0.04$). Post-hoc LSD analysis showed that these were due to the students who wanted to become lawyers (having significantly lower EQ scores than those who had not yet chosen a profession ($p=0.003$, 95%CI= [-9.32, -1.91]) and than those who wanted to become doctors ($p<0.001$, 95%CI=[-9.28, -3.1]). Women had higher SQ scores than the men ($p<0.001$, $t(584)=3.82$, 95%CI=[2.1, 6.5]). There were no correlations between either of the quotients and the degree of self-reported stress or the average number of hours of sleep per night.

Based on our results, we may conclude that the specific differences in personality traits that influence the choosing of a profession may be predicted by the empathizing quotient.

(ID 39) Neonatal respiratory distress sydrome in a 32 weeks neonate

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Objective: Respiratory distress syndrome caused in the premature neonates by deficiency in surfactant production is the most severe respiratory pathology in this category of patients. Deciding the amount and the duration of support is often a difficult decision, balancing the need for intervention with the concern of complications represented mainly by the infection.

Methods: We present the case of a 32 weeks premature male neonate that presented with signs of respiratory distress and received early CPAP as initial respiratory support. Despite an initial favorable course, at 24 hours of life an increase in the need for oxygen was observed, thus the neonate was intubated and ventilated and surfactant was administered (one dose of 100 mg/kg). The respiratory evolution was favorable, the patient was extubated on day of life 4. We based the decision to extubate on the improvement of the gas exchange, respiratory compliance curve, the evolution of the pulmonary ultrasound and the presence of spontaneous breathing. There was no intra-ventricular hemorrhage or leukomalacia detected on the head ultrasound. The patient was fed with fresh mothers' milk, feeding was advanced according to the tolerance of the baby. At 8 days the neonate was on full feedings.

Results: The most difficult decisions to be taken were the decisions to intubate and extubate the patient. They were based on trends in evolution, not allowing the status of the patient to deteriorate, but anticipating the possible deterioration based on early signs. The decision about the readiness to extubate was also made on indirect signs, the pulmonary ultrasound pattern played an important role.

Conclusion: The treatment of a neonate with Respiratory Distress Syndrome is always a difficult task, because the decisions should be made quickly according to the trend in evolution.

(ID 254) Pregnancy in rheumatoid arthritis

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Background: Planning a pregnancy in rheumatoid arthritis (RA) meets several issues, mostly concerning potential drug toxicity and disease flares. The purpose of this study is to evaluate pregnancy planning, RA activity during pregnancy and postpartum, pregnancy and fetal outcomes in a Romanian cohort of female patients diagnosed with RA.

Methods: This is an observational, ambispective study, including 58 RA Caucasian females with obstetric history after the onset of RA. The cases were obtained from several Clinics of Rheumatology from Romania.

Results: The mean age at inclusion was 37.1 years, age at RA diagnosis 3.9 years and mean age at conception 32.2 years. We recorded a total number of 96 pregnancies: 48 deliveries at term, 4 premature births, 15 elective abortions, 24 spontaneous abortions, and 5 ongoing. 34/96 (35.4%) had at least one unplanned pregnancy, while being on treatment.

Concerning the exposure to synthetic DMARDs during the pregnancy: 6 patients received Leflunomide and 4 received Methotrexate during the first trimester,.

Regarding biologic DMARDs: 5 were exposed to Etanercept - 3 less than 3 weeks, 2 treated in second trimester: 1 only in the 15th and 16th weeks due to relapse, and the other one until week 20.

One patient received Certolizumab until week 12, and one Adalimumab until week 4.

6 patients treated with Rituximab were included, last infusions were between 4 weeks and 48 weeks before conception, and one in the fourth week of pregnancy. In several cases the patients stopped the biological therapy before conception.

81.25% of our patients were in Remission or Low Disease Activity (by DAS28CRP) at conception and generally this status was maintained, excepting several situations.

The average pregnancy length was 36.36 weeks and the mean birthweight was 2878.90 grams. 2 growth restriction was identified and several atopic dermatitis, no teratogenic effect.

13 patients never had a new flare postpartum and in the others the mean time of postpartum flare was 12.1 weeks.

Conclusions: Patients with RA can have successful pregnancies. More than 60% of pregnancies have been planned. Pregnancy decreases disease activity, but many deliveries are followed by RA flares. No fetal abnormalities were diagnosed.

(ID 34) Pregnancy overlaid to myelofibrosis with myeloid metaplasia - case report

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Idiopathic myelofibrosis is encountered within the myeloproliferative diseases, being the least prevalent one in women of childbearing age. The prognosis is guided by pancytopenia, leukemic transformation and thrombosis as a dominant complication. Data for support a management protocol for pregnancy in context of myelofibrosis are insufficient, under ten cases being described until now, a half of this cases being finalized with fetal death due to placental infarction in the second or third trimester. We present a case of a 34-year-old pregnant woman diagnosed with primary myelofibrosis with myeloid metaplasia Jak 2 negative. Personal history does not include miscarriage or still-birth. The patient was treated with anagrelide hydrochloride, which is interrupted and replaced with Interferon A, 3MU/day at 6 weeks of gestation when the pregnancy was confirmed. Considering the sever thrombocytosis overlaid on her disease administration of low-dose aspirin was recommended (150 mg/day). The course of the pregnancy was uneventful. The patient was hospitalized at 33 weeks of gestation because of moderate vaginal bleeding and high risk of preterm birth. After a specialized hematological investigation, the treatment with aspirin was replaced with low molecular weight heparin 0,6 ml per day which resulted in a stabilization of platelet number. The patient delivered at 38 weeks of gestation by cesarean section a healthy baby boy, 2750 grams, Apgar score 9. Anticoagulant and interferon treatment was continued post-partum under hematologic surveillance. The particularity of the case is represented by its rarity, being the first case of this kind declared in Romania until now and by the complexity of association with pregnancy, that required continuous obstetrical – hematologic collaboration and surveillance.

(ID 229) Rapid remission in an esophageal neoplasm

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Objectives: The objectives of this case report are to highlight the symptoms of a patient with esophageal neoplasm with invasion of cardia and to highlight the fast partial remission of such a tumor.

Method: A male patient aged 53 shows to the family doctor complaining of dysphagia and repeated vomiting after ingestion of coffee. In the past he had an episode of pulmonary embolism which is treated now with low molecular weight heparin. The family history include grandmother with uterine neoplasm and father with liver neoplasm. He is diagnosed with gastritis and he take treatment for two months. The symptomatology worsens and the weight decreases with 28 kg, reaching 68 kg.

Results: The patient shows to the local hospital where on endoscopy suggestive appearance of a tumor is observed. Circumferential narrowing of the lower third of esophagus, about 17 mm, with invasion of cardia is observed on computer tomography of the thorax; the proliferative process expands to the stomach and liver. Nodular formations in the liver and kidney are observed. After biopsy and histopathology, the diagnosis of esophageal cancer with liver and kidney metastases is established. A 10 cm stent in the esophagus is being assembled and the chemotherapy is initiated, which consists of six series in XELIRI regime every 21 days, with irinotecan 300 mg and capecitabine 500 mg, 6 capsules per day. The patient has pain after stenting. Evolution is good, the patient responds well to treatment, he has achieved partial remission, the tumor decreases in size and he eliminate the stent on rectal way after the second round of chemotherapy. Prognosis is poor because of liver and kidney metastases.

Conclusions: The diagnosis of esophageal neoplasm should be considered in a patient presenting with symptoms mimicking gastritis and gastritis treatment should not begun before endoscopic diagnosis.

(ID 359) Particularities of physical and rehabilitation medicine following a spinal arachnoid cyst

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Spinal meningeal cysts are diverticulae of the arachnoid or dura mater or of the nerve root sheath. Arachnoid cysts are cerebrospinal fluid covered by arachnoidal cells and collagen that may develop between the surface of the brain and the cranial base or on the arachnoid membrane and can be found on the brain or on the spine. They are uncommon, usually asymptomatic – but if they are large, they may cause mass effect and symptoms relating to compression of local structures - and typically found incidentally at MRI (that has been performed for another reason). Symptomatic cysts should be surgically resected. If complete resection is impossible, fenestration of the cyst wall, drainage or shunting may relieve symptoms.

We present the case of a patient misdiagnosed at first, then diagnosed with T2-T4 spinal arachnoid cyst, who underwent repeated surgeries, drainage and shunting, at first without any therapeutic outcome, then left with a hemiparetic motor deficit. It took years of rehabilitation for the patient to be able to walk and to perform ADLs, ASIA score was permanently modified and the Modified Ashworth score for spasticity recently became 0.

The particularity of the case consists in a wrong diagnosis that was put at first which led to complications and to permanent motor deficit; also the iterative surgeries and their complications led to a very difficult process of rehabilitation.

(ID 25) The benefits of medical gymnastique in postmenopausal osteoporosis

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Background: Post-menopausal osteoporosis represents one of the most frequent subjects in many medical specialties as diagnostic and treatment researches and also, in mass-media, because it has become a public health problem due to the increasing number of affected patients, with possible complications in time with major impact upon the patient's QoL and on the resources of the medical health system.

Objectives: There are many studies regarding the drug therapy but also, there are proofs about the physical exercise benefits based on the anabolic effects on the bone metabolism, with anti-resorbtive effects, conservation and even increasing the bony mass after regular aerobic exercise.

The authors designed a study based on the presumption that a specific medical exercises program is useful for patients with postmenopausal osteoporosis. The aims were:

Unitary evaluation of clinical parameters

Paraclinic monitoring (osteodensitometry, lab markers)

QoL evaluation

Material and method: It was a prospective study on a group of 30 caucasian over 45years old women diagnosed with postmenopausal osteoporosis based on osteodensitometry score (T score<-2.5); exclusion criteria – secondary osteoporosis, malignancies, decompensated heart problems, severe physical or psychic dysfunctions that interdict physical effort, low compliance.

All of the patients were integrated in a specific kinetic program during 3 study-years, with evaluation of the following parameters: clinic evaluation, VAS, fracture score, QUALEFFO 41 score, Tinetti and „up and go" test, „chair rising" test, DXA, osteocalcin and HGH level; the statistics used EPI INFO.

Results: The osteocalcin mean values levels (the resorbtive marker) decreased in 6 months of medical gymnastics (from 20.4 ng/ml to 14.7 ng/ml)

The mean value levels of HGH rised 4.3 times comparing to initial determination

Significantly statististic decrease of QUALEFFO 41 score from 124.4 at the beginning of the study to 115.8 at the end of the study

DXA showed maintainance of the mean values.

Conclusions: Medical exercise can positively influence the bone turn-over with promoting antiresorbtive effects and bone-growing stimulative effects.

The QoL increases after regular kinetic exercises.

Good long-term compliance to medical gymnastique

The physical program must be individualised and based on solid kinesiologic principles.

(ID 8) Intra-abdominal giant cystic mass in a hemodialysed patient with diabetes mellitus and decompensated virus C cirrhosis - case presentation

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Background: Diabetes mellitus is an important cause of impaired renal function which can progress to end-stage renal disease (ESRD). On the other hand, infection with Hepatitis C virus is another cause that can leads to chronic kidney disease (Hepatitis C cryoglobulinemia, cirrhosis). In such cases, gradually increasing abdomen's volume can be initially interpreted as a greater liver decompensation, not as intra-abdominal tumor presence.

Methods: A 57-year-old man, with uncontrolled type 2 insulin diabetes mellitus for 12 years, was diagnosed in January 2015 with vascular and parenchymatous decompensated virus C chirrosis and diabetic ESRD (RFG =12ml/min/1.73m2). The important secondary anemia, hypoalbuminemia, thrombocytopenia and severe acidosis have been highlighted. Internal jugular tunelled CVC was implanted and hemodialysis was start in June 2015. Clinically, the patient presents cachexia, small ascitis and no fever. Esophageal varices were endoscopic detected. In the next 5 months, the patient presents gradually increasing abdomen's volume, initially interpreted as a greater liver decompensation. Paracentesis removed a greenish fluid, but fluid cultures including BK, were negative. The pelvic and abdominal CT-scan highlighted right parasagittal intraperitoneal cystic mass (12/22/27cm), with homogenous content and thin walls. The upper mass limit was prehepatic (in the plane of the biliary tree and gallbladder) and lower limit in contact with the urinary bladder. The cystic mass moving and compress bowel loops around the mesentery; maybe mesenteric cysts or intra-abdominal cystic lymphangiomas. A very thin blade of fluid was detected in the perihepatic space and parietocolic recess. These types of intraabdominal masses are uncommon and clinically confusing lesions

As a treatment, only 12 cm from cystic mass was surgically removed, due to important intraperitoneal bleeding (trombocytopenia), without postoperative complications or restoring intraperitoneal fluid. 4L of greenish fluid without smell were removed. Fluid collected cultures were negative for germs included BK or fungus or anaerobic bacteria.

Conclusions: The case particularity is represented by differential diagnosis between spontaneous bacterial peritonitis and giant intracystic fluid mass, in a patient with decompensated virus C cirrhosis. But also differentiation between mesenteric cysts and intra-abdominal cystic lymphangiomas could be important for the patient's prognosis.

(ID 112) Endoscopic treatment of postoperative fistulas in sleeve gastrectomy

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Objectives: Sleeve gastrectomy is a surgical procedure in which the stomach is reduced by surgical removal of a large portion of the stomach along the greater curvature. One of the most feared complications after a sleeve gastrectomy is gastric leak. The objective of this study was to present the endoscopic treatment used to treat postoperative fistulas.

Methods: A retrospective study was performed on all patients treated in our endoscopy center in the period January 2016 and March 2017. The study included a number of 5 patients with gastric leaks at the gastroesophageal junction and mediogastric leak, after sleeve gastrectomy. In 1 case we used endoclips along the fistula tracts, in another case covered stent and clips and in the other 3 cases only fistula self-expanding stents.

Results: All 5 patients needed reintervention. In one case the patient acused severe pain after the placement of the covered stent, non-responsive to pain medication, and we were forced to remove it and use endoclips instead. The patient with mediogastric leak had a good evolution after placement of "umbrella stent" fully covered. In another case with peritoneal abscess we used endoclips with the need of a second intervention after 6 months. In one case migration of the stent occurred and we removed it endoscopically. Unfortunately one of the patient died because of septic complications. In all other 4 cases the patients were able to return to oral diet after the procedures, covered stents were successfully removed and the gastric leaks were sealed.

Conclusion: The upper digestive endoscopy represents a reliable and effective method not only to diagnose but also to treat possible complication of postoperative fistulas and it has good results in terms of survival. Also it allows rapid healing compared with a surgical re-intervention and also allows oral nutrition.

(ID 78) Monolateral intravitreal cysts - two rare cases

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First described by Tansley in 1899, intravitreal cysts are rare vitreal pathologies , poorly understood and researched. They still remain at the status (rank) of "ocular curiosities" as Duke Elder called them. Few cases are reported and discussed in the specialty literature.

We report two cases of intravitreal cyst with different etiology. The first case is of a 14 year old child without any significant medical history and the other case is of a 20 year old woman whose intravitreal cyst is accompanied by a retro crystal membrane. Both patients were accidentally discovered. They did not have any history of ocular trauma, infection, their visual acuity was 20/20, without miodesopsia or any other ocular symptoms.

The causes of vitreous cysts are still controversial; after countless pathophysiological hypotheses, there was proposed a classification that divides concise intravitreal cysts in congenital and acquired disorders. The two presented cases have approximately the same clinical aspect, but most likely the cause of their appearance is different.

(ID 32) Management of osteoporosis in a patient with primary hyperparathyroidism treated conservatively

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Objective: Primary hyperparathyroidism (PHPT) is a known cause of secondary osteoporosis because of its catabolic effects promoting osteoclast activity and bone resorbtion. Osteoporosis itself is an indication for parathyroidectomy in a patient with PHPT. Studies show a significant remineralization with and increase of 20% of bone mineral density (BMD) in the first year after surgery.

Methods: A 74 years old woman presented for a routine evaluation. The patient was known with: osteoporosis diagnosed at 59 years old with vertebral fractures (T4-T5,T12), PHPT (inferior left and superior right parathyroid adenomas, with the maximum size of 19 mm) diagnosed at 63, high blood pressure,atrial fibrilation and type 2 diabetes. The spine T score L1-L4=-5.6 with Z=-3.7 at diagnosis. At first, the inconstant higher levels of PTH (77.41 pg/ml) with normal calcemia and calciuria were considered to be secondary to the vitaminD deficiency.The patient was continuously treated with bisphosponates, calcium and vitaminD with BMD improvement. She started to have higher levels of calcium and calciuria after 4 years of treatment [highest level of PTH was 104.5 pg/ml and highest calcium=10.95 mg/dl with constantly low bone turn-over markers, normal 25 (OH)D and renal function].The calcium treatment was stopped but PTH level remained high even after the correction of vitaminD deficiency and under alfacalcidol.The treatment was adjusted accordingly and PHPT was diagnosed (parathyroid ultrasonography, neck CT and 99m technetium-sestamibi scintigraphy localized the 2 parathyroid adenomas). Although the patient fulfilled criteria for parathyroidectomy, she refused to undergo surgery.

Results: Our last evaluation found high PTH (82.72 pg/ml), high calcium (10.3 mg/dl) and hypercalciuria (330 mg/24h) with normal 25(OH) vitamin D, phosphorus and bone turn-over markers. Parathyroid ultrasonography reconfirmed the adenomas, abdominal ultrasound showed kidney microlithiasis and DXA revealed persistent osteoporosis (TL1-L4=- 4;Z=-1.7). Recommendations were:advisement for surgery,fluid intake,treatment with bisphosphonates and alfacalcidol with phosphocalcic metabolism reevaluation after 3 months.

Conclusion: The case particularity is the history of longtreated osteoporosis and mild PHPT with a slow evolution that manages to be countered by bisphosphonates having low bone turn-over in a patient which refuses surgery.The most important fact is not the BMD increase but especially the absence of fractures in the last 15 years of treatment.

(ID 268) Cardiovascular impairment in the use of anabolic steroids

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Background: It is well documented in the literature that strength anaerobic exercises can cause changes in the cardiovascular system. Additionally, anabolic steroid use is associated with a wide range of adverse conditions, such as hypogonadism, testicular atrophy, impaired spermatogenesis, gynecomastia, and psychiatric disturbance. But what effect does steroid consumption have on the cardiovascular system?

Materials and methods: We present the case of a patient aged 41 years, practicing physical strength training, predominantly anaerobic, for over 20 years at 80% of its 1 RM (repetition maximal) intensity, hospitalized in the cardiology clinic for chest pain. From his personal history, we mention that 1 year ago he had a complete ambulatory cardiovascular evaluation with normal biological findings, mild concentric hypertrophy and no ECG arrhythmias on the 24 Hours ECG monitoring. He was completely investigated during the hospitalization with clinical, biological, and paraclinical examinations.

Results: During his hospitalization, biological investigations have shown mixed dyslipidemia, impaired fasting blood glucose, mild hepatic cytolysis, moderate nitrogen retention, without resting ECG changes indicative of ischemia. From the echocardiographic perspective, there was noticed a considerable progression of the left ventricle hypertrophy with the development of impaired relaxation diastolic dysfunction pattern at the mitral pulsed wave doppler analysis. The vascular stiffness assessment showed increased pulse wave velocity. Bruce protocol treadmill ECG stress test performed was positive for ischemia imposing the need to perform diagnostic coronary angiography which revealed permeable epicardia coronary vessels. Thus, the final diagnosis was microvascular angina.

Conclusions: By corroborating clinical and laboratory data, additionally considering the accelerated progression of structural cardiac changes with increased pulse wave velocities, the suspicion of anabolic hormones consumption was raised. Medical anamnesis was taken again, insisting on the issue of consumption of anabolic substances. Finally, the patient admitted using injectable anabolic steroids in the last eight months in 3 cycles with different active substances. In this context, the patient was advised to stop the use of all physical activity enhancement supplements; he received an adjusted workout plan and was revaluated after one year. No medication was administered during this time. Results showed a partial reversibility of clinical and laboratory changes.

(ID 22) Clinical characteristics at diagnosis in a cohort of patients with endogenous Cushing's syndrome

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Introduction. Endogenous Cushing's syndrome is a rare disease associated with severe morbidity and increased mortality if untreated. The most frequent causes are Cushing's disease (ACTH secreting pituitary adenoma) and adrenal Cushing's syndrome (cortisol-secreting adrenal adenoma, hyperplasia or, rarely carcinoma)

Objective. To investigate the clinical characteristics at the time of diagnosis in a cohort of patients with endogenous Cushing's syndrome (CS) belonging to these most frequent types.

Material and methods. We retrospectively analyzed the presentation of 68 cases diagnosed with endogenous Cushing's syndrome followed-up in our institution.

Results. There were 57 women, 11 men aged 18-74 years –old (mean 45.57+/-14.2). 38 had Cushing's disease (CD) while 30 had adrenal CS (27 single adrenal adenoma, 3 bilateral adrenal hyperplasia). Patients with CD were significantly younger (40.42 vs 52.1 years, p 0.000)

The most frequent signs/symptoms leading to the initial consultation and diagnostic suspicion were central obesity (55 cases, 80.88%), purple striae (28 cases, 41.1%), secondary arterial hypertension (27 cases, 39.7%), secondary diabetes mellitus (24 cases, 35.29%), hirsutism in 23/55 women (41.81%), hypogonadism in 23 cases (33.82%), proximal myopathy in 17 cases (25%), edema (10 cases, 14.7%). 13 cases (19.11%) also had secondary osteoporosis (diagnosed by DXA osteodensitometry).

Among the two diagnostic groups there were several differences. Proximal myopathy, secondary hypertension and diabetes mellitus were all more frequent in cases with adrenal Cushing compared to those with CD. (p= 0.011, 0.006 and 0.024, respectively) This did not reflect more severe hypercortisolism in adrenal CS, as the hormonal values were similar in the two groups.

Conclusions. Clinical signs in patients with CS are both nonspecific (central obesity, edema, arterial hypertension) and more suggestive of the disease (purple striae, proximal myopathy) and a combination of these should prompt a thorough investigation for this severe condition. Some of them occur more frequently in adrenal CS compared to CD (myopathy, arterial hypertension, diabetes mellitus)

(ID 172) Measles epidemics in Romania from 1996 to 2016

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Introduction: Measles is a vaccine preventable diseases, 2 doses of measles-containing vaccine (MMR) providing lifelong immunity. High (>95%) vaccine coverages for the first and also for the second dose are required to interrupt transmission. The WHO Europe set the year 2018 as target to eliminate measles in region, in accord with WHO Global Strategic Plan for Measles and Rubella, 2012-2020.

Our aim was to describe the measles epidemics in Romania in the past 20 years.

Method: We reviewed the data from ECDC, CNSCBT and the medical literature for this period.

Results: Since 1996 there were 4 epidemics reported in Romania: 1997-1998, 2004-2006, 2010-2013 and 2016-present. Out of these, the highest number of cases (32915) was recorded in 1997-1998. There were over 9000 cases in 2004-2006, 13645 cases in 2010-2013, and 3911 cases reported in 2016-2017 (up to 24 March). The fatality rate was (in chronological order) 0.06%, 0.15%, 0.03% and 0.43%, respectively.

In all these 4 epidemics, the most affected age group was that of children <1 year old.

The most affected regions were the north and west part of the country and the neighbouring districts, areas which also had suboptimal measles vaccine coverage (in 2016 Arad 74.3%, Timis 75.2%). Vaccine coverage with one dose of MMR at 24 months of age was 88.1 % at national level in 2016.

The circulating genotype of the measles virus was D4 in the 2004-2006 and 2010-2013 epidemics. In the current epidemic, the circulating genotype is B3.

Conclusions: Romania has low vaccine coverages for the first and second doses of MMR, which only decreased over the years, leading in turn to the accumulation of a pocket of susceptible population and thus to measles epidemics.

The fatality case rate in the 2016-present epidemic is higher than that observed in the past three.

The circulating genotype in Romania has changed in 2016 from D4 to B3.

The highest number of cases is reported in the north and west part of the country where the vaccine coverage is lowest.

The current epidemic is ongoing, with the decrease of vaccine coverage remaining as the main cause.

(ID 53) The role of radiotherapy in palliative treatment of a recurrent lip cancer in an elderly patient case

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Introduction: Lip cancer is the most frequent malignant neoplasm of the oral cavity. Typically, squamous cell carcinoma originates in the red lip, whereas basal cell carcinoma involves the white lip. The most frequent tumour related to the lips is squamous cell carcinoma, with the lower lip more commonly involved than the upper lip.

Materials and methods: We present the case of a 97 years old female with multiple cardiovascular comorbidities diagnosed in 2010 with squamous cell carcinoma of the upper lip treated by surgical excision. In 2013 and 2014 two surgical reintervention were practiced for local-regional reccurences in the nasal groove with tumor-free margins <2 mm in healthy tissue and positive margins respectively. The pacient did not recived adjuvant treatment. In May 2015 the pacient had a new reccurence with significant substance loss in the left nasal and genian region complicated by local hemorrhage. She was considereded outside the therapeutic resources of surgery, and after the initial presentation in the Radiotherapy Department, a palliative and hemostatic radiotherapy in total dose (TD) of 30 Gy/10 fractions with photons was initiated.

Results: Seven months after completing radiotherapy treatment the patient return with a local bleeding. It was decided to initiate a superficial radiotherapy (orthovoltage) with hemostatic intention and healing. The irradiation was interrupted after DT=33 Gy/11 fractions because of a mycosis and a grade III oral mucositis and best supportive care was recommended. The evolution was favorable after the treatment and the patient died 4 months later due to comorbidities.

Conclusions: Radiotherapy may be a feasible solution with good palliative hemostatic and healing results for patients who are not candidates for curative surgical treatment. Adjuvant radiotherapy performed within 3 months after surgery if positive or inadequate surgical margins is indicated for reducing the risk of local relapse. Elderly patients should not be excluded from a therapeutic option but comorbidities and performance status can be a limiting factors for a aggressive treatment with curative intent.

(ID 201) Tuberous sclerosis (Bourneville Syndrome), a rare genetic disorder and with many complications

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Objectives: Our purpose is to present this rare case of tuberous sclerosis and the associated multiple organ lesion. Tuberous sclerosis complex (TSC) is a genetic disorder caused by mutations in the TSC1 or TSC2 genes, affecting cellular differentiation, proliferation, and migration early in development, resulting in a variety of hamartomatous lesions that may affect virtually every organ system of the body. These genes provide instructions for making the proteins hamartin and tuberin which act as tumour suppressors.

Materials and methods: Data were extracted from Bucharest Emergency University Hospital's medical records and combined with information from older paper-based records and medical charts. Computed tomographic (CT) scans and echography were performed every 2 to 3 years as part of routine follow-up. Angiomyolipoma and subependymal giant cell astrocytoma were identified by CT scan, epilepsy was measured by electroencephalography, and other manifestations were determined by clinical examination and history taking. The treating physician's observations were used to determine the presence of skin lesions and assess cognitive function.

Results: 1978 (1.5 year old) - epileptic seizure, 1986 - diagnosis of Bourneville Syndrome based through the cutaneous manifestation. 1993 - macroscopic hematuria and a left kidney colic, echography: bilateral kidney cysts and a caudat lobe tumour, CT: subependymal giant cell astrocytoma. 1994 - left kidney nephrectomy (subcapsular renal haemorrhage, massive hematuria not responding to conventional therapy). From 1998 - episodes of right kidney subcapsular hematoma. 2010 - a resection of the hepatic tumour was performed at Liver Surgical Centre Regesburg/Germany, histopathological result: hepatocellular carcinoma well-differentiated. 2012: hysterectomy with bilateral adnexectomy. 2016 - autoimmune haemolytic anaemia, COOMBS test: positive, therapy with methylprednisolone, the immune system was supressed and it caused a pulmonary infection which bring the decease.

Conclusions: TSC is a lifelong condition, therefore individuals should be regularly monitored by an experienced clinician. TSC must be included in the differentials of children presenting with seizures, developmental delay, and mental retardation.

(ID 47) Prognostic value of QRS duration to predict mortality in patients with acute heart failure

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Background: Acute heart failure is a major problem in clinical pathology, often with very severe prognosis. We tried to find common parameters useful to estimate prognosis in this pathology.

Purpose: We studied if there is any correlation between QRS duration and mortality in patients with acute heart failure.

Methods: We examinated 186 consecutive patients with heart failure, hospitalized in our clinic between 01.01.2016- 01.07.2016, which were divided into 3 groups (depending on the duration of QRS):

- group I with QRS <0.11 seconds,
- group II with QRS = 0.11-0.15 seconds
- group III with QRS >0.15 seconds.

All 3 groups had similar characteristics in terms of gender, age, risk factors etc.

Patients were followed up for 1 year.

Etiology of heart failure was in most cases ischemic cardiomyopathy – CMD (56.45%) and hypertensive cardiomyopathy – HTA (36.55%) – see Figure 1.

Were used to compare Student t test and chi square and P values <0.05 were considered significant.

Results: We obtained a continuous relationship between QRS duration and mortality at 1 year:

in group I (QRS <0.11 s) mortality was 6.45%, in group II (QRS = 0.11-0.15 s) death rate was 11.42% and in group III (QRS >0.15 s) mortality was 18.53% (see Figure 2).

Also, correlations were obtained between QRS duration and NYHA class and left ventricular ejection fraction (Figure 3).

Conclusions: Thus, a parameter easily determinable (QRS duration) can be used in the initial evaluation of severity of heart failure and to select the best management for this.

(ID 166) Left ventricular outpouching associated with ischemic dilated cardiomyopathy - a challenging differential diagnosis with important prognostic implication

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Purpose: Left ventricular (LV) outpouchings commonly include aneurysm, pseudoaneurysm and diverticulum. The outcomes for these conditions differ substantially. Accurate imagistic diagnosis is crucial for clinical decisions. We describe a unique case of a woman with ischemic dilated cardiomyopathy associated with apical septal LV diverticulum.

Case: A 63-year-old hypertensive woman was admitted for prolonged chest pain and dyspnoea at rest. She was anxious, tachycardic and polypneic, with signs of pulmonary congestion and hypoperfusion, apical gallop rhythm. The ECG showed left bundle branch block. Laboratory test revealed myocardial necrosis (elevated sensitive troponin I, CK and CK-MB). Transthoracic echocardiography detected a markedly reduced LV function (LVEF=15%) (Figure 1), extremely dilated LV (EDV=330 ml), severe mitral regurgitation, low cardiac output, global severe hypokinesia, small pericardial effusion. In the apical interventricular septum we noted a small outpouching (18/7 mm) with sudden interruption of myocardium, suggestive for pseudoaneurysm rather than true aneurysm. No thrombus was seen. We did not perform coronarography, due to haemodynamic instability. The patient was admitted in ICU stabilized. Cardiac magnetic resonance (CMR) confirmed severe reduction of LVEF (EF=11%), severe dilated LV, mid-cavity lateral and inferior segments akinesia with signs of myocardial oedema, defining acute myocardial infarction in this areas. CMR showed a thin apical septal outpouching containing all myocardial layers (17/6 mm), with no ischemia, scar, and thrombus, with the same motion as the near areas, raising the idea of a myocardial diverticulum, and excluding pseudoaneurysm and aneurysm (Figure 2).

Discussions: A correct diagnosis was important for therapeutic purpose. Echocardiographic images raised suspicion of pseudoaneurysm, which necessitates urgent surgical repair. This diagnosis was excluded by CMR- the outpouching contains all layers. The differential diagnosis was made between small aneurysm and diverticulum. Aneurysm has fibrous walls and exhibit paradoxical motion, while diverticulum displays synchronous contractility. CMR showed an apical septal outpouching with the same motion as the near areas and no scar, suggesting myocardial diverticulum.

Conclusions: In our case, CMR was crucial to establish diagnosis and to manage the case appropriately. CMR is the gold standard for evaluation of LV outpouchings, that allows simultaneous anatomical and functional evaluation along with tissue characterization, with diagnostic, therapeutic and prognostic implications.

(ID 48) Ovarian function following allogeneic bone marrow transplantation for severe aplastic anemia - the role of GnRH agonists

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Abstract: Allogeneic bone marrow transplantation (BMT) from a HLA-identical sibling or unrelated-matched donor is currently the only cure for severe aplastic anemia (SAA). Endocrinopathies are a common late effect of BMT, resulting in ovarian insufficiency, thyroid dysfunction, impaired growth, impaired glucose tolerance and decreased bone mineral density. It is of critical importance to discuss with the patients at diagnosis regarding long-term side effects of therapy and the options for preservation of normal gonadal function and the possibility for future fertility. It has been demonstrated by several clinical randomized studies that the use of gonadotropin-releasing hormone analogue (GnRHa) in advance of starting chemotherapy decreases the risk of gonadal dysfunction and infertility, but GnRHa use for ovarian protection in BMT patients is not fully resolved.

Case report: We report a case of a 10-year old girl with SAA, candidate for BMT, who received GnRHa therapy prior to the specific conditioning regimen and later on presented normal menarche (at 12.5 years of age) and cyclic menses following BMT. The patient was diagnosed with SAA in January 2009 and was treated with two courses of immunosuppressive therapy in addition to granulocyte-colony stimulating factor with no clinical response. Because of the lack of a matched sibling donor, an allogeneic BMT from a HLA-matched unrelated donor was performed in July 2010. In the post-BMT period the patient suffered from severe graft-versus-host-disease that was treated with high-dose intravenous glucocorticoids. In November 2010, she developed femoral avascular necrosis and received therapy with bisphosphonates for 6 months. Also, at her last visit in our department in 2017, the oral glucose tolerance test diagnosed impaired glucose tolerance.

Conclusion: Survival after allogeneic BMT is no longer the only concern, as many patients survive the acute complications of the procedure and remain free of their original disease. Instead, long-term side effects are important to recognize and treat in order to maintain a good quality of life for BMT recipients. The addition of GnRHa to conditioning regimen for BMT may significantly increase normal ovarian function in BMT survivors.

(ID 23) Fulminant myocarditis: complex clinical presentation, few treatment strategies

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A case of fulminant myocarditis in a woman of 34 years, with initial clinical picture of myocardial infarction with ST segment elevation, in whom coronary angiography show normal coronary arteries, with normal systolic function of the left ventricle. It is revealed the importance of monitoring patients with STEMI type II in Chest Pain Unit area with the same caution as STEMI type I patients, as they can suffer the same complication as the last ones. Evolution towards cardiogenic shock occurred on day 3 of admission after developing a complet heart block tranzitor, echocardiographic reassessment showed severe systolic dysfunction of the left ventricle. Results of serological tests proved the presence of acute infection with Toxoplasma gondii and reinfection with virus Ebstein Baar, both with cardiac tropism. The use of immunosuppressive therapy and antiviral therapy in acute myocarditis of viral etiology is controversial; hence, the treatment is based on hemodynamic and ventilatory support and sulfadiazine for Toxoplasma. The use of hemodynamic support by intraaortic balloon counterpulsation remanins a valid treatment in this situation.

The purpose of this presentation is to highlight high index of clinical suspicion correlated with bedside echocardiography and serological tests in the diagnose of fulminant myocarditis in a hemodynamically unstable patient, in which the gold standard methods as endomyocardial biopsy and cardiac magnetic resonance with late gadolinium enhancement are imposbile to achieved. Full recovery of ventricular function is also an indirect marker of retrospective diagnosis of myocarditis.

(ID 279) *K-ras* gene and microsatellite status in colorectal carcinoma

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Background: The Kirsten rat sarcoma viral oncogene homolog (*K-ras*) mutation is the most common somatic mutation in colorectal carcinoma (CRC) and is predictive of resistance to anti-EGFR antibodies in the metastatic forms. Microsatellite instability (MSI), a mismatch repair (MMR) system defect, accounts for approximately 12% of sporadic CRCs, more frequent in early stages. Patients with tumours presenting both K-ras wild type and MSI have a reduced risk of dissemination and recurrence. Patients with *K-ras* mutated microsatellite stable (MSS) tumours appear more likely to have disseminated disease, the association of K-ras and MMR status with prognosis demonstrating that mutated *K-ras* and MSS represent negative predictors for disease-specific survival.

Methods: Our study included formalin-fixed paraffin-embedded tissue samples from 40 patients with metastatic CRC, aged between 40 and 71 years old, sex ratio 2,33:1, with different metastatic localizations. The MMR proteins (MLH1, MSH2, MSH6 and PMS2) were analysed using an indirect bistadial immunohistochemical (IHC) technique with monoclonal antibodies, performed with Dako EnVision+ Dual Link System-HRP. *K-ras* gene mutations in codons 12 and 13 of exon 2 were detected by PCR-Restriction Fragment Length Polymorphism analysis.

Results: Of the 40 tumours analysed, 16 (40%) presented *K-ras* mutations located in codon 12 (13 cases – 32,5%) or codon 13 (3 cases – 7,5%). Immunohistochemical expression of MMR proteins was positive for all four (MSS status) in 35 cases, including 15 cases with mutated *K-ras*. MSI status was identified in 5 cases (4 with *K-ras* wild type, 80%), 3 cases having the loss of expression for all analysed MMR proteins. All MSI tumours had a poorer histological differentiation and 4 cases revealed a mucinous phenotype. 80% of the patients with MSI status were older women.

Conclusions: Our study demonstrates a 20% frequency of mutated K-ras in MSI CRCs, the incidence of K-ras mutations being inversely correlated with MSI status in these tumours. MMR protein deficient CRCs tend to occur in older females, have a poorer differentiation and are frequently associated with K-ras wild type.

(ID 316) Opinion of medical students regarding vaccination

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Aim: Assessment of the risk of preventable diseases by national vaccination scheme among medical students.

Objectives: To determine the level of knowledge of medical students on vaccine-preventable diseases and the effect of the usual vaccinations, to evaluate the prevalence of misconceptions about vaccination among medical students and to assess the students availability to recommend vaccination for future patients.

Methodology: It was conducted a descriptive transversal study, an opinion survey on a lot of 540 respondents, the research instrument was a 15 questions questionnaire. It was applied online by students of the 5th year, which conducted Public Health internship during October 2016-March 2017, to their colleagues from UMP „Carol Davila", regardless the academic year.

Results: 73.5% of centralized questionnaires were completed by female students. The average age of lot was 22.43 ± 1.86 years. Most were from clinical years - 71.9%, 88.3% are people unvaccinated against seasonal influenza.

Only 10.2% have ticked all the right options in terms of the symptoms of hepatitis B and 22.4% in terms of polio symptoms.

The most common side effects completed by students were: fever - 29.6%, allergies - 24.3%, local reactions (including pain) - 20.2% and a milder form of disease - 10.6%.

As vaccination benefits were highlighted: prophylaxis - 30.4%, decreased incidence - 21.7% and eradication of serious diseases - 21.5%.

On the most common misconceptions regarding vaccinations, according to the Robert Koch Institute research, students answered correctly for the statements between 63.9%- "vaccinations increase the incidence of allergies"- and 97.4% "vaccines are now for nothing, since the majority of vaccine-preventable diseases, can be treated with antibiotics".

Students recommended vaccination for various diseases in a proportion of more than 38%, most often for polio -93.0%, hepatitis B 87.2%, measles - 86.3% and rubella - 83.5%

Conclusions: The level of knowledge of medical students on vaccine-preventable diseases is insufficient; students know partially the side effects and the positive ones for the usual vaccinations. Have fewer misconceptions regarding vaccination, and although 9 out of 10 respondents in the study were unvaccinated against seasonal flu, still recommends vaccination for children against various diseases.

(ID 245) Success and failure in 100 cases of pediatric interventional cardiology in Emergency Children's Hospital "Marie Curie"

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Congenital heart diseases are affecting almost 1% of all pediatric population. Many of these diseases can be resolved by dedicated interventional cardiology, by implanting devices to close the defects (atrial septal defects, some of the ventricular septal defects, patent ductus arteriosus, coronarian fistulas), or by balloon valvuloplasty (aortic, pulmonary, coarctation), atrial septostomy, stent implantation (coarctation of the aorta, stenosis of the pulmonary) or valve implantation (pulmonary valve).

Methods: In 2015 we succeeded to implement a national program for congenital heart disease in children in "Marie Curie" Emergency Children's Hospital, Bucharest.

Results: Between June 2015 and January 2017, 100 cases of congenital heart diseases were diagnosed and treated in the Compartment of Interventional Cardiology of the "Marie Curie" Emergency Children's Hospital. From these cases79% were interventional cases and 21% diagnostic cases. Of all cases 21% were atrial septal defect (ASD) closures using Cocoon Atrial Septal Occluder, 33% were patent ductus arteriosus (PDA) closures using Cocoon Duct Occluder, Oclutech Duct Occluder, PFM coil and Flipper Coil. 18% beneficiated of pulmonary valve dilatation using both Tyshak balloons or Osypka balloons, and 5 % of all were aortic coarctation with stent implantation using CP Stent Bare or Covered, 2% were Rashkind atrioseptostomy. 5% were done in children with Down syndrome. 8 % were performed in cases of pulmonary hypertension. 11% were done in children less than 1-year-old. The complication and failures rate for the first 100 cases was 5% (including one ASD device embolization, two failures for pulmonary valve dilatation, one PDA device 4/6 mm withdrawal and changed to a 6/8 mm dimension device) .

Conclusion: After 100 cases performed in our institution the early and intermediate results are very encouraging and are similar with other results reported in the current literature.

(ID 372) The importance of monitoring minimal residual disease in acute promyelocytic leukemia

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Acute promyelocytic leukemia (APL) is characterized by a special morphology of the leukemic blasts, a life threatening coagulopathy caused by disseminated intravascular coagulation, hyperfibrinolysis and thrombocytopenia; a specific cytogenetic abnormality: translocation (15; 17) that leads to the fusion protein PML-RARA. The fusion protein PML-RARA is necessary for diagnosis, assessing the response to treatment and identifying relapse by monitoring the minimal residual disease (MRD). By introducing, in the treatment, the all-trans retinioic acid (ATRA) in combination with anthracyclines (± CYTOSAR), followed by arsenic trioxide (ATO), the evolution of APL has changed radically from a rapidly fatal disease to a "curable leukemia".

Methods: We reported a 36 years old man who was diagnosed in September 2012 with APL (M3 FAB) PML-RARA positive, disseminated intravascular coagulation. The patient was included in the "high risk" relapse category based on the white blood cell count >100,000/μL and platelet count 12.000/μL. Bone marrow aspirate identified 84 % promyelocytes with the following immunophenotype: CD 45 + moderate internal complexity (75%) which express CD38+, CD117+, MPO+, CD33+, CD13+, HLA-DR-, CD34-. Emergency treatment with ATRA+DNR+Alexan (APL 2000 protocol) and supportive treatment with fresh frozen plasma and platelet transfusion was required in order to prevent consumption coagulopathy. A perianal abscess, that required colostomy, occurred during post-chemotherapy cytopenia. After induction cycle, the patient achieved complete hematologic and molecular remission, in October 2012. Two cycles of consolidation were done followed by maintenance therapy with 6-mercaptopurine, methotrexate and ATRA. In April 2015, first molecular and morphological relapse was confirmed, the patient was started on the AIDA protocol and in October 2015 a second morphological and molecular complete remission was obtained. Maintenance treatment was started (6MP + MTX + ATRA) under the control of MRD. In October 2016 the patient presented a second relapse and he received treatment with ATO + ATRA. In March 2017 he achieved a third complete remission (molecular and morphological).

Conclusions: The salvage therapy with ATO allowed the obtainment of a new molecular remission. This case described the importance of monitoring minimal residual disease in acute promyelocytic leukemia.

(ID 320) The relationship between perception of stress and clinical evolution of acne

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Objectives: Acne is one of the most common skin conditions among young people, with a strong emotional and social impact. Our study evaluated the relationship between stressful events, stress perception and the onset and clinical evolution of acne.

Methods: Twenty two patients were enrolled in the study (aged 16-35 years) divided into two groups: a group of 10 patients with acne lesions and a control group, which included 12 patients with various dermatologic conditions with low psychosomatic component. Stressful life events were evaluated using Holmes and Rahe's Social Readjustment Rating Scale and the perception of stress was measured using the Perceived Stress Scale.

Results: The assessment of stressful life events showed no significant difference between the two groups; however the perception of stress was significantly higher in acne patients as compared to the control group.

Conclusions: Our study suggests a connection between perception of stress and clinical evolution of acne. However, more detailed studies are needed for determining the exact extent of stress contribution.

(ID 348) Evolution of a patient following a complex rehabilitation program for ataxic polyneuropathy and chronic tophaceous gout

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Objectives: Polyneuropathy is a generalized process, relatively symmetrical bilaterally, which affects several peripheral nerves, predominantly distal neuropathy.

Methods: We present the case of a 62 years old man with sensorimotor, ataxic polyneuropathy with tetraparetic flaccid motor weakness, predominantly crural and left central facial paresis, with secondary trophic disturbances, predominantly lower limbs atrophies. The patient associates : chronic gout with tophi around the joints of hands fingers bilaterally, multiple lacunar cerebral infarcts, heart failure by hypertrophic and ischemic cardiomyopathy, stage 3 hypertension, peripheric arterial disease, COPD, microcytic, hypochromic anemia, chronic kidney disease, mixed ischemic and toxic hepatopathy, bilateral carpal tunnel syndrome, operated right bimalleolar fracture sequelae, left external malleolar and left calcanean eschars, fingers II and III bilaterally blocked in extension and fingers IV and V right hand and finger V left hand blocked in flexion.

For the initial evaluation we used a number of instruments to assess physical functions–eg, self-care, ambulation, food preparation, shopping, housekeeping, etc : Barthel, FIM (Functional Independence Measure), ADL (Activity of Daily Living) and muscle strength scales, scoring 40 points on Barthel scale, 5 points on ADL, 3 points on FIM scale, 4/5 muscle strength on superior limb and 3/5 on inferior limb. At admission, the patient was able to maintain short-sitting position but could not initiate orthostatism.

The patient followed a 3 weeks complex rehabilitation program including kinesiotherapy, trophic massage, analgesic, decontracting and muscular stimulation electrotherapy.

Results: The evolution of the patient was favorable, scoring 45 points on Barthel, 5 on ADL and 3 on FIM scales. He transfers from bed to wheelchair, maintains orthostatism, and walks on shorts distances with a walking frame.

Conclusion: The particularity of the case were the multiple associated pathologies that prevented us from a complete rehabilitation program, but the efficient control of the comorbidities and the progressive, individualized dosage of the kinesiotherapy methods depending on the patient's tolerance brought satisfactory result. The retraction of the palmar aponeurosis has prevented the improvement of the ADL score.

(ID 334) Facilitated PCI for acute anterior chest pain - case study

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Background: Myocardial infarction is the irreversible necrosis of heart muscle secondary to prolonged lack of oxygen supply produced by a variety of etiologies. The aim of this study is to underline the role of facilitated angioplasty through efficient thrombolysis, intended for the patients that could not reach, in the recommended time limit (<90 minutes), a cardiovascular center with possibility of PCI.

Methods: A 61-year-old male sought medical care at the hospital with a 5 hour history of severe retrosternal chest pain. He was hospitalized in the CCU and has undergone the investigational and curative process. This wasn't the first episode of UA from the PMH. The patient was aware of being hypertensive (stage 2) and was a smoker (10 years). Also, he is a known patient with hypothyroidism (treated with levothyroxine), dyslipidemia and a former alcoholic.

At physical examination (March 20, 2017) he had a HR of 95 bpm and blood pressure of 140/80 mmHg. Lung examination showed no alterations (SO2=97%) and heart examination was normal.

The initial ECG (Ibid. date) showed a heart rate of 95 bpm, sinus rhythm and extensive ongoing anterior-lateral wall infarction (ST elevation in V2 to V6,lead 1 and aVL), Killip class I. No reperfusion signs were found in the clinical examination and ECG (which is abnormal).

The current patient sustained the thrombolysis procedure in a county hospital, where there did not exist the possibility of PCI. The thrombolysis being inefficient as it is displayed in the laboratory results, respectively in the elevated amounts of the troponin, CK, CK-MB and transaminases.The cardiac infarction was associated with a hepatic cytolisis syndrome and leukocytosis. In the present clinic (Iliescu) the patient goes through an ecocardiography: the cardinal echo concludes the prior investigations (moderate dysfunction of the left ventricle –LVEF 40%, akinesia in the 2/3 anterior and 1/3 apical of the IVS, mild mitral insufficiency, no PHTN, aorta 20/32 mm). The second Doppler cardiac eco investigation has found an remaining aneurysm. The coronarography has found a 90% stenosis situated in the LAD (proximal and medium segment). In the same sitting with the coronarography, the angioplasty with 2 stent implants was performed , with a favorable evolution sustained by the decreasing value of the cardiac enzymes (troponin, CK-MB) reporting to the initial levels, but with considerable sequelae, respectively an left ventricle aneurysm and and cardiac insufficiency.

Results: Firstly, the treatment was initiated with the pharmaceutical combination of a thrombolytic, an anticoagulant and an antiaggregant-2 hours post AMI.

Secondly, angioplasty was performed with stent implant in the LAD-4 hours after the outset of the chest pain.

Conclusions: Although, the revascularization was performed with 2 stents not to late-after 90 minutes from the beginning of the AMI, the patient having an inefficient thrombolysis, he was left with considerable sequelae.

(ID 30) Hereditary thrombophilias in a cohort of patients with cerebral venous thrombosis

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Introduction: Cerebral venous thrombosis (CVT) is an uncommon form of stroke which involves primarily young adults, mainly women. This type of disease can present with minimal ymptoms and is only diagnosed on imaging studies with contrast. Hereditary thrombophilias play an important role in the etiology of this disease. We present a paper with relevant findings after genetic testing for hereditary thrombophilias in a cohort of patients admitted in Colentina Clinical Hospital for cerebral venous thrombosis.

Methods: All patients with CVT seen at Colentina Clinical Hospital between 2013 and 2017 were enrolled in a cohort study. Each patient was screened for hereditary thrombophilias, specifically for mutations of factor II (G20210A), factor V Leiden, plasminogen activator inhibitor-1 (PAI-1), methylenetetrahydrofolate reductase C677T and A1298C and factor XIII.

Comparisons were analyzed with chi square and relative risk calculations using SPSS version 23.

Results: 23 patients diagnosed with CVT were enrolled (12 females, 11 males). Their mean age was 45 ± 16 years old. Most of them were from urban areas (88.2%), where there is a greater accessibility to health services. At the same time, an important part of the lot (78.9 %) had other prior illnesses, mostly cardiovascular diseases (46.7 %), but also of neurological (40%) or infectious (26.7 %) nature. All enrolled patients presented at least one genetic mutation.

PAI-1 mutation was more frequent in patients living in urban areas ($p=0.041$, Chi (1) = 5.5).

Surprisingly, factor II mutation was more frequently encountered in patients without prior illnesses ($p=0.047$, Chi (1) = 4) and factor V Leiden mutation in patients without a history of cardiovascular disease ($p=0.038$, Chi (1) = 4.3).

Conclusions: Hereditary thrombophilias are an established risk factor for cerebral venous thrombosis and the fact that 100 % of patients enrolled in our study had at least one genetic mutation supports existing data in the literature related to the need to assess these patients from a genetic standpoint. Of course, it would be a gold standard to be able to identify these mutations before the appearance of neurological complica-

tions.

(ID 224) Unusual drug adverse reaction in a patient with severe primary hyperparathyroidism

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Introduction. Primary hyperparathyroidism (PHPT) is a generalized disorder of calcium, phosphate and bone metabolism due to an increased secretion of parathyroid hormone (PTH). The elevation of circulating PTH levels leads to hypercalcemia and hypophosphatemia. The clinical presentation varies from very subtle (in milder forms of disease) to life-threatening in severe cases.

Case report. We report the case of a 55 years-old hypertensive female patient admitted for dizziness, fatigue, polyuria,polydipsia, anorexia and significant weight loss (10 kilos in 6 months) diffuse bone pain (predominantly affecting thelong bones). Severe hypercalcemia had been revealed by previous laboratory tests but had been overlooked. The clinical examination on admission revealed: generalized muscular weakness, dehydration, asthenia. Severe hypercalcemia (15.8 mg/dl) with concomitant extremely high serum PTH levels established the diagnosis of severe primary hyperparathyroidism.

The cervical ultrasound revealed polinodular goiter (three hypoechogenic nodules with discrete peripheral and central vascularization in the right lobe of the thyroid) but could not detect a parathyroid adenoma. Parathyroid scintigraphy also showed no suggestive images for parathyroid adenoma. In preparation for surgery forced diuresis (intravenous administration of saline solution and frusemide) was started with very favourable evolution (constant decrease in calcium levels, improvement of the general condition of the patient). During admission the patient presented a febrile episode, with malaise and without suggestive clinical signs for infection. She received acetaminophen, metamizole sodium, and ibuprofen. Following this episode, a sudden and severe decrease in blood count occurs (anemia,leukopenia with neutropenia and thrombocytopenia). The bone marrow biopsy did not offer convincing arguments for a superimposed haematologic condition. A severe drug reaction to the drugs received for the febrile episode (most likely methimazole) was diagnosed. Parathyroid surgery was postponed until complete haematological recovery.

Conclusions. This case presents an unusual association of rare life-threatening conditions (severe PHPT and adverse drug reaction).

(ID 119) Exertional dyspnea in a young adult

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A 28-year-old male, without known history of cardiovascular disease, presented with increasing dyspnea on exertion for 6 month.

Clinical examination revealed an underweight patient, conjunctival icterus, blood pressure of 100/60 mmHg, heart rate of 85 beats/minute, irregular, with a grade III/VI systolic murmur in pulmonary valve (PV) area and tricuspid valve area, jugular vein distention, moderate peripheral edema, mild hepatomegaly.

The electrocardiogram demonstrated atrial flutter with variable conduction, RBBB, right ventricular (RV) hypertrophy, secondary repolarization abnormalities. BNP was 634 pg/mL, bilirubin levels were slightly elevated and the patient had mild thrombocytopenia.

Transthoracic echocardiogram showed severe pulmonary stenosis (PS) with dome-shaped PV, with a maximum transvalvular gradient of 80mmHg, mild pulmonary regurgitation, severe RV dilatation with severe systolic dysfunction, severe tricuspid regurgitation (TR).

Because in 20% of cases PS is associated with other cardiac congenital defects, given the severe dilated RV, it was performed transesophageal echocardiogram. It confirmed the presence of severe PS with only mild regurgitation, showed post stenotic pulmonary artery dilatation, permitted accurate measurement of PV annulus of 20 mm, without intracardiac shunts.

Thoracic CT angiography revealed a hypoplastic right pulmonary artery.

It was initiated treatment with metoprolol, furosemide, spironolactone and anticoagulant (CHA2DS2-VASc score =1). Given the symptomatic severe PS associated with severe TR the patient had an indication for surgical intervention, which he refused. Because the morphology of PV was favorable, it was performed percutaneous balloon pulmonary valvulotomy using a balloon sized 1.25 times the annulus diameter, with a significant reduction of transvalvular gradient to 12 mmHg (measured invasively).

Post-procedural echocardiography showed: peak transvalvular gradient of 17mmHg, new severe pulmonary regurgitation and the persistence of severe TR.

After 3 months, the patient showed significant amelioration of dyspnea.

Discussion: this is a case of congenital severe PS with a long asymptomatic evolution. At the moment of diagnosis, the RV was dilated and severely dysfunctional, which increases the operative risk. Because the patient refused surgical intervention, it was performed percutaneous balloon pulmonary valvulotomy. This case illustrates a possible complication of this procedure: severe pulmonary regurgitation.

(ID 161) Asymptomatic prolactin - secreting pituitary gland adenoma – case report

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Objectives: We present the case of a 66-year-old female patient, recently diagnosed with asymptomatic prolactin-secreting pituitary adenoma, with good response to specific medical treatment.

A pituitary adenoma is a benign pituitary tumour in most cases, being the most common type of tumour of the sella turcica and prasellar region. Also, it represents 58% of all intracranial tumours. Functional pituitary adenomas excessively release into the blood stream a certain active hormone. Patients usually exhibit symptoms related to the action of that respective hormone at systemic level. Prolactin-secreting adenomas are called prolactinomas. In women, a prolactinoma most frequently determines amenorrhea and galactorrhoea. In men, elevated prolactin levels may decrease testosterone levels, thereby leading to secondary decrease in libido.

Method: 66-year-old female patient, known with euthyroid multinodular goitre and left thyroid lobe macronodule, presents for endocrine periodic follow-up in this context. When measuring serum levels of PRL a significantly increased value of 170.29 ng/ml is revealed, the patient presenting no specific signs or symptoms. In terms of the patient's medical history, we must mention physiological climax at the age of 37 years and regular menstrual cycles throughout life according to anamnesis. A brain CT with contrast agent is performed, highlighting a right posterolateral pituitary micronodule and partially empty sella. The patient is advised to initiate treatment with carbegoline 0.5 ug/wk divided in two 0.25 ug doses, followed by return to normal values after 3 months.

Results and conclusion: We report the case of an asymptomatic 66-year-old female patient, incidentally diagnosed with PRL-secreting pituitary adenoma with good response to administration of specific medication and follow-up 3 months after diagnosis.

(ID 151) The exoskeleton modern therapy of upper limb rehabilitation skills

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Introduction-Aim: Upper limb disability-consequence of multiple central and peripheral neurological diseases - represent a priority in physical therapy rehabilitation in order to increase the quality of life for children.

Currently, computerized therapy joins classical rehabilitation efforts in order to get results faster motivating the patient to be more involved. Exoskeleton rehabilitation is a system whose difficulty level can be adjusted depending on the patient's driving performance and is based on augmented virtual reality thus wanting to keep a high level of motivation.

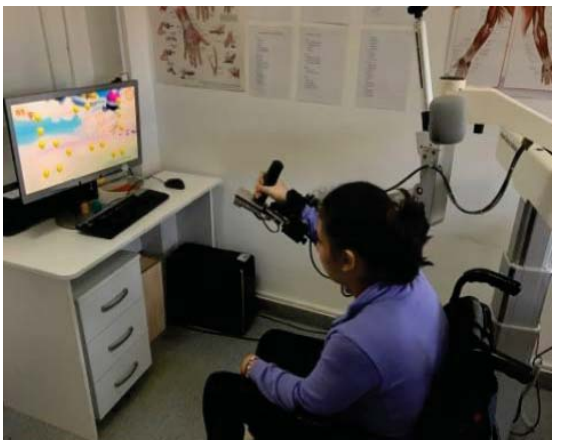
There are possible assessments and functional training for all upper limb joints, leading to increase mobility and coordination, accuracy and stability for little patients.

Material and methods: The study has included 10 children in-patients at CNCRNC Dr. Robanescu, aged between: 4-12 years, diagnosed with Cerebral Paralysis.

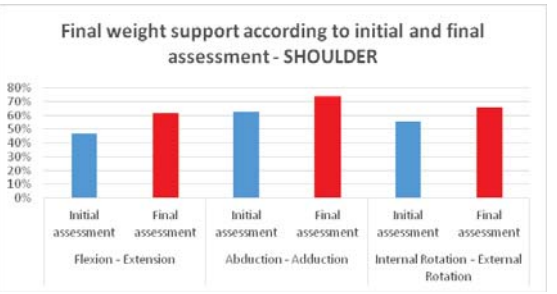
Evaluation was done using computerized instrumentation offered by Armeo software. Patients were evaluated on the first and last day of hospitalization and during the period they were trained with functional exoskeleton, daily for 2 weeks.

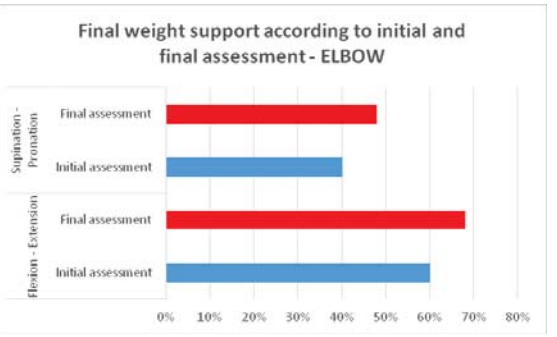
It was evaluated the mobility of the shoulder (Flexion-Extension/F-E, Abduction-Adduction/ABD-ADD, Internal Rotation-External Rotation/RI-RE), the mobility of the elbow (F-E, S-P) and the mobility of the wrist (F-E).

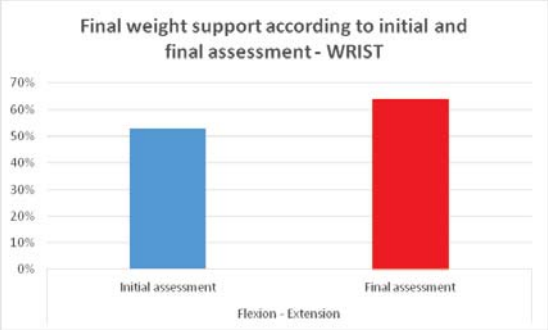
Motivational games were used to increase the global amplitude of the upper limb (i.e. playing with bubbles), to develop the coordination, accuracy and stability (i.e. island game) and to train the supination (i.e. goal-keeper game).



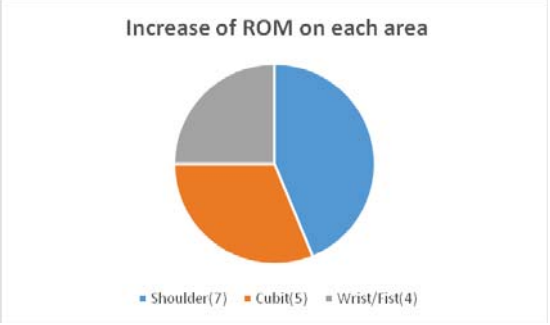
Results:



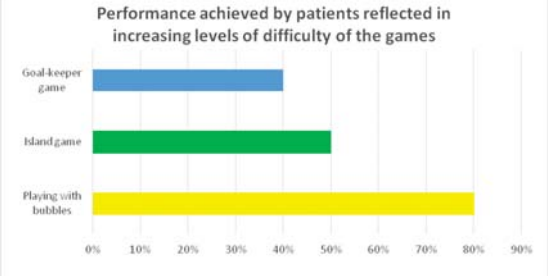




Final assessments recorded the increase of global amplitude for all 10 patients and improvement of coordination, accuracy and stability from easy to medium level.



The most important increase in amplitude -RANGE OF MOTION/ROM- was observed in the shoulder zone.



Conclusions: The exoskeleton computerized method is an effective method to recovery of upper limb disability by automatic evaluation of joint function, by getting better results in a short time, by motivating the patient through feedback provided, by gradual increasing of difficulty of exercises and by monitoring easily the progress.

(ID 108) Rare hepatitis in children: concept, diagnosis, prognosis

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Objective. The concept of a rare disease refers on its prevalence in general population, which is below the threshold of 1/2000. When the prevalence is under 1/10 000, we speak of an "ultrarare" disease or hepatitis. Our aim is to present our experience on the domain of "rare hepatitis", with genetic and non-genetic origins.

Material and methods. From our cohort of 401 children diagnosed with hepatitis, admitted in 9 ½ years (July 2006 – January 2016), we have selected 85 non-infectious hepatitis (21%). A number of 33 cases were congenital hepatic fibrosis, 5 autoimmune hepatitis, 2 glycogenosis and 2 secondary liver involvements in cystic fibrosis. We present other 43 patients with cirrhosis, 9 secondary to biliary atresia, 7 primary biliary cirrhosis, 2 autoimmune, 2 in cystic fibrosis and 3 gangliosidosis.

Results: We will refer especially to the ultarare causes, detailing 4 patients: glycogenosis type IX, GM1-gangliosidosis, primary billiary atresia and one case of cirrhosis secondary to inflammatory bowel disease. Clinical aspects, neurological impairment, liver function assay, renal injury or cardiac failure associated, hematological changes are presented. Diagnostic tools, general or specific treatment and prognosis is described for each entity. Pictures are provided for each rare case.

Discussions: Liver is suffering -primarily - in almost all inborn errors of metabolism. Lysosomal storage diseases is a chapter opening widely: sphingolipidosis (e.g. Gaucher disease), glycogenosis(e.g. I, II), gangliosidosis. Secondary liver involvement appears ingenetic or non-genetic disorders: cystic fibrosis, autosomal recessive polycystic disease or autoimmune diseases. Prognosis is evaluated in actual context of DNA recombinant evolving technologies.

Conclusion. The etiopathogenic spectrum of child's hepatitis is changing. Rare diseases, especially inborn errors of metabolism are more frequent. Diagnosis requires specific genetic workup. Prognostic depends on the moment of diagnosis, the neurological involvement and the availability of specific treatment.

(ID 282) Follow up of prospective patients with hydatidosis, study in a three years period

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Objectives: Hydatidosis is a wide spread disease in Romania, with a special importance due to its high morbidity and considerable socio-economical implication. We carried out a prospective cohort study. The data collection started from October 2013 as part of HERACLES collaborative project, in order to evaluate the actual situation of hydatid cases.

Method: The enrolled study group included 309 prospective patients showing 482 cysts, representing new cases of human cystic echinococcosis (CE) admitted in Colentina Clinical Hospital, Parasitic Diseases Department (October 2013-October 2016). We followed epidemiological aspects and clinical evolution of the patients with cestocidal treatment and/or surgical intervention.

Results: Our results showed: 226 primary infection (73.1%), 55 secondary infection (17.8%), and unknown origin 28 cases (9.1%). There were 182 female and 127 male, coming from urban areas (157) and from rural areas (152).

The location of the cysts were as follows: liver 327 cysts (67.84%), lung 55 cysts (11.41%), peritoneum 31 cysts (6.33%), spleen 26 cysts (5.29%), kidney 20 cysts (4.15%), pancreas 10 cysts (2.07%), heart / bone 5 cysts (1.04%), and soft tissue 4 cysts (0.83%).

The cysts sizes were: less than 5 cm, 189 cysts (39.3%); 5-10 cm, 222 cysts (46.6%); more than 10 cm, 62 cysts (22.8%); undetermined 9 cysts (1.8%).

Most patients had 1 cyst - 173 (55.9%), but more cysts were reported as follows: 2 cysts - 91 (29.4%); 3 cysts - 25 (8.2%); 4 cysts - 8 (2.6%); 5 cysts or more - 12 (3.9%).

The US image according to WHO classification distribution showed that the majority were CE1 (113 cysts) followed by CE3b (72 cysts).

Allocation of prospective patients to the appropriate treatment was: to surgery (conservative, radical and laparoscopic) 114 cases, to percutaneous treatment 36 cases, to medical treatment 87 cases, and for watch and wait 72 cases.

Conclusions: Pre- and post-surgical treatment with Albendazole is recommended for non-calcified cysts, whatever their size. Albendazole decreases the tension in the cyst with the subsequent closing of small fistulas. The antiparasitic treatment can be administered to inoperable patients, with secondary hydatidosis, with several disseminated cysts or to those with medical issues that do not allow surgery.

(ID 90) Data on general views about vaccination in Bacau and Harghita counties

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Objectives: In recent years, due to the numerous campaigns against vaccination, more and more parents are refusing a consent for their children's immunization. The aim of this study was to determine the general opinion about vaccination in two of Romania's counties, Bacau and Harghita.

Method: A survey was conducted among 253 randomly selected people, of whom 128 were from Bacau county and 125 from Harghita county, at the end of 2016 and in 2017. The research tool was a structured questionnaire interview. The data was processed using Epi Info 7.

Results: The vast majority of the people surveyed recognized the benefits of vaccines as an efficient method of prophylaxis against infectious diseases ($p=0.36$). Nevertheless, only a small number of them considered all the vaccines from the National Immunization Schedule useful for their children's safety. One of the main differences between the two counties was the primary vaccine considered unnecessary. In Bacau, 33.8% were opposed of vaccinatig their children against rubella ($p=0.05$), whereas, in Harghita, 30.6% were opposed of vaccinating their children against tuberculosis ($p=0.001$). About 45.3% of the respondents from Bacau claimed that vaccination presents risks, as opposed to 31.7% from Harghita ($p=0.03$). The most of them stated that the main reason why people do not vaccinate their children is the lack of information on a certain disease and its affiliated vaccine, whereas the second place, with a percentage of approximately 50% is taken by the fear of the possible adverse reactions of that product. When asked if they thought the parents of unvaccinated children should suffer legal consequences, 39% of the people from Bacau and 33.8% from Harghita agreed, the majority of them stating that financial penalties are the best means of punishment ($p=0.46$).

Conclusions: In defiance to the wide access to different sources of information, a significant group of people had the knowledge and views about vaccination in contradiction with data resulted from years of medical research. Also, these findings suggest a need for informing campaigns to raise awareness about childhood immunization.

(ID 323) Correlation of high seric levels of anti-cytomegalovirus IgG antibodies with cardiovascular disease

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Background: The immunology of atherosclerosis, the complex pathologic process that underlies cardiovascular disease, the leading cause of death in the entire world, was lately a very debated research subject. Besides hypercholesterolemia and the other usual risk factors as diabetes, hypertension, smoking or obesity, cytomegalovirus was associated with atherosclerosis and cardiovascular disease by several groups of researchers.

The aim of our cross-sectional prospective study was to determine the impact of chronic CMV infection as a risk factor for cardiovascular disease in Romania.

Methods: 142 patients aged between 20 and 65 years old, 81 women and 61 men, mean age 54.5 years old, with or without cardiac disease were enrolled in the study. An informed consent approved by the local Ethics Committee was signed by every patient. All patients underwent a detailed medical history to identify pre-existent cardiovascular factors and all of them carried out a complete clinical examination and a cardiac ultrasound to assess left ventricular remodelation or hypertrophy (Devereaux formula). Blood samples were taken to determine the cholesterol levels and antiCMV IgG (quantitative immunoenzymatic assay). Microsoft Office Excel for Windows 10 was used for the results' database and for their processing. Two groups of patients were designed: 49 patients with high anti CMV antibodies titers (8-16 UI/ml) and 51 patients with low anti CMV antibodies titers (0,5-4 UI/ml). A severity scale from 0 (no CV disease) to 4 (surgical approach for CV disease) was considered for cardiovascular disease.

Results: Chronic CMV infection was present in 96.8% of our patients and all of them presented hypercholesterolemia. High titers of antiCMV IgG antibodies were associated with a more severe cardiovascular disease in men (p 0.0006). Ventricular remodelation and LVH were not associated with chronic CMV infection (p 0.4). No statistically significant data were obtained using the Framingham/EUSCORE risk scores (p 0.2)

Conclusions: Chronic CMV infection has a very high prevalence in Romania. High titers of IgG anti CMV antibodies might be an aggravating factor for CV disease in men. Further studies, including a negative CMV group and a more detailed immunological assessment of patients need to be done to confirm our hypothesis.

(ID 205) The quality of life of members of families with children having allergic rhinitis

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With a constantly ascending prevalence, allergic rhinitis is a global healthcare issue. According to the ARIA data, there are 400 million patients with allergic rhinitis nowadays, and the current prevalence counts for 25% of allergic rhinitis in Europe. The ARIA data also claim that 40% of children suffer from allergic rhinitis, while the ISAAC data show that allergic rhinitis affects 0.8–14.9% of children aged 6 to 7 years old and 1.4–39.7% of children aged 13 to 14 years old. According to the official statistical data provided by the National Healthcare Management Centre of the Republic of Moldova, the prevalence of allergic rhinitis in children is also increasing. The symptoms of allergic rhinitis, persistent over a long period of time, can significantly affect the quality of life of the child and their family. Moreover, since allergic rhinitis is a huge economic burden on family and society as a whole, this has attracted an increased attention towards its investigation. The change in child and family's life stereotypes, the limitation of child's social activity and his/her involvement into the educational process and selection of future career because by allergic rhinitis, have a major impact on the quality of life. The deterioration of the quality of life of the children suffering from allergic rhinitis negatively affects not only their life, but also their parents' life. It leads to functional and emotional disorders and impacts the development of the child's personality. Therefore, the exploration of the emotional status and personality features of the children with allergic rhinitis, as well as family's educational peculiarities is of great importance in this sense. Given that the quality of life of parents with children having allergic rhinitis could better reflect the dynamics of the condition, one key issue that has been less investigated is the assessment of parents whose children have allergic rhinitis. Currently, there are no complex researches in the Republic of Moldova regarding the social characteristics of the children with allergic rhinitis and of their family members. The quality of life of the children with confirmed diagnosis of allergic rhinitis and of the family members has not been assessed. Consequently, the significant prevalence of allergic rhinitis and its impact on the quality of life requires not only a clinical approach towards allergic rhinitis, but also a better management of these patients.

Objectives. To determine the impact of allergic rhinitis on the quality of life of the members of families with children having allergic rhinitis.

Methods. This scientific research represents a descriptive, selective, nonexperimental clinical trial on a cohort that included 151 children with confirmed diagnosis of allergic rhinitis. The research was conducted by using a specialised questionnaire. The legal representatives of the children with allergic rhinitis were interviewed based on the actual cases of the Departments of Allergology, Pulmonology and ENT from the Institute of Mother and Child. The data collected dur-

ing the survey were entered into a Microsoft Office Excel 2007 table. The results were processed on the personal computer by using Microsoft Office Excel and EPI-Info 2007.

Outcomes. The analysis of the obtained data revealed the socio-economic status of these families and their modest incomes. Out of the total number of respondents, 57 (38%) have declared they were happy with their living conditions, and did not need changing anything or making investments. Only 41 (27%) of the family members have stated they had a good or a very good financial situation. Of all parents, 59 (39.10%) have confirmed they treated individually (own methods) their children, although only 45 (30%) have mentioned the affordability of the individual treatment of the child. At the time of the interview, some of the parents were working abroad, to financially support the family: in four cases (2.6%) – fathers were absent, in 12 cases (7.9%) – mothers were absent and in eight cases (5.3%) – both parents were out of the country. The complex analysis of the data obtained after having interviewed the legal representatives of the children confirmed the financial, psychological and social stress that are determined by the change of stereotypes of the child and family members' everyday life.

Conclusions. The significant prevalence of allergic rhinitis and its impact on the quality of life of the members of families with children with allergic rhinitis requires not only a clinical approach towards allergic rhinitis, but also a better management of these patients.

Key words: allergic rhinitis, children, quality of life, members of families

(ID 89) Peripheral neuropathy in the elderly - a complex diagnostic - clinical case

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Introduction: Polyneuropathy is a manifestation of peripheral nervous system disease that affects the whole body. Correct diagnosis of peripheral polyneuropathy in the elderly, should take account of its plurietiologia.

Methods: Patient, 75years old with type 2 diabetes under oral treatment(for 8years) has lower limbs paresthesia pain for 18 months, accompanied by the disturbance of walking, repeated falls, superficial and deep sensitivity disorders, sensory ataxia and areflexia tendon with preserved muscle strength. He followed treatment for diabetic sensory polyneuropathy. In the past 4 weeks had malaise, skin and mucous jaundice, leg edema, dysaesthesia of the lower limbs, weak pulsatile artery (right>left), abdominal flatulency, liver lower bound was 4cm below ribs edge.

Results: Bioassays: glycemic curve=320-287 mg/dL, hepatic cytolysis syndrome (ALT=100U/L, AST=90 U/L), CL creatinine=45ml/min; marker CA 19-9=30 U/ML3; ECG: sinus rhythm; Abdominal ultrasound: heterogeneous hepatomegaly, dilated intrahepatic biliary tract, pancreas intense inhomogeneous with many transonic pictures/necrosis in the pancreatic tail. Abdominal MRI: tumor formation, partialy necrotic, in the region of the tail pancreatic part with various liver metastases. Splenic vein thrombosis in the retro-caudal pancreatic segment and possibly left intrahepatic portal branch. Small lymph nodes above and under diaphragm. Excisional hepatic biopsy: IHC assays advocates digestive tumor origin, likely a cholangiocarcinoma, while not totally exclude extrahepatic biliary/pancreatic ducts origin. Diagnosis: Secondary polyneuropathy; Moderately differentiated tai of the pancreas adenocarcinoma, stage IV cT3cN1M1HEP. Progress of the case was express, resulting exitus within one month.

Conclusions: Along with diabetes, alcoholism, multiple sclerosis, circulatory system diseases, kidney disease, poisoning, cancer, especially in patients >65 years are common causes of peripheral neuropathy to be known and early identified. Paraneoplastic neurological syndromes take various clinical panel, including polyneuropathy, which explains its inclusion in neurological differential diagnosis algorithms. Pancreatic cancer is on the 7 position as frequency in Europe and is the fifth most common cause of cancer related death. In elderly patients, the interaction of chronic diseases is common, therefore this age requires a comprehensive and integrated assessment which may be associated with specific investigations of tumor markers for neurological diagnosis certainty.

(ID 103) Obstetrics pediatric - "children who make children"

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Introduction. Teen pregnancy face additional obstetric complications as physical development can be a hindrance in maintaining a pregnancy to term and birth itself. Risks related to biological age are factors that influence both social and economic development of pregnancy and the health of the newborn. Mother's age is important in assessing the risk of preterm birth, pre-eclampsia, gestational anemia, weakness of the newborn, etc. In emerging countries, smaller pregnancy ages are increasingly growing, most often not associated with prenatal or hospitalization care, and the consequences at national level are reflected in the increased cost of healthcare, social services, the education system - reduced education opportunities for both mother - school dropout, and for the child born in that environment.

Material and method. Retrospective study of the clinic of Obstetrics - Gynecology Emergency Hospital "St. Pantelimon "focuses on women who gave birth at ages 13-18 between 01.01.2015 - 31.12.2016. Among the items sought are birth weight of the newborn, gestational age, Apgar scores and birth method.

Results and conclusions. In an international environment of declining birth rates, increasing age at

which women give birth to their first child, due to low sexual education, ignoring traditional values and without fear of social stigma, we face a new social group: "children who make children". Among the results of the study it is highlighted the high incidence of teenage pregnancies belonging to rural areas, from large families with low socioeconomic status, without access to education or information about conventional methods of preventing unwanted pregnancies.

(ID 124) Aortic stenosis with intracardiac double thrombosis, anasarca, and liver failure — case report

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Objectives: We report a rare case of double thrombosis of left cardiac chambers associated with rheumatic aortic valve disease and dilated cardiomyopathy (DCM), refractory heart failure, cardiac cirrhosis and liver failure. We could not identify in the literature any case encompassing all the features of our patient. Cardiac thrombi are associated with pathologies that generate intracardiac stasis, especially by mechanical inefficiency of the atrial (atrial fibrillation) or ventricular wall (hypokinesia secondary to myocardial infarction, DCM, or advanced valvular disease). Echocardiography is the main diagnostic tool because it is easy, reliable, repeatable, and noninvasive.

Methods and results: A 62 year-old woman presented with dyspnea/ orthopnea, anasarca and massive ascites. Echocardiography revealed aortic valve disease with severe stenosis and mild regurgitation, diffusely dilated hypokinetic left ventricle with depressed ejection fraction, a thrombus in the left atrium and another in the left ventricle, severe free tricuspid regurgitation, dilated right cardiac chambers, inferior vena cava, and suprahepatic veins, right pleural effusion, ascites. Electrocardiogram: atrial fibrillation, QRS axis at 30°, nonspecific repolarization abnormalities. Blood chemistry: cirrhosis-associated cholestasis, hepatocytolysis, and liver failure, increased nitrogenous waste products probably due to renal hypoperfusion. Firmly indicated by atrial fibrillation associated with intracardiac thrombosis, anticoagulation was nevertheless hazardous given the hypocoagulable state; a sky-rocketing INR compelled us to discontinue anticoagulation soon after initiation, while some bleeding events precluded its reinstatement. Cardiac rhythm was intially controlled with Carvedilol which was also stopped for fear of a negative impact on myocardial contractility and was replaced with Digoxin (adequately dosed for the degree of renal impairment). Diuretic medication increased diuresis but also the renal dysfunction. After 10 days of hospitalization the ventricular thrombus was partially resorbed, while the atrial one vanished.

Conclusions: The simultaneous failure of thee vital organs severely limited the therapeutical options: the anticoagulant and the β-blocker were stopped because of the hypocoagulability and the negative inotropic effects, respectively; the diuretic dose was reduced because of the drop in the kidney function. The thrombus resolution was spontaneous, highlighting the utility of echocardiographic follow-up.

(ID 213) Assessment of cardiovascular risk in patients with chronic hepatitis C and metabolic syndrome

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The objective of this study was to evaluate cardiovascular risk in patients with chronic hepatitis C (HCV) depending on the presence of metabolic syndrome (MetS) and cardiovascular risk determinants.

Methods: This study is transversal and included 171 patients with HCV, of whom 111 patients with HCV and MetS and 60 patients with HCV without MetS. We followed anthropometric indices (weight, height, waist circumference, BMI). The biochemical parameters followed were fasting plasma glucose, glycosylated hemoglobin, lipid profile, liver profile and blood counts. For each patient the cardiovascular risk was calculated using the UKPDS software (The United Kingdom Prospective Diabetes Study). Insulin resistance was determined by using HOMA-IR. MetS was defined according to the IDF criteria 2005.

Results: Average age of patients introduced in study was 53.14±8.3 years. Of the total number of patients 52% were women (n=89). Mean duration of liver disease was 4.9±2.8 years for patients with MetS, and mean duration of liver disease for patienits without MetS was 5.0±2.01 years (p=NS). Using the UKPDS score, the total number of patients, 55.6% (n=95), 24.0% (n=41) and 20.5% (n=35) had a low cardiovascular risk, moderate and high, respectively. The prevalence of cardiovascular risk moderate (n=30) and high (n=30) were significantly higher in patients of the group of MetS, those without SM exhibiting cardiovascular risk much lower (RCV moderate, n=11; RCV high n=5).

Conclusions: The prevalence of high cardiovascular risk in this study was 20.5% and the moderate was 24%. MetS can be considered a risk factor for cardiovascular disease in the general population but not only in patients with HCV. The results of this study suggest the need for further research to develop public health policies for specific population groups to reduce cardiovascular risk.

(ID 333) Tight calcified aortic stenosis - therapeutic challenges - case study

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Objectives: Bicuspid aortic valve is the most frequent congenital valvulopathy in young adults, twice as common in men than in women, which determine tight aortic stenosis clinic expressed after 50-year-old. Almost all patients diagnosed with bicuspid aortic valve need surgical treatment.

Method: A 58-year-old male patient was admitted to hospital for worsening of cardiac insufficiency's phenomena: resting dyspnoea, calf edema, fatigue.

From pathological background we mention an aortic stenosis with indication of surgical correction delayed by the patient, an atrial fibrillation, a chronic renal failure and a significant cardiovascular risk through dyslipidemia, high blood pressure, diabetes mellitus type II.

We remark from the recent pathological history a left ventricle systolic dysfunction (EFLV decreased from 30-35% to 25%), an iatrogenic hyperthyroidism (amiodarone) and minimal coronary arterial lesions revealed at coronarography.

Actual clinical and paraclinical examinations ascertain a class IV NYHA cardiac insufficiency (generalized edema, turgid jugular veins, resting dyspnoea), blood pressure=95/80 mmHg, pulse=120/min, SpO2=89%, irregular heartbeat, systolic murmur in aortic area, biological BPN=2549.0, creatinine=3,01mg/dl. Echocardiography shows a narrowed, calcified aortic orifice, an afterload mismatch, LVEF=10-15%, Vmax=4.4m/sec, mean pressure gradient=65mmHg.

Results: The data obtained support the diagnosis of tight aortic stenosis complicated with cardiac insufficiency NYHA IV and severe left ventricular systolic dysfunction. Considering the pour status of the patient with physical exhaustion, without improvement of symptoms under specific therapy, the delay of transcatheteric aortic valve implantation and the further administration of medication become the best option for the patient in this moment.

Conclusion: In time the tight aortic stenosis leads to left ventricular failure with decreased LVEF that uncontrolled determines lower or faster progressive decompensation despite all therapeutic efforts. Peculiar in this case is the early appearance of symptomatology, which suggests the presence of a congenital anomaly hard to detect because of the important calcifications on the valve.

(ID 250) Blunted bone turnover markers in antiosteoporotics drugs free menopausal women with type 2 diabetes mellitus

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Background: It is known that patients with diabetes mellitus have an increased risk of bone fractures. Bone fragility in type 2 diabetes is a result of bone quality deterioration, rather than bone mass reduction. There are several mechanisms involved, including alteration of bone cells metabolism and, thus of bone turnover.

Objective: evaluation of bone turnover markers in postmenopausal women with type 2 diabetes (2DM) compared to non-diabetic patients.

Method: We conducted a cross-sectional study in a Romanian Tertiary Endocrine Center on postmenopausal women without known prior bone pathology or anti-osteoporotic drugs exposure. We analyzed: the 25 hydroxy vitamin D (25(OH)D) and parathyroid hormone levels, phospho-calcium metabolism, the bone turnover markers (CrossLaps-bone resorption marker, osteocalcin and procollagen I aminoterminal propeptide: P1NP - bone formation markers). and the anthropometric data (BMI:Body Mass Index). Statistical analysis was performed using SPSS software. Statistical significance was considered at $p<0.05$.

Results: Were enrolled 30 patients with 2DM (63.43+/-9.2years) and 37 control patients without 2DM (59.05+/-9.2years). In the 2DM group, 25(OH)D (15.99+/-7.87 ng/ml), Osteocalcin (19.29+/-8.56 ng/ml) and P1NP levels (45.89+/-17.8 ng/ml) was lower ($p=0.03$, $p= 0.01$, $p= 0.07$) and the BMI was higher ($p=0.01$). There was a moderate negative partial correlation between osteocalcin level and BMI ($r= -0.329$, $p = 0.009$), maintained even after adjusted for age ($r= -0.326$, $p= 0.01$) independent of 2DM.

Conclusion: Our observations showed a lower levels of 25(OH)D and bone formation markers: osteocalcin and P1NP (borderline significance), in type 2 diabetes. Osteocalcin showed significant negative correlation with BMI, even adjusted for age, independent of 2DM.

(ID 226) Serum sclerostin in postomenopausal women with osteoporosis

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Aim Sclerostin is a glycoprotein produced by the osteocytes that inhibits bone formation by the osteoblast. High levels of sclerostin were associated with low bone mineral density. The aim of the study was to assess serum sclerostin in postmenopausal women with osteoporosis compared with premenopausal women.

Methods Sclerostin was assessed in three groups: premenopausal healthy women (group 1; n=30, mean age 36.3±8.6 years), postmenopausal women with osteoporosis but without diabetes (group 2; n=21, mean age 61.7±6.7 years) and postmenopausal women with osteoporosis and diabetes (group 3; n=19, mean age 55.6±7.3 years). Sclerostin was measured using and ELISA assay. Diagnosis of osteoporosis was made using a DXA scan.

Results There were no significant differences in serum sclerostin between the three groups: 173.9±56.2 (group 1) vs. 191.4±56.7 (group 2) vs. 207±75.4 (group 3) pg/mL (p=0.19 ANOVA). One subject in group 1, 1 in group 2 and 3 in group 3 had serum sclerostin levels above the upper limit of normal.

Conclusion Osteoporosis, particularly in diabetes patients, is associated with higher, although not statistically significant, levels of serum sclerostin. Higher number of patients is needed to draw firm conclusions.

(ID 167) Could be used diagnostic biomarkers to predict the response to biologic therapy in rheumatoid arthritis? What happens to them under this treatment?

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Background: biologic therapies has revolutionized the treatment of rheumatoid arthritis (RA). Despite these advances, 20-40% of the patients are declared non-responders to at least one of the therapies. The patient exposure to the potential side effects and high costs requires the discovery of a biomarker that could identify those who can benefit from the pretreatment of a certain therapy.We proposed to test the predictive role for the response to biologic therapy of diagnostic biomarkers used in RA: rheumatoid factor (RF) isotypes IgM and IgA, anti-cyclic citrullinated peptide (anti-CCP) and autoantibodies against mutated citrullinated vimentin (anti-MCV). We also followed the evolution of serum levels of these biomarkers under biologic therapy with anti-TNF α agents.

Methods: prospective and observational study including 64 patients followed 12 months with active RA, uncontrolled by conventional synthetic DMARDs or declared nonresponders to one of the biologic DMARDs.

Results: lower baseline titres of RF type Ig M (51.36±95.359 U/ml, p=0.01629), Ig A (22.45±61.256 U/ml, p=0.03336) and anti-CCP (60.82±26.331 ng/ml, p=0.00011) had predictive value for achieving a good EULAR response at 6 months. Regarding anti-MCV baseline titres, there were no differences between groups at 6 months (p=0.45914) or at 12 months (p=0.11354).

Grouping patients in 2 categories (responders/non-responders), we identified significant differences between groups only for anti-CCP and response at 6 months (responders 96.04±50.355ng/ml, non-responders 146.16±41.68 ng/ml, p=0.02834)

For the EULAR response at 12 months, lower baseline titres for RF type Ig M (92.93±120.22 U/ml, p=0.01032) and Ig A (49.96±98.08 U/ml, p=0.00247) had predictive value for achieving a good response at 12 months. We didn't obtain other information grouping patients in 2 categories

Regarding the evolution of serum levels, we noticed a reduction for all four biomarkers tested, statistically significant at 6 and / or 12 months from baseline.

Conclusion: beside from their diagnostic role, these biomarkers could be used for other purposes in Rheumatoid Arthritis.

(ID 233) The importance of molecular analysis of f8 gene in haemophilia a – current and future perspectives

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Objectives: Haemophilia A is the most severe bleeding disorder and is transmitted in a X-linked recessive fashion. The diagnosis is based on the decreased level of clotting factor VIII (FVIII<50%, normal levels: 50-150%) and on a normal level of von Willebrand factor. Our aim was to identify the current role and importance of molecular biology techniques in the diagnosis and therapeutic management of haemophilia A.

Methods: A systematic literature search was computed by two independent investigators using the MEDLINE database, PubMed, and Google Scholar search services with the following keywords and word combinations: hemophilia A, intron 22 inversion, intron 1 inversion, molecular testing, genetic testing, genotyping, and F8 mutation analysis. Inclusion criteria incorporated relevant articles in English, published in between 1st January 2000 and 1st January 2017, that addressed hemophilia type A as their main theme (pathophysiology, diagnosis and treatment). The exclusion criteria were unavailability of any full article, unclear presentation, non-relevant studies and reports of different languages other than English. The common features were assembled into this present review.

Results and conclusions: According to data provided by the National Association of Haemophiliacs from Romania, approximately 2200 patients suffer from haemophilia in our country. This hematological disease affects one in 5000-7000 newborns of male sex and is caused by mutations occurring in the F8 gene, located on the long arm of the X chromosome (X-q28). The most common mutations, the inversion in intron 22 (Inv22) and the inversion in intron 1 (Inv1), account for approximately 40-50% and 5% of cases of severe haemophilia A, respectively However, a molecular analysis of the F8 gene in our country has yet to be performed and the frequency of the most common mutations, Inv22 and Inv1, are yet unknown in our population. Thus, our aim is to implement molecular genetic testing in the Molecular Biology Laboratory of Fundeni Clinical Institute, since 20-30% of patients with Inv22 or Inv1 develop inhibitors to replacement therapy.

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(ID 44) A case of secondary myeloid metaplasia with myelofibrosis and extramedullary haematopoiesis site

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Objectives: Haematopoiesis ensures the renewal of functional blood cells and takes place in the bone marrow alone in adults. Extramedullary haematopoiesis (EH) occurs actively following infections and locates in the liver and spleen, sites which play a key role in the production of phagocytes and antigen-presenting cells. Moreover, EH is an essential step in normal fetal development, with the yolk sac, liver and spleen as main locations of haematopoiesis. However, passive foci of haematopoiesis characterize the failure of the bone marrow and can be found in a rare disease: myeloid metaplasia with myelofibrosis (MMM). Our objective is to report the incidental finding of an EH site in an MMM patient.

Methods: We present the case of a 63-year-old female, hospitalised in the Haematology Clinic, Filantropia City Hospital, Craiova, for a routine check-up, severe physical weakness and urinary incontinence (September 2016). The patient was diagnosed with polycythemia vera (1986), disease which evolved into secondary MMM (2000). The complete physical examination revealed hepatomegaly (+4cm) and grade IV/V splenomegaly. The complete blood count revealed: hemoglobin 10.2 g/dL, erythrocyte sedimentation rate 30.6%, leukocytes 10.500/mmc, oxyphilic erythroblasts 1%, banded neutrophils 4%, segmented neutrophils 74%, lymphocytes 15%, monocytes 5%, eosinophils 2%, platelets 40.000/mmc, and tear-shaped erythrocytes in the peripheral blood. The osteomedullary biopsy indicated medullary fibrosis. The patient was subjected to gynecological examination and abdominal computed tomography scan with contrast media to evaluate the gigantic splenomegaly. The initial treatment consisted in cytoreductive therapy (hydroxyurea), followed by radiotherapy on the inferior splenic pole with unsuccessful results and persistent anemia and thrombocytopenia. The patient received ruxolitinib 10 mg/day of April, 2016.

Results and conclusions: The gynecological examination revealed effort incontinence, cystocele, atrophic vaginitis. Pap-smear was recommended at every six months. The computed tomography report concluded the following: cardiomegaly, pericardial effusion, hepatosplenomegaly, minimal perisplenic fluid, laterally left deviated uterus, myometrial microcalcifications, cystic right adnexa with microcalcifications, and an osteolytic mass localised in the centrum of the sacrum (2/3.6 cm). The last finding raised the suspicion of a possible EH site since MMM is characterised by medullary fibrosis, leukoerythroblastosis, tear-shaped erythrocytes in the peripheral blood, and foci of abnormal EH.

(ID 79) The degree of diabetic retinopathy and Cystatin C level in new onset type 2 diabetes mellitus without chronic renal disease

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Objective: The aim of our study was to investigate the association between the degree of diabetic retinopathy (DR) and Cystatin C (CC) level in patients with new onset type 2 diabetes mellitus (T2DM) without chronic renal disease (CRD).

Material and methods: The CC level was measured through immunoturbidimetry method. DR was diagnosed through direct ophtalmoscopy. The vascular screening was performed using a Fukuda Denshi Vasera VS 1000 device. An estimated vascular age is obtained by applying the calculated right/left Cardio Ankle Vascular Index (CAVI) as surrogate marker of arterial stiffness, to age graph, with the actual age entered in patient information and the standard deviations of CAVI taken into consideration.

Results: Out of 269 patients, 142 patients (52.78%) were considered without CRD. 108 (76.05%) patients did not have DR and 34 (23.95%) were diagnosed with different stages of DR. The subjects without DR compared to those with severe proliferative DR have a significantly lower arterial estimated age (57.77 vs. 74.57 years, p=0.01), not related to mean actual age, which were not significantly different. The level of serum CC were also significantly lower in subjects without DR compared to those with severe proliferative DR (0.47 vs 0.93 mg/l, p=0.01) according to MDRD which is higher in first group compared to the second group. The linear regression analysis of relationship between CC value and the degree of DR has shown a positive correlation (coefficient $\beta = 0.31$) statistically significant ($p = 0.009$).

Conclusion: The severity of DR links with the serum CC level in new onset patients with T2DM, without CRD. An increase in the CC value could be associated with a progression in diabetic retinopathy degree.

(ID 74) Comparative study of matrix metalloproteinase expression between AIDS-related and non–AIDS-related Kaposi's sarcoma

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Introduction: Kaposi's sarcoma (KS) is an angioproliferative tumor caused by human herpesvirus 8 (HHV8) which became widely known as the most frequently observed Human Immunodeficiency Virus (HIV)/Acquired Immunodeficiency syndrome (AIDS)-associated malignancy. The pathogenesis of the disease is complex and incompletely understood. To date, matrix metalloproteinases (MMPs) are associated with Kaposi's sarcoma (KS) tumorigenesis and may contribute to the mechanism of KS invasive growth. The aim of this study was to evaluate the expression of multiple MMPs in patients with acquired immune deficiency syndrome (AIDS)-related and classic cutaneous KS lesions.

Materials and methods: We performed a retrospective study on 82 patients, of whom 67 patients with classic Kaposi's sarcoma and 15 patients AIDS-related Kaposi's sarcoma. Patients included in the study were aged between 36 and 90 years and diagnosed during 2010-2014. All specimens had been fixed in formalin and embedded in paraffin wax. Immunohistochemistry for HHV8 and monoclonal antibodies specific for MMP1, MMP3, MMP9, MMP11, MMP13 was performed on formalin-fixed, paraffin-embedded tissue sections.

Results: The results of our statistical analyses reveals that lesional cells of Kaposi sarcoma in HIV-positive and HIV-negative patients were immunoreactive for all MMPs. Ulceration, present in the nineteen of the nodular KS lesions, did not alter MMP staining. There were no appreciable differences in immunoreactivity between classic KS and AIDS-KS lesions.

Conclusions: So far, only a few MMPs have been studied in KS lesions and exactly which MMPs are involved in KS development and progression remains unanswere. The present study could provides further evidence for the *in vivo* expression of five MMP in classic and AIDS-KS cutaneous lesions. Thus, our observations may contribute to the mechanism of KS invasive growth, and may provide new therapeutic approaches using specific MMP targets.

(ID 332) Hashimoto's thyroiditis in adult obese population

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Introduction: A potential link between increased Body Mass Index (BMI) and risk of developing Hashimoto's Thyroiditis (HT) is described based on common pathways of metabolism regulation, thermogenesis as well as control of oxidative stress, central mechanisms of food intake. A slight increase of TSH (Thyroid Stimulating Hormone) and potentially of FT3/T3 levels has been described and directly connected with BMI increase but potentially seen as a an adaptation to re-set resting energy expenditure to a higher level. These anomalies do not need therapy unless an autoimmune background is detected and confirmed.

Aim: Our objective is to describe HT pattern in obese population.

Material and method: This is a cross-sectional observational study in patients admitted to different endocrinology centers for non-specific thyroid complains. Endocrine profile was focused on HT confirmation, meaning a raise of either circulating antibody at any moment in life.

Results: After HT confirmation, we included only the subjects with a BMI ≥ kg/sqm: 31 adult patients (12.9% males). Mean age was 50.085+/-13.463 (ranges between 18 and 75 years). Mean TSH was 7.585+/-15.529 μUI/mL (ranges between 0.18 and 80 μUI/mL, with normal values between 0.4-4 μUI/mL) and FT4 was 1.154+/-0.458 ng/mL (ranges between 0.3-3.16ng/mL, and normal levels between 0.89-1.76 ng/mL). Anti-thyroid antibodies were TPO (anti-thyroperoxidase antibodies) of 526.36+/-426.943 U/mL (with patients's maximum and minim values of 9, respective 1720U/mL, normal levels of <50U/mL), TgAb (anti-thyroglobulin antibodies) of 368.645+/-665.62 U/mL (ranges between 14.7 and 3200 U/mL, normal values of <60U/mL). Overall, 93.54% of subjects had hypothyroidism. No statistical significant correlation (p>0.05) was found between either BMI-TSH, BMI-TPO, BMI-TgAb.

Conclusions: Both obesity and HT has an increasing prevalence in modern society and it is unclear if these are incidental or pathogenically linked.

(ID 105) The eyes signal: blue periphery, tan collarette and freckles iris pattern - strong indicator for epidermal skin cancer

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Objective: Eye and skin share the ectodermic embryological origin and both are established risk factors in epidermal skin cancer. There are few reports using iris color classification scales, most of them either analyze only color in general or are too complex to use in daily practice. The objective of this study was to demonstrate that the Descriptive iris color classification scale (previously reported by the same authors) is a precise and easy to use tool in epidermal skin cancer risk evaluation.

Methods: A case control study was conducted on 480 patients. Three parameters of the iris were analyzed for each patient: periphery, collerette and freckles. Although visible with the naked eye, digital images of the iris were used. Patients were divided into two lots: 229 epidermal skin cancer patients and a control lot of 251 dermatology patients free of skin cancer.

Results: Two iris patterns were strongly associated with epidermal skin cancer: blue periphery with light brown (tan) collarette and freckles, followed by blue periphery with blue collarette and freckles. The strongest indicators for skin cancer patients were blue periphery and blue collerette, in terms of individual parameters.

Conclusion: The most frequent iris color pattern in skin cancer patients was blue periphery with light brown (tan) collarette and freckles. In addition, the lack of blue pigment on the iris was a strong indicator for a lower association with epidermal skin cancer. Our results differ from previous reports that showed association of skin cancer risk with a homogenous blue iris. We account these differences to the characteristics of the recruited patients (S-E European, skin type II-III). Our results sustain the hypothesis that blue periphery with light brown (tan) collarette and freckles iris or simply the presence of blue color on the iris are phenotypic markers for epidermal skin cancer risk assessment.

(ID 386) Forty years of rheumatic disease - a case report

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Objectives: A case of severe rheumatoid arthritis derived from long-term juvenile idiopathic arthritis is presented, with emphasis on the specific medical problems, comorbidities and treatment difficulties it implies.

Methods: We report the case of a 48 year-old male, followed-up in a tertiary rheumatic center, whose present medical complaints are persistent symmetrical invalidating pain in the small joints of the hands, worsening dyspepsia and loss of interest in his everyday activities.

His medical history includes the onset of juvenile idiopathic arthritis at the age of 9, with severe, polyarticular involvement and mobility loss. Shortened asymmetrical upper extremities, ankylosis of wrists, and great disability followed by the age of 11. The patient received gold salts therapy for 6 months and oral corticosteroids, followed by several synthetic disease modifying drugs (Methotrexate, Sulphasalazine, Hydroxychloroquine). The modest control of pain and active inflammation resulted into the impossibility to withdraw the corticosteroids – the patient received Prednisolone for more than 20 years - tapered dose after an episode of hemorrhagic gastritis. High disease activity persisted, followed by bilateral coxitis and secondary osteoarthritis of the hip and left knee, each requiring arthroplasty. Laboratory results include negative rheumatoid factor and ACCP antibodies, persistent moderate anemia, mildly elevated ESR and CRP.

Results: Persistent active inflammation, debilitating deformities, long-lasting although tapered immunosuppressant and corticosteroid therapy have resulted in multiple comorbidities such as severe osteoarthritis, the need of joint replacement surgery, decrease in bone mineral density - osteopenia in this case, Cushing syndrome, infections, social dysfunction and depression. Although burdened by decreased mobility and multiple therapy-related side effects, the patient managed to gain satisfactory quality of life with surgical management and biological therapy – a safe and effective choice for adult patients with AIJ-related RA, as proven by a recent UK cohort study.

Conclusion: Adult patients with juvenile onset and long-lasting rheumatic diseases face complex medical needs that very much differ from those of patients with adult onset disease. The therapeutic approach has to be prompt, complex and interdisciplinary.

(ID 371) Rheumatoid arthritis treatment in the presence of TB silicosis - case report

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Objectives: Rheumatoid arthritis (RA) is an inflammatory chronic disease, with destructive joint damage. Disease-modifying antirheumatic drugs (DMARDs) can slow the progression of rheumatoid arthritis and save the joints and other tissues from permanent damage but carry a high risk of infections.

Methods: We present the case of a 64 years old male patient, known with rheumatoid arthritis for 3 years, at present in treatment with Metotrexat 20 mg per week and Methilprednisolon 16 mg per day, which presents for arthritis of small joints of hands, elbows, knee, ankles, with prolonged morning stiffness. In 2014 he started the treatment with Metotrexate with a good evolution of the disease. In june 2016, Izoniazidis, Etambutol and Rifampicina were added for a new diagnostic of silicoTBC, and, MTX was replaced with Leflunomid 20 mg/day ,under which the joint symptoms get worst; this is why he returned to Metotrexat, from October 2016.

Results: laboratory tests have highlighted the persistence of slight anemia of chronic disease, RF and ACPA positive, high level of uric acid and the presence of inflammatory syndrome. The ultrasonography showed sinovitis of hands small joints and elbows;

The radiography and the pulmonary computer tomography showed fibronodulare disseminated lesions in both lung areas, interpreted as fibrosis in the context of silicosis. We noticed that between October 2016 and February 2017 pulmonary impairment progressed, with progression of fibrosis witch determined us to change again the background treatment. The differential diagnostic of fibronodulare disseminated lesions could be: pulmonary tuberculosis, infection, rheumatoid nodules, pulmonary metastatic disease. A pulmonary biopsy would be very useful.

After end of the tuberculostatic therapy, the patient can be initiated on the biologic remissive therapy with Abatacept (orencia), with less risk of TB infections;

Conclusions: The treatment of rheumatoid arthritis with imunosupressive drugs can be very difficult in the context of high risk of TB reinfection and pulmonary fibrosis.

(ID 352) Post-traumatic myositis ossificans - case report

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Objectives: Posttraumatic myositis ossificans occurs as a complication in approximately 20% of large haematomas associated with muscle contusions and strains.

Post-traumatic myositis ossificans is the proliferation of bone and cartilage within a muscle after the formation of an intramuscular haematoma. It is more common in the sporting community as a complication of muscle contusions and strains by either a major trauma or repeated injury.

The objective of this paper is to show the approach of differential diagnosis between inflammatory and traumatic muscular disease.

Method: We are studying a 17 years old patient which came to our clinic on 02.03.2017 presenting diffuse pain at the right coxofemural joint. The patient described multiple traumas throughout the years as he is an athlete, the most recent trauma occurring 3 weeks before. The symptomatology debuted approximatively 5 days before. The physical exam showed tenderness and swelling on the antero-medial side of the right thigh, accompanied by a large ecchymosis.

Results: Considering that the hematological results were normal, the biochemistry was in normal parameters (CK=80 U/l, LDH = 152u/l, CRP= 5,47 MG/l) and the immunology was normal, polymyositis was excluded. For a clear diagnosis, further imagistic investigations were made: pelvis radiography, which showed a large calcification following the contour of the right hip. Musculoskeletal echography also showed a large calcification, with intense Doppler signal, situated inside the quadriceps tendon.

IRM scan of the hip (bone and soft tissue) guided the diagnosis towards posttraumatic myositis.

After a closer anamnesis, the patient recalled a trauma 3 weeks before, but does not recall any signs of inflammation at the time (swelling, ecchymosis, tenderness). Considering all of the above, the most probable diagnosis is myositis ossificans. A CT 3d with reconstruction was also made.

Conclusion: In order to diagnose a muscular disease the clinical approach must be reinforced by blood tests and imagistic (radiology, IRM, CT, echography). The peculiarity of this case is represented by lack of symptoms for a period of time despite the giant calcification of quadriceps tendon.

(ID 255) Students and plagiarism

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Objective. Internet plagiarism can be easily detected by teachers when students' papers and essays are received online, because they can then use plagiarism–detection software. This is not as easy when students hand over a hardcopy, but still the originality of their work has to be verified by the teacher. The present study intended to document students' self-awareness on the subject of plagiarism.

Method. 89 first year students of the Medical and Pharmacy University Carol Davila were surveyed. The medical students answered a questionnaire consisting of 13 questions, 10 of them being reported in this paper. The students had to answer: how they wrote an essay in genetics (copy-pasting from the Internet or creating an original paper), and the extent to which they copied (very much, much, intermediate, enough, not at all). Other questions asked students to explain their opinion on totally vs partially plagiarizing a paper and to motivate their action.

Results. 7 students recognized that they have plagiarized a lot, 15 considered it was only intermediate, while 33 chose enough as an answer. When having to motivate their action 49 students answered they did not copy-paste the paper, although when firstly asked only 33 of them stated they had not at all plagiarized.

Students were asked to write their own opinion in the essay, and plagiarism was never discussed during the workshops of medical genetics, so that students could express their unbiased view. Self-reporting is difficult and sitting next to their peers might have influenced students' answers, but 30% of those questioned recognized they plagiarized. The study was done on a very small sample but it created a picture on students' awareness about the way in which they had to write a paper. Teaching science to students entails educating them and although it is not an epidemic, Internet- plagiarism is a concern in academic environment worldwide.

Conclusion. Students have to be taught to write original papers and their development in this area has to be documented all along the years of their study.

(ID 383) Diagnosis and management challenges in patients with Cushing syndrome

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The diagnosis and management of patients with of Cushing's syndrome represents a challenge for the endocrinologist. Once the diagnosis of Cushing's syndrome is clinically suspected, we have to confirm or not because of increased morbidity and mortality. Screening for hypercortisolism is made as follow: assessment of cortisol secretion in a 24-hour period- urinary free cortisol, documenting loss of normal diurnal variation in cortisol secretion-midnight cortisol or late-night salivary cortisol, and dexamethasone suppression tests- 1mg dexamethasone overnight and 2mgx2 days.) Plasma ACTH helps to distinguish between ACTH-dependent (pituitary or extrapituitary ACTH-secreting tumors) and ACTH-independent Cushing's syndrome (adrenal cortisol-secreting lesions) and high-dose dexamethasone suppression test is used in the differential diagnosis between pituitary and ectopic ACTH secretion as are CRH testing, and inferior petrosal sinus sampling.

Case presentation of a 23 years old women who addressed to our Department for obesity, hirsutism and an unclear history of excess cortisol secretion starting in pubertal years. We were able to demonstrate hypercortisolism in her case but the result tests were difficult to interpret. She had 5 times increased urinary free cortisol, abnormal diurnal cortisol secretion (midnight cortisol same as 8 am cortisol), absence of suppression in 1mg dexamethasone suppression test 11 mcg/dl (<1.8), non-suppressed basal ACTH, partially suppressed cortisol in 2 mgx2 dexamethasone suppression test, and suppression of ACTH in high dose suppression test. Also she had 2 pituitary microadenomas and hyperplasic adrenals.

The test were not concludent to establish a positive diagnosis so we decide to recall the patient 3 months later and repeat them. At this moment she didn't associate diabetes or hypertension.

(ID 209) Echocardiography between the guidelines: a rare case of acute myocardial infarction with ST-segment elevation and atrial myxoma

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Objectives: In patients with acute myocardial infarction (AMI), echocardiography evaluation is recommended in cases of hemodynamic instability. Nevertheless, there are rare cases when acute coronary syndrome (ACS) is associated with other cardiac pathologies (atrial myxoma) that can otherwise go unnoticed.

Methods: We report the case of a 77 years old female, who was admitted for prolonged chest pain 6 hours onset. The physical examination was unremarkable, except for a grade II/IV systolic murmur in the mitral area.

Results: According to the emergency department's protocols, we performed: electrocardiogram (ECG) which showed sinus rhythm with ventricular rate of 80 bpm and an ST-segment elevation of 6 mm and q waves in DII, DIII and aVF respectively. Basic analysis revealed elevated cardiac necrotic enzymes (cTnI = 0.075 ng/mL, CK-MB=718 U/L).The patient was diagnose with ST elevation acute myocardial infarction (STEMI). Therefore, after receiving 300 mg of Aspirine and 180 mg of Ticagrelor, the patient underwent urgent coronarography which showed right coronary artery occlusion in the proximal segment. Coronary angioplasty was performed with pharmacological stent placement (an atherosclerotic plaque was identified after thrombaspiration), having full recovery of the blood flow in the vascular territory (TIMI 3 flow, BLUSH 3 flow). After the procedure, the patient was transferred to the intense cardiac care unit (ICCU) for non-invasive monitoring. Transthoracic echocardiography performed in day I identified a hyperechogenic tumoral mass of 2.5/4 cm diameter with a large base of implantation alongside fossa ovalis, mobile, confirmed through transesophageal echocardiography. The patient had indication of cardiac surgery which was performed 4 weeks after STEMI, when Ticagrelor was safe to be temporarily stopped, with full excision of the tumor and the interatrial septum, which was repaired with pericardial patch. The biopsy confirmed the presumed diagnosis – atrial myxoma.

Conclusions: The association between cardiac tumors and ACS is very rare. Cardiac myxoma may be responsible for recurrence of ischemia, since large myxomas can be flow limiting in cardiac cavities or alternatively may embolize. The timing and quality of imaging is crucial since surgical treatment may interfere with recovery after AMI and antiplatelet therapy.

(ID 267) Concomitant acute peripheral ischemia and venous thromboembolism: causality or coincidence?

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Objective: We present the case of a 62-year-old man that arrived to the hospital complaining of intense pain in the right upper limb.

Methods and materials: The patient reports pallor and functional impairment in the right upper limb for 3 hours. He also mentions progressive dyspnea and important weight loss in the last 2 months. From his heredocolateral history is notable a daughter with heterozygous mutation for MTHFR and PAI-1 genes. On the clinical examination the patient was tachycardic (110 bpm) with cyanotic, cold skin of the forearm, absent pulse distally to the brachial artery, polypneea, right ventricular gallop, BP 135/75 mmHg. ECG showed sinus tachycardia, northwest axis, S1Q3T3 and minor right bundle block.

Results: The Doppler ultrasound of the right arm showed in the brachial artery thrombotic material occluding the lumen with no Doppler signal distally. Echocardiography showed severe dilated right cavities, flat interventricular septum, hypokinesis of the free wall of the right ventricle, high probability of pulmonary hypertension, patent foramen ovale with intermittent right-left shunt. The venous Doppler ultrasound of the lower limb revealed right popliteal trombosis and computerthomographie showed massive bilateral thrombi in both main pulmonary arteries with extension on the lobar branches and chronic trombi distally.

The diagnosis of concurrent pulmonary thrombembolism and acute peripheral ischemia due to the paradoxial embolism via a patent foramen ovale in a patient with chronic pulmonary heart was made. Urgent thromboembolectomy with a Fogarty catheter was performed and anticoagulation therapy was initiated initially with unfractionated heparin and subsequentlly with acenocumarol. Taking into account that a frequent cause of deep venous thrombembolism is neoplasia supplementary investigations were made including abdomino-pelvic CT showing asymmetrical circumferential parietal thickening of the cecum with mesenteric lymph nodes. Colonoscopy with biopsy could not be done due to the anticoagulation. View the family history a complet panel of thrombophilia analysis was recommended.

Conclusion: We describe a rare case of a patient with concomitant pulmonary thrombembolism and acute peripheral ischemia due to paradoxal embolism through a patent foramen ovale having as embolic sourse the deep venous system of the inferior legs in the context of possibly paraneoplasic syndrome.

(ID 200) CT and MR imaging severity index in pericarditis

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Objective: To review and illustrate typical CT and MR imaging findings in complicated pericarditis. To identify worrisome imaging signs (hemodynamic compromise, myocardial involvement, large pericardial effusion) that represent negative prognostic predictors in patients with pericarditis.

Materials and methods: We review CT and MR findings in 17 patients, aged 37 to 75 years, 10 male and 7 female, with suspected pericarditis. We performed thoracic CT evaluation, both unenhanced and enhanced sequences, in arterial (25-30 seconds post contrast media injection) and late phase (70-80 seconds). CMR protocol consists in T1/T2 FSE, STIR and Cine SSFP sequences, followed by early and delayed enhancement phase after paramagnetic iv. injection.

Results: Pericardial thickening (more than 4 mm) and diffuse pericardial enhancement were found in all patients with inflammatory pericardial disease. In all cases we found different amount of pericardial effusions and the CT attenuation value was greater than the water, in five cases due to hemopericardium. In eleven cases compression of the cardiac chambers was noted. CMR imaging was able to depict the extension of the inflammation into the surrounding fat and adjacent myocardial tissue. In three cases signs of impending cardiac tamponade were noted.

Conclusion: Although echocardiography is considered the first-line investigation to diagnose and to guide therapeutic procedures for pericarditis, cardiac cross-sectional imaging (CT and MR Imaging) has an important role in the morphologic evaluation of the inflammatory pericardial disease. Cardiac cross-sectional imaging techniques, both CT and MR imaging, improve detailed assessment of the pericardium, with reliable identification and extension of the pericardial thickening. MR imaging has the advantage to identify also myocardial involvement and functional consequences of the inflammatory pericardial disease.

(ID 331) Angina free ischemic cardiomyopathy

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Background: The majority of cardiac diseases could evolve in advanced stages with cavity dilatation and systolic dysfunction, entity which defines DCM (dilated cardiomyopathy), clinical consequence of these modifications lead to an emergence phenomenon of heart failure. The etiology of this matter reunites a group of primary myocardial diseases, with genetic implication, but also an ischemic affectation.

Methodology: We present the case of a 64 year old patient that presents symptoms of dyspnea and fatigability due to cardiac failure class III NYHA.

From the patient's file we mention DCM with severe systolic dysfunction of the left ventricle (EF 25-30%), severe mitral valve regurgitation secondary to an wide anterior myocardial infarction.

The coronarography done at that time showed tricoronary lesions that were dealt with in two steps – angioplasty with stent insertion per primam ADA I, followed by ballooning angioplasty MG II and ADA II.

We also mention atrial fibrillation spontaneously converted to sinus rhythm. From the cardiac risk factors we mention dyslipidemia and impaired glucose tolerance.

Clinical examination revealed H.R.= 80 bpm, blood pressure=130/70 mmHg, respiratory rate=15/min, SO2=98%, systolic murmur at the apex, protodiastolic gallop, the anterior margin of the liver at 5 cm below the costal margin, diminished vesicular murmur in the lower right lung, retromaleolar edema.

Paraclinical investigations reveal high BNP, dilated left ventricle with a high preload pressure, functional mitral valve regurgitation, right pleural effusion.

The data obtained from clinical and paraclinical investigations indicate dilated cardiomyopathy secondary to ischemia with severe dysfunction of the left ventricle.

The dosage of diuretics has been increased.

Results: The patient meets the criteria for ICD unicameral implantation for primary prevention of sudden cardiac death (chronic heart failure class III-IV NYHA, EF<35%, without a myocardial infarction in the last 40 days, over a 3 month period of optimal treatment). The procedure has been performed during hospitalization.

Conclusion: Ischemia represents one of the most frequent factors in the etiopathogeny of dilated cardiomyopathy disease.

The particularity of this case is the absence of standard symptomatology for coronary ischemia, patient showing signs of heart failure: signs of pulmonary congestion and low cardiac output.

(ID 251) Manouguian technique: a solution to avoid patient-prosthesis mismatch in aortic valve replacement - case report

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Objective: Aortic stenosis is one of the most common pathologies in cardiac surgery and surgical treatment has developed continuously over the years. One of the major problems associated remains patient-prosthesis mismatch in patients with small aortic anullus.

Methods: We present the case of a 67 years old patient with severe aortic disease (severe stenosis and regurgitation) and permanent cardiostimulator who was reffered to out clinic for aortic valve replacement. Echocardiography showed normal left and right ventricular function, severe aortic stenosis with a mean transvalvular pressure gradient of 74 mmHg and a severe aortic regurgitation. Aortic annullus was of 19 mm diameter and extensive calcifications of the aortic valve were observed. The patient's BSA was 1.73 m2 and the calculated EOA in order to avoid prosthesis mismatch was 1.47 cm2 . Due to the intraoperative aspect of the aortic valve and the small aortic annulus we performed an aortic valve replacement with a biological prosthesis number 21 and the Manouguian tehnique for aortic root enlargement. Manouguian technique was performed by incising the aortic annulus and the subaortic curtain. The reconstruction of the defect was done with a teardrop-shaped patch of colagenated Dacron prosthesis.

Results: Postoperative evolution of the patient was eventless and echocardiography showed a transprostethic pressure gradient of 21 mmHg. The patient was discharged after 7 days.

Conclusion: The enlargement of the aortic annulus has demonstrated excellent results for avoiding patient-prosthesis mismatch. Manouguian technique has been shown to be a safe and reproductible procedure. The benefit of this procedure is the implantation of a bigger valve prosthesis (by one or two sizes), thus avoiding patient-prosthesis mismatch, which is an important factor that affects mortality and morbidity.

(ID 266) Fungal pleurisy: a rare but significant entity

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Objective: Pleurisy involves the inflammation of the pleura and is often associated with the accumulation of fluid between the two layers of pleura. Fungal pleurisy represents only 1% of pleurisy cases. The aim of this case study is to demonstrate the possibility of a fungal aetiology in a case of pleurisy characterised by severe symptoms and refractoriness to antibiotics.

Method: A 30-year-old male known with COPD and epilepsy, presents to the emergency department with fever, shivering, cough, stabbing pain in the right hemithorax, diaphoresis, vomiting and malaise. Symptoms started 3 days before presentation. Clinical examination revealed: haemodynamic stability, malnutrition, pseudomembranous pharyngolaryngitis signs that debuted during hospitalization, dullness, absent vesicular murmur and bronchial rales at the base of the right lung.

Laboratory Investigations revealed: leucocytosis (27/10*3/uL), elevated fibrinogen (748 mg/dl), elevated ESR (53 mm/h), neutrophilia (88.2%), thrombocytosis (398/10*3/uL) lymphocytopenia (3.3%, mm/h), and anti-HCV antibody presence. Pharyngeal exudates revealed a fungal infection. Bronchoalveolar lavage and sputum sample couldn't be obtained.

Chest X-Ray revealed right lung pleural effusion. Clinical and laboratory data suggested pneumonia with parapneumonic pleurisy as diagnosis.

Results: CT showed fluid collection with heterogeneous attenuation in the right pleural space. Pleurocentesis identified a serous citrine exudate. Taking into account the negative culture on Gram's and Ziehl-Neelsen stains and the inflammatory syndrome refractory to antibiotic therapy; we made differential diagnosis with systematic inflammatory conditions: Vasculitis, SLE, Sarcoidosis, Tuberculosis, and HIV/AIDS. All of which were excluded (Negative p-ANCA and c-ANCA excluded Vasculitis).

At the Thoracic Surgery Unit, the patient underwent right lung decortication, pleural biopsy and suture of pleural effraction at the inferior lobe of the right lung. Antibiotic therapy was instituted afterwards, but the symptoms weren't ameliorated.

The occurrence of fungal pharyngolaryngitis prompted the decision to institute anti-fungal therapy leading to the amelioration of the pharyngeal and pulmonary symptoms.

Conclusion: Although cytopathologic examination of the pleural exudative effusion did not identify a causative agent, anti-fungal therapy proved to be efficient for both fungal pharyngolaryngitis and pleurisy. A fungal aetiology of pleural effusion in the right lung was thereby sustained.

(ID 338) Food allergy and *Helicobacter pylori* infection in symptomatic children admitted in a digestive endoscopy unit

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Introduction: *Helicobacter pylori* (*H. pylori*) is one of the most widespread bacterial infection worldwide, which is generally acquired in childhood. There are some studies which support that *H. pylori* could favour the development of food allergy. On the other hand, there are some studies which do not support a positive association between food allergy and *H. pylori* infection.

Objectives: To assess the relationship between active *H. pylori* infection and mediated Ig E food allergy in children.

Methods: We conducted a prospective study of 406 symptomatic children (254 girls, age range 6 months-18 years), mostly with uninvestigated dyspepsia or extradigestive signs suggestive for organic disease requiring a first gastrointestinal endoscopic evaluation in our unit, during the last year. All patients were evaluated for *H. pylori* infection by at least two standard invasive tests and for specific immunoglobulin E antibodies to major food allergens (R-Biopharm, Germany). Epi-Info version 7 was used for statistical analysis.

Results: Active *H. pylori* infection was documented by a positive rapid urease test and histological examination in 251 of 406 studied children (61.8%). The allergic sensitization to at least one of the food allergens was identified in 139 of the 406 patients (34.2%). The majority of specific Ig E positive children were positive for cow's milk (114 of 139 cases; 82.01%), followed by egg (17.26%), wheat (7.19%), peanut (4.31%) and soybean (3.59%). The allergic sensitization to food allergens was associated with abnormal levels of specific Ig E antibodies to common inhalatory allergens in 55 of 139 cases (39.56%). Regarding the association of *H. pylori* infection with an elevated serum specific Ig E level to at least one of the food allergens tested, there was no significant correlation (p= 0.45). Of the 251 *H. pylori* infected children, 82 (33.66%) were positive for food specific Ig E antibodies and 169 of them (67.33%) were specific Ig E negative (Fisher exact test= 0.2).

Conclusions: This endoscopic series revealed that the recent decline of *H. pylori* infection observed in developed countries is not evident in our symptomatic children. There was no significant correlation between *H. pylori* infection and Ig E mediated food allergy in our patients.

(ID 339) Efficacy of the invasive diagnostic tests in symptomatic *Helicobacter pylori* infected children: a single center study

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Introduction: *H. pylori* is usually acquired mostly in childhood and leads to prolonged exposure to this potentially carcinogenic agent.

Aim: The aim of this study was to evaluate the accuracy of invasive diagnostic tests for *H. pylori* infection in symptomatic infected children who were referred for endoscopic evaluation and to analyze the prevalence of selected virulence genes (cag A, vac A, ice A).

Pacients and methods: We conducted a prospective study of 300 consecutive symptomatic children (age range 1-18 years) with uninvestigated dyspepsia requiring a first upper gastrointestinal endoscopy.

The gastric biopsy specimens were evaluated by rapid urease test, histological examination, culture and polymerase chain reaction (PCR).

The sensitivity, specificity, predictive positive value (PPV) of the invasive tests used, were evaluated.

Statistical analysis were performed using the Graph Pad Prism Program.

Results: Active *H. pylori* infection was documented in 145 of the 300 studied children (48.33%).

Endoscopic nodular gastritis was identified in most of the cases (105/145 patients; 72.41%).

The rapid urease test was positive in 115 children (sensitivity 85.19%, specificity 93.94%, PPV 92%) and histopathology in 129 cases, with a higher sensitivity (89.58%) and VPP (99.23%).

Culture was performed in 108 cases, with the lowest sensitivity results (74.48%) but with higher specificity and VPP.

H. pylori infection virulence genotype was analyzed by conventional PCR which was positive 140/145 infected children with significantly higher levels of specificity (100%) and VPP (100%) compared to other invasive tests used.

The cag A gene was positive in 96 cases, compared with vac A gene which was identified in all 140 cases isolated by PCR with the predominant vacA s1/m1 genotype (86/140 cases; 61.42%). H pylori strains positive for ice A1 gene were identified in 100/140 cases (71.42%) which were associated with the most virulent genotypes (vac A s1/m1 and vac A s1/m2).

Conclusions: Our data suggest that among invasive test PCR had a significantly higher sensitivity, specificity ($p < 0.0001$) compared with other invasive tests. There was no difference in specificity and PPV between histology and culture, as opposed to RUT, in which case they were lower.

(ID 342) Own experimental studies about action of distress and classical music on ventilatory parameters in asthmatics

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Objectives: Plurietiologic approach of bronchial asthma management has to take into account the psycho-social factors among other triggers (allergic or non allergic) of asthma symptoms. Today, there is yet a persistent distrust of a main part of physicians regarding the extent of psychological stress 'intervention in modulation of asthma evolution: either directly (stress hormones) or indirectly (patient' illness behavior). Author, by oneself and with his PhD students, has tried along 1980-2015 years to demonstrate experimentally the evident reasons for accepting this intervention.

Method: Effects of experimentally induced distress (provocation tests) on ventilatory parameters (FEV1, PEFR, MEF50) in asthmatics versus control groups (asthmatics without distress) (Iamandescu -1980,Popilean-2015) and on salivary cortisol (Serghiescu -2007)2. Effects on the same ventilatory parameters, provoked by eustress (positive stress) represented by a) listening to classical music pieces (Rapiteanu-2009, Cioca 2012, Popilean -2015) and b) Cognitive Behavioral Therapy before and after 12 weekly sessions (Nicoara 2016). Both studies analyzed the differences between the treated asthmatics (with music and CBT) and control non-treated asthmatics.

Results: Distress provocation tests have decreased, more than 15 %, levels of ventilatory parmeters: FEV1 (Iamandescu 1980), PEFR, and MEF 50 (Popilean 2015) - only in asthmatics with initial mild bronchoobstruction -, and have revealed low cortisol secretory response to TSST (Trier test), suggesting a hypocortisolism induced in chronic asthmatics by a prolonged stress. (Serghiescu). 2. a) Music improved in 23-38% cases ventilatory parameters - especially MEF50 (Cioca, Popilean), but exclusively in asthmatics with a high intellectual level, who enjoyed classical music. b). After C BT (add ed to control medication) sessions, treated asthmatics registered both significant improvement of ventilatory parameters, and of clinical scores (questionnaires for asthma control) as compared to the lot of asthmatics who received only medication.

Conclusions: Psychological triggers of asthma symptoms act in a variable manner due to patient's biological and psychological background and also to the significance and intensity of stressors.

Positive effects of psychotherapy (including also music-therapy) are generally mild but without side -effects of medication, and - when is added to controlling asthma medication - they could improve considerably clinical state of asthmatics.

(ID 30) A rare combination of polycythemia vera and hypertrophic obstructive cardiomyopathy in a young patient

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Introduction: Hypertrophic cardiomyopathy (HCM) is a genetic cardiovascular disease defined by increased left ventricular wall thickness that exceeds 15 mm in one or more left ventricular myocardial segments, without any apparent cause. HCM has variable clinical presentations, from mild symptoms of heart failure to sudden cardiac death.

Case report description: We report the case of a 50 year-old male with previous history of untreated Polycythemia Vera, who addressed for the first time to our clinic with sporadic episodes of exertional chest pain and dyspnea with progressive worsening in the past months. The family history was negative for hematological or cardiovascular disorders.

There were no remarkable findings on the physical examination. The laboratory data was concordant with the hematological pathology, showing proliferation of all blood cells. The ECG revealed tall, symmetrical T waves in the precordial leads V2-V3. The transthoracic echocardiography showed a marked increase in the left ventricular wall thickness, predominantly of the interventricular septum, with SAM and a resting left ventricular outflow tract obstruction of 70 mmHg, leading to the diagnosis of hypertrophic obstructive cardiomyopathy. There were no arrhythmias recorded on the 24-hour Holter-ECG monitoring and the risk for sudden cardiac death was appreciated at 2.16, thus having no current indication for ICD therapy.

Results: Treatment with a beta blocker was initiated. The patient was included in the cardiomyopathy register and genetic testing was performed. He underwent a hematological evaluation and specific treatment for Polycythemia Vera was prescribed.

Conclusions: This is a rare combination of Polycythemia Vera and HCM in a relatively young patient without known familial history of such disorders. The history of untreated Polycythemia Vera might have partially explained the symptoms of the patient, thus delaying the diagnosis of HCM. The fact that both Polycythemia Vera and HCM are genetic disorders raises the question if this is simply a coincidence or if they are somehow genetically connected. To the present, there have been reported associations between cardiac hypertrophy and myeloproliferative neoplasms in JAK2V617F transgenic mice, but data in the human population is still scarce.

(ID 355) Electrophysiologic evaluation of the visual pathway at different levels of sevoflurane anesthesia

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Objectives: General anesthesia influences the cerebral activity in dependence to the anesthesic dosage. The purpose of the study is to investigate how moderate and deep levels of sevoflurane anesthesia affect the primary sensory cortex and retinal function. Our study follows the changes of visual evoked potentials (VEP) and electroretinogram (ERG) during different stages of anesthesic depth.

Methods: For this study we used 16 rats that were randomly divided into 4 groups depending on the sevoflurane anesthesic dose. We used 3%, 4%, 6% and 8% inhalatory concentration of sevoflurane during which simultaneous VEP and ERG elicited by flash stimulation were recorded. The recordings were performed one week after electrode implantation. Photopic ERG was recorded by a nichelchrome active electrode positioned on the stimulated eye. VEP waveforms extracted from the occipital encephalogram and ERG were obtained by signal averaging of a 300 s epoch. Amplitudes and latencies of the ERG a- and b-waves and VEP N1, P1, N2 peaks were analyzed.

Results: In all tested concentrations, sevoflurane affected the amplitude and latencies of the VEP and ERG component elements. With increasing anesthetic depths, sevoflurane increased the latencies of both the ERG a- and b-waves and of the N1, P1, N2 VEP peaks. The amplitude of N1-P1 and P1-N2 of the VEP, on the other hand, showed enhancements in higher concentrations of sevoflurane, contrariwise to the drop of amplitude seen in the ERG.

Conclusions: Our results support the fact that sevoflurane affects the VEP and ERG during deep anesthetic levels. High doses of sevoflurane increase the latencies of both VEP and ERG but potentiate the amplitude of the VEP in a dose-dependent manner suggesting a facilitated visual cortical reactivity to light stimulation during increased anesthetic depth.

(ID 38) Sharing medical information and advice on social media among Romanian pregnant women and mothers

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Objectives: Technological advancements have both positive and negative impact. Despite the higher availability of online medical information, accurate and truthful information is hard to find. It is not uncommon for people to seek for health advice from other patients, from relatives or other unreliable sources. This process brings contradictory information and a loss of trust in the healthcare system.

We aimed to characterize and analyze the quality and reliability of medical information shared on social media (Facebook) by pregnant women and young mothers throughout Romania.

Method: We extracted and retrospectively analyzed a total of 735 posts in 6 Facebook groups whose members are Romanian pregnant women and young mothers from all over the country.

Results: Of the 735 posts, 165 (22.44%) were on medical issues, which means that almost a quarter of the social media information is related to a medical content. In 45 (31.51%) of the 165 cases, the women were seeking medical advice from the group members. The total number of group members was 157.191, which illustrates the high number of pregnant women and mothers with unreliable shared medical information access. The most common discussion topics were: asking for a medical recommendation, asking about certain signs, symptoms they or their children were experiencing, their diagnosis and treatment and asking about the efficacy of certain drugs. Interestingly and worryingly, the responders were members of the groups lacking any medical training.

Conclusions: Pregnant women and mothers in Romania use social media to exchange medical information quite often, which could have serious healthcare implications. One positive effect would be the opportunity to share their experience regarding certain health related motherhood issues. Nevertheless, the negative side of the problem is the traffic of uncertified medical opinions and medical information. The public health authorities' involvement is weak. One solution would be to create online Facebook groups which contain reliable medical information or to share reliable medical information in those groups.

(ID 364) The successful story of tyrosine kinase inhibitors in Philadelphia chromosome-positive acute lymphoblastic leukemia therapy

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Objectives: Philadelphia chromosome-positive (Ph+) Acute Lymphoblastic Leukemia (ALL) is associated with poor prognosis and poor response to chemotherapy. Approximately 25-40% adults with ALL have a malignant clone expressing the Ph chromosome. Translocation (9;22) leads to BCR-ABL oncogene expression and synthesis of p210 fusion protein which is a tyrosin kinase (TK) which causes the cell to divide uncontrollably. Tyrosin kinase inhibitors (TKI) represent a target therapy and in combination with chemotherapy and allo-hepatopoetic stem cell transplant (SCT) represent the standard of care for these patients. One review study (Leoni V et al, 2015) highlighted some important numbers about the evolution of the disease course upon TKI introduction: in the past, treatments with standard chemotherapy lead to a survival rate of only 10%. The 5-year overall survival became around 38% with chemotherapy and SCT and around 47% when TKI were introduced to the standard treatment scheme. The introduction of TKI also decreased the relapse rate after SCT with around 17%.

Methods: We present the case of 46 years-old female patient, O. A, diagnosed with Ph+ ALL in March 2013. The patient was followed-up during a 4-year period.

Results: The patient received protocol induction and consolidation treatment combined with Imatinib (600 mg/day) followed by allo-Stem Cell Transplant (SCT) in November 2014, during the first complete remission. Post-transplant, she received maintenance therapy with Imatinib 600 mg/day. In October 2016 the disease relapsed but following combined chemotherapy and 2nd generation TKI (Dasatinib 140 mg/day) a new complete remission was obtained. The patient did not present any adverse reaction to TKI.

Conclusions: Introduction of TKI in Ph+ LAL treatment scheme represents the standard of care nowadays. It has been proven to significantly improve the outcome of Ph+ ALL by decreasing the relapse rate and increasing the disease-free survival. TKI treatment is clinically and hematological well tolerated and has minor, easy to cope with, adverse reactions.

(ID 211) The impact of the thrombolytic therapy on the hemodynamic profile in patients with intermediary-high risk pulmonary embolism

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Objectives: The objective of the study is the assessment of the impact of the thrombolytic therapy on the main features of the hemodynamic profile (the mean systolic blood preasure (SBP) and mean double product (DP)) compared to the impact of the therapy with unfractioned heparine (UFH) on these markers in patients with intermediary-high risk pulmonary embolism (PE).

Methods: We selected 65 patients with first episode of acute intermadiary-high risk PE, defined by the cirteria from the 2014 ESC Guidelines for the management of the acute pulmonary emmbolism. The patients had PESI score >85 and both biochemical and echocardiographic markers of right ventricle dysfunction. The patients were divided in two groups, study group (receiving t-PA 10mg bolus and 90 mg in 2h) and control group (treated with UFH alone aPTT controled). In the control group we included 37 patients with high bleeding risk (obese patients, patients with severe renal dysfunction as these features were associated with high bleeding risk in the previous studies). In the study group we included 28 patients with low bleeding risk associated to these therapy. The groups were identical regarding the medium PESI score (113.28 +/- 13 pts in control group vs 113.5 +/- 12 pts in study group). The medium SBP and medium DP were determined on admision by the medium of 10 recordings on 30 minutes interval, while the impact of the therapy on these hemodynamic features was assessed by automatic blood presure monitoring (ABPM) on 24 hours after the therapy.

Results: There was a statisticaly significant difference between the two groups regarding a higher increase of the SBP in patients from the study group compared to control group (17.99% vs 14.05%, p 0.04) and a higher decrease of the DP in the study group compared to control group (11.7% vs 8.6%, p 0.03). The decrease of the DP was dued to the remission of the tachycardia after the hemodynamic improvement.

Conclusion: The thrombolytic therapy may have an positive effect on the determinants of the hemodynamic stability in patients with PE, but more studies are needed to assess the effect on the mortality.

(ID 87) The effects of sleep deprivation on cardiovascular parameters

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Introduction: It is known that the total duration of sleep in healthy adults has an average between 7 and 8 hours per night. Sleep deprivation is becoming a problem that affects a big part of the population, and involves all social categories. Among these, one of the most affected categories by this problem is represented by physicians and medical students, especially in East European countries. The purpose of our study is to analyze the effect of sleep deprivation on cardiovascular functions on residents and medical students after continuous 24h on-call duty.

Material and methods: In our study, we have included residents, and students- aged between 22-33 years old, 12 men and 14 women. We have evaluated their cardiovascular function using electrocardiography and arterial blood pressure measurement using the manometric method, before and after one night of call duty. Each of the subjects remained awake the entire night and consumed either coffee or caffeinated drinks such as coca-cola during this period. As consequence, a caffeine unit was described.

Results: Surprinsingly all subjects have a decrease in their heart rate after one night of sleep deprivation - Mean: 79.77 b/min before to 70.62 b/min after($p = 0.000$), also the medium arterial blood pressure is lower after the overnight call (from mean- 97.8438 mm Hg before to 86.3504 mmHg after).

Conclusion: Acute sleep loss for 24 hours, due to continuously, intense on-call work, modifies several cardiovascular parameters: heart rate, medium arterial blood pressure. These effects may be a predictor for future cardiovascular dysfunctions.

(ID 72) Diagnostic value of CD34 and CD31 endothelial markers in Kaposi's sarcoma

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Introduction: Kaposi sarcoma (KS) described as "idiopathic multiple pigmented sarcoma of the skin" by Kaposi in 1872 is known as a vascular tumor associated with human herpesvirus 8 (HHV8) infection. After the recognition of its association with the acquired immune deficiency syndrome (AIDS), it remains one of the most frequent tumor in HIV-infected patients. With a complex pathogenesis, Kaposi's sarcoma poses problems in histological diagnosis because of its broad morphologic variants and similarity to many vasoproliferative lesions. Thus, immunohistochemistry (IHC) has become the gold standard for an accurate diagnosis. The aim of this study was to evaluate the role of CD31 and CD34 as diagnostic markers in Kaposi's sarcoma.

Materials and methods: The present study included a total of 67 patients, aged between 36 and 90 years and diagnosed during 2006-2010. For all specimens, IHC for HHV8 was performed to confirm the clinical diagnosis. IHC staining for the blood vessel endothelial cell markers CD31 and CD34 were also evaluated on formalin-fixed, paraffin-embedded tissue sections stained with Hematoxylin–Eosin.

Results: Statistical analysis performed in our study reveals CD34 antibodies provided exceptionally consistent labelling of all elements within the lesions of Kaposi sarcoma. The CD31 antibody was less consistent than the CD34 markers. Thus, from of total of sixty-seven (67) patients twenty-five (25) Kaposi's sarcoma biopsies showed positivity for CD34 markers and only eighteen (18) tissue samples lesions were labelled by CD31 antibody.

Conclusions: Monoclonal antibodies directed against CD31 and CD34 are the most widely used markers of endothelial differentiation, although neither is entirely specific. The data presented here demonstrate that CD34 and to a lesser extent CD31 markers are more reliable at labelling Kaposi's sarcoma lesions than the traditional endothelial cell markers. For Kaposi sarcoma CD34 seems to be superior to CD31. In summary, our results confirm that the immunostaining for CD31 and CD34 appears to be a valuable tool for diagnosing Kaposi's sarcoma lesions and for differentiating from its simulators.

(ID 18) Mono ovulation induction in polycystic ovary syndrome – outcomes of different pharmacological agents

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Background: Ovulation induction is the first line of treatment for infertility in women diagnosed with polycystic ovary syndrome and with no other cause of infertility. The main used agent is Clomiphene Citrate. The goal of the study was to establish if the second line induction agent (Recombinant FSH) offer better results compared to Clomiphene Citrate and to compare the efficiency of Clomiphene Citrate, Letrozole and Recombinant FSH.

Methods: A prospective study was conducted to evaluate different ovulation induction agents (Clomiphene Citrate, Letrzole and Recombinant-FSH) outcomes in 60 patients diagnosed with this syndrome. The patients enrolled had no other cause of infertility except chronic anovulation. Diagnosis of PCOS was based on the Rotterdam criteria. A total of 60 women were included and they were divided into 3 groups per stimulation protocol used. Pregnancy was diagnosed using beta-hCG levels. The endometrial thickness, mature follicles, ovulation and pregnancy rates were compared between the groups.

Results: The study results showed similar results from Letrozole and Clomiphene Citrate in ovulation induction and pregnancy rate, but Recombinant FSH had the best results.

The number of follicles(≥17mm) was lower in the Letrozole group (1.2) and highest in Clomiphene group (2.1). The endometrial thickness and ovulation was better in the recombinant FSH group, then in the other two. In the Recombinant FSH group the pregnancy rate was highest (55%) and the lowest (45%) was in the Letrozole group. In the recombinant FSH group was recorded the greatest number of positive free-βhCG.

Conclusions: As compared with Clomiphene and Letrozole, Recombinant -FSH was associated with higher positive free-βhCGand ovulation rates among infertile women with the polycystic ovary syndrome.

The less positive β-hCG in Clomiphene Citrate group can be explained through the antiestrogenic effect on the endometrium. Also, there was no significant difference in the ovulation and pregnancy rates between Clomiphene citrate and Letrozole.

(ID 210) Wilson disease: Brain MRI diagnostic criteria from theory to imaging

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Objective: To review, synthesize and illustrate typical brain MR imaging findings in Wilson disease.

To list and discuss the differential diagnosis of brain lesions in Wilson disease.

Materials and methods: We review 10 brain MRI evaluations of patients diagnosed with Wilson disease (7 males/3 females, aged 10- to 30 years old) with positive neurologic signs (subtle tremor, dysarthria, dystonia, incoordination, bradykinesia, subtle pyramidal syndrome) during a period of five years. Kayser-Fleischer rings were present in 6 cases. MRI protocol consisted in T1/T2, T2 GR weighted sequences, DWI, followed in cases with important lesions involving the basal ganglia by MR-spectroscopy using a multivoxel PRESS SI(TR: 1500, TE-270, 1Nex M: 256x16) and single-voxel STEAM sequences (TR:1500, TE-144, M: 256x24, Nex-8). The volume of interest included the right and left globus pallidus.

Results: MRI evaluation revealed the presence of T2 hyperintense areas in the region of the putamen in all cases; in 2 cases there were also T2 hyperintense areas in ponto-mesencephalic and thalamic regions, and in 5 cases it was also an involvement of the caudate nuclei. The signal intensity changes (low signal intensity T1, high signal intensity T2) were bilateral and symmetrical. The H-1 MR spectra findings were characterized by reduction of the NAA (N-acetyl aspartate) peak relative to the Cr (creatine) peak (neuronal loss) and abnormality of the mI (Mio-Inositol)/ Cr ratio. Differential Diagnoses include: Leigh disease, carbon monoxide poisoning, Creutzfeldt-Jakob disease, Japanese encephalitis, striatonigral degeneration, organic aciduria.

Conclusions: MRI is the method of choice for diagnosing and monitoring brain lesions in Wilson disease. Brain H-1 MRS is a functional method who brings new biomarkers for clinical diagnosis of Wilson disease.

(ID 101) A rare case of severe anaphylaxis related to a primary solitary splenic hydatid cyst

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Hydatid cyst disease is an infection most frequently caused by the larval form of a parasite named Echinococcus granulosus. The hydatid cyst can present as a simple cyst without having the classic serological and imaging features, and later can lead to life-threatening complications like anaphylaxis. Splenic involvement alone in hydatid disease is very rare, spleen is the third most common organ involved in hydatid disease (liver and lung involvement 67% respectively 25%). Worldwide incidence of splenic hydatid is 0.5-4%.

Method: We report a case of a 34 years old female who was admitted in our clinic with recurrent anaphylaxis without a specific trigger. She experienced two episodes of anaphylaxis manifested by acute urticaria and angioedema, inspiratory dyspnea, abdominal pain and metrorrhagia. Hemodinamicaly she was unstable with hypotension and loss of consciousness. The patient needed emergency assistance consisting of repeated doses of adrenaline, intravenous corticosteroids, fluids and antihistamines.

The next days postcritical the patient was asthenic with high fever, loss of balance and vertigo.

The cerebral MRI was normal.

Results: After admission in our clinic we performed specific IgE panels for food and aeroallergens who was negative. Blood test analysis showed slightly elevated inflammatory markers, leucocytosis with eosinophil dominance and high total Ig E levels (17000 UI/L). The abdominal ultrasound that followed described a large splenic multi septated cyst. The patient underwent radical surgery with total splenectomy. A preoperative CT scan was made to exclude other possible organ involvement. After the surgical intervention she had drug (analgetics) triggered skin reactions. The patient was followed up with ultrasound and blood serology that displayed no recurrence of the disease during a follow-up of 6 months.

Conclusions: The hydatid cyst is still a serious health problem in endemic areas as well as in our country. Although the liver and lung are the most frequently involved organs, primary splenic hydatidosis is quite rare. Hydatid cyst must be considered in the differential diagnosis of patients presenting with hystory of anaphylaxisis.

(ID 64) Multifactorial Gait Analysis in the management of the diagnosis and rehabilitation of the children with hereditary motor and sensory neuropathies

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Objective: Multifactorial Gait Analysis is instrumental method for assessing body movement, based on a biomechanical model. It quantifies the segmental movement of the lower limbs during walking and it has major benefits and application in gait disorders in children, as the hereditary motor and sensitive neuropathies (HMSN).

Methods: 10 patients diagnosed with HMSN, aged between 5-16 years were recorded in our Gait Lab of the National Center of Neurological Rehabilitation for Children Dr. N. Robanescu, Bucharest, between February 2015- March 2017. This complex system of movement assessment provides information about the spatial and temporal parameters, 3D kinematics (variation of angles the lower limb's joint during a gait cycle), kinetics (ground reaction forces) and about muscle's activity using a dynamic surface EMG.

Results: In patients with HMSN, we observed modifications of spatial and temporal parameters, primary and secondary kinematic changes, and alterations of muscle's activity of the lower limbs during walking. Multifactorial Gait Analysis enables the understanding, quantification of gait disorders, allows an objective follow-up of gait problems during growth period and ensures a proper management of the therapeutic recommendations.

Conclusion: Multifactorial Gait Analysis is a very important and accurate evaluation method of gait disorders, with a major role in the management of neurological pathologies.

(ID 110) Data on opinions and attitudes toward influenza vaccination in health professionals from Bucharest

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Objective: Analysis of vaccination rate in health professionals, the risk group for influenza, in 2016-2017 season.

Methods: In January 2017 we conducted a survey involving 100 health professionals in Bucharest in all specialties: 34 doctors, 36 nurses, three midwives, 11 support staff, one paramedic. The data obtained were entered and processed using Epi Info for Windows, version 7, offered free by the CDC, Atlanta, GA.

Results: Of the respondents, 69% were female and 41% were within the age category 31-40 years. Only 26% of respondents had children at the time of the interview.

Medical staff interviewed is active in clinics in Bucharest. Only 21% of respondents were flu shot this year with one of the two vaccines from the Romanian market. People vaccinated: eight doctors, seven nurses, two support staff and four fellow staff.

The main reason for not being immunized: 37.9% disagreed with vaccination (of whom 21.11% were doctors and 31.66% were nurses). Other reasons given were: fear of side effects (29.11%) and use of natural flu prevention (21.5%). In addition, 15% did not recommend vaccination against influenza at all, of whom 5 (33%) are doctors (5 doctors) and 8 (53.33%) nurses.

Regarding information and knowledge of the real situation, 47% of respondents believe that Romania does not advance a flu epidemic at the time of the interview, 27% consider it flu outbreak in Romania, while 26% said they did not know.

Conclusion: Medical information of health professional is poor and it is expected that in the general population to be even lower. In order that population's vaccination to be successful, it is needed a proper information campaign in health professionals first followed by a campaign at a population level. Preparedness' for control of epidemics / pandemics must be made in advance because measures taken in crisis are often ineffective. From the open answers of interviewed medical staff emerged that the marketing of the vaccine produced by INC Cantacuzino would increase the confidence of medical staff in influenza vaccination.

(ID 176) Type II autoimmune polyglandular syndrome- family aggregation and therapeutic management

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Introduction: Type II autoimmune polyglandular syndrome is the most common type, usually affects women, polygenic transmission is associated with the HLA system and the phenotype is determined by interaction with environmental factors.

Aim: Presentation of a case from a family with autoimmune aggregation and therapeutic decision based on comorbidities.

Case presentation: We report the case of a patient aged 35 years, former smoker, from endemic area of iodine deficiency, known with Graves' disease, treated inconsistently with antithyroid medication (ATS) subsequently diagnosed with type I diabetes, associating family history autoimmune thyroiditis and type I diabetes. The patient was recently diagnosed with heart failure with mixed etiology (valvular and arrhythmia), and proposed for surgical valvular correction. Family history reveals thyroid autoimmune affection in one of five sisters and type I diabetes - a sister and a niece. On admission she presented high titer of TRAb (anti TSH Receptor Antibodies), severe chronic glucose imbalance (HbA1c =10.8%), without adrenocortical deficiency and atrial fibrillation. After one month of ATS treatment we noticed the disappearance of heart failure symptoms, spontaneous conversion of atrial fibrillation to sinus rhythm and improvement of glycemic control.

Conclusions and discussion: In the presented family we observe a strong familial aggregation, but without an identifiable pattern of transmission, emphasizing the importance of familial screening when a member is diagnosed with autoimmune polyglandular syndrome, and periodic screening for other autoimmune conditions in the same individual. In such cases therapeutic management needs involvement of a multidisciplinary team and must be focused on the patient, according to his comorbidities.

(ID 111) The level of knowledge and understanding the use of HPV vaccine in medical students from Bucharest

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Objective: In Romania HPV vaccination is not scheduled at any degree, since the failure of HPV vaccination attempt from 2009, even if cervical cancer is the 3rd most frequent cancer among Romanian women and the 2nd most frequent cancer among women between 15 and 44 years of age. Since 2010 full course HPV vaccination coverage for routine immunization is below 5%.

The purpose of this study is to assess the level of knowledge and attitudes towards HPV infection and vaccination in medical students, more precisely in the future medical doctors and nurses; the ones that have to inform and help the general population to understand the importance of HPV vaccination and the risk of HPV infections.

Method: A cross-sectional questionnaire-based study was carried out between June and July 2016 in Bucharest. A total of 580 medical students from the University of Medicine and Pharmacy Carol Davila: 331 from Faculty of Medicine and 249 from Faculty of Nursing participated with given consent.

Results: The average age of the students was 21.85± 4.7. The majority of them heard about HPV but 2.75% did not. 81.20% realised that HPV can be the cause for cervical cancer, while the rest didn't. 15.51% of the students didn't know of the HPV vaccine at all. Only 7 students, (1.20%) were immunised against HPV and 4.48% aware of the fact that in other countries people are vaccinated against HPV. 51.03% of the responders understood the utility of HPV vaccination, 7. 93% did not and 41.03% did not answer at all. More than that 36.55% were against or didn't care about HPV vaccination in adolescents. The majority of students started sexual life at >16 years (65%) and had one sexual partner (35.17%). Only 42.24% used condoms frequently, the rest used them seldom or never. Overall 66.72% of the students believe that HPV infections are spread in Romania.

Conclusion: The results of this study could help in the understanding the preparedness of the future Romanian medical system toward HPV prevention and could be used to start new plans and strategies to expand HPV vaccination and the recommendations for HPV prevention in Romania.

(ID 351) How an informed career choice is impacting medical students' satisfaction towards their current status and future medical career

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Objectives: To assess the impact of being informed before choosing the career on the medical students' satisfaction towards their current status and future medical career.

Methods: Observational cross-sectional study, conducted in January 2017 in a sample of 556 students from the Faculty of Medicine, University of Medicine and Pharmacy "Carol Davila", Bucharest, study years 1-6, mean age 21.8±2.29 years, median 22 years, 80% women. We used for data collection a questionnaire with 22 items (4 for personal data and 18 exploring the timing and motivation for choosing medical career, perception on medical career before and after becoming a student, satisfaction towards the current status, perception regarding future medical career), applied via Google Forms. We compared students that received information about the Faculty before admission to students which didn't receive any prior information (Chi2 test).

Results: Two thirds of the students (66%) have chosen medicine in high-school, while only 52% of them knew what being a medical student really means. Only 17% students got career counselling before admission, even 44% would have liked to. The main perception before and after attending medical school was "noble profession which needs many sacrifices" vs. "profession not appreciated according to the necessary efforts, which need many sacrifices". Over 38% of the students have thought of leaving medical career during the faculty program, but proportion was significantly higher the group of not-informed students (33% and 43% in informed and not-informed students respectively, p=0.015,). 75% of students consider that being a medical student induces high social and financial sacrifices (71% and 80% in the two groups respectively, p=0.012). Regarding the future, the informed students seemed to be satisfied by their perspectives also in higher proportion (82% vs. 74%, p=0.02). 91% and 81% of the informed and respectively not-informed students would choose the same type of faculty, if they had the chance.

Conclusions: Informing high-school students about the requirements of medical studies and providing systematic vocational counselling both before and after admission to Medicine seem to contribute to a higher level of satisfaction towards their current status and future medical career.

(ID 234) Ups and downs in a common case of aortic stenosis

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Introduction: Aortic stenosis has a growing prevalence, becoming the most common valvular disease in adults, in which the appearance of symptoms represents a turning point, being a factor of negative prognosis in the absence of aortic valve replacement. Installation of atrial fibrillation usually leads to a rapid hemodynamic deterioration and brings difficulties in assessing the severity of aortic stenosis.

Methods: We report the case of a 74 year old woman, diagnosed with symptomatic severe aortic stenosis for two years, which now presents with symptoms of orthopnea and paroxysmal nocturnal dyspnea, worsened over the last two months. The clinical examination reveals a systolic murmur grade II/VI in the aortic valve area and the ECG shows atrial fibrillation with a heart rate of ~130 beats/minute. The transthoracic echocardiography reveals low flow-low gradient aortic stenosis -AVA <1 cm^2, AV median gradient 20 mmHg, moderate LV systolic dysfunction (EF=40%), severe mitral and tricuspid regurgitation and secondary pulmonary hypertension. Two years ago, the echocardiography showed normal systolic LV function, severe aortic stenosis (AV median gradient 45 mmHg), mild mitral and tricuspid regurgitation and no pulmonary hypertension.

We upgraded the diuretic treatment, along with high doses of beta-blocker and digitalis, proposing aortic valve replacement which was refused by the patient. A second evaluation showed atrial fibrillation with controlled rate (70-80/min) and significant symptomatic improvement, the ultrasound showing a normalized systolic LV function, together with all the parameters of a severe aortic stenosis, with a mean gradient of 43 mmHg.

Results: Regarding the particularities of this case, we consider it a common case of aortic stenosis, but one which eloquently illustrates the evolution of this disease in the absence of surgery and the difficulties of grading the severity of aortic stenosis in different hemodynamic conditions (atrial fibrillation, LV systolic dysfunction).

Conclusions: This case closely follows the evolution of a patient with aortic stenosis for a period of two years , illustrating both the sudden worsening of symptoms with the installation of atrial fibrillation and the hemodynamic changes that occur during disease progression and lead to heart failure.

(ID 65) An unusual presentation of pemphigoid gestationis

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Introduction: Pemphigoid gestationis (PG) is a specific autoimmune disease of pregnancy, occurring more frequently during the second and third trimester. Clinically PG manifests as urticaria-like lesions consisting of pruritic edematous plaques; in the course of the disease the lesions evolve into tense vesicles and bullae. Usually the onset of the lesions is periumbilical and the eruption extends to the abdomen and legs, involving the palms and soles. The face and mucous membranes are rarely involved.

Material and method: A 27-year-old primi gravida presented to our clinic with a two weeks history of multiple pruritic lesions. The onset of the lesions was on her palms and soles and progressively extended to her trunk and limbs. At the beginning, the eruption consisted of erythematous plaques, but after three days several blisters appeared. There were no significant aspects in her medical past.

Results: On local examination a polymorphous eruption disseminated on her trunk and limbs, consisting of erythematous plaques and placards and scattered blisters was observed. The blisters were located especially on her palms and soles. Several erythematous plaques were noticed on her neck and face. Based on the anamnestic and clinical characteristics the diagnosis of PG was suspected. A skin biopsy was performed and the histopathological examination confirmed the diagnosis.

Conclusion: PG is a rare autoimmune disorder, which usually starts in the second or third trimester of pregnancy. The pruritus diagnosed in a pregnant woman should raise the suspicion of PG. We present a case of PG with onset of the lesions on the palms and soles, a rarely described localization in medical literature.

(ID 317) Evolution of West Nile infection in Europe and Romania in 2016

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Introduction: West Nile (WN) infection is caused by a Flavivirus (WNV), transmitted to humans through infected mosquitoes bite, possible alsothrough infected blood, breastfeeding and organ transplantation. At the EU level, blood safety for WNV is regulated by the EU Blood Comission Directive 2004/33/EC/.The is no vaccine available for humans.

After the large urban outbreak occured in 1996 (393 cases and 17 deaths), Romania implemented in 1997 a seasonal surveillance system, which identified WN cases each year and an outbreak in 2010 (57 cases and 5 deaths).

Our objective is to present the situation of WN infection at national and European levelin 2016.

Methods: We reviewed the data reported at ECDC, CNSCBT and also risk assessments and medical literature.

Results: Two hundred fourteen cases of West Nile infection have been reported in the European Union between July and October 2016, most in Romania (93 cases, 43.5%), followed by Italy (68 cases, 31.8%) and Hungary (43 cases, 20.1%). Austria and Spain reported three cases each; Bulgaria two cases, Cyprus and Croatia one case each.

Two hundred sixty-seven cases has been detectedin the neighboring countries (135 in Russia, 84 in Israel, 41 in Serbia, two in Syria, two in Turkey, and one each in Egypt, Tunisia and Ukraine).

In Romania, the incidence was 0.5/100 000 populationandthe fatality rate 21.4%,the biggest in Romania since now (4.3% in 1996, 8.8% in 2010).

Most cases were recorded in southern part of the country, but also in eastern and north-western, with a new affected are, Satu Mare city.

Most of the cases (71/76.3%)were confirmed in people over 50 years. All cases were hospitalised, mainly with meningitis (65%), meningoencephalitis (25%), encephalitis (10%).

All the cases presented mosquitoes bites. No cases reported blood transfusion or organ transplantation.

Conclusion: West Nile virus circulation in 2016 was associated with outbreaks in several European countries, including Romania. Early detection of cases, vector control measures, public awareness, blood and tissue safety measures are essential for the preventionof West Nile outbreaks.

(ID 100) Endocrine hypertension secondary to abdominal paraganglioma

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Objectives: Paragangliomas are rare neuroendocrine tumors that develop from autonomic parasympathetic or sympathetic nervous chains. Most parasympathetic paragangliomas are localised in the head and neck region having frequently a non-functional biological pattern. Furthermore, sympathetic paragangliomas are found usually in the paraaortic regions of the thorax, abdomen and pelvis including the organ of Zuckerkandl and they often secrete catecholamines. Due to their common catecholamines secretory profile, pheochromocytoma and sympathetic paragangliomas, can share the same clinical manifestations: arterial hypertension, headache, palpitations.

Methods: We report the case of a male patient of 67 years old who presented at National Institute C.I. Parhon for endocrine evaluation in the context of difusse abdominal pain and uncontrolled arterial hypertension (the highest systolic blood pressure on medication of 230 mmHg). Personal medical history included medically controlled type 2 diabetes mellitus diagnosed 2 years ago, congestive heart failure stage II NYHA (New York Heart Association Classification) and dyslipidemia. Clinical examination showed a congestive facies, discrete leg edema, obesity grade II (body mass index of 36 kg/m^2) and a blood pressure of 180/90 mmHg under specific medication.

Results: Hormonal evaluation revealed elevated plasmatic and urinary normetanephrines. Furthermore, plasmatic chromogranin A and neuron-specific enolase were elevated. The assessment of pituitary, thyroid, parathyroid hormones, aldosterone-renin axis and ACTH-cortisol axis values were within normal limits. Computed tomography revealed a tumor mass localised at the upper pole of the right adrenal gland with slightly inhomogeneous structure and with sizes of 40/37/43 mm, without regional lymphadenopathies. The patient was transferred to the general surgery ward, where he underwent a laparoscopic tumorectomy. Histopathological and immunohistochemical examination diagnose a paraganglioma. The patient evolution was favorable, with the remission of the symptoms and normalization of the hormones.

Conclusions: We present the case of a patient with clinical signs and symptoms of catecholamine excess due to a functional abdominal paraganglioma.

(ID 321) Fetal anemia of unknown cause - case report

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Introduction: Pregnancy is associated with specific hemodynamic changes which are continuously evaluated to identify specific changes in placental syndromes as preeclampsia. Impedance cardiography is a controversial noninvasive technique that evaluates hemodynamic profile in medical field with recent applicability in obstetrics.

Material and methods: We performed a prospective study that included healthy women in all trimesters of pregnancy. We evaluated their hemodynamic profile using impedance cardiography technique. This report refers only on base impedance parameter changes.

Results: Our study included a number of 141 healthy pregnant women. We evaluated the base impedance in each trimester of pregnancy. We observed that base impedance decrease in the second trimester of pregnancy compared with the first trimester of pregnancy ($Z= -7{,}105$, $p<0.0001$) and the third trimester of pregnancy ($Z= -5.378$, $p<0.0001$). The base increased after delivery ($Z= -4.603$, $p<0.0001$). Base impedance values were correlated with cardiac output changes in the same pacients. The mean values decreased during pregnancy from 58.47 Ohm to 42.8 Ohm.

Conclusion: Impedance cardiography offered the extensive hemodynamic profile of pregnancy in healthy woman through multiple parameters: cardiac output, systemic vascular resistance, ventricular ejection time or base impedance. Base impedance parameter can define the pregnancy hemodynamic profile.

(ID 381) Multidrug-resistant and extensively drug-resistant tuberculosis in a national reference center - one-year retrospective study

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Objective: The increasing burden of multidrug-resistant (MDR) and extensively drug-resistant (XDR) tuberculosis (TB) in the endemic countries represents a substantial public health problem. The aim of our study was to assess the recent drug resistance pattern of Mycobacterium tuberculosis strains in a laboratory reference centre from Romania, in order to keep under control the current drug resistance and prevent the emergence of more XDR TB in the future.

Method: We conducted a one-year retrospective study, in which we collected data on the drug resistance for 1249 M. tuberculosis strains, from 2016. We obtained the available information from the notebook with standardized direct susceptibility tests of "Marius Nasta" National Institute of Pneumophtysiology, Bucharest. The antimicrobial susceptibility testing has been done for 9 anti-TB drugs (isoniazid-INH, rifampicin-RMP, ethambutol-EMB, streptomycin-STM, ethionamide-ETH, amikacin-AMK, capreomycin-CM, ofloxacin-OFX and kanamycin-KM).

Results: Participants to the study were aged between 2 and 92, with a median of 45 years old. We included 385 (30.82%) women and 864 (69.18%) men. The overall frequency of MDR TB strains (TB that is resistant to INH and RMP) has been 21.70% (95%CI: 19.46%-24.11%). Besides, XDR TB (MDR TB that is also resistant to OFX and at least one from AMK, CM or KM) was found in 8.57% (95%CI: 7.10%-10.29%) of the patients. MDR TB affected mostly men, in a proportion of 81.55% (95%CI: 76.41%-85.98%) and people between 40 and 60 years old (52.03%, 95%CI: 45.90%-58.11%). Likewise, most of the people with XDR TB (43.93%, 95%CI: 34.34%-53.85%) belonged to the age group of 40-60 years old and 78.50% (95%CI: 69.51%-85.86%) were men.

Conclusions: Laboratory services for adequate and timely diagnosis of M/XDR-TB must be strengthened and management of the pacients should include a proper use of anti-TB drugs, to cure the existing MDR TB and prevent its transmission as XDR TB.

(ID 223) Job syndrome - what can it hide?

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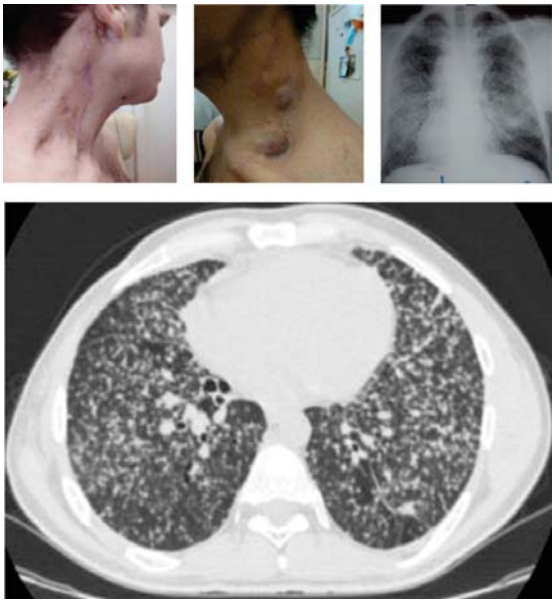
Introduction: Job's syndrome also called hyperimmunoglobulin syndrome (HIES) is a rare primary immunodeficiency disorder characterized by recurrent skin and pulmonary infections, skeletal abnormalities and high levels of serum Ig E. About 200 cases of HIES have been reported worldwide. Prognosis depends on early diagnosis and prompt treatment of complications. The therapeutic strategy is directed mainly toward the prevention and management of complications.

Case report: A 27 year-old man, non-smoker, was diagnosed in childhood with Job syndrome based on clinical manifestations, such as: recurrent skin infections (cold abscesses), persistently high levels of serum IgE and skeletal abnormalities respectively mild facial asymmetry, broad forehead and prominent nose. In the past he had had several episodes of respiratory illnesses treated with antibiotics and bronchodilators, also skin rash. Skin biopsy was also done, but remained inconclusive.

He came to our hospital with fever (39.5C), difficulty in breathing and nonproductive cough. On examination: moderate pallor, numerous eczematous skin lesions (pyoderma) and keloid scars on the neck, associated with laterocervical painful lymph node masses. Laboratory findings included: leukocytosis ($22.53x10^6/mm^3$), nonspecific inflammatory syndrome (erythrocyte sedimentation rate=55 mm/h), moderate anemia (Hb=10.7g/dl), hyper-IgE (4835 UI/ml, NV <100 UI/ml) and negative HIV test. Chest X-ray showed miliary mottling of both lung fields. Sputum for acid fast bacilli was negative.

Pulmonary TB confirmation was established by bronchial aspirate obtained by bronchoscopic procedure with BAL in LM: PCR (polymerase chain reaction) for Mycobacterium was positive, also Ziehl Neelson stain (AFB 3+). Thorax CT scan: aspects of pulmonary miliary TB, small abscesses in liver, right perirenal and brain, multiple necrotic lymph nodes. Whereas the initial response to treatment was unfavorable, to exclude an atypical mycobacterial disorders or multidrug-resistant TB we have opted for performing mediastinoscopy with biopsy of lymph node, that confirmed the bacillary etiology (TB lymphadenitis).

Conclusions: We report a case of miliary pulmonary TB and severe affected of immune system, who responded slow favorable to standard anti-tuberculous treatment with first line drugs. Hyper-IgE syndrome remains a diagnosis challenge for clinicians, due to a wide constellation of clinical manifestations.



(ID 285) Compliance to iterative calprotectin testing in inflammatory bowel disease patients

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Aim: We prospectively investigated the level of compliance with faecal calprotectin test in inflammatory bowel disease patients.

Methods: All consecutive adult inflammatory bowel disease patients having been prescribed an faecal calprotectin test since January 2016 were included. They been instructed about calprotectin importance to the follow up and the necessity of bringing the test. At their next visit to the hospital, patients had to return a stool sample for the faecal calprotectin test and to answer to a simple questionnaire: 'Have you brought a stool sample as required? If not, why not? If so, did you encounter any difficulties when collecting the sample?

Results: Thirty-one patients were included (16 men; 17 patients with Crohn's disease). The range age was 19 years (19–69).

Seventeen patients (54%) had performed the faecal calprotectin test. Of the 14 patients who did not take the test, the prime reasons for non-compliance were forgetfulness (7), constipation (2), refuse to handle faeces (2). In three patients difficulties collecting the stool sample were the main reason of failure (laboratory refused the vials that contained more material than needed).

Conclusion: Only half of the patients performed the faecal calprotectin test. The main reason for non-compliance was forgetfulness. We believe that there is a need for better patient education on the paramount importance of the faecal calprotectin testing in monitoring IBD.

(ID 144) Very low prevalence of pheochromocytoma in patients referred to an endocrinology tertiary center

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Aim: Pheochromocytoma (PHEO) has a very high morbidity and mortality. Testing for pheochromocytoma is usually based on resistant or oscillating high blood pressure or the presence of an adrenal tumor. Our aim was to calculate the prevalence of PHEO in patients preselected for high blood pressure or adrenal tumors and referred to an endocrinology tertiary center.

Methods: We retrieved from our endocrinology center electronic database all plasma metanefrines (MN) and normetanefrines (NMN) measurements between January 2011 and December 2016. PHEO was diagnosed on pathology. In patients with multiple measurements only the highest values were used. Plasma MN and NMN were measured using an ELISA assay.

Results: There were 14 PHEO out of 2241 screened patients (0.62%). Seven patients were tested based on clinical suspicion and 7 patients based on MEN personal or family history. The prevalence of PHEO remained low also in patients with high blood pressure (14 out of 1247 patients, 1.12%) but doubled in patients with an adrenal tumor (14 out of 568, 2.46%). Out of 2241 measurements, MN and NMN were normal in 2049 (91.43%) and 2043 (91.16%) patients respectively, 1-3 times the upper limit of normal in 170 (7.58%) and 185 (8.25%) patients respectively and higher than 3 time the upper limit of normal in 22 (0.98%) and 13 (0.58%) patients respectively.

Conclusion: Pheochromocytoma has a very low prevalence even in patients preselected for high blood pressure or adrenal tumor and referred to a tertiary endocrinology center.

(ID 367) Influenza vaccination among medical students what do we know? What should we do?

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Objectives: Worldwide, vaccination coverage among general population and healthcare professionals is unsatisfactory. While coverage target is 75% for general population, in Romania, the last season vaccination coverage was 3.2%. Medical students are part of medical personnel and thus are at a high risk of influenza infection.

Our aim was to evaluate the knowledge and attitude regarding influenza viruses and seasonal influenza vaccines in medical students.

Method: We designed a questionnaire with several sections: personal information and influenza notions - with 13 multiple choice questions. In March 2017 we sent the online version of the questionnaire to medical students of „Carol Davila" University of Medicine and Pharmacy. There were 467 participants to the study. Data collected have been processed using Epi Info 7.1.4.0.

Results: More than 98% of the participants knew about the existence of influenza vaccine, 96.9% thought that the flu could be prevented, and 97.7% believed that vaccination could prevent it.

About three quarters got vaccinated at some point in life, and only 7.1% got vaccinated this season, while 32.1% of respondents consider that at the time of the study there was influenza epidemic in Romania. Regarding frequency of vaccination, slightly above 75% knew that flu vaccine should be given annually.

Reasons for not getting vaccinated were as follows: 16.6% are afraid of adverse reactions, 21.2% consider it healthier to get immunity by passing through disease while 15.1% believe that influenza is not dangerous. More than 16% of participants consider that influenza cannot be fatal, while 55.3% of the participants are afraid of getting flu. Almost 8% believe that they will never get influenza.

Conclusions: In the time of influenza epidemic in Romania, only a small portion of the medical students got vaccinated, this fact being due in part to a lack of vaccine availability, but also to a misperceived risk of the influenza infection. There is also a knowledge gap, which means educating future healthcare professionals should be a priority in order to correct misconceptions and promote vaccination.

(ID 368) Updates on statin use and type 2 diabetes mellitus development

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Objective: 3-Hydroxy-3-methyl-glutaryl coenzyme-A (HMG-CoA) reductase inhibitors, also known as statins, are used worldwide for their impressive evidence-based effects on lowering cholesterol levels and thus preventing major cardiovascular events. However, recent studies debate the diabetogenic impact of statin treatment. This study aims to highlight the latest advances in the research of the causality relationship between type 2 diabetes mellitus and statins use.

Method: By using the search terms "statins", "adverse effects" and "diabetes mellitus" on PubMed and narrowing the search down to the publication timespan March 2015 - March 2017, we have identified 20 fully published articles in English, describing results from original investigations or meta-analyses specifically designed to assess the risk of incident diabetes and impaired glycemic control in patients who already have diabetes.

Results: A baseline assessment of risk factors for statin intolerance such as impaired fasting glucose, body mass index of 30 kg/m^2 or greater, or an HbA_{1c} over 6% has been stated as a key step to preventing the side-effects of statin use. The presence of 1 or more risk factors has been associated, in a study that compared rosuvastatin-treated group with placebo, with a 39% decrease in major cardiovascular events and with a 28% increase in the incidence of diabetes. Another study that compared statin users without risk factors with participants receiving placebo revealed a lowering of the cardiovascular events with 52% and proved no difference in the incidence of diabetes in both groups. A meta-analysis comparing the effect of different types and doses of statins concluded that patients on fluvastatin, lovastatin, and rosuvastatin were at lower risk, whereas patients who took pravastatin were at greater risk. Simvastatin and atorvastatin had a neutral effect.

Conclusion: Statin therapy of high-intensity is connected with a higher risk of incident diabetes mostly in prediabetic individual. However, risk/benefit analyses suggest that statin treatment is favorable in high risk and secondary prevention populations. In such circumstances, the *American College of Cardiology* advises in recent guidelines that patients that meet risk factors for statin intolerance should receive moderate doses of statins to avoid side-effects.

(ID 249) An interesting case of complete response of a metastatic immature teratoma of the ovary in a 34 year-old-woman

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Objectives: Ovarian teratoma is a type of germ cell tumour. There are 2 main types of ovarian teratoma: mature teratoma, which is benign and immature teratoma, which is malignant. Immature teratoma is rare and usually diagnosed in young women. High grade tumors are associated a high recurrence rate and in case of advanced disease, overall survival rate is 2 years.

Methods: We present a case of 34 year-old-woman who presented with diffuse pain and enlargement of the abdomen and dyspnoea . The patient had had right anexectomy 1 year earlier for ovarian torsion (pathology report described imature teratoma) and left anexectomy 8 months yearlier, which proved immature teratoma. Imaging studies revealed metastases in the liver, pleura, peritoneum, lymph nodes and malignant ascites. 4 cycles of BEP (bleomicin 30 mg days 1, 8,15/ etoposide 100 mg/m^2 days 1-5 /cisplatin 20 mg/m^2 days 1-5, q3w) chemotherapy regimen were administered, and partial response was obtained. Then the patient underwent hysterectomy, Hartmann colectomy, enterectomy, total omentectomy, partial peritonectomy, splenectomy and surgical ablation of the diaphragmatic lesions.

Results: Postoperatively, TIP (paclitaxel 250 mg/m^2 day 1, ifosfamide 1500 mg/m^2 days 2-5 and cisplatin 25 mg/m^2 days 2-5, q3w) chemotherapy regimen was administered as consolidation therapy. Complete response was obtained. Follow up did not show any recurrence for three years.

Conclusion: Immature teratomas are rare malignant germ cell neoplasms accounting for less than 1% of all ovarian tumors. Although know as a very aggressive tumor, multidisciplinary approach can cure this disease even in metastatic stage.

(ID 37) Data on tuberculosis treatment compliance in Bacau and Harghita counties

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Objective: It is a well-known that tuberculosis treatment is long term and difficult to be followed through. The purpose of this study was to evaluate the patients' compliance towards the treatment in the Romanian counties, Bacau and Harghita.

Method: This survey was conducted among 155 patients with tuberculosis, of whom 102 (66%) were from Bacau and 53 (34%) from Harghita, on a time panel from between the end of 2016 and 2017. The people filled out a questionnaire and the data resulted were processed and analyzed using Epi Info 7.

Results: Out of all the patients from Bacau, 29% abandoned their treatment voluntarily, and from Harghita, only 6% gave up their treatment (p=0.001). In Bacau 44% patients admitted to skipping at least one dose of the treatment, whereas, the number of people from Harghita was much lower, only 17% of the people surveyed admitting to omitting a dose (p=0.001). This survey also analyzed social and economic factors that can contribute to a low adhesion to the treatment, such as their settlement, profession and the average monthly income. Out of a total of 38.96% unemployed people from both counties, 38.33% abandoned their treatment. Out of the 59.35% people living in the rural area, 23.91% stopped their treatment, whereas out of the 40.65% of the people residing in the urban area, 17.46% gave up the medication (p=0.44). Also, this survey analyzed parameters such as HIV testing, pulmonary radiographies among the family members of the patients, or existing relatives with prophylactic treatment for tuberculosis. In Bacau, 7% of the patients did not consent to HIV testing, as opposed to 32% from Harghita, 28% of the patients from Bacau had relatives without pulmonary investigations, whereas in Harghita, only 8% and 23% from Bacau and 43% from Harghita had relatives that followed a prophylactic treatment.

Conclusions: We can conclude that people from Harghita have a better adhesion to tuberculosis treatment than people from Bacau and that social and economic factors play a decisive role in patients' treatment compliance.

(ID 248) Hepatitis C comorbidities affecting the course and response to interferon-free treatment

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Introduction: Hepatitis C virus afflicts more than 170 million people worldwide. Treatment is rapidly evolving from IFN-α–based therapies to IFN-α–free regimens that consist of directly acting antiviral agents. Several studies have demonstrated that the outcome of chronic hepatitis C infection is profoundly influenced by a variety of comorbidities.

Methods: We conducted a retrospective study including 44 patients with genotype 1b hepatitis C associated liver cirrhosis, class Child Pugh A, who underwent treatment with dasabuvir (Exviera™), ombitasvir, paritaprevir, ritonavir (Viekirax™) and ribavirin for twelve weeks. The most frequent comorbidities of the patients were arterial hypertension, diabetes mellitus and coronary heart disease. All the patients were instructed on monitoring their adverse reactions and were evaluated monthly.

Results: 14 patients had no previous antiviral treatment, 18 patients were non-responders to pegylated interferon and ribavirin and 12 patients had relapsed after interferon therapy.

Two of the patients with diabetes mellitus presented with acute pancreatitis in the first two weeks of treatment. This required medical management with good evolution and ribavirin was discontinued. 4 other patients required ribavirin dose reduction from week 8 due to anaemia and intense fatigability.

At the end of the treatment, serum HCV- RNA was determined in all 44 patients. 43 patients had undetectable viremia, while one patient had a level of HCV-RNA under the limit of detectability (less than 15 IU/ml).

Most patients required lower doses of antyhypertensive medication. Patients with stable angina had more frequent episodes than before treatment, but with remission after rest and without requiring nitrate administration.

Conclusion: In chronic hepatitis C, control or amelioration of comorbidities before embarking on antiviral therapy represents the milestone for higher post-antiviral therapy response. However, no decompensation of comorbidities was noted in any of the patients. Sustained virologic response still remains to be evaluated at 12 weeks after the end of treatment.

(ID 69) Poligraphy modifications in pulmonary arterial hypertension

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Introduction: The correlation between sleep apnea (SAS) and pulmonary hypertension (PH) has been addressed in various studies showing a causal relationship SAS-PH, but the incidence of SAS in patients with pulmonary arterial hypertension (PAH) was less studied. Awareness of SAS incidence is important in that oxygen therapy during sleep is required in patients who continuously desaturate, despite being normoxemic at rest during daytime.

Methods and materials: During January-July 2016, in the Department IV of the «Marius Nasta» Institute, we performed 12 nocturnal ventilatory polygraphic examinations for patients with PAH who did not mention any SAS symptoms prior. Examinations were performed using the following polygraphs - Stardust, Alice and Porti - and consisted of measuring airflow, respiratory thoracic effort, abdominal respiratory effort, heart rate, O_2 saturation and snoring.

Results: We noticed in most of the patients abnormalities specific to the „syndrome of upper airway obstruction", even in the absence of risk factors for SAS. Most of these patients have been found to continuously desaturate, with a SaO_2 ~90%, and without significant respiratory events.

Conclusion: All patients with PAH show a continuous desaturation. Modifications may be associated with PAH medication-induced vasodilation responsible for nasal congestion and with the intra-pulmonary shunts created by the arterio-venous anastomoses.

(ID 203) Medial patellofemoral ligament reconstruction in acute patella dislocation

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Introduction: Acute dislocation of the patella is a very common injury of the knee. In more than 90% of the cases the medial patellofemoral ligament (MPFL) is injured. Reconstruction of the MPFL has become a popular soft tissue procedure, which reduces hospitalization and the rehabilitation period. We would like to present our experience and short-term results after MPFL reconstruction with semitendinous autograft and bio absorbable fixation devices.

Material and method: 10 patients were involved in this study with PF joint instability, who underwent to MPFL reconstruction. In order to evaluate the functional outcome of the procedure we applied the Tegner Lysholm scoring system before and after 3 Months of surgery.

Results: MPFL reconstruction significantly improved the functionality of the PF joint. Gender distribution of the studied group was: 7 females with an average age of 25 5,03 SD and 3 male patients with an average age of 29 1 SD.

Conclusions: The key for the success in MPFL reconstruction is the positioning of the femoral tunnel, followed by an isometric tensioning of the graft. Bio absorbable materials reduce inflammatory, and foreign body response facilitating bio-integration of the autograft.

(ID 283) Diagnosis during transition of non-secretor pituitary adenoma and optic neuritis

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Introduction: Pituitary adenoma is rare in childhood and sometimes causes ocular anomalies. Most often pituitary microadenoma is associated with hyperprolactinemia.

Aim: We introduce a challenging case of a boy with optic neuritis, pituitary microadenoma and hyperprolactinemia who was followed in two tertiary Romanian centers of endocrinology.

Material and method: This is a case report

Results - case data: A 17-year boy without significant medical history regarding his birth or family history was admitted for progressive overweight (until 102.5 kg for a height of 168 cm) since last two years associated with asthenia, intermittent headache and the presence of pink and white stretch marks on abdomen and arms. Endocrine evaluation revealed normal cortisol circadian rhythm, normal value of cortisol after 1 mg overnight Dexamethasone suppression test, ACTH (Adrenocorticotropic Hormone) of 33.36 pg/mL (Normal: 7.2-63.3 pg/mL), normal FT4-free thyroxine (of 1.36 ng/mL, Normal 0.89-1.76 ng/mL) with TSH (Thyroid Stimulating Hormone) slightly increased (of 4.36 μUI/mL, Normal: 0.35-5.8μ UI/mL), prolactin moderately increased (of 32.5 ng/ml, Normal: 1.8-17 ng/mL) with normal value for testosterone and gonadotropins. Pituitary Magnetic Resonance Imagery (MRI) highlighted a pituitary mass of 5 mm (millimeter) by 6 mm by 12 mm with right parasagittal extension. Adequate diet and treatment with daily 25 μg levothyroxine was started. Six months later was admitted in a pediatric emergency unit for intense headache, concentric narrowing of the visual field predominantly in the left eye, fever of 38.7, pharyngeal congestion. Cerebral MRI was performed but no signs of intracranial pressure or progress of pituitary mass were reported. According to neurological and ophthalmic examinations diagnosis of neuritis optic due to inflammatory effect in the context of rhino-sinusitis was established. All symptoms have resolved after anti inflammatory drugs and complex antibiotics therapy combination. Further followed-up by a multidisciplinary team is recommended.

Conclusions: Assignment of severe ocular manifestations to an extrinsic cause is always difficult in the presence of a pituitary adenoma and requires complex endocrine, neurological, ophthalmic and imagery evaluation. Some literatures reports are found regarding non-functioning pituitary adenoma and optic nevritis but they are exceptional in very young population.

(ID 19) Characteristics of patients with pulmonary multidrug resistant tuberculosis

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Objective: Tuberculosis (TB) remains a serious threat in many countries. The costs for the treatment and long-term hospitalizations of a patient with pulmonary multidrug resistant tuberculosis (MDR TB) are much higher compared with the costs for a patient with sensitive TB. In addition, the prognosis is worse for these patients. The objective of the study was to identify the main risk factors for MDR TB acquisition and patient characteristics in order to enable a better implementation of MDR TB prevention strategies.

Method: We conducted a retrospective randomized study collecting data on 80 patients diagnosed with MDR TB, between 2009 and 2011.

Results: It was noted that 40% of the patients were over 50 years. With regard to the younger patients, most cases were identified in the age group 20-24 (11.3%). A male predominance was observed. A significant percentage of the patients were smokers (61.2%) and 18.8% consumed alcohol abusively. Over 60% of patients had a history of treatment with anti-TB drugs, of which 11.3% defaulted and 1 in 5 was a chronic case. Of 51 patients for whom information was available regarding their occupation, 17.6% were working with the public and 27.5% were unemployed.

Regarding the radiologic appearance, caseous and cavitary lesions were the most common. Fibrosis was observed in 32.5% of the patients. Lesions suggestive for miliary TB were described in 3.8% of the patients. The acid fast bacilli sputum smear was negative in 23.8% of the patients.

Conclusions: Previous treatment with anti-TB drugs is common among patients with pulmonary MDR TB. A significant percentage of the patients had a low socioeconomic level, being unemployed. Habits like smoking and alcohol abuse characterize the patients with pulmonary MDR TB. It is important to know the population groups at risk for MDR TB in order to pay an increased attention to these patients. Clinical suspicion of resistant TB is important for an early diagnosis and appropriate treatment.

(ID 21) The picture of pulmonary tuberculosis in young patients

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Objectives: Worldwide, millions of new cases of tuberculosis (TB) are reported annually. Thus pulmonary TB is the second leading cause of death through an infectious disease after the infection with human immunodeficiency virus. In the absence of an early diagnosis and appropriate treatment the risk of complications is increased. The aim of our study was to observe the characteristics of young patients with pulmonary TB, a population group at risk by spending time in crowded places and less frequent visits to the doctor.

Method: The study was retrospective, the data being collected between 2009 and 2011. We randomly selected the medical records of 140 young patients (20-24 years) with pulmonary TB and analyzed them.

Results: There was a slight predominance in males (57.9%). Most cases (90.7%) were new cases. On admission the patients presented cough (89.3%), associated with hemoptysis (19.3%), dyspnea (12.9%), fever (34.3%), night sweats (28.6%), pain chest (15%) and weight loss (42.1%). Regarding the radiologic appearance, the most common lesions were located in the upper lobes, unilaterally (right lobe - 28.6%, left lobe - 19.3%) or bilaterally (23.6%). Cavitary lesions were most common (52.9%) followed by infiltrative lesions (47.1%).

Acid fast bacilli sputum smear was negative in 15% of the patients. With regard to the susceptibility to anti-TB drugs, 9.3% of the Mycobacterium tuberculosis strains were resistant to isoniazid and 7.7% were classified as multidrug resistant strains.

Conclusions: The clinical picture of young patients with pulmonary TB was characterized mainly by cough, sometimes associated with hemoptysis, fever and weight loss. Pulmonary lesions were most commonly located in the upper lobes, and included mainly cavitary lesions. Resistance of the Mycobacterium tuberculosis strains was significantly high. Knowledge of the main characteristics of TB in young patients is the key for an early diagnosis. In these patients it is absolutely necessary to assess the anti-TB drug susceptibility in order to establish an optimal treatment.

(ID 275) Characteristic of the cerebrovascular/atherosclerosis diseases among patients with type 2 diabetes

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Objective: Type 2 diabetes is a major risk factor for cerebrovascular diseases. To study clinical and epidemiological features of cerebrovascular diseases prevalence in patients with type 2 diabetes.

Material and methods: 110 patients aged 34 to 74 were involved to the research. They answered the questions wich using in clinical and epidemiological studies. All patients were examined by a neurologist. A carotid dopplerography was implemented and the level of glucated haemoglobin (HbA_{1c}) was identified by express method for all the patients.

Results: The questionnaires analysis showed that 14% parents of the patients with type 2 diabetes had cerebral stroke under the age of 55 . Carotid artery stenosis degree was about 44% in 33% of patients (males – 2.5%, females – 29%, p0.01). Carotid intima-media coefficient was 1.3±0.6 mm on the right side and 1.5±0.7 mm (p0.05) on the left side. The average level of HbA1c was 8.8±0.4% (men 8.4±0.5%, women 8.9±0.5%) (p0.05). Inadequate glycemic control was considered as the reason of IMC increase (p0.05).

Conclusion: Frequency of cerebrovascular/atherosclerosis diseases prevalence in type 2 diabetes was significantly higher among women than men and it can be explained with non adequate glycemic control.

(ID 390) High-sensitive troponin and other biomarkers in the early diagnosis of acute myocardial infarction

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Objective: Fetal anemia is still a significant cause of fetal and neonatal mortality and morbidity. Fetal anemia is a serious complication of pregnancy that may results from immune-associated conditions, with rhesus D. Hemolytic diseases of the fetus secondary to red cell alloimmunization is characterized by severe fetal anemia that could case increased cardiac output, tissue hypoxia, lactic acidosis, fetal hydrops, and eventually intrauterine death. The are also non-immune etiologic factors of fetal anemia such as parvovirus infection, fetomaternal hemorrhage, homozygous thalassemia, and placental chorioangioma.

Methods: Standard evaluation of fetus at risk of moderate and severe fetal anemia was based on invasive procedures such as amniocentesis to evaluate bilirubin levels in the amniotic fluid and cordocentesis for direct determination of fetal blood count, and non-invasive evaluation with serial ultrasound doppler monitoring.

Results: Intrauterine red cells transfusion (IUT), first via the intrauperitoneal route and later directly to fetal circulation, is the standard practice in most centers, with survival rates that exceed 90%, particulary if anemia is diagnosed early and treated in a timely manner. In addiction, plasmapheresis and intravenous administration of high-dose immunoglobin have been implicated in the treatment of pregnancies complicated with early-onset severe red cell alloimmunization.

Conclusions: The latter is successfully carried out with the use of Doppler, evaluating the peak systolic velocity in the middle cerebral artery, wich considered to be the most reliable tool to provide sensitive prediction of the several anemia.

(ID 265) Fetal anemia: therapeutic management

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[3]*Emergency University Hospital, Bucharest, Romania*

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Conclusions: The latter is successfully carried out with the use of Doppler, evaluating the peak systolic velocity in the middle cerebral artery, wich considered to be the most reliable tool to provide sensitive prediction of the several anemia.

(ID 328) Transmembrane resting potential of cell membrane as quantifier of DMSO-induced chemical permeabilization

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Aim: Transmembrane resting potential (TRP) is sensitive to the cellular membrane integrity and energetic status of the cell. TRP is due to the uneven distribution of ions (mainly Na^+, K^+ and Cl^-) across the plasma membrane. TRP physiological values are maintained by active pumping of ions against their electrochemical gradients and constant leakage of K^+ thru specialized channels. Dimethyl sulfoxide (DMSO) is able to produce cell membrane permeabilization as suggested by some molecular simulations and experimental reports. Despite current uses of DMSO (cryoprotectant, cell fusogen, solvent for peptides in NMR studies, skin penetration enhancer for various active molecules, etc.) the consequences of DMSO interaction with the lipid bilayer continue reveling new aspects.

We focused our study on using TRP as monitor of discreet variations of ions distribution across cellular membrane in presence of controlled concentrations of DMSO.

Method: K^+ based component of TRP was measured using DiSC(3)5 potentiometric fluorescent probe which exhibits slow, but very sensitive voltage-dependent changes in its transmembrane distribution that are accompanied by a strong modification of the fluorescence quantum yield. The fluorescence of DC3F hamster fibroblasts was recorded (645nm excitation and 670nm emission wavelengths) in presence of various concentrations of DMSO (from 1% to 30%, v/v). The fluorescence signal was calibrated as mV by a standard procedure using Valinomycin to clamp the membrane potential due to K^+ and then, by modulating the extracellular concentrations of K^+.

Results: Control cells present a negative TRP of -22.47 ± 4.97 mV which is in good agreement with values reported for these cultured cells by other methods[2]. DMSO depolarizes the cell membrane, TRP increasing up to a positive value of 26 ± 6.23 mV. TRP reached a plateau above 12% (v/v) DMSO concentration. For concentrations of DMSO above 30% (v/v), no measurements could be performed, the cells forming aggregates.

Conclusions: Our experiments provide quantitative data on DMSO-induced membrane permeability by reporting the changes in cellular TRP.

(ID 133) Cardiovascular, pulmonary and hepatic manifestations of the same disease

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A 37-year-old male presented with fever and resting pain in the buttocks and legs for 2 days. He had intermittent claudication and left upper quadrant abdominal pain for 5 months.

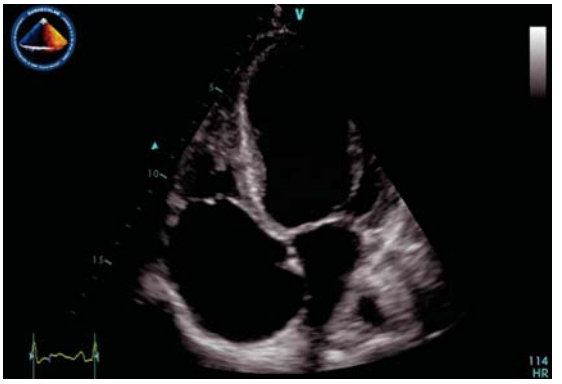
On clinical examination, the blood pressure was 140/90 mmHg, heart rate 100 bpm, regular, with a grade II/IV diastolic murmur in the aortic valve (AV) area, temperature 39°C, jaundice, hepatosplenomegaly, cold, pale feet and absent femoral, popliteal and dorsalis pedis pulses. He had 12.000/μL leucocites with blood eosinophils 50,5%, negative blood cultures, procalcitonin <0.5 ng/dL, hepatic cytolysis, BNP 346 pg/ml and myocardial necrosis biomarkers elevated.

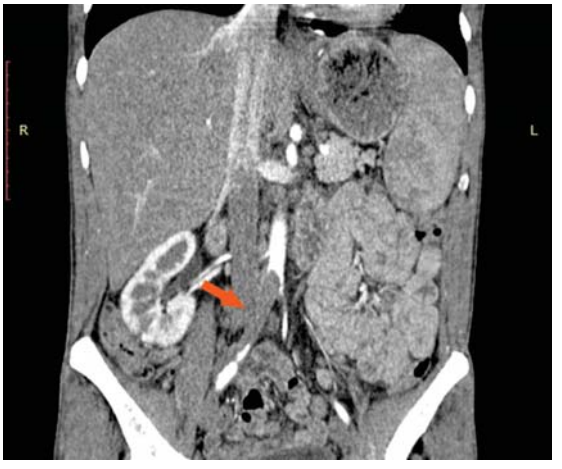
A chest radiography revealed pulmonary infiltrates involving the right inferior lobe. Ultrasonography documented echogenic material in the aorta with extension on right common iliac artery (RCIA).

Transthoracic and transesophageal echocardiography (Figure 1) revealed: dilated left ventricle with marked systolic dysfunction (LVEF= 30%) and diffuse global hypokinesis; echogenic, irregular masses attached to the tricuspid and AV and significant aortic and tricuspid regurgitation; markedly dilated right atrium; right ventricular (RV) dysfunction and echogenic material at the apex of RV; severe pulmonary hypertension.

Thoracoabdominal CT scan (Figure 2) with contrast demonstrated thrombosis of the terminal aorta and RCIA, with minimal extension on the left common iliac artery, hepatosplenomegaly, focal hepatic lesions and right pulmonary lower lobe opacity.

Our working diagnosis was hypereosinophilic syndrome (HES) with multiorgan involvement. Bone marrow biopsy was performed, revealing hypercellular marrow with 19% eosinophils in all development stages. Testing for FIP1L1-PDGFRA rearrangement was positive. The patient was diagnosed with primary HES with cardiac, pulmonary and hepatic involvement. He was treated with Imatinib, Hydroxyurea and specific treatment for heart failure with reduced LVEF. On follow-up he had a normalization of his eosinophil counts, improvement of symptoms and full LVEF recovery with resolution of the masses located at the level of the aortic and tricuspid valves, RV and terminal aorta. Significant aortic and tricuspid regurgitation persisted in association with moderate RV dysfunction. The patient will be closely monitored to identify the right moment for valves replacement and early diagnosis of a possible complication of HES – restrictive cardiomyopathy.





(ID 360) Renal involvement in Fabry disease - the experience of Fundeni Clinical Institute

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Our site is a referral centre and a treatment centre for Fabry disease. Between March 2015 and March 2017 we examined 20 patients with Fabry disease, with the diagnosis confirmed by genetic test. We assessed renal function using serum creatinine and cystatin C, albuminuria and proteinuria. Chronic kidney disease (CKD) was defined as eGFR <60 mL/min per 1.73 m^2 and/or urinary albumin/creatinine rate ≥30 mg/g. Kidney biopsy was performed for patients with important proteinuria and progressive CKD for diagnostic and evaluation of extension of the disease. Three techniques are used in the analysis of renal biopsy specimens: light microscopy, immunofluorescence and electron microscopy.

Among 20 patients (mean age, 45 years; range, 20–69 years), 10 male and 10 female, 17 patients showed renal manifestations of Fabry disease. A reduced GFR was observed in 16 patients (80%). Average eGFR (estimated glomerular filtration rate) was 45.5 ± 13.3 mL/min/1.73 m^2. Two of these patients (10%) presented with end stage renal disease at a mean age of 27 years and had received a renal transplant (one from deceased donors and one from a living related donor). Proteinuria was present in 17 patients (85%), and one patient had nephrotic proteinuria. Six patients (30%) performed kidney biopsy. The severity of renal involvement in patients with FD has been correlated with elevated serum uric acid (p=0.0001), proteinuria (p=0.02), and stroke history (p=0.008). 14 patients (70%) had cardiac involvement and 18 patients presented specific Fabry neurologic manifestations. 7 patients were treated with enzyme replacement therapy and 10 patients received indication for enzyme replacement therapy. Nine patients are treated with agalsidase-beta (1 mg/kg/2 weeks) in our clinic.

Fabry nephropathy is an important feature of Fabry disease. A very important aspect is that Fabry patient should be evaluated carefully and at regular interval. Fabry nephropathy is progressive and should be managed as it occurs, in order to halt worsening or possibly prevent irreversible damage.

(ID 41) Systemic lupus erythematosus with hematological debut

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Background: SLE is a systemic autoimmune disease with multisystem involvement. Although the blood abnormalities are common, the are only few cases described in literature of association between SLE and thrombocytopenic purpura.

Case description: 36 years old female with a recent medical history of high intestinal obstruction check in with malaise, malnutrition, nausea and vomiting. She was previously diagnosed in with hemolytic anemia and idiopathic thrombocytopenic purpura. At that moment she was not responding to Rituximab (anti CD20 Ab) but was a responder to Eltrombopag.

Clinical examination at admission revealed cachexia, pale skin, lower limb ecchymosis, bilateral calves' edemas, dullness in the inferior 2/3 of the right hemi thorax, tachycardia, increased abdominal volume due to ascites.

The laboratory results showed anemia, low white blood cell counts, low complement levels, extreme low platelet counts (9000/mm^3), low protein levels, positive anti DNA Antibodies. Due to the association of hematological abnormalities with serositis, low complement and positive anti dsDNA the patient met SLICC Criteria for lupus. Thrombocyte mass transfusions were administered in combination with cortisone for a short period, with no result She was then successfully treated with high doses of cortisone, Danazol, an androgenic hormone, Eltrombopag and Hidroxicloroquine.The mixed mechanism of the malnutrition (lupus enteropathy and the post surgically lack of digestive mucosa stimulation) was treated with i.v. nutrition and albumin transfusion.

Conclusion: The TIP as a debut of SLE is extremely rare and the efficient treatment could be a real challenge.

(ID 132) Magnetic resonance imaging features in the follow-up of minimally-invasive treated nodular-type hepatocellular carcinoma

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Objectives: The aims of this paper are to describe the distinct Magnetic Resonance Imaging (MRI) features of the hepatocellular carcinoma (HCC) nodules treated by chemoembolization or radiofrequency ablation therapy, to list the challenges in differential diagnosis and to outline the pitfalls that may obscure a correct management of these patients.

Methods: A retrospective study including patients with minimally-invasive treated HCC that were investigated by MRI between January and December 2016. The follow-up MRI evaluations included in this study were performed on two 1.5 Tesla MRI machines (Toshiba Vantage Titan and Siemens Aera) with a dedicated protocol for liver multimodal studies and hepatocyte-specific contrast media (Gadoxetate disodium).

Results: We have classified the MRI results in: 1. tumor recurrence, in cases with specific MR features such as nodular contrast "wash-in" in arterial phase, contrast "wash-out" in portal venous phase, restricted diffusion, and hypointensity in the hepatobilliary phase; 2. pseudolesions in patients with morphopathological changes induced by chemoembolization or radiofrequency ablation therapy; 3. non-tumoral pattern on the basis of ring shaped contrast "wash-in", absence of contrast "wash-out" or restricted diffusion and late homogeneous enhancement. Portal vein thrombosis, perfusion deficits, and new high dysplastic or HCC nodules were also found in the investigated patients. Magnetic susceptibility of the sensitive diffusion weighted imaging sequences, presence of ascites and breathing artifacts in patients with poor condition were the main challenges in obtaining high quality diagnostic images.

Conclusions: Using an adequate MRI protocol for follow-up in patients with minimally-invasive treated nodular HCC is the forefront of a high accuracy in tumor recurrence diagnosis. Hypointensity in the hepatobiliary phase detected in the treated nodule is highly predictive of persistent malignant foci and only possible by the usage of hepatocyte-specific contrast media. Cardinal imaging features of HCC foci should be well known, thus allowing a correct differential diagnosis from treatment-induced pseudolesions.

(ID 17) Oro-dental phenotypes among Down syndrome population

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The extra chromosome 21 or part of its long arm (including 21q22 band) can come in distinct genetic ways, such as full trisomy 21, mosaic trisomy 21 or translocation trisomy 21 causing Down's syndrome (DS). The severity of clinical features, including oral-facial abnormalities, varies from an individual with DS to another being very hard to predict how much a fetus/newborn will be affected as a child or an adult. DS has the highest incidence at birth as any chromosomal abnormality and every paediatric dentist can expect to deal with some oro-dental problems relating to DS.

Aim: to analyze if the severity of oro-dental features can be predicted based on cytogenetic analysis.

Methods: a total of 47 DS persons were chromosomally investigated to confirm the clinical diagnosis of DS. The oro-dental characteristics were described performing the complete extra- and intra-oral examinations and radiological evaluations.

Results: Most of the oro-dental features including teeth, gingiva, tongue, palate, and occlusal anomalies were variable in both frequency and expression showing no differences between standard and non-standard trisomies ($p > 0.05$). The most common dental anomaly was hypodontia (86%) followed by microdontia (21%). All DS persons presented occlusal problems. The eruption of both dentitions was delayed in most cases.

Conclusion: Severity of oro-dental phenotype is not associated with specifically chromosomal mechanisms of trisomy 21.

(ID 311) Interleukin-6, ICAM-1 and von Willebrandt factor are associated with vasculopathy severity in patients with systemic sclerosis

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Background: Vasculopathy represents the earliest event in the pathogenesis of systemic sclerosis (SSc). The main pathogenic mechanisms of vasculopathy includes inflammation, and activation of the endothelial cells and coagulation cascade. Several biological molecules related to these processes, including interleukin 6 (IL-6), inter-cellular adhesion molecule 1 (ICAM-1), and von Willebrand factor (vWF) have been associated with early vasculopathy. To date, nailfold capillaroscopy (NFC) represents the most objective method to evaluate vascular dysfunction.

Objective: We aimed to evaluate the possible association between selected biomarkers and distinct capillaroscopic SSc patterns.

Materials and methods: Forty consecutive SSc patients, aged [median (IQR)] 52 (18) years, male gender 4/40 (10%), diffuse cutaneous subset (dcSSc) 14/40 (35%) were investigated for serum markers of inflammation (IL-6, CRP), endothelial activation (ICAM-1), impaired coagulation (vWF) and scleroderma pattern at NFC. Selected serum markers were measured using the ELISA method. Extensive clinical and NFC pattern assessment was performed on all patients. Associations between selected biomarkers and disease characteristics were evaluated by Mann-Whitney U-test and Spearman correlations.

Results: Good and statistically significant correlations were found between serum levels of all 3 selected vascular biomarkers and also, between these biomarkers and CRP (r indices: 0.660 to 0.332, and 0.465 to 0.727, respectively). Patients with the NFC "late" pattern (reflecting a severe vasculopathy) had higher levels of IL-6 (median 12.06 vs. 3.08 pg/mL, $p=0.001$), vWF (median 3284 vs 2730 IU/mL, $p=0.013$) and compared to patients with NFC "early" or "active" patterns. There was a significant, negative correlation between lung transfer for carbon monoxide (DLCO) and ICAM-1 ($p<0.001$) and vWF ($p=0.013$).

Conclusion: IL-6, ICAM-1 and von Willebrand factor serum levels are elevated in patients with more severe SSc-associated vasculopathy and correlate with

serum CRP. Together with NFC data they may be used for assessing vasculopathy severity in SSc.

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(ID 118) Giant pheochromocytoma associated with adrenocortical adenoma

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Background: Pheochromocytoma is one of the rarest causes of endocrine secondary hypertension (incidence of 2 to 8 per million), being a catecholamine secreting tumor located in the adrenal medulla. 10% could be bilateral, 10% could be malignant and 10% could be developed as a part of a genetic syndrome (such as Von Hippel-Lindau Syndrome, MEN 2 or Neurofibromatosis 1).

Objectives: We report the case of a 64-year-old patient, smoker, with a history of supraventricular and ventricular extra-systoles, presenting with severe abdominal pain, diarrhea and flushing in his hometown hospital. Abdomen sonography revealed a left adrenal tumor of 6.8/9.5/9 cm, the patient being directed to C.I. Parhon Institute.

Method: Laboratory findings showed subclinical hypercortisolism, a normal aldosterone-to renin ratio, but high values of serum metanephrines (2478 pg/ml, N: 10-65) and normetanephrines (2517 pg/ml, N: 20-196) and a high value of chromogranin A (577 ng/ml, N: 20-125). Screening tests for MEN2 showed low calcitonin level, normal-to-high PTH with vitamin D deficiency and hypercalcemia (calcitonin=5.27 pg/ml, PTH=61.74 pg/ml, 25OHVitD=7.83 ng/ml, Corrected Calcium=10.7 mg/dl). CT examination showed a left adrenal mass, of 6.92/8.85/7.16 cm, and a right adrenal mass of 1.8/4.1/5.2 cm. During the hospitalization the patient had 2 hypertension crises (250 mmHg that dropped spontaneously after 5 minutes) with tremor and vertigo. Doxazosin alpha-blocker was introduced (increasing doses from 2 mg/day to 8 mg/day), associated with Carvedilol (12.5 mg/day), the patient being referred for a surgical treatment, being discharged with systolic B.P's of 90-100 mmHg.

Results: The histopathological exam after the surgery revealed a voluminous encapsulated tumor of 12/7.5/6 cm, with massive necrosis (80%), with yellow spots in the capsule: pheochromocytoma (PASS index >4.2) and a second piece: adrenocortical adenoma of 3 cm with alveolar pattern. After the surgery, the patient presents primary corticoadrenal insufficiency under glucocorticoid substitution, the serum metanephrines and normetanephrines, and chromogranin A values normalized. The CT scan shows no evidence of adrenal masses or dissemination.

Conclusion: We present the case of a male with pheochromocytoma, who presented initially gastro-intestinal and cardio-vascular symptoms of elevated catecholamines and whose further development was very good under proper medical and surgical treatment.

(ID 59) Learning from mistakes: errors in melanoma approach, the urgent need for updated national guidelines

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Objective: Tracking and identifying errors in melanoma detection and follow-up are important because of the huge potential to increase awareness about the most vulnerable aspects of diagnosis and treatment and from a health care economics perspective. Our aim was to identify where errors occur and to propose a minimum set of rules for the routine guidance of any specialist in melanoma management.

Methods: This report describes evaluation of a unique series of 33 cases with detected errors covering many steps related to melanoma diagnosis and treatment. Cases were collected at two centers in Romania, one public and one private, as part of a patient-requested second opinion. Results and conclusion: A total of 166 errors were identified for the 33 patients, most of whom had experienced treatment errors. The errors fell into six categories: clinical diagnostic errors (36 errors among 30 patients), primary surgical errors (31 errors among 16 patients), pathology errors (24 errors among 17 patients), sentinel lymph node biopsy errors (13 errors among 13 patients), staging errors (17 errors among 13 patients), and treatment/management errors (45 errors among 33 patients). Based on our results, we propose that in countries lacking national guidelines, clinicians should adhere to international evidence-based guidelines in the diagnosis and treatment of melanoma.

(ID 178) Non-metastatic large CMT tumor in a patient with a longtime history of goiter

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Background: Medullary thyroid carcinoma (MTC) is a rare malignancy that accounts for 3% of all thyroid carcinomas and it develops from the C cells which normally secrete calcitonin. There are two types of CMT-sporadic and familial (inherited in an autosomal dominant pattern, isolated or associated with other types of tumors in MEN2 syndrome).

Case report: We present the case of a 62yr old woman with a 20-year history of nodular goiter, with a dominant nodule of over 4 cm, hypothyroidism (LT4 substituted), and frontal lobe arachnoid cyst-recently diagnosed (47/27mm), which had symptoms of dysphagia for solids, difficulty in breathing during the night and polyarthralgias, for the past 2 years. Physical examination revealed a euthyroid state and an enlarged, mobile, unpainful, uneven thyroid (left lobe >> right lobe), with a higher consistency, and high blood pressure (Systolic value up to 190mmHg) under hypotensive medication.

Laboratory findings showed a slighty decreased TSH=0.253μ Ui/ml (n=0.5-4.5) and a calcitonin of 10733pg/ml (n=5.17-9.82) diagnostic for MTC. Thyroid imaging showed a dominant left thyroid nodule of 2.90/3.05/4,6 cm - hypoechogenic, well delimitated, with regular contour and no latero-cervical lymphnodes. No metastases were present on the CT scan. 99mTc-HDP whole body scintigraphy showed only an intense accumulation of radioactive technetium in the left thyroid lobe. Histopathological examination confirmed the CMT diagnosis. Association with Pheochromocytoma or hyperparathyroidism was ruled out by the normal values of PTH=59.29 pg/ml (n=15-65), plasma metanephrine, plasma Normetanephrine =157pg/ml (20-200), and no family history suggestive for MTC or MEN2.

Conclusion: The patient had an almost 5 cm tumor, but no apparent metastases, despite increased calcitonin levels - over 10000 pg/ml -, which is unusual for tumors of this size. A total thyroidectomy with lymphadenectomy was performed, with a favorable clinical post-surgery evolution. To evaluate the tumor aggressiveness, genotyping for RET gene is recommended.

(ID 150) Diagnostic challenges in elderly with urinary tract infection. Case presentation

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Aim: Elderly have a higher risk for infections because of physiological suppression and presence of comorbidities. Infectious diseases represents a third of total number of deaths in patients over 65 years old. Urinary infection is the most frequent cause of bacteremia and multiple organ dysfunction at the elderly.

Methods: A 88 years old female patient comes with asthenia and memory loss, symptoms that appeared at least 6 weeks ago. Her medical history shows the presence of comorbidities: atrial fibrillation with oral anticoagulants, hypertension, diabetes mellitus type 2, osteoporosis, stomach ulcer. Clinical exam: general weakness, loss of appetite, apyretic (T=36.8°C), obesity (BMI=31.11kg/m^2), pallid teguments, normal vesicular breath sound, arrhythmic heart rates, grade II mitral systolic sound, BP=125/60 mmHg, HR=64/min, abdomen palpation: pain in the right flank, Maneuver Giordano negative and temporo-spatial disorientation.

Results: Biological: infectious syndrome (WBC=14.66 cells/mm^3; ESR=33 mm/hour), microcytic anemia, GFR=49 ml/min/1,73 m^2, leukocyturia, urine sample: Escherichia coli pathogen with multiple drugs resistant; sensitive to levofloxacin according to antibiogram. Electrocardiogram: atrial fibrillation with medium HR. Normal Chest X-ray. Abdominal ultrasound: pyelocaliceal distension in both kidneys. Geriatric assessment: depressive disorder (GeriatricDepresionScale=11/15points) with moderate cognitive decline (MiniMentalStateExamination=18/30 points) lower than 2014 evaluation(MMSE=29/30 points). Brain CT: sequelae of lacunar images at the level of MCA bilateral diffuse cerebral and cerebellum atrophy. Leukoaraiosis. Diagnosis: Clinical and paraclinical aspects sustain Escherichia coli urinary infection and depression trouble with cognitive impairment. We decided to initiate the antimicrobial treatment for 14 days and cognitive support treatment. Clinical evolution was favorable: urinalysis was sterilized after 14 days of treatment and cognitive assessment was improved, MMSE=20/30 points; GDS = 8/15 points.

Conclusions: Neurocognitive symptoms at the elderly can hide an infectious disease. Early diagnosis is sometimes difficult because of the absence of specifically symptoms. As recommendations a comprehensive geriatric assessment is necessary for every old patient.

(ID 168) Gait rehabilitation using modern computerized methods with active participation of patients in autocorrect posture during movements

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Introduction: One of the most important objectives of rehabilitation is to help the patient to achieve the highest level of independence giving his specific condition. The gait is one of the most important activities with direct impact on the independence of the patient. Beeing affected in neurological pathologies, the rehabilitation's goal is to restore or improve the gait in order to increase the quality of life.

Material and method: The study included 10 children (6 girls, 4 boys) diagnosed with hemiparesis, aged between 4 and 16 years, in-patients at "Dr. N. Robanescu", enrolled in a physical therapy program customized according their specific conditions.

Computerized analysis of ambulation (gait analysis) was done using computerized instrumentation offered by Walker View, monitoring in real time 2 parameters – step length and contact time. The initial assessment was made at the beginning of the hospitalization after a short period in which it was intended to improve patient compliance with the device, and the final assessment was done after 3 days of physical therapy program, meanwhile the patients being trained to autocorrect the posture during walking.

Results: After 3 days of training, for both legs (affected and unaffected), there was found an improvement of gait, 60% of patients showing an increase of step length and 80% of patients a shortened of contact time.

It has also been found a decrease of step length for affected leg at 30% of patients and for unaffected leg at 40% of patients. At 10% of patients with affected leg do not have been changes in step length.

Regarding contact time there was an increase of contact time at 10% of patients with affected leg, meanwhile at 10% of patients there was no change and at 20% of patients with unaffected leg there was an increase of contact time.

Conclusions: Computerized gait rehabilitation with active participation of patients in autocorrect posture during movements proved beneficial results in a significant percentage appeared a short time after initiation of therapy.

(ID 257) Whooping cough in Romania, 2008-2016

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Introduction. Pertussis is an acute and highly contagious disease caused by Bordetella pertussis. It is an important cause of childhood morbidity and mortality. It is no longer just a childhood disease, affecting both adolescents and adults.

The disease is preventable by vaccination. In Romania acellular pertussis vaccine is used since 2008 in the National Immunization Program, the current schedule consisting of 5 doses (DTPa at 2, 4, 11 months and 6 years of age and dTa at 14 years of age).

Our aim is to describe the pertussis evolution in Romania between 2008 and 2016.

Methods. We reviewed available surveillance and vaccine coverage data reported to the National Centre for Surveillance and Control of Communicable Diseases (CNSCBT) from 2008-2016. It is mandatory to nominally report the whooping cough cases, according to the surveillance methodology developed by the CNSCBT. Laboratory confirmed or clinically confirmed cases with an epidemiological link (probable cases) were included in the analysis. The 2016 population from the National Statistics Institute was used to calculate the cumulative incidence rate.

Results. During this period, there were 573 reported cases (512 confirmed and 61 probable cases) with no deaths. The incidence rate was low and relatively constant, with an average value of 0.55 cases/100,000 inhabitants. The highest incidence rate (2.4 cases/100,000 inhabitants) was recorded in 2008 and the lowest in 2009 (0.05 cases/100,000 inhabitants). The age group distribution revealed that 27.6% cases were in the >10 years group and 19.2% cases were in the 0-4 months age group. In terms of immunization history 33.6% of the cases were unvaccinated. The highest cumulative incidence was recorded in the district of Sibiu, followed by Timis and Ialomita. The districts with no reported cases were Dolj, Salaj and Tulcea. The vaccination coverage for pertussis was <95% (57.9% DTPa3 at 12 months in 2016).

Conclusions. The disease remains either underreported or underdiagnosed in some regions of Romania. Increasing immunization coverage in both children and adults, adding an additional dose to the vaccination schedule in order to prevent immunity waning, improving surveillance, early diagnosis and case reporting should be considered.

(ID 392) Obesity, systemic inflammation and the risk of cardiac arrhythmia in obstructive sleep apnea

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Background: The obstructive sleep apnea syndrome (OSAS) is associated with a high risk of cardiac arrhythmias through nocturnal hypoxemia, sleep fragmentation and increased sympathetic drive. Obesity, the main risk factor for OSAS and an independent inducer of systemic inflammation, may be an additional risk factor for heart arrhythmias.

Objective: To evaluate the relationship between the risk of heart arrhythmias, expressed by the corrected QT interval (QTc) on the resting electrocardiogram (ECG), obesity and systemic inflammation (evaluated by the platelets to lymphocyte ratio, PLR) in patients with OSAS.

Material and method: Transversal evaluation of newly diagnosed OSAS patients (cardiorespiratory polygraphy with apnea-hypopnea index – AHI, and mean nocturnal oxygen saturation – $mSaO_2$) through: anthropometric indices (body mass index-BMI, body weight, neck circumference), QTc (using Bazett's formula), PLR, and statistical analysis of the correlations between these parameters. All reported correlations were statistically significant (p value of < 0.05).

Results: 68 patients (55 men), with mean/median values of age: 52.65 ±12.8 years, BMI: 33.75 kg/m2[26-52], AHI 51.64±24/hour, $mSaO_2$ 92% [78-96], QTc 430.12±29 ms. In the study sample, we observed a positive correlation between BMI and OSAS severity (AHI, r 0.414) and a negative correlation between BMI and $mSaO_2$ (r -0.418). QTc was positively correlated with BMI (r 0.375) and negatively correlated with $mSaO_2$ (r -0.277). PLR was negatively correlated with body weight (r -0.284) and neck circumference (r -0.421).

Conclusion: The severity of both obesity and OSAS, as well as a low mean nocturnal SaO_2, correlated with the risk of heart arrhythmias (increased QTc). Systemic inflammation, as measured through the surrogate marker PLR, was not significantly correlated with QTc values.

The risk of heart arrhythmias in the studied OSAS subjects seemed to be associated more with low nocturnal SaO_2 and increased sympathetic stimulation, secondary to sleep fragmentation, than with systemic inflammation.

(ID 157) Analysis of lymphocyte populations from melanoma-bearing mice

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Introduction: Melanoma resistance to conventional therapies and its high immunogenicity justifies the development of novel therapies aimed to stimulate effective immune responses against melanoma. These characteristics of melanoma reinforce the previous consideration of melanoma as a suitable model for studying tumor immunity. Here, we investigate the peripheral cellular immune status of melanoma-bearing mice, that may account for a potential immunosuppression-favoring development of tumors.

Methods: We used wild type C57BL/6 mice, 8-10 weeks old. The animal models used were B16F10 mouse melanoma. Normal values were established in healthy, age-matched mice. Mice were monitored every week to evaluate tumor growth. On day 21 after tumor cell inoculation populations and sub-populations of lymphocytes (CD3, CD4, CD8, CD19, NK1.1) were evaluated by flow cytometry.

Results: Evaluation of peripheral blood and spleen lymphocyte populations from melanoma-bearing mice showed alteration of their distribution in comparison to healthy mice. We found a decreased percentage of peripheral NK cells and, to a lesser extent, of TCD4+ lymphocytes, accompanied by an increase in the percentage of B cells. Also, a negative correlation between T and B lymphocytes was highlighted. In the spleen was observed a significant decrease in the percentage of NK cells and B lymphocytes and a poor increase in the percentage of TCD4+ lymphocytes.

Conclusions: The distribution of lymphocyte populations is different in peripheral blood and spleen of melanoma-bearing mice. Tumor induce the decrease in the percentage of T lymphocytes and NK cells in the peripheral blood, but induce the increase in the percentage of TCD4+ lymphocytes in the spleen. This is possible because of the TCD4+ lymphocytes sequestration in secondary lymphoid organs. Moreover, it has been revealed a compensatory mechanism between T and B lymphocytes, at least in number.

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(ID 130) Addressing the posterior malleolus during open reduction and internal fixation of complex ankle fractures: case series

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Objective: The purpose is to present the indication and surgical technique for complex ankle fractures using open reduction and internal fixation with minimally invasive posterior malleolus screw fixation.

Method: Fracture pattern was evaluated using Digital Radiology. Open reduction and internal fixation was used, with intent of relative stability for the extra-articular fracture fixation. All patients benefited from the postero-lateral approach for peroneal fixation, antero-medial approach for the medial malleolus whilst the posterior malleolus was fixated using antero-posterior screw and washer. After fracture fixation, all patients benefited from 3 weeks non-weight bearing short-leg cast followed by 3 weeks passive range of motion exercises with progressive weight bearing and further 3 weeks active range of motion with full weight bearing.

Results: At 24 weeks follow-up, all patients presented with minimal pain, normal range of motion at the ankle and radiologically stable implants.

Conclusion: Open reduction and internal fixation of complex ankle fractures using dynamic compression plating proves to be an efficient in controlling posterior malleolus fragment stability, with favorable clinical, functional and radiological outcomes at 24 weeks follow-up.

(ID 175) Exclusive breastfeeding and atopic dermatitis

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Objectives: Atopic dermatitis (AD) is a chronic inflammatory skin disease affecting primary the children. It is one of the clinical manifestations of the atopic march along with respiratory and food allergy. Breastfeeding has been considered a major barrier against AD and allergy. Its protective status has been linked with immunomodulatory factors (cytokines, IgA, fatty acids) that might play a role in the development of the child's immune system.

The aim of the study was to investigate the relationship between exclusive breastfeeding and AD in a population-based group from Romania.

Method: We performed an observational study on 190 subjects whose purpose was to evaluate the risk according to the method of breastfeeding. The study consisted in filling in questionnaires by the parents. The questionnaires were divided into two parts. The first part contained questions from International Study of Asthma and Allergies in Childhood translated into Romanian. In the second part questions investigating possible factors involved in occurrence were addressed. A positive diagnosis of AD was established by performing clinical assessment for all subjects enrolled associated with completion of "U.K. Working Party's Diagnostic Criteria". We tested the association of AD with breastfeeding first in simple logistic regression. Then we tested the association in multiple logistic regression models comprising the variables associated with AD after stepwise selection of covariates. The analysis was performed using MedCalc software, version 16.2.0.

Results: The unadjusted analysis showed that exclusive breastfeeding was not associated with AD in children (OR = 0.96; 95% CI = 0.48-1.89; p = 0.9). The adjusted analysis showed similar results (OR = 0.91; 95% CI = 0.35 – 2.39; p = 0.85)

Conclusion: Despite undisputedly benefits, exclusive breastfeeding in children was not associated with AD in our study.

(ID 73) Does arthroscopic acromioplasty provide significantly better outcome in clinical measures compared to a physiotherapy program in the treatment of shoulder impingement syndrome

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Objectives: There has been an increasing focus in the number of clinical studies evaluating the role of arthroscopic procedures in clinical practice compared to conservative treatments.

Evidence based data has limited comparative outcomes in clinical measures between arthroscopic acromioplasty, over continued conservative treatment, including physiotherapy.

The first line of treatment for shoulder or subacromial impingement syndrome is often conservative, with the patient undergoing a physiotherapy program.

Surgical modalities, such as arthroscopic acromioplasty, are typically indicated in cases of a failed response to conservative management.

The principal question of this 2 year follow-up was to see whether there is consistent benefit, such as significantly better outcome in clinical measures, provided by arthroscopic acromioplasty, compared to a physiotherapy program in the treatment of shoulder impingement syndrome.

Method or Study Characteristics: Population, Intervention and Comparison: 26 patients with shoulder impingement syndrome were randomly selected to acromioplasty followed by a physiotherapy program, or to a physiotherapy program alone.

The physiotherapy program included 10 sessions of electrotherapy twice a year for 2 years and 45 minutes of decompression and group exercise therapy 3 times a week for 2 years.

Outcomes and Methods, Time: Patients were followed up for clinical measures of patient-reported pain and disability at 6 months, 1 year, 18 months and 2 years.

Primary outcome was pain on a Visual Analogue Scale (VAS).

Secondary outcomes were the (1) Shoulder Disability Questionnaire (SDQ) score, the (2) impact on personal (ADL), professional, and social disability or lack of performance and the (3) number of days with pain in the previous 6 months prior to the follow-up visit.

Results: The study demonstrates that the arthroscopic acromioplasty does not provide a significantly better outcome as compared to a physiotherapy program in the treatment of shoulder impingement syndrome.

Conclusions: Studies with extended follow-up will be needed to evaluate the therapeutic efficacy of these treatment options in the long-term.

(ID 380) Thyrootoxicosis and thyroid cancer

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A frequent cause of thyrotoxicosis in patients with cardiac disease is amiodarone-induced thyroid dysfunction. The mechanism underlying this adverse reaction can be attributed to high iodine content and the direct toxic effect of the drug on thyroid cells. Thyrotoxicosis is considered to be a very rare finding in a patient with thyroid cancer, but still there are several reports regarding this unexpected association in specialty literature.

We present the case of a male patient treated with amiodarone for paroxistic atrial fibrillation, which addressed our service with a large anterior cervical mass, causing mild edema and compression of the upper respiratory tract. The laboratory evaluation revealed thyrotoxicosis. The fine needle aspiration and the immunohistochemistry results were consistent with undifferentiated thyroid carcinoma.

There are few cases of anaplastic thyroid cancer in patient with amiodarone therapy reported in specialty literature, but the question whether exposure to the high iodine content in the antiarrhythmic drug influences the emergence and evolution of this rare form of cancer is still unanswered.

(ID 104) Desensibilization protocol for ASA

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Nowadays, both aspirin (ASA)and nonsteroidal anti-inflammatory drugs (NSAIDs) play an important role in adverse drug reactions. Most of them, are of the hypersensitivity type. The first places in clinical manifestations of aspirin hypersensitivity are: aspirin-induced urticaria/angioedema (AIU) and aspirin-induced bronchial asthma/rhinosinusitis (AIA/R).

Aspirin is a cyclooxygenase-1 (COX-1) inhibitor that prevents platelet aggregation and is base of treatment for patients with coronary artery diseases (CAD). Hypersensitivity or intolerance of aspirin may restrict its use from patients described above.

Objective: In order to obtain the tolerance for 75 mg/day of aspirin, in a case of patient aged 38 years with recent myocardial infarction with ST-segment elevation in the territory infero-posterolateral thrombolysed and stented, we performed desensibilisation protocol for aspirin. The personal history of the patient is relevant for hipersensibility to NSAIDs medication. He had experienced periorbital angioedema and urticaria lesion after administration of 500 mg aspirin.

Methods: Several desensitization protocols that involve oral challenge interval up to 24 hours are available. We use the Wong protocol adapted to the particular case. ASA challenge should not be performed just for diagnostic purpose because some of the reactions can be quite severe.

Results: During hospitalization was conducted aspirin desensitization. The patient reaching therapeutic dose of 75 mg without showing immediate-type hypersensitivity reactions. Desensitization test involved oral administration of acetylsalicylic acid, that was performed safely during three days with increasing doses. On the first day it was administered the cumulative dose of 32.40 mg. On the second day they were administered the cumulative dose of 81mg. The third day was done to test the drug challenge that Aspenter 75mg was well tolerated without immediate-type hypersensitivity reactions.

Conclusions: Aspirin desensitization should be considered in such patients who require long-term therapy for cardiovascular indications. For safety, administration of ASA therapy in a patient with recent myocardial infarction and history of hypersensitivity to NSAIDs should be done under supervision allergist and cardiologist, using protocols adapted to each case.

(ID 145) The evolution of BMI in association with gestational diabetes status, during pregnancy and postpartum

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We assessed the evolution of BMI (Body Mass Index) in association with non-diabetes and gestational diabetes mellitus (GDM) patients, during pregnancy and 6, 12 weeks postpartum.

Objective: The aim was to investigate whether gestational weight gain is correlated with an increased incidence of GDM and its postpartum outcome.

Methods: We compared perinatal outcomes in mothers without GDM (n=96, 88.07%) to mothers with GDM (n=13, 11.92%) within a prospective study, which took place at The Clinical Hospital "Nicolae Malaxa" Bucharest, OGYN Ward, in interdisciplinary collaboration with The Diabetes, Nutrition and Metabolic Diseases Ward of the same institution. This study was done using 109 subjects.

Results: Maternal obesity could be found in 3 out of the 13 women with GDM, but the increased BMI during the second trimester of the gestational period, contributed to the probability rate of this pathology with 1.55 times.

Women with type 2 GDM at the 12th week postpartum, the decrees if BMI between the initial evaluation and the 12th week postpartum evaluation was significant (p= 0.044).

There is a strong association between the risk of incidence of GDM and the extensive weight gain, compared to the BMI during the previous pregnancy. Out of the 13 women with GDM, 9 (24.3%) had a weight gain above the accepted index and only 4 (5.6%) were below the accepted index.

Conclusion: The GDM diagnostic could be explained in 6.2% of the weight gain cases. Clinically, this observation leads to the fact that the simple presence of the GDM diagnostic could suggest the pregnant woman might exceed the normal weight during the pregnancy for both the fetus and the woman.

(ID 98) Tyrosine kinase inhibitors in the treatment of breast cancer - EGFR blockade

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Introduction and objectives: Epidermal growth factor receptors (EGFR) family consists of four categories of tyrosine kinase receptors - ErbB1 to ErbB4 (HER1 to HER4). Abnormal activation of these kinases results in inhibition of apoptosis, excessive cell growth and angiogenesis in epithelial cancer. Excellent results for breast cancer therapy were obtained with HER2 inhibition that became a standard targeted therapy for HER2 overexpressing breast cancer. The review aims to assess the current status of anti EGFR targeted treatments in breast cancer.

Material and method: We conducted a review of the literature from years 1950 to 2017. Medline, Embase and Scopus database were searched using terms: "breast cancer", "tyrosine kinase inhibitors", "epidermal growth factor receptor". Significant clinical trials for our objectives were selected. Outcomes evaluated were progression free survival (PFS), overall survival (OS), pathologic complete response rate (pCR), safety and adverse events.

Results: There were 84 articles found; after abstracts review, 27 articles met inclusion criteria. Specific anti-EGFR therapies identified included a series of compounds acting as tyrosine kinase inhibitors - gefitinib, erlotinib, afatinib, lapatinib, osimertinib, neratinib, canertinib.

Gefitinib showed reduced antitumor activity and low clinical benefit with higher toxicity. Erlotinib had minimal efficacy in unselected population, in phase I and II trials, with increased antitumor activity in a subset of basal-like breast cancer and metastasis inhibition in triple negative breast cancer. Afatinib was evaluated in advanced and metastatic breast cancer in combination with other agents; comparable pathologic complete response rates with anti-HER2 agents were observed, but below expectancies. Lapatinib showed increased progression free survival rates in hormone receptor positive, HER2 positive metastatic breast cancer, when administered in combination with letrozole. Also, lapatinib combined with capecitabine improved PFS in patients with advanced and metastatic breast cancer. It is the only anti-EGFR agent approved by Food and Drug Administration Agency (FDA) for the settings mentioned above. Other agents (neratinib, canertinib) did not show significant clinical benefit.

Conclusion: Anti-EGFR treatment in breast cancer needs to be improved by identifying selected molecular subtypes most susceptible to targeted therapy. Apart from anti-HER2 therapy with trastuzumab and pertuzumab used on a wide scale nowadays for HER2-positive patients, lapatinib is the only anti-EGFR agent approved in clinical setting, in association with hormone therapy and chemotherapy. Future research is needed to establish the place of tyrosine kinase inhibitors in the treatment of breast cancer.

Acknowledgements: This work was supported by a grant of the Romanian National Authority for Scientific Research and Innovation, CCCDI – UEFISCDI, project number 46 BM/2016 Code PN3-P3-246.

(ID 378) Arrhythmias and conduction disturbances in a cohort of patients with dilated cardiomyopathy

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Objective: Arrhythmias and conduction disturbances frequently accompany heart failure and influence its prognosis, increasing sudden cardiac death and worsening heart failure. We aimed to investigate the prevalence of arrhythmias and conduction disturbances and their correlation with bioumoral and echocardiographic findings in a population of patients with dilated cardiomyopathy treated according to current guidelines.

Methods: We investigated a cohort of 102 patients with dilated cardiomyopathy admitted in our hospital center during the previous 2 years. Patients were evaluated and treated according to standards of care. We recorded data on etiology, NYHA class, medication, blood tests results including NTproBNP, ECG findings (focused on arrhythmias and conduction disturbances) and echocardiographic parameters.

Results: The study group included 84 men (82.4%) and 18 women (17.6%), aged 64 ± 12 years. 35.3% had ischemic cardiomyopathy, while 9.8% had alcoholic cardiomyopathy, 4.9% valvular etiology, 3.9% other causes (post-myocarditis and tachyarrhythmias), 29.4% mixed etiology and 16.7% were idiopathic. 58.8% of patients were in NYHA class IV, while 26.5% were in NYHA class III and 14.7% in NYHA class II. Medical treatment included: beta blockers 86.3%, ACEIs/ARBs 73.5%, mineralocorticoid antagonists 62.7%, diuretics 90.1%, digoxin 46.1%, calcium channel blockers (dihydropiridines) 10.8%, anticoagulants 32.4%. Cardiac resynchronization therapy (CRT-P) was used in 5.9% of patients and CRT-D in 2.9% of patients. Supraventricular arrhythmias (atrial fibrillation, atrial flutter and supraventricular ectopies) were found in 49% of patients. There was an inverse correlation with left ventricular end-diastolic diameter (r= -0.387,

p= 0.001). Patients treated with ACEIs/ARBs had fewer supraventricular arrhythmias (p= 0.019). Ventricular arrhythmias (ventricular tachycardia and ectopies) were found in 25.5% of patients. There was an inverse correlation with potassium serum level (r= -0.208, p= 0.039). 50% of patients had conduction disturbances, of whom 39.2% left bundle branch block. There was a direct correlation with left ventricular end-diastolic diameter (r= 0.399, p= 0.001).

Conclusions: Arrhythmias and conduction disturbances are frequent in patients with dilated cardiomyopathy, irrespective of etiology. Treatment with ACEIs/ARBs is associated with fewer supraventricular arrhythmias. Conduction disturbances are more frequent in patients with more dilated ventricles, while supraventricular arrhythmias are more frequent in patients with less dilated ventricles.

(ID 379) Detailed case of concomitant pulmonary embolism, acute right heart failure and neck haematoma

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Case description: We report the case of a 50 years old patient, with history of left popliteal deep vein thrombosis (DVT), admitted in our department with right occlusive DVT of the external iliac vein complicated with flegmatiae cerulean-dolens. The patient undergone alteplase fibrinolytic treatment administered on right jugular vein. 18 hours from thrombolysis' start, a massive cervical hematoma with extension along upper mediastinum occurred (Figures 1, 2). Shortly after the withhold of the thrombolysis, the patient presented systemic hypotension and hemodynamic shock. Emergency CT thorax scan revealed a new massive and bilateral PE (Figure 3). The following day the evolution is dramatically complicated by development of acute renal failure and cardio-hepatic syndrome. A multidisciplinary cardiothoracic medical and surgical team decided to start a new thrombolytic sequence with alteplase.

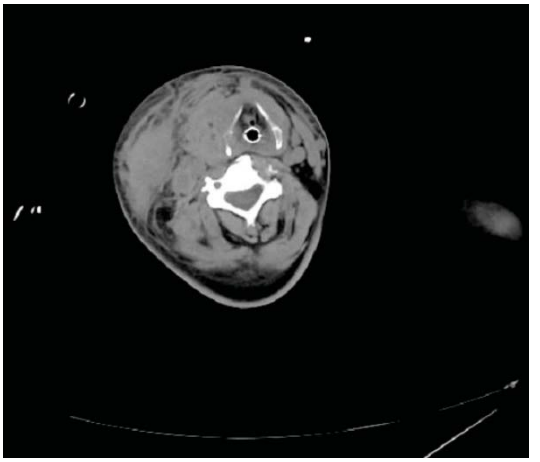

Figure 1. Lateral cervical hematoma

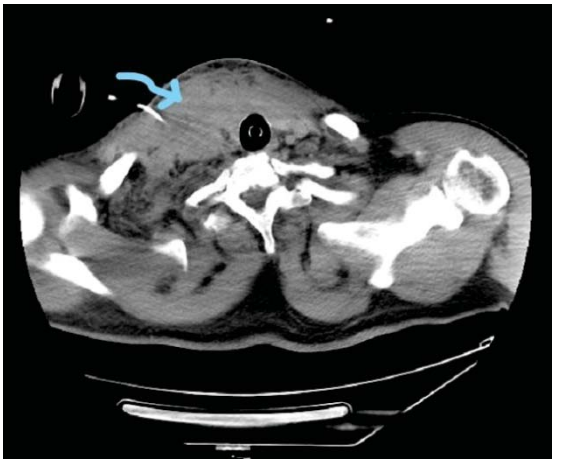

Figure 2. Cervical hematoma extended in upper mediastinum

After two days, the patient's evolution has improved, the pulmonary pressure normalized and the patient was waved from mechanical to assisted respiration. The cervical hematoma did not further extend. Hemodialysis was needed for 10 days. The patient was discharged with minimal hematoma of the cervical region (Figure 4) and restored lung function. He completely recovered his renal and liver function.

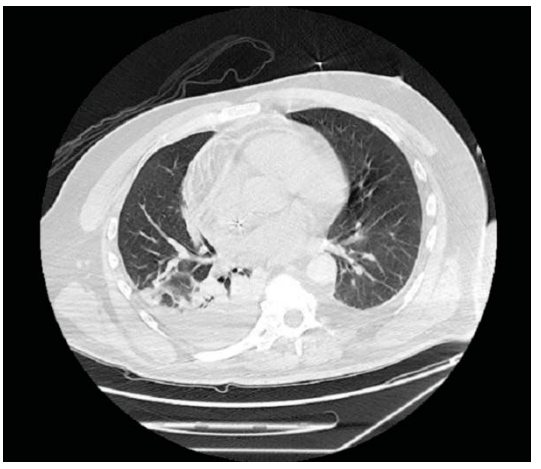

Figure 3. Bilateral PE on contrast CT scan of the lungs

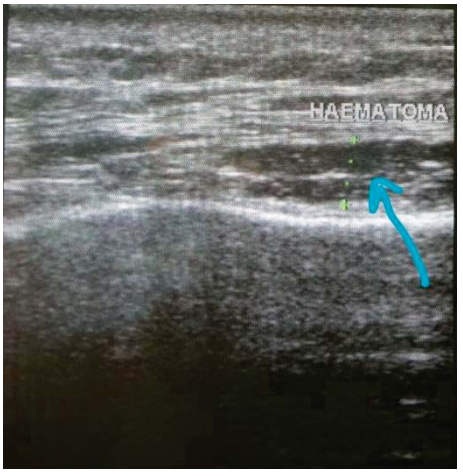

Figure 4. Minimal cervical hematoma at discharge

Discussions: Given the recurrent thrombotic events we suspected an inherited thrombophilia. The appropriate blood tests to prove thrombophilia were not used due to impossibility to stop the anticoagulant treatment. We administered a new oral anticoagulant (NOAC) for long term treatment. We didn't identify another risk factor for the acute case apart from supposed thrombophilia. A genetic testing for thrombophilia was planned but it will not change the long-term indication for anticoagulant treatment.

Conclusions: Acute severe heart failure secondary to high risk thromboembolic disease requires urgent fibrinolysis. The multiple systemic risks implied both by low cardiac output and bleeding events should always be considered. The lack of positive tests for thrombophilia in a patient with recurrent severe thrombotic events should not change the long term anticoagulation attitude.

(ID 36) Central sleep apnea – a rare cause for acute respiratory insufficiency in children

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Central apnea represents an event of minimum 20 seconds of respiratory pause, without detectable respiratory effort, or a 10 second pause, accompanied by tachycardia, cyanosis, pallor and pronounced hypotonia. Central apnea can either by primal by affecting nervous respiratory centers, peripheral nerves or respiratory muscles (which can't process the information received from the brain) or mixt, in association with obstructive peripheral apnea.

We present the case of a female child age 5 years and 6 months, known to have thoracolumbar myelomeningocele (for which she underwent a surgery procedure), secondary hydrocephalus (with ventriculoperitoneal shunt) and flaccid paralysis. She arrived through transfer at our clinic due to a prolonged fever syndrome, frequent productive cough, subsequently followed by marked expiratory dyspnea and perioral cyanosis, symptomology that started 3 weeks prior.

The stage diagnostic established through clinical and laboratory findings, is that of aspiration pneumonia with acute respiratory insufficiency. Treatment is started with: antibiotherapy, antifungal, systemic and inhaler bronchodilator, oxygen therapy accompanied by thoracic tapping and secretion aspiration. The evolution of the patient was clinically favorable (normalization of the thermic curve and of pulmonary auscultation, diminish in couch frequency) and in laboratory findings (normalization of the blood count, negative inflammatory syndrome, normal pulmonary X-ray).

During the entire length of the hospitalization, the patient shows nocturnal respiratory rhythm disorders, with sleep apnea crisis of approximately 20 seconds and desaturation of up to 60% under oxygen administrated through nasal cannula; followed by decompensated hypercapnic respiratory acidosis. The symptoms show a decrease in frequency and intensity after the treatment, but not a complete remission. This raises the suspicion of a sleep apnea syndrome.

The ENT consultation excludes the presence of obstructive peripheral apnea, thus the diagnostic of central apnea is taken into consideration. A CT scan is performed and leads to the diagnosis of isolated fourth ventricle that compresses the brainstem. The neurosurgical examination is requested and a communication is established between the cystic fourth ventricle and the laterobulbar systems. This leads to total remission of the respiratory symptoms.

We find ourselves in front of a very rare complication of the thoracolumbar myelomelingocele with drained secondary hydrocephalus (ventriculoperitoneal shunt): the isolated fourth ventricle that caused central sleep apnea.

(ID 177) Non traumatic rhabdomyolysis in a case of isolated ACTH deficiency

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Secondary adrenal insufficiency in adult caused by isolated ACTH deficiency is a rare disorder that imposes many difficulties in what regards the diagnosis. Many causes may be implied, from autoimmune like lymphocytic hypophysitis, pituitary tumor, triple H syndrome, genetic causes like mutation in the POMC gene, cleavage enzyme defects, TPIT gene mutations, to familial transcortin deficiency and drug uses.

We present the case of a 67 year old man, who had symptoms of asthenia, occasional episodes of increased muscle weakness, nausea, dizziness, orthostatic hypotension (up to TAs=70mmHg). On the clinical examination no hyperpigmentation of the skin and the mucosae was observed. A Neurology consultation was made prior to the Endocrinology addmision, but it did not reveal any neuromuscular abnormalities to suggest a myopathic process or neurological deficit.

Laboratory tests showed hypoglycemia, hypochromic microcytic anemia, hyponatremia (131 mmol/l, N=135-145 mmol/l) and elevated CK levels (315 U/L, N=55-170 U/L), but no kidney damage. 8AM serum cortisol levels was 1.16 ug/dl (n=6.7-22.6) with normal ACTH level=31.65 pg/ml (n=3-66). Serum cortisol after insulin induced hypoglycemia raised to 0.55 ug/dl (cutoff >18 ug/dl), along with normal assessment of all the other pituitary axis and a diagnosis of isolated ACTH deficiency was established. Pituitary MRI revealed non-homogeneous normal sized gland. Corticoid replacement therapy was implemented and the clinical manifestation quickly subsided but no improvement was shown in the CK-MM levels. The patient has an active lifestyle with regular physical activity, including cardio and weight lifting, but denies to have taken any supplements to boost muscle mass.

Discussion: The most frequent cause of isolated ACTH deficiency is autoimmune in the form of lymphocytic hypophysitis, although both indirect pituitary MRI and the assessment of other autoimmune pathologies were not suggestive for this diagnosis. Anti-pituitary and anti-corticotroph antibodies, although not yet generally available, might be helpful.

The patient has biological signs of non traumatic rhabdomyolysis despite the replacement therapy and symptoms of chronic fatigue syndrome which might be an indicator for familial transcortin deficiency.

Conclusion: this is a case of isolated ACTH deficiency with uncertain etiology; close endocrine and imaging follow-up is needed in order to detect early new-onset pituitary hormones deficiencies or imaging abnormalities.

(ID 361) Assessment of chronic kidney disease awareness among the medical community

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Aim of the study. We assess awareness and knowledge of chronic kidney disease (CKD) clinical practice guidelines among non-nephrological medical specialties by using the questionnaire instrument.

Method. We performed a cross-sectional study using a questionnaire survey applied to general practitioners and other medical specialists. Questionnaire included questions regarding CKD staging and risk factors, nephrology referral criteria, knowledge of renal protective mechanisms and CKD complications, as well as diagnostic and therapeutical approach in 4 clinical cases.

Results. 50 of those 100 doctors asked to participate responded to the questionnaire. 72% of physicians correctly identified the GFR level corresponding to a certain CKD stage. 30-50% of doctors are unaware of the CKD risk factors as age over 60 years, obesity, ischemic heart disease, and chronic consumption of NSAIDs. Most of the subjects (74-84%) are aware of the usual tests for the evaluation of renal impairment (creatinine, urinary sediment, glomerular filtration rate), but only 22% use the specific tests as the urinary albumin/creatinine ratio.

66% doctors indicated CKD stage 3a as optimal moment for nephrology referral. However, 15-20% of doctors do not consider nephrology referral for hyperkalemia, hematuria, and patient preparation for renal replacement therapies. Anemia and mineral bone disease are recognized as a CKD complication by 90% of doctors, drug induced acute renal failure by 64%, while increased risk of cardiovascular and cerebrovascular disease by 40-44%, and risk of malnutrition only by 36%. Most of subjects are aware of renal protective effects presented by angiotensin-converting-enzyme inhibitors (76%) and angiotensin receptor blockers (64%).

Answers presented in clinical cases are generally focused on referring the case to the nephrologist, suggesting lack of involvement rather than patient needs awareness.

Conclusions. We found there is great variability in the level of awareness and knowledge, as most doctors have disparate, uneven and rather superficial knowledge on the management of chronic kidney disease patients.

(ID 318) Disease awareness among chronic kidney patients

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Aim of the study. We assess the disease awareness and interest of patients to obtain information about chronic kidney disease (CKD) and about dialysis.

Method. We applied a test for rapid assessment of medical knowledge and an individual questionnaire in CKD patients. We calculated individual scores for capacity to identify risk factors and signs of disease, knowledge of the type and age of CKD, awareness of kidney failure and proteinuria. Finally, we calculated global scores of subjective perception and of objective knowledge about CKD.

Results. We assessed 112 patients (males 55.6%, mean age 61.6 ±14.6 years). Most of the subjects recognized diabetes mellitus (69.6%) and hypertension (79.5%) as CKD risk factors. 21.4% patients were not aware about the renal insufficiency, while 52.7% do not know about their proteinuria. Patients with advanced CKD (stages 4-5) had a better knowledge about disease, and properly declared the presence of renal failure ($p<0.05$).

Subjective perception score correlated with the number of visits to a nephrologist in the past year ($p = 0.002$); the score of objective knowledge correlated with age ($p = 0.002$), monthly income ($p = 0.046$), number of visits to a nephrologist ($p = 0.043$) and dialyzed status ($p = 0.021$).

A small percent of patients do not want to (2.7%) or deny the need to (1.8%) learn about their renal disease, but the percentage greatly increases (18.8%, and 10.7% respectively) when it comes to dialysis. Patients over 75 years showed lack of interest in CKD in a higher percentage (11.1%) compared to other age groups ($p <0.05$). Interest in CKD information correlated with objective knowledge score ($p = 0.046$) and a family history of renal disease ($p = 0.048$), and the interest in details about dialysis correlated with marital status ($p = 0.047$) and objective knowledge score ($p = 0.001$).

Conclusions. We found that the subjective perception of CKD is satisfactory and is improving gradually with the number of visits to the nephrologist, suggesting a doctor-patient communication benefit. Objective knowledge is weaker, being negatively correlated with advanced age and positively with lower income and higher number of visits to the nephrologist.

(ID 244) Diagnostic difficulties of paroxysmal events in a case of Sturge-Weber syndrome

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Introduction: Sturge-Weber syndrome is a congenital disease, caused by a somatic mutation of the GNAQ gene on chromosome 9q21, which appears sporadically of unknown causes. It affects mainly the skin, central nervous system and the eye but it can present numerous systemic complications. The major signs are the presence of facial hemangioma (port-wine stain), leptomeningeal angiomstosis and glaucoma on the same side. Secondary to leptomeningeal angiomatosis the most frequent neurological complications are represented by focal epileptic seizures which depending on the severity can determine important development delay, motor deficits, visual field deficits and mental retardation.

Case description: Patient aged 11 months and 3 weeks, diagnosed with Sturge-Weber syndrome at 4 months (hemifacial hemangioma and congenital glaucoma) and focal structural epilepsy treated with Topiramate (1/2-0-1) presents paroxysmal events with generalized hypotonia, head and eyes deviation to the right, aresponsivity, variable in onset and period, with spontaneous recovery. The clinical examination found inequality of palpebral aperture (L>R), left hemifacial hemangioma, left lumbar mongolian stain and motor development age of 8 months. The cognitive examination found a DQ of 88 and language, knowledge and social acquisitions corresponding to 10 months of age. Imagistic investigations found pericerebral leptomeningeal venous enhacement in the left hemisphere. EEG recordings (awake and sleep) showed left-right amplitude asimmetry with no significant epileptiform activity.

Discussion: Among Sturge-Weber syndrome, epileptic seizures represent a challenge, having a strong impact on the quality of life, early diagnosis and treatment being of high importance. Taking into account the presence of the leptomeningeal angiomatosis, there is a high probability of other manifestations such as stroke-like events or migraine. The case particularity consists of the subtle paroxysmal manifestations that could have easily gone unnoticed in an infant, which make the differential diagnosis challenging. Paraclinical investigations (long term EEG monitoring, MRI) are of paramount importance in recognizing such events, further influencing the therapeutical approach and the patient's evolution.

(ID 158) The incidence of diabetes mellitus for colorectal cancer patients

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Colorectal cancer is the third most common cancer in men and the second in women worldwide. There is a wide geographical variation in incidence across the world and the geographical patterns are very similar in men and women (M/W=1.3). In the global mortality through cancer classification it takes the fourth place. In Romania the incidence and mortality have doubled in the last 20 years and it represents the second most common cause of death among cancers. Diabetes mellitus represents a major health problem (alarming number of new cases, the negative impact on the length and quality of life and the socio-economic impact). In the last three decades the number of patients has doubled. In Romania about 6% of the population with age between 20-79 years have diabetes. Nationwide, every year there have been diagnosed approximately 50.000 people with diabetes.

Aim/Hypothesis. The risk of developing colorectal cancer in Diabetes Mellitus patients is higher than for the normal population.

Methods. After a review of the literature regarding Diabetes Mellitus as a risk factor for Colorectal Cancer we examined the incidence of Diabetes Mellitus for the colorectal cancer patients admitted in our department of surgery.

Results. We identified 183 patients with colorectal cancer admitted in our clinic between January 2015 and December 2016 and 57 (31.15%) had Diabetes Mellitus in different evolution stages. We also evaluated whether the association varied by sex and by cancer subsite.

Our findings based on a small descriptive study provide evidence of the association between diabetes mellitus and colorectal cancer and further studies regarding this matter should be conducted because of the prevalence of diabetes that will probably increase as a result of the growing obesity epidemic, and thus this disease may contribute to the development of additional cases of colorectal cancers.

(ID 173) Diagnostic difficulties in achalasia – case report

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Background: Achalasia is a primary esophageal motor disorder typically characterized by the absence of peristalsis of the esophageal body and a failure of the lower esophageal sphincter to relax upon swallowing, benefiting from multiple ways of diagnosis (barium swallow, upper endoscopy and manometry). Although achalasia is a relatively rare condition (1,63/100000 individuals each year), it carries a risk of complications, including aspiration pneumonia and esophageal cancer.

Methods: We present the case of a patient aged 60 with no significant pathological history that at the moment of admission presented dysphagia for both solids and liquids suddenly onset for two weeks, marked weight loss (appetite still present)and epigastric abdominal pain. Upper endoscopy reveals complete stenosis of the gastro-esophageal junction and entire esophagus coated with white-gray deposits (bacteriological results - *Candida albicans*.

Barium swallow reveals important dilation of the esophagus along with the presence of proliferative mass involving cardia which determines complete stenosis. During the surgery no mass was found at stomach level with normal gastric mucosa which points to achalasia therefore the Heller-Dor procedure was applied.

Results: The postoperative evolution was favorable, feeding gradually resuming with good digestive tolerance and clear passage of barium through the esogastric junction at postoperative barium swallow, image which it maintained at the 8 weeks radiological reevaluation.

Conclusions: Although in most cases the diagnosis of achalasia can easily be established preoperatively through the recommended imaging methods, on the cases when there is a coexistent infections or inflammations at esophageal level, both barium swallow and endoscopy can have false negative results that can lead to errors of therapeutic conduct which is why surgical exploration is indicated in order to obtain a certain diagnosis.

(ID 313) Hysteroscopy in the management of female infertility/subfertility

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Background: Hysteroscopy is considered the "gold standard" in the diagnosis of intrauterine lesions. The most common indication for this procedure is the abnormal uterine bleeding, but it is also widely used in cases of infertility. Uterine abnormalities, congenital or acquired, are incriminated in up to 34% to 62% of infertile women, giving that they compromise spontaneous fertility and also reduce pregnancy rates in assisted reproduction (25% of patients with repeated failed in vitro fertilization and embryo transfer cycles).

Objective: Our objective was to assess the involvement of uterine factors in the causality of female infertility or subfertility.

Methods: We conducted a retrospective study in which we included all patients with infertility (primary or secondary)/subfertility that underwent diagnostic hysteroscopy (after clinical examination, transvaginal ultrasound, and couple infertility laboratory workup) between 1st of January 2012 and 31st of December 2014 in the Obstetrics and Gynecology Department of "Nicolae Malaxa" Clinical Hospital. All patients found with uterine lesions that underwent surgical treatment to correct the defects were followed-up until 31st of December 2016 for pregnancy occurrence.

Results: 37.08% of patients had intrauterine lesions potentially involved in causing their infertility/subfertility. The lesions identified were: septate uterus, submucous fibroids, endometrial polyps and intrauterine adhesions. 48.39% of treated patients obtained a pregnancy before the end of the follow-up period.

Conclusions: Although hysteroscopy increases diagnostic accuracy and serves as an adjunct in treating intrauterine conditions, the true value of this procedure in the management of female infertility/subfertility remains under debate.

(ID 154) Mucinous cystadenoma of the pancreas in a 30-year-old woman, at eight month postpartum

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Objective. We present a rare pathology with uncommon onset.

Background. Mucinous cystic pancreatic neoplasms are rare tumors that occur almost exclusively in women in the fifth and sixth decades. Although some of those are frankly malignant, all are considered to be potentially malignant.

Method. A 30-year-old woman, at eight month postpartum, presented in the Surgery Department for pain in the upper abdomen, nausea and vomiting, associated with abdominal distension. All laboratory tests showed normal values, including tumor markers (CEA and CA 19.9). Both abdominal ultrasonography and computer tomography revealed a 16 cm-sized multilocular cystic lesion in the body of the pancreas, which was suggestive of a cystic mucinous neoplasm. No retroperitoneal lymph nodes were identified and no involvement of other surrounding anatomic structures. Surgery was performed with central pancreatectomy.

Results. The tumor size was 18,5/14/8,5 cm, presented a smooth, congestive surface, with no communication with the pancreatic ductal system. Cystic compartments, varying in size (1.5-6 cm), containing thick mucus, were found into the tumor. Histopathological examination evidenced a cystic mass with papillary mucinous cystadenoma appearance, composed of two distinct components: an inner columnar epithelial layer and outer densely cellular ovarian-type stromal layer. The post-surgery evolution was good, the patient was discharged 8 days after intervention. At 2 years, presents a good general condition, with no signs of tumor relapse or alteration of pancreatic function.

Conclusions. Preoperative imaging features may be suggestive of mucinous cystic neoplasm, but cannot specify the nature of the tumor. Postpartum onset can indicate a relationship between hormone levels during pregnancy and the development of this tumor, considering the ovarian-type stroma and the presence of estrogen and progesterone receptors in this neoplasm.

(ID 153) Pyogenic peripancreatic abscess with atypical presentation

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Objective. Rare disease with uncommon presentation.

Background. Pancreatic abscesses are rare and usually occur as a pancreatitis complication. The absence of acute pancreatitis and the clinical presentation that mimics a neoplasm are very unexpected.

Method. A 49-year-old man, known with arterial hypertension and virus hepatitis B chronic infection, presents to the surgery department for weight loss, marked asthenia, nausea/vomiting and jaundice, associated with moderate upper abdominal pain. At admission, without fever and no medical history of acute pancreatitis. Laboratory values showed an important inflammatory syndrome (WBC=23400 /ml, ESR=91 mm/h, CRP=9.4 mg/dl), mild anemia (Hb=11,5 g/dl), near normal pancreatic enzyme (Amylase=146 U/L, Lipase=398 U/L) and an increased tumor markers (CA19.9=98.7 u/mL). Abdominal computer tomography revealed a heterogeneous fluid collection with gas bubbles inside, localized into the lesser sac, that tends peri splenic extension, to the anterior and posterior pararenal areas and caudal to pelvis area. Surgery was performed and were discharged peripancreatic and left retro colic abscesses, associated with debridement and peritoneal drainage.

Results. A culture yielded *Streptococcus Anginosus* which was sensitive to the most antibiotics tested. At 7 days post intervention hemoperitoneum occurred, due to bleeding from the remaining cavity. Was needed a second intervention for hemostasis. Good subsequent developments, with discharge after eight days.

Conclusions. Pyogenic peripancreatic abscesses in patients with no history of pancreatitis can mimics infected pancreatic cystic neoplasms, by the presence of symptoms and increased tumor markers. The absence of acute pancreatitis does not exclude a mild acute pancreatitis with development of pseudocysts, which later became infected.

(ID 194) Multiple malignancies of the head and neck: report on four cases

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Introduction: Patients who present a head and neck cancer are always at risk of developing a second neoplasm, due to the exposure to the carcinogens factors, genetic instability, oncological treatments, immune deficiency and prolonged survival after some primary tumours. The incidence of second primary malignancies is increasing, especially in the patients suffering from cancer of the larynx, squamous cell variant.

Materials and methods: We present four cases of patients with two primary malignancies. First, patient A was diagnosed with left preauricular basal cell carcinoma, 2 years after total laryngectomy and bilateral lymph node dissection. Patient B was diagnosed with nasopharyngeal cancer 5 months after being treated for clear cell renal carcinoma. Patient C was treated in our clinic for tonsillar cancer and during the follow up he was diagnosed with laryngeal cancer, and patient D was diagnosed with squamous cell cancer of the nose and paranasal sinuses, underwent surgery and oncological treatments and 2 years later he was diagnosed and treated for laryngeal cancer.

Results: The carcinogens factors are common for most head and neck cancers, smoking and alcohol consumption being very frequently involved. All the patients received surgical treatment for their first malignancy along with oncological treatments. The prognosis of patients with multiple cancers is poor.

Conclusions: As the incidence of multiple malignancies of the head and neck is increasing, it is very important to monitor and investigate regularly patients that have survived a head and neck cancer. The curiosity of these cases was that both cancers appeared in a short period of time.

(ID 385) Giant ovarian tumor. A case study presentation

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Introduction: Ovarian cancer is the second most common gynecological cancer and the fifth leading cause of cancer death in women in the world. Huge ovarian masses are mostly benign, but malignancy should be ruled out by investigations and clinical assessment.

Objectives: The presentation of a case of 44-year-old female who came to the Coltea Hospital for rapidly increasing severe distension of abdomen and pain in abdomen since 2 months. The fast growing and the lack of diagnosis postponed the curative treatment.

Methods: All of her past medical history has been studied from 2015 to 2017.

Results: Laboratory tests were not specific, except for raised inflammatory markers. Tumor markers such as CA 125, CEA had normal values.

Ultrasound examination was suggestive of a cystic mass of a 30 cm cystic size lesion, arising from left annex. It was extending from supraombilical region to the pelvis. Normal liver, hypotonic cholecyst, without calculi, pancreas and spline within normal limits. Right and left kidney with normal aspect.

Surgical intervention: Tumoral formation measuring 30 cm was detected upon surgical opening of the peritoneal cavity. The collection was punctioned and 4 L of mucinous liquid were aspired from the containing tumor. A left oophorectomy was performed. Following the extemporaneous exam, which showed a borderline tumor, right oophorectomy was also decided. Lavage and drainage of the peritoneal cavity was performed through a drainage CH18 tube inserted in the Douglas pouch, followed by anatomical parietoraphy.

Conclusion: In the modern era of medicine, such huge mucinous ovarian tumors have become rare in the current medical practice, as most of the cases are diagnosed early during routine gynecological examinations or incidental finding on the ultrasound examination of the pelvis and abdomen. The introduction of screening programs is essential in raising general awareness about the importance of early diagnosis, which would allow for a better surgical management with improved prognostic and prolonged life expectancy.

(ID 358) Solid spleen tumor – NHL with aggressive pattern

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Introduction: Non-Hodgkin lymphoma (NHL) is a cancer that develops in the lymphatic tissue - located in various parts of the body. The incidence is around 7% per year. The disease occurs mainly in adults, the most common in people aged between 45 and 60 years. NHL is divided into two categories:

- Aggressive non-Hodgkin's lymphoma (intermediate grade / high), characterized by rapid dividing of the neoplastic cells in the lymph nodes, requiring immediate treatment.
- Passive non-Hodgkin's lymphoma is characterized by slower multiplication and spread of cancer cells in the body in time.

In this case it is a large spleen tumor, whose etiology could not be determined only after surgery, followed by Ex Histopathologic, with difficult recovery, with an important leucemoid reaction and numerous cardiorespiratory complications that, ultimately, leading to exitus.

Materials and methods: Patient aged 64 years with diabetes and hypertension, is transferred to the department of surgery for the left upper quadrant pain, asthenia and weight loss. The patient was investigated in another service, where CT indicate tumoral splenomegaly, hepatomegaly, thoracic - mediastinal and abdominal lymph nodes. Bone biopsy was performed not in conclusive results, so it is proposed to splenectomy. Clinical: pale skin and mucous membrane, stomach, sensitive to touch in the left upper quadrant, palpable spleen about 10 cm below the costal margin.

Results: surgical intervention- splenectomy but with residual tumor tissue in the pancreas tail where the tumor can not be mobilized. Postoperative evolution difficult, massive leucemoid reaction, with significant cardiopulmonary complications (pulmonary edema and heart failure), which finally lead to pacient decease.

Conclusions: With a few exceptions main lymphoma treatment is chemotherapy, but most often surgery is required for diagnosis of certainty, in which case aggressive forms can cause major complications, including loss of patient.

(ID 346) A rare case of peroneum head metastasis: multidisciplinary approach of oncological patients

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Objectives: Multidisciplinary case conferencing is becoming an integral part of care, as we should learn from each patient that the human body is a whole entity with every part connected and there is no disease but patients. Our main objective is to underscore the importance of a multidisciplinary team approach to the diagnosis, treatment, and supportive care of patients. Treating cancer patient can be very challenging, be it infection, malignancy or autoimmune disease.

Methods: We present the case of a 65 yo male patient who was admitted to the Orthopedic Clinic for pain, partially harmed function and the appearance of a swelling on the anterior and external part of the right calf. These symptoms started 2 months before presentation, but increased recently. The first investigations indicate a primary bone cancer. After surgery the histopathological result reveals an aspect of adenocarcinoma metastasis. The patient is not mentioning any signs or symptoms characteristic for the digestive tract cancer nor abnormalities in the clinical examination. The CT exam and colonoscopy revealed a tumor of the sigmoid colon, proven by biopsy. Therefore, ablation of the colon tumor was performed.

Results and conclusions: Peroneum head is a rare and nonspecific site for bone metastasis. As malignant tumors itself can be a very misleading diagnostic, taking into account metastasis and performing precise assessment of the pathology can rule out even the slightest chance of other diagnosis. Eventually, in our case thorough investigation revealed the right diagnostic and led to the correct treatment of the patient.

(ID 260) General surgeons' attitudes to the treatment, prevention and diagnosis of postoperative abdominal adhesion syndrome

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Introduction. Postoperative peritoneal adhesion syndrome represents an old medical problem that still represents a concern in the healthcare system.

Material and method. A questionnaire survey of general surgeons from the Surgical Departamanet of the „Sf. Pantelimon" Hospital, Bucharest, was undertaken between 1st of January-31st of May 2016, to estimate the incidence of abdominal adhesions and to establish current attitudes to the treatment of adhesional bowel complications and the prevention of adhesion formation.

Results and disscusion. Replies were received from 25 of 27 surgeons, with a response rate of 92.59%. In all, the responders operated upon at least two patients each year with adhesional small bowel obstruction, only a few having operated upon more than five patients. This result demonstrated a high incidence of adhesion-related clinical problems, the frecquency being higher taking into account the number of cases in which the surgeons found adhesions to be a problem during a non-adhesionrelated laparotomy or laparoscopy. A number of preventive measures are generally accepted, the role being controversial

Conclusions. This survey highlights the large socioeconomic burden caused by postoperative abdominal adhesions, and demonstrates surgeons' wide variety of approaches to both the treatment and prevention of adhesion formation.

(ID 263) Therapeutical itinerary in the management of the postoperative peritoneal adhesions - review of the barrier agents used in prevention

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Introduction: Surgical techniques such as laparoscopic surgery and microsurgery reduce the risk of adhesion formation, but do not eliminate it entirely. Once adhesions are surgically removed, they often reform. Various agents are available to reduce these consequences of surgery.

Material and method: Few prospective studies have assessed the direct clinical consequences of adhesions (subfertility, pain, intestinal obstruction, or complications during future surgical procedures) and the majority of studies have used the secondary outcome of the adhesion score at Second Look Laparoscopy (SLL). The present study made reference, especially, to two Cochrane reviews of adhesion prevention agents used in abdominal and pelvic surgery, almost all other meta–analyses derivng from these reviews.

Results and disscusion: This document reviews the effectivenes of adhesion prevention barrier agents, that work on the principle of separating injured peritoneal surfaces during the healing phase.

Conclusions: Hydroflotation agents, gels and solid-barriers have proven to be useful in the adhesion prevention, also being cost-effective. Further studies should also use clinical outcomes such as further surgery for adhesion related complications, before including these preventive methods in daily practice.

(ID 274) Peritoneal adhesion syndrome - complications and patients' tolerance to conservative treatment

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Introduction: The aim of the present study is to evaluate how long patients with complicated postoperative peritoneal adhesions can tolerate conservative treatment.

Material and method: This retrospective, single-center, study analyzed the data of the patients with postoperative peritoneal adhesion syndrome admitted in the Surgical Department of Emergency Hospital Sf. Pantelimon from Bucharest between January 2015 and March 2017, regarding the number of admissions, type of management for each admission, duration of conservative treatment, number of repeat laparotomies, and operative findings.

Results: Medical treatment alone was given in most of the admissions, and repeat laparotomy was performed in approximately one third of the study population. The period of observation in patients managed medically ranged from 2 to 14 days (average: 7 days), while for those who underwent surgery, the range was 4 to 21 days (average 8.4 days). At surgery, adhesions were the only finding in half of the cases, while intestinal complications where present in 30% of the patients.

Conclusion: With closely monitoring, most patients with complications secondary to postoperative adhesions could tolerate supportive treatment and recover well averagely within 1 week, although some patients require more than 10 days of observation.

(ID 269) High concentration therapeutic barium enema for hemorrhagic colonic diverticulosis - long and short term results

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Introduction. The prevalence of diverticular diseases of the colon, including severe and persistent bleeding, has increased in the last decades. The most common cause of acute lower gastrointestinal bleeding is represented by bleeding colonic diverticulosis.

Material and Method. The present study reports 10 cases of severe and persistent bleeding of colonic diverticular disease, admitted in the Surgical Department of the "Sfântul Pantelimon" Emergency Hospital from Bucharest between January 2016 and February 2017, that could be treated with a high concentration barium enema.

Results. For these cases, that showed a similar pattern of bleeding, colonoscopy revealed fresh blood in the entire colon and many diverticula present throughout the colon. No active bleeding source was identified, but large adherent clots in some diverticula were noted. After endoscopic or medical therapies failed, therapeutic barium enema stopped the severe bleeding. There were no patients with re-bleeding episodes in the follow-up period (range 3-12 mo) after the therapy.

Disscusion and conclusion. We report this case series of therapeutic barium enema and review the literature regarding this procedure.

(ID 137) Rare mesenteric tumor - cystic lymphangioma

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Objective. Lymphangioma is a benign tumor of lymphatic vessels that begins in childhood and is located in order of frequency in the neck, mesentery, upper and lower limb, intraosseous etc. Mesenteric cystic lymphangioma is a form developed in the mesentery, extended to the abdominal cavity that develops with nonspecific symptoms during its evolution. The diagnosis is established by computer tomography and the curative treatment is the surgical one and consists of wide excision of the cyst, sometimes requiring a segmental small bowel resection.

Methods. We present a case of a 44 years old patient, with a history of apendectomy, being investigated several times in other hospitals for a painful abdominal syndrome, flatulence and episodes of diarrhea. On clinical examination in the right iliac fossa and flank palpation detected a tumor of about 10/7 cm, with firm-elastic consistency, painless on palpation, relatively well defined, with was confirmed by the CT scanning as a mesenteric tumor. Intraoperative, the cystic tumor was detected, about 10 cm in diameter, located in the mesentery. The tumor has been punctured, the result of biochemical analysis highlighting the lymphatic origin.

Results. Surgery was performed: a segmental resection of the small bowel with entero-enteroanastomosys, good postoperative outcome, the histopathological result confirmed the presence of a mesenteric cystic lymphangioma.

Conclusion. Mesenteric lymphangioma is a rare cystic tumor, most often diagnosed late because of nonspecific symptoms, but with good results following surgery.

(ID 227) Gestational weight gain and fetal development

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Background: According to multiple studies, fetal environment, maternal characteristics and lifestyle play a role in the origin of several chronic diseases manifesting later in life. It is widely suspected that fetal growth may be mediated by nutritional availability during critical periods of gestation, being controlled by complex mechanisms of "fetal programming". Gestational weight gain is thought to influence pregnancy outcomes and fetal development, although the actual mechanisms are not fully understood.

Objectives: The aim of this study was to investigate the relationship between gestational weight gain through pregnancy, maternal serum adipokines and fetal weight.

Methods: We enrolled in our study 102 pregnant women who were followed throughout their pregnancy, recording data about pre-pregnancy weight, gestational weight gain at the end of each trimester, total gestational weight gain, fetal biometry, fetal weight and maternal serum levels of adiponectin and visfatin. All patient data was collected from patient files in the Bucharest University Emergency Hospital.

Results: More than a half of the pregnant women enrolled in our study were classified as having an "excessive weight gain" above recommendation limit. Obese women had a lower weight gain following the first trimester. These women exhibited lower levels of adiponectin and gave birth to larger babies. Fetal weight inversely correlated with maternal serum adiponectin. Visfatin levels showed inconstant results, but the highest levels were found in mothers who gave birth to large for gestational age neonates.

Conclusion: Gestational weight gain is an important factor implied in fetal development, being known to influence fetal and pregnancy outcomes. Fetal weight is influenced by maternal adiposity, which may be investigated by evaluating the interplay of certain adipokines throughout pregnancy.

(ID 33) Uncommon hemorrhagic complication of vaginal delivery

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Labor and implicitly delivery include a broad spectrum of possible complications, hemorrhagic ones representing the major causes of maternal death. The dominant cause of primary postpartum hemorrhage is uterine atony, being followed by cervical, vaginal and perineal lacerations, retained placental tissues, abnormal placentation and coagulopathy. Clinical presentation includes a variety of unspecific symptoms: from abdominal pain to signs of a significant loss of blood, tachycardia, palpitations, paleness and a generally altered status. We report from our experience a rare case of puerperal hematoma following vaginal delivery, managed with perineal reintervention and secondary exploratory laparotomy, where conservative method was applied successfully. Intraoperative a retrorectal and retroperitoneal hematoma was noted, with the extension in the rectal and sigmoid colon serosa. Regarding the status of the rectum and sigmoid colon, there was a general aspect of necrosis, but an expectant attitude was decided due to tissue response to lidocaine infiltration test. Regarding the management, endovascular treatment is preferential when the source of the bleeding is arterial and obvious, but it was not our case. The indications for laparotomy are: hemodynamic instability, compression signs and presence of contrast leakage on noninvasive imaging methods. Retroperitoneal and retrorectal hematomas are uncommon following vaginal delivery; more uncommon complication of labor is the extinction of the hematoma trough the intestinal wall.

(ID 258) Risks in parathyroid surgery

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Objectives: The surgery of the parathyroid glands is complicated by several nerve and vascular structures: the recurrent laryngeal nerves, the superior laryngeal nerves and the thyroid vascular pedicles. Our aim was to analyze the impact of parathyroidectomy on these structures.

Methods: We followed 250 patients with secondary hyperparathiroidism (SHP). All were operated in our clinic between October 2011-June 2015. In 229 (91.6%) cases was performed total parathyroidectomy, in 14 (5.6%) subtotal parathyroidectomy and in 7 (2.8%) cases surgery was deemed incomplete (less than 4 parathyroid glands highlighted during surgery).

Results: Complications found to be asociated with this type of surgery were: damage to the recurrent laryngeal nerve with resultant weakness or paralysis of the vocal cord or cords, bleeding or hematoma, recurrence of the disease with the need for further and more aggressive surgery, myocardial infarction and stroke. The overall mortality was 0.8% and the specific postoperative morbidity was 2.8%.

Conclusions: Parathyroidectomy is encumbered by a small number of postoperative complications. Bilateral recurrent laryngeal nerve injury could require emergency tracheostomy. The risk is higher in those who underwent surgery in the cervical region or in case of reoperation for recurrent SHP. Unilateral nerve lesions lead to dysphonia, often transient. Bleeding complications, even if not quantitatively significant, may require emergency surgery because of the risk of asphyxia by the cervical lodge compressive hematoma. During parathyroidectomy is preferably first to identify the recurrent laryngeal nerves. In the event of an intraoperative bleeding, the damaged vessel should not be clamped unless there is certainty of its identification and the identification of the recurrent laryngeal nerve. The use of electrocautery near the nerve structures should be avoided. It is preferably to drain the thyroid lodge at the end of the intervention. Bleeding from superficial cervical veins may also require reoperation.

(ID 237) New surgical procedure for the treatment of atopic keratoconjunctivitis with corneal ulcer

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Purpose: To report the case of a 14-year-old male patient, with bilateral atopic keratoconjunctivitis with corneal ulcer.

Methods: The patient complained of bilateral red, itchy eyes, decreased vision, photophobia, difficulty opening the eyelids upon awakening, palpebral edema, excessive tearing, along with yellowish mucous discharge. He had a two-year history of chronic blepharitis and recurrent episodes of conjunctivitis that were treated with Tobramycin and corticosteroid eye drops over the years. The patient's past medical history was significant for atopic dermatitis (AD) and he had a family history for atopy. At the eye exam: his best-corrected visual acuity at the initial presentation was 0.2 in the right eye and 1.0 in the left eye. The following elements were found upon the slit lamp biomicroscopy: Eyelids - +4 palpebral edema (pseudoptosis), Dennie-Morgan fold and Herthoge's sign were both present, tylosis; Conjunctiva - hyperaemia, cobblestone appearance of the tarsal papillae in both eyes, +2 chemosis; Cornea - corneal edema with a 8 mm × 4 mm epithelial defect in the inferior part of the cornea, covered partially by the lied, that stained positive with fluorescein dyes. Using the Evaluation Signs Severity for Allergic Ocular Diseases, a diagnosis of bilateral atopic keratoconjunctivitis with a grade 3 status for the right eye and a grade 2 status, was made. It was decided that he should be administered Olopatadine hydrochloride and Sodium cromoglicate eye drops, along with Moxifloxacin and steroid eye drops. The microbiological exam tested positive for staphylococcus aureus, and, based on the sensitivity pattern, Chloramphenicol eye drops had to be added to the treatment. After 2 weeks, his symptoms diminished, pain was significantly relieved and inflammation was markedly reduced, but the corneal ulcer persisted. In order to prevent corneal perforations, amniotic membrane transplantation (AMT) was used to promote epithelialization.

Results: A month later, the epithelial defect healed smoothly in an underlying vascular stromal scar and the visual acuity improved to 0.4 RE.

Conclusions: This case demonstrated the role of patient history and close clinical observation in the diagnosis of AKC. As this case showed, the use of topic medication along with amniotic membrane transplantation (AMT) was successful in the treatment of atopic keratoconjunctivitis and secondary staphylococcal aureus keratitis.

(ID 241) Clear lens extraction as treatment for uncontrolled primary angle-closure glaucoma

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Purpose: Glaucoma is the second leading cause of blindness globally, and angle closure accounts for close to half of the blindness caused by this disease. This study aim is to report a case of Clear lens extraction as a treatment for uncontrolled angle closure glaucoma.

Methods: A 40 years old patient, with two episodes acute closed angle glaucoma history and previous treated with dorzolamide-timolol and pilocarpine eye drops along with Nd: YAG Laser Iridotomy presented to our clinic complaining of severe eye pain, blurred vision, and photophobia. Her clinical examination reveled decreased vision with intraocular pressure of 44 mmHg in the right eye, shallow anterior chambers, clear lens, angle crowding- thick peripheral iris roll and peripheral iridotomy. Retinal examination showed a cup-to-disc ratio of 0.6 and 0.7 for right and left eyes and inferior neuroretinal rim loss. The grading of angle with the Shaffer System was 1 in both eyes, Schwalbe line and the top of the trabeculum 1800 for RE, 2700 for LE can be identified along with the forward bowing of the iris. Changes were found in the visual field in superior hemifield for RE, nasal step and arcuate scotoma, MD 5.75 db PSD 4.34 and inferior arcuate scotoma for LE MD – 4.51 db PSD – 2.84.The Anterior Chamber Depth was 2.2 mm RE, 2.4 mm LE and 470 μ, RE, 490 μm LE Corneal thickness. The patient was diagnosed with Posner-Schlossman syndrome. Systemic Methylprednisolone and acetazolamide with dorzolamide-timolol and pilocarpine eye drops were administered. The IOP remained elevated under treatment, so Clear Lens Extraction was decided to be performed.

Results: 14 days postop, Patient visual acuity improved, anterior chamber depth was 4mm with 14mmHg intraocular pressure. The next follow up, after 1 year, no progression of the visual field defects was observed without medication.

Conclusion: In conclusion, this study proved that Clear lens extraction is a safe and effective procedure, lowering IOP and preventing its long-term increase. This success is achieved by improving anterior chamber morphology and visual acuity, without optic nerve damage progression.

(ID 384) Sloan-Orringer abdomino-cervical esophagectomy for locally advanced squamous cell carcinoma

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Introduction: In the last 30 years, transhiatal esophagectomy has become an accepted surgery that substantially decreased the mortality and morbidity associated with traditional surgery – transthoracic esophageal resection.

Case presentation: A hypertensive 58 year old female patient was diagnosed in May 2016 with invasive esophageal squamous cell carcinoma, locally advanced, stage T2N1M0, with PEG tube placement. She underwent chemoradiotherapy: external beam radiotherapy, IMRT 46.8 Gy/26 fractions, along with weekly chemotherapy (4 doses).

Laboratory results were in the normal range except for a 9.1 g/dl hemoglobin, with normal EKG and spirometry. The barium swallow test showed a narrowing of the lower esophagus, with marked infiltration of the parietal wall, while the esophageal time was clearly slower. CT scan revealed a circumferential segmental narrowing of the lower esophagus, with extension to the gastroesophageal junction. Upper gastrointestinal endoscopy revealed two small tumors of 8/3 mm located 30 cm from dental arch, and a sessile protrusive growth of 12/3 mm situated 40 cm from the dental arch. Between the two limits, the mucosa had the appearance of an endured scar.

The surgical treatment consisted of a left transhiatal esophagectomy with gastric pull-up, termino-lateral, monolayer, esogastric anastomosis with separate surgical threads, D2 lymph node dissection, jejunostomy tube placement after the removal of the gastrostomy tube. The postoperatory evolution was without any notable complications, with the patient feeding through the jejunostomy tube. A radiological follow-up of the cervical anastomosis was performed on the 10th day after the surgery.

Discussions: Although controversy exists about the use of induction chemotherapy and concurrent radiation in patients undergoing an esophagectomy for carcinoma, the current enthusiasm for this approach is increasingly supported by reports of downstaging large tumors and making them more resectable, and improved survival, particularly in patients who are complete responders to this treatment.

(ID 299) Surgical spinal stabilization in a thoracic fracture-dislocation

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Case History: 26 y.o. woman suffered a polytrauma by accidental falling from the 3rd floor (15m) in June 2013.

Clinical Findings: The patient had hemorrhagic shock, severe thoracic trauma with multiple fractured ribs, bilateral hemothorax, abdominal trauma with hepatic contusion together with splenic dilaceration, vertebral trauma with T6-T7 fracture-luxation without neurological findings and right collarbone and scapula fractures.

Investigations/Results: The radiography and CT scan during the spinalization confirm the diagnosis.

Diagnosis: Severe polytrauma with multiple fracture lesions. Vertebral trauma with T6-T7 fracture-luxation without neurological findings. Bilateral Hemothorax. Abdominal severe contusions and internal bleeding.

Therapy and progression: The hemothorax was drained. -> Splenectomy was performed. -> The spine surgery:

Spinal decompression. Spinal reduction. Fixation. Fusion using titanium instrumentation: transpedicular screws, rods and cages.

The postoperative evolution was favorable, the patient being discharged 10 days after surgery.

After 1 year the patient had no complaints and the vertebral fusion was complete.

Comments: Severe spinal lesions with fracture-luxations are frequently found in polytrauma patients. Neurological symptoms (paraplegia) are frequent and the lack of these symptoms is very rare.

The treatment is by election surgical and consists in the decompression, reduction, fixation and fusion of the spine.

(ID 300) Vertebral osteosynthesis in TBC thoracic osteomyelitis

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Introduction: A 59 y.o. patient was admitted in May 2014 to the 4th Neurosurgical department of Bagdasar-Arseni Emergency Hospital in Bucharest with thoracic back pain and T7-T8 right intercostal nevralgy with progressive evolution of 2 months.

Pathological history: chronic pyelonephritis, arterial hypertension, ischemic cardiopaty and NYHA II heart failure.

The patient had no biological inflammatory syndrome, no fever and no traumatic history.

MRI exam: T7-T8 osteomyelitis with a spinal abscess

The absence of an etiologic diagnosis of the infectious source and the persistence of the clinical symptoms lead to surgical treatment.

Objectives: Evacuation of the infectious source, decompression of the spinal canal, establishing a histopathological and bacteriological diagnosis and the stabilization of the spine.

Method: The surgery was performed under general anesthesia and required an approach using T8 right costotransversectomy with a large decompression of the spinal canal and the right T7-T8 neuroforamen, together with vertebral osteosynthesis using bilateral titanium transpedicular screws and rods T6-T7-T8-T9.

Results: The postsurgical evolution was favorable with a fast improvement of the symptomatology and a mobilization of the patient 2 days after surgery.

Histopathological exam: TBC Giganto-Folicular Granulomatous Chronic Osteomyelitis.

The patient received a long term tuberculostatic treatment for one year.

The one year follow-up revealed: the healing of the infectious source, a T7-T8 vertebral block, no spinal instability and no neurological signs.

Conclusions: Vertebral osteosynthesis using titanium transpedicular screws and rods offers the possibility of a fast stabilization of the vertebral column, the preservation of the sagittal balance and rapid mobilization with a fast recovery. Targeted postsurgical antibiotherapy is mandatory for the annihilation of the infectious source and the prevention of recurrences.

(ID 356) Alar defect reconstruction with nasolabial flap – case report

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Objectives: Nasal reconstruction has been one of the most challenging procedures in reconstructive plastic surgery. Small nasal defects may be closed by primary suture or covered by small local flaps or skin graft. But in large nasal defects, involving different types of tissue, we need to find a larger and more complex source of colour and texture matching tissue that will ensure functional and aesthetical outcomes.

Methods and material: We chose a case report of one patient admitted in our clinic in march 2017, who represented a daring task for us. Best suited for a nasolabial flap reconstruction, the patient underwent a one step procedure wich led to a very satisfying nose re-Construction for both the patient and the surgeons.

Conclusion: In order to achieve a good coverage with the smallest donor site defect, we used a nasolabial flap with a superior pedicle, wich gave us the possibility to rotate the flap without distorting the blood supply of the flap, in combination with reversed local cutaneous flaps to rebuild the vestibular surface of the alla.

(ID 188) Surgical treatment in breast cancer - a case study presentation of a pacient undergoing modified madden type mastectomy

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Background: Breast cancer remains the second leading cause of cancer death worldwide , in spite of national screening programs and improvements in molecular research.

This paper aims at illustrating the case of a 35-year old patient who presented with a tumoral formation in the right breast, pain and tegumentary retraction – sympthoms that appeared 8 months ago and developed progressively.

Methods: A retrospective analysis was conducted based on the patient's clinical and paraclinical reports (including medical imaging reports and laboratory data) up to the moment of presentation in the Surgery Department of the Coltea Clinical Hospital, in order to establish her medical evolution.

Results: Billateral mammogram revealed the presence of a dense irregular opacity situated in the anterior third of the superior exterior quadran of the right breast, raising suspicion of a neoplastic process, BI-RADS classification 4, and corresponded to the nodular formation previously described at the ultrasound examination. CT exam reports also confirmed the presence of a 30/34 mm tumoral formation with areas of necrosis.

Core biopsy and immunohistochemistry results established the diagnostic of invasive ductal carcinoma, NST, G2, positive for ER 85%, PR 45%, positive circumferential incomplete membranal CerbB2, with moderately intense reaction >10% (2+) ASCO/CAP2013 criteria and Ki57 45% in tumoral cells, with p83 positive in the myoepithelial cells around preserved mammary ducts.

The patient underwent 5 chemotherapy sessions.

Surgical intervention: A radical modified Madden, surgical approach was decided by the surgical team., with complete excision of the mammary gland, the pectoralis major muscle and satellite lymph nodes.

Post-operative medical care showed positive evolution with no complications.

Conclusion: Radical surgical management of invasive ductal carcinoma of the breast overrides the conservative approach, when considering tumor size and risk of lymph node involvement. Lymphatic metastasis have been linked to immunohistochemical markers for molecular aggression, such as Ki57. Early screening for these factors could lead to a faster diagnosis and initiation of treatment, preventing tumor dissemination and improving the prognostic and life quality of patients.

(ID 212) Synchronous intrauterine and ectopic pregnancy- series of case reports in Filantropia Hospital in 2016

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Introduction: Heterotopic pregnancy, meaning intrauterine and ectopic pregnancy, is a rare but life-threatening condition. The risk of heterotopic pregnancy is increasing due to assisted reproductive techniques, with an incidence of 1/ 4000 pregnancies, being extremely rare in spontaneous pregnancies with an incidence of 1/30.000 pregnancies.

Objectives: The aim of this paper is to report two cases of heterotopic pregnancies in Filantropia Hospital during 2016.

Methods and results: We studied the cases of 2 patients presenting at the hospital for pregnancy follow up and diagnosed at admission both intrauterine and ectopic pregnancies in each case. The patients were both aged between 30-35 years. First patient obtained the pregnancy spontaneously, the other after medical induction of ovulation. Both patients have been treated successfully laparoscopically, both having the histological confirmation of the diagnosis after surgery. First patient decided on voluntarily termination of the intrauterine pregnancy, the second patient choose to continue the intrauterine pregnancy and delivered a healthy term baby.

Conclusion: Both cases were successfully treated laparoscopically in our service with short hospitalization time after surgery.

(ID 191) Operative vaginal delivery – Filantropia experience

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Introduction: Operative vaginal deliveries represent an important part of obstetric practice. Vacuum and forceps assisted vaginal births account for 3.21% in 2014 in U.S.A. (0.57% forceps and 2.64% vacuum).

Materials and Methods: We studied the total number of births and the number of operative vaginal births which took place in Filantropia Hospital, during 2010-2015.

Results: We had a total number of 20.543 birth in 6 years, with 3.12% (642) operative vaginal births. The incidence of instrumental vaginal births was 3.35% in 2010, 2.79% in 2011, 2.44% in 2012, 3.5% in 2013, 4.55% in 2014 and 2.17% in 2015. Forceps deliveries accounted for 2.78% of all births and vacuum deliveries accounted for 0.34% of all births. The most frequent indications for the use of vacuum or forceps were: immediate or potential fetal compromise, prolonged second stage of labor and maternal exhaustion.

Conclusions: Operative vaginal births have a long history, but still have an important place in modern practice. The percent of operative vaginal deliveries in our hospital is consistent with the percent from international literature, with the predominance of forceps use.

(ID 276) The role of exome sequencing in the diagnosis of recessive genetic syndromes transmitted during early childhood

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Objectives. To highlight the importance of exome sequencing in the postnatal diagnosis of recessive genetic syndromes with major phenotype impact.

Method. We analyzed the cases of two pregnant women monitored during pregnancy, who gave birth at term to normal weight newborns with good cardiorespiratory adaptation and subsequent favorable evolution. The first male child suffered at the age of eight months a serious deterioration of health consecutive to a common respiratory viral infection. This generated multi-organ failure (acute hepatic failure and severe cardiomyopathy) and death within 10 days of the disease onset. The second case, a male child aged three months, presented an occipital lymphadenopathy for which there were carried out analyzes, revealing persistant hepatocytolisis. Infectious diseases consult found very high values of creatine kinase, raising suspicion of progressive muscular dystrophy, supported by neurological examination.

Results. In the first case, complete exome sequencing from a sample of umbilical cord blood collected at birth revealed two heterozygous mutations in coding 14 and 15 exons of the α subunit of mitochondrial trifunctional protein, which has a role in beta-oxidation of fatty acids. This rare deficiency prevents the conversion of fatty acids into energy, especially during fasting periods. Further analysis of parents confirmed the quality of mutation carriers, the mother for exon 14 and the father for exon 15. The couple continued their reproductive plan, with two more pregnancies in which were targeted sequenced the two exons with mutations in chorionic villi samples at 11-12 weeks of gestation, which were absent. In the second case, the clinical suspicion of Duchene muscular dystrophy was confirmed by exome sequencing with the identification of hemiziogote deletion of exon 45 of the dystrophin gene. Following this discovery the mother was tested, who carried the same mutation. It was recommended the testing of female relatives at risk and future male fetuses by CVS or amniocentesis.

Conclusions. Recessive genetic syndromes with phenotypic expression during early childhood are difficult to recognize, exome sequencing as a diagnostic tool being useful in the etiological diagnosis. Moreover, identifying the genetic mutation is important for future pregnancies, which can identify gene abnormalities antepartum.

(ID 271) Case report of necrotizing fasciitis

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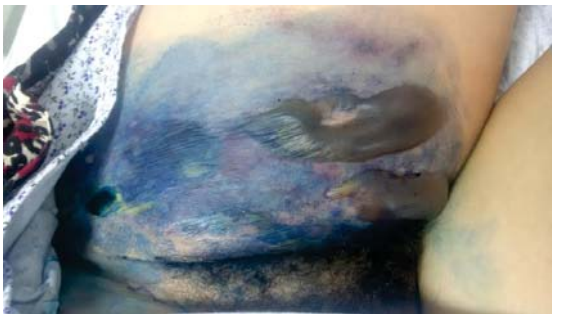
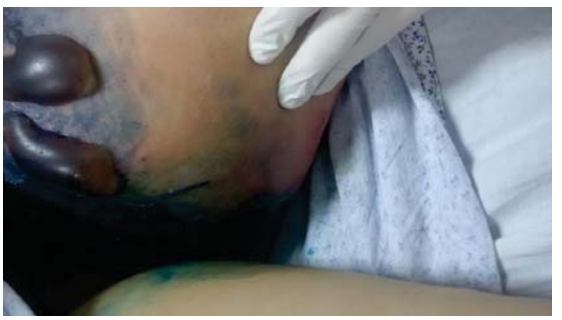
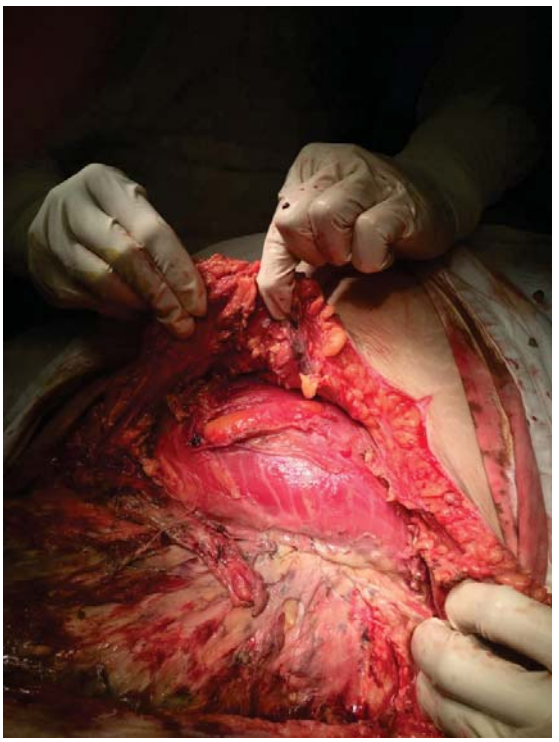
Necrotizing fasciitis is a severe soft tissue life threating infection associated to persons with diabetes mellitus. It has high mortality rate and it needs emergency surgery and intensive supportive treatement.

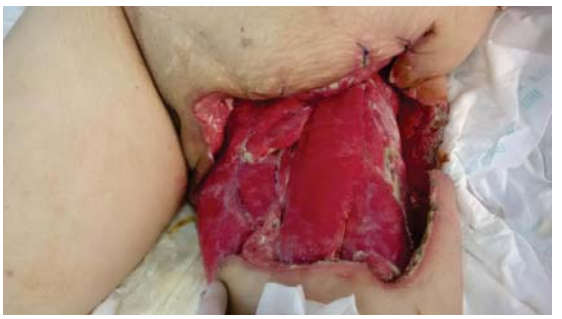
We report a case of a 43 year old female, with diabetes mellitus transferred from a service of Dermatology, where she was hospitalized seven days prior to the transfer for fever and chills. General state at admission is mediocre,local at left anterior-medial left inflammatory swelling with necrotic skin, blistering at this level with fetid pus, swelling of the thigh and functional partial impotence of the limb. During hospitalization underwent 12 surgical interventions in 44 days. The patient has received antibiotic therapy according pathogen susceptibility, repeated supportive treatment, or daily dressing in the operating room or at bed, dressing negative pressure,initial allowed to stabilize the wound with the appearance of granulations. 32 days after admission, an occurrence rocket and progressive degradation of the general state and finally to death.

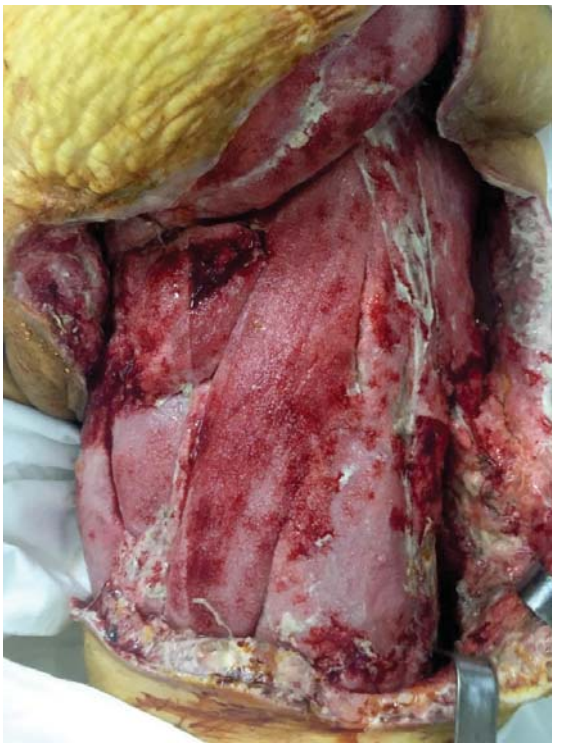
Necrotizin fasciitis is a fatal condition when is not recognized or with late intervention.

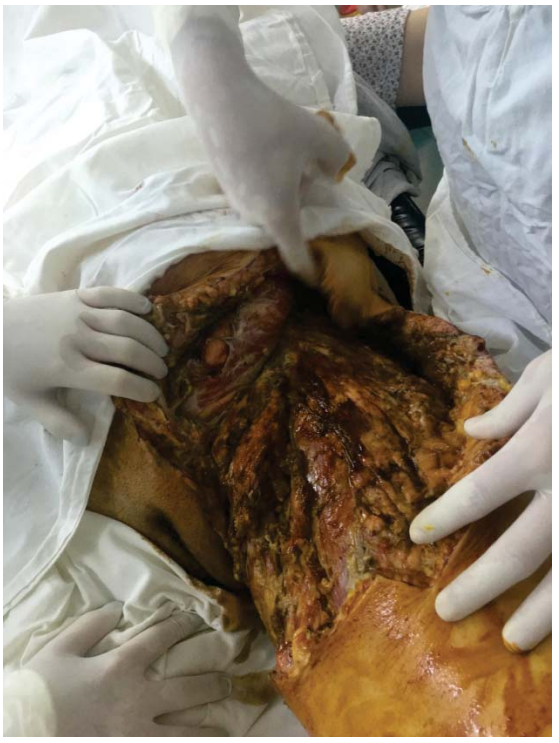












(ID 169) Discovering of the antiphospholipid syndrome in a young patient with leg ulcerations

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Objective: Antiphospholipid syndrome is an acquired autoimmune disorder characterized by a large production of antiphospholipid antibodies and thrombotic phenomena.

Leg ulcerations are a common skin complication of the antiphospholipid syndrome being observed in 20% of the patients, usually after years of diagnostic.

The purpose of this paper is to present the diagnostic of an antiphospholipid syndrome in a young male patient with non-healing leg ulcers.

Material and method: We describe the case of a 19-year old male patient admitted in our Plastic Surgery Department with two painful ulcers of 3 cm diameter with irregular borders, surrounded by a purple-brownish halo, situated in the distal third of the calf. The patient mentioned that 3 months before had a transitory ischemic stroke with temporary aphasia.

Usual blood tests were realized and showed a severe thrombocitemia with 88.000 platelets and no splenomegalia in an abdominal echography. After additional cardiac and neurologic evaluation we decided to transfer the patient in the hematology department where multiple tests were realized.

Results: Considering the positive tests of anticardiolipin antibodies and lupus anticoagulant associated with an episode of thrombosis, a definitive diagnosis of antiphospholipid syndrome was realised and an anticoagulant treatment associated with hydroxychloroquine was started. Leg ulcerations had a favorable evolution and epithelized after 1 month.

Conclusions: Non-healing leg ulcers in a young patient with no arterial or venous insufficiency could be a manifestation of an underlying autoimmune disease. Transitory ischemic stroke in a young patient with no other pathologies should also encourage doctors to search for the main cause of thrombosis.

The treatment in Antiphospholipid syndrome is still controversial, immunosuppressant or high doses of corticosteroids have not proved to be sufficient. However, patients with this syndrome are more susceptible to recurrent thrombotic events therefore long term warfarin treatment is recommended.

(ID 171) A rare case of a clitoral carcinoma

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Objective: Vulvar cancer is a rare gynecological malignancy, with an incidence of 2 per 100 000 women/year , affecting women over 60 years. The most common vulvar cancer is squamous cell carcinoma, usually involving the inner edges of labia majora or labia minora; however, rarely, it may also appear on the clitoris or in Bartholin glands.

The aim of this paper is to present the therapeutic management of a squamous cell carcinoma of the vulvar region.

Method: We report a case of a 80-year-old female presented to the Department of Plastic Surgery of the "Prof. Dr. Agrippa Ionescu" Emergency Clinical Hospital with a 3/2.7/0.7 cm painful ulcerated tumoral mass located in the clitoral area. The lesion slowly increased in size over the past 15 months and was mobile over the underlying structure. The tumor was surgically removed with oncological safety margins and sent for histopathological evaluation.

Results: The histophatological examination revealed an ulcerated squamous carcinoma, well differentiated (G1) with invasion of the reticular dermis (Clark's level IV), thickness of 7.1 mm and negative margins. No lymphovascular or perineural involvement was identified. Postoperative results were favorable and no local or general complications were observed.

Conclusion: We highlight this case due to its unusual presentation on the clitoral area. Moreover, considering the potential for recurrence we point out the importance of complete tumor resection followed by a through histopathological examination, in order to put a precise diagnosis and ensure the best possible treatment for the patient.

(ID 107) The use of tibial stems in primary total knee arthroplasty

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Objectives: The purpose of the study was to analyze the influence of adding a tibial stem extension to a primary TKA, following it at mid-term and assessing the clinical results.

Design and methods: We reviewed one hundred and seven primary total knee arthroplasties using proximally cemented tibial components with stem extensions, short and long. Stem lengths varied from 50 mm to 140 mm. Our indications for tibial stem extension in primary TKA are: varus – valgus deformity (more than 15 degrees), osteoporotic bone structure, rheumatoid arthritis with porotic bone structure, large tibial proximal preexisting defect, previous proximal correction osteotomy or callus deformity. Patients were reevaluated at an average of 3 years after surgery (2 to 7 years) and were assessed using the Knee Society (IKS) pain and function scores, radiographic analysis as well as complications analysis.

Results. From 107 tibial stem extension in primary TKA 52 had varus deformity more than 15 degrees, 28 valgus deformity, 20 with severe osteoporosis, 4 rheumatoid arthritis with porotic bone structure and 3 with previous proximal correction osteotomy or callus deformity. Radiographic evaluation reported 2 cases of tibial implant aseptic loosening. The average IKS pain and function scores at the time of assessment were 85 and 83. Average range of motion was 110° at latest follow-up respectively. There were no radiolucent lines except for the 2 cases of loosening. There were signs of osteosclerotic bone around the stem in 45% of the cases. No knees had dislocation, polyethylene insert breakage, peroneal palsy, or infection.

Conclusion: The necessity of tibial stem extension in primary TKA in our opinion is: big deformity of varus-valgus, osteoporotic bone structure, large proximal tibial defect or previous correction osteotomy, to increase tibial stability.

The stem length and diameter must be precisely chosen in a very careful preoperative planning and also intraoperatively to diminish the fail rates dramatically. Further studies are required and a larger number of patients to determine a long-term success of tibial stems in primary TKA.

(ID 183) Histopathological stages of a relapsed retroperitoneal liposarcoma - case presentation

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Objectives: To present a 43 years old male with relapsed retroperitoneal liposarcoma, mixed histologic type, without metastases and with the possibility that the liposarcoma had developed from a preexisting lipoma.

Methods – case presentation: The patient presented with an abdominal mass, without any other complaints. Computer tomography (CT) shows a retroperitoneal tumoral process, about 18/14 cm, extending below the diaphragm to the pelvis, dislocating intra and retroperitoneal elements, without invading them and bilateral renal lithiasis. Exploratory laparotomy showed two tumors which were excised preserving the left kidney. Histopathology exam shows dedifferentiated liposarcoma. The patient received six courses of chemotherapy. Ten months follow-up magnetic resonance suspected a recurrence measuring 20/10 cm, but no tumor was found at exploratory laparotomy. Twenty-seven months follow-up CT found a new tumor recurrence, without distant metastases. Exploratory relaparotomy shows three masses which were excised with macroscopic tumor-free margins: a firm-elastic mass, encapsulated, measuring 15/11 cm, pushing the descendent colon and left kidney without invading them; one retroperitoneal, encapsulated, about 12/10 cm and another multilobulate, about 15/13 cm between the pancreas and the left kidney. Histopathological exam shows myxoid liposarcoma, atypical lipomatous tumor and lipoma.

Results: Liposarcomas are diagnosed in advanced stage because retroperitoneal space allows tumor to grow to a large size. The survival rates are influenced by multiple factors such as age of the patient, site and depth of origin, size, tumor-free resection margins, histologic grade, nodal disease and distant metastasis. Although surgical resection is the gold standard curative treatment, patients with large high-grade liposarcomas may benefit from multimodality treatment with chemotherapy and radiation. Kidney preservation was mandatory because our patient had bilateral complicated renal lithiasis.

Conclusions: Despite tumor-free resection margins, our patient presented local recurrence due to evolution of his histological type of tumor. The presence of four different histological types of retroperitoneal tumors is very rarely reported on the same patient and probably explains disease recurrence. There is a slight possibility that the liposarcoma had derived from a lipoma by genetic changes mechanisms insufficiently documented. However, large sample investigations must be performed to further confirm this hypothesis.

(ID 343) Resumption of sports activity after acromioclavicular dislocation- comparative study between Acroplate vs Tightrope

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Objectives: The aim of this study is to determine joint recovery and also the level of sport activities in time between open and minimal invasive procedures in acromioclavicular dislocations.

Material and method: Out of 28 patients with acromioclavicular dislocation, according to Rokwood staging 4 patients were type III, 5 patients type IV and 19 patients type V.

Patients were divided into two groups, the first group (G1), comprising 17 patients, included those with acromioclavicular dislocation in which we opted for the fixation of the dislocation with acroplate. For the 11 patients of the second group (G2) we opted for fixation of the acromioclavicular dislocation using TighRope.

The average time of follow-up was 7 months (between 6 and 9 months)

Patients completed a questionnaire focused on the time to return to sport activities and treatment course. Pre- and postoperative functional assessment was performed using the Constant score and University of California Los Angeles (UCLA) Score. Pain was assessed by visual analog scale (VAS).

Results and discussions: In the G1 batch, out of 17 patients, 15 were men and 2 were women with age between 19 and 42 years old (mean 34 years) and in the G2 batch there were nine men and two women with a mean age of 29 years (ranging between 18-38 years)

In the G1, the mean time for return to sport activities was 4.2 months (with range between 3-6 months) and postoperatively the UCLA score at 3 months was 89.8 points.

In G2, 10 patients (90.9 %) returned to the same level of sport activities at 3 months (ranging between 3-5 months), with preoperative UCLA score of 24.3 points that enhanced to 94.6 points at 3 months postoperatively.

The VAS score did not differ significantly between the two groups at 3 months postoperatively (mean 0.4 in G1 and 0.6 in G2).

Conclusions: Fixing acromioclavicular dislocations using TighRope is a minimally invasive alternative treatment, that reduces the postoperative recovery period and, thus, the return to sport activity compared to open methods of fixation.

(ID 120) The proper surgical approach of a hepatic hydatid cyst

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Objectives: We present a case in which a particular surgical therapy was applied on a young patient diagnosed with hepatic hydatid cyst, in order to prevent intraoperative and long-term complications.

Cystic echinococcosis (CE) is caused by the larval stage of the cestode named Echinococcus granulosus. The preferential localization of the parasite is the liver (70%), preferentially in the right hepatic lobe, followed by the lungs. Even though this is a sporadic disease in Romania, its treatment represents a real problem to clinicians because it involves laborious approaches, differing from patient to patient. Also, it is important to take into consideration possible complications, such as mechanical jaundice due to biliary obstruction, severe pruritus, anaphylactic shock, rupture of the cyst and vesicle dissemination. For that it is important to choose the proper approach between the surgical methods: conservative or radical, using thoraco-phreno-laparatomy or open surgery.

Methods: The clinical case is about a hepatic hydatid cyst in a 28-year old female patient with epigastric pain, anemia, mild hepatocytolisis and elevated inflammatory markers, who underwent medical treatment with Albendasole and hepatic protectors after the abdominal MRI scan revealed a 10,4/8,6 centimeters multilocular cystic mass, located in the left liver lobe. Early in treatment, the serological tests for EG were negative.

Results: A radical surgical approach has been made in this case and it consisted of an en-block resection of the cyst together with S II and S III liver segments. The left hepatic lobe was resected due to impressive dimensions and a particular multilobular form of the cyst. A sample of the proligere membrane was tested and it revealed the cyst was viable, not dead as it was expected looking at the serological tests.

Conclusions: The hepatic bisegmentectomy is the most suitable surgical approach for the patient, revealing that a surgical conduit for malignant processes (resection of healthy liver tissue among the tumour) could be used to treat a benign lesion with high risk of intraoperative complications. Also, this type of surgery offers long-term protection and a low-risk of echinococcosis relapse.

(ID 295) Late massive intraabdominal hemmorhage from an arterio-enteric fistula after radical Ivor-Lewis esogastrectomy

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Postoperative massive hemorrhage after total gastrectomies is a rare entity with a high mortality rate if not diagnosed and treated immediately. They comprise of early hemorrhage (under 24 hours since index surgery) and late (beyond 24 hours).

We present the case of a 64 yo male patient who recently underwent surgery (day 14 po) for a Siewert type I adenocarcinoma (Ivor Lewis esogastrectomy with Roux en Y reconstruction) which was admitted to our Clinic for severe upper GI bleeding with hematemesis and haematochesia which started 2 hours prior. On admission the patient presents with extreme paleness, shortness of breath and general malaise. Clinical examination reveals a tachycardic patient with cold, sweaty and pale skin, with a supple abdomen, mild pain in the upper right quadrant with no signs of peritoneal inflammation. Blood works reveal a severe anemia with a 4.8 g/dl hemoglobin, mild leucocitosis with normal coagulation. FAST US shows a 2 cm fluid acummulation in Morrison space. The patient undergoes EGD which cannot point out any active bleeding source. During the EGD the patient becomes haemodinamically unstable and is sent to the OR for immediate laparotomy. Intraoperatively we found o duodenal stump dehiscence which caused errosion of the right gastric artery stump with arterio-enteric fistula. Carefull hemostasis is performed with peroperative EGD to rule out any other source of bleeding. The duodenal stump is guided on a 14 Fr Foley catether. Postoperative course is uneventfull and the patient is discharged on day 5 po. The Foley catether is removed after 3 weeks.

Postoperative intraabdominal hemorrhages are rare but potentially lethal. This makes swift diagnosis and especially treatment of utmost importance. Treatment options include EGD with in situ hemostasis and angiography with embolisation for stable patients and relaparotomy for hemodinamically unstable patients.

(ID 235) Giant anterior cervical tumor – anaplastic thyroid carcinoma – with airway compression

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Objectives: We present the case of a giant anterior neck tumor due to anaplastic thyroid carcinoma with massive enlargement and mass effect and displacement of the airway.

Methods: Male patient, 44 years, presents at the emergency department of Coltea Clinical Hospital, with respiratory distress, hypoxia and a massive enlargement of the neck due to improper access to healthcare services. The patient underwent full ENT exam which excluded any other primary tumor sites and a surgeon-performed ultrasonography of the mass. Ultrasound exam revealed a complex mass with 14.3/11.2 cm in diameters with multiple hypoechoic and transonic areas and mixed Doppler signal. Sonographically the tumor appeared to have replaced the left thyroid lobe and to put pressure on the airway. Due to its dimensions the tumor made difficult the oro-tracheal intubation. While awaiting the CT scan we performed ultrasound guided drainage of the transonic areas of the tumor with the extraction of a serous colloidal fluid and necrotic debris, but with minimal benefit to the airway obstruction.

Results: Emergency CT scan revealed a complex mass bulging from the thyroid left lobe with displacement but not invasion of the adjacent structures. Under local anesthesia a tracheotomy was performed with subsequent endo-tracheal intubation and total anesthesia for salvage tumor debulking. We managed to remove the tumor and the final pathology result was that of an anaplastic thyroid carcinoma. The patient was subsequently referred to Parhon National Institute of Endocrinology for further management of the thyroid carcinoma. The patient had subsequently tumor recurrence and died the next year.

Conclusions: Giant anterior cervical tumors may have many origins but in this case the anaplastic carcinoma probably implied an accelerated evolution of the pathology in combination to a deficient access to healthcare services. There are still questions about the proper management of such dramatic cases. We tried the minimally invasive approach of fluid drainage with little effect and after the acquisition of CT imaging we performed tumor debulking.

(ID 253) Retroperitoneal neuroendocrine tumor at male pacient with bilateral operated breast cancer in antecedents

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Introduction: Neuroendocrine tumors are rare, mostly malignant and usually they give metastases in liver and lymph nodes. Radical or reductional resections of primary tumor and metastases are indicated and useful in any moment of the disease.

Material and method: It is presented the case of a 74-year-old male, with hyphotyroidism, hypertension and congestive cardiac failure, with bilateral mastectomy for mammary gland cancer in antecedents. The patient is submitted after finding an abdominal retroperitoneal voluminous tumor on MRI. Clinical examination of the abdomen reveals no pain or palpable tumors, the patient has no fever, the general status being favorable.

Results: MRI conclusions - left retroperitoneal tumor, probably originating in the left adrenal gland, with no demarcation limits to pancreas and spleen hilum, which are invaded. Intraoperative tumorectomy, splenopancreatectomy and hepatic metastasectomies are performed, the post surgical evolution being favorable.

Conclusions: Histopathological result, moderately differentiate neuroendocrine carcinoma, with hepatic and lymph nodes metastases certificates the correct surgical approach and imposes the need for immunohistochemical tests. The connection between histological type and bilateral breast cancer in patients antecedents has to be taken into consideration.

(ID 55) Curious case of atypic case of Alagille syndrome – case report

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Objectives: Alagille sydrome is an autosomal dominant disorder associated with billiary duct hypoplasia, skeletal, cardiac and ocular malformations as well as characteristic facial features. It is determined by JAG1 mutation in chromosome 20 and it affects 1 in 100.000 newborns. Our aim is to report a case of suspicion of Alagille sydrome with atypic presentation treated with succes in a conservatory manner.

Method: A 17-year old female pacient first presented in our clinic acusing intense itchiness and dark urine emission. She was known with chronic HBV and HDV infection, pulmonary artery stenosis and systolic murmur for 10 years. Clinical examination revealed poor linear growth, dysmorphic facial features, dry and thickened skin with scratching leasions and hepatomegaly. Investigations showed intense colestatic syndrome with moderated hepatic necrosis and diffuse hepatic steatosis. Due to her family denying the biopsy, we established a pathogenic and symptomatic treatment which consisted of Ursofalk and vitamins K,D,E.

Consequently, she presented in our clinic acusing blurred vision and nose bleeding. She was diagnosed with keratoconus in both eyes, and needed a keratoplasty intervention for the right eye due to a corneal ulcer. ENT consult revealed anterior septal perforation and Emofix was recommended for the bleeding.

Results: The evolution of the pacient under conservatory treatment for the colestatic syndrome is favourable. The ocular pathology requires changing of the therapeutic contact lenses every 4 weeks as well as local treatment.

Conclusion: The presence of hepatic symptoms, cardiac abnormalities and specific facial characteristics cannot confirm the diagnosis of Alagille syndrome without a liver biopsy that shows billiary duct hypoplasia or a genetic test that shows JAG1 mutation. Nonetheless, it is worth mentioning the fact that ocular pathology in Alagille syndrome is rarely associated and nasal pathology is yet to be described.

(ID 376) A case of small round cell tumor developed in the flexor pollicis longus muscle

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Small round cell malignant tumors are characterized by being highly malignant, relatively undifferentiated tumors, largely occurring in children; they include entities such as: Ewing's sarcoma, peripheral neuroectodermal tumor, rhabdomyosarcoma, synovial sarcoma, non-Hodgkin's lymphoma, retinoblastoma, neuroblastoma, hepatoblastoma, and nephroblastoma. We present a case of a patient with a tumor located at the midshaft, volar aspect of the forearm of 8/6 centimeters. The patient reports that the onset of the disease occurred about five months ago as a subcutaneous painless swelling, without any other changes in the surrounding area. Increase in size happened rapidly, along with the appearance of paresthesia in the median nerve distribution territory and decreased digital grip strength. An MRI was conducted, which revealed an imprecisely delimited tumor in the deep flexor muscle's lodge of the right forearm.

The clinical examination confirms the presence of a soft tissue tumor in the volar aspect medium third of the right forearm, imprecisely delimited, mobile on the superficial plans and adherent to the deep ones, without any changes in the overlaying skin, which causes deformation of the local landscape on an area of 12/10 centimeters. Laboratory investigations are completed with a computed tomography of the thorax and abdomen (without evidence of tumor suspicious changes in the lungs, mediastinum or liver).

We decided to perform surgery in order to excise the tumor, with a right axillary block anesthesia, with the patient in supine position, after applying a tourniquet to the arm to prevent excessive bleeding, under optical magnification of 2.5x, using classical surgical and microsurgical instruments. Intraoperatively, we found an encapsulated tumor, of about 8/6 centimeters in the muscle belly of the long flexor of the thumb, presenting adhesions to the radius periosteum and the interosseous membrane; the tumor was excised along with the adjacent muscle fibers, radius periosteum and interosseous membrane fragment; at the end of the intervention, a suction drainage tube was left in place. The postoperative evolution of the patient was favorable, the suction drainage was suppressed after 72 hours, the healing of the wound occurring without any problems.

The histopathological examination in paraffin revealed a small, round cell tumor malignancy and an ongoing immunohistochemistry examination will determine the tumor's histogenesis (neuroectodermal/mesenchymal).

(ID 335) Management of esophageal anastomotic leaks in oncologic patients

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Objectives. Assessment of early anastomotic complications after total gastrectomy and/or subtotal esophagectomy in cancer patients and establishing appropriate therapeutic attitude.

Method. Between 2009-2016 in the Department of General and Esophageal Surgery of Sf. Maria Hospital Bucharest were performed 215 esophageal anastomoses after gastric or esophageal resections for neoplastic pathologies, of which 67.14% were men and 32.56% women. 64.18% of anastomoses were intra-abdominal, 6.05% intrathoracic and 29.77% cervical. Jejunum was used as an anastomotic partner in 64.19% patients, while the stomach and colon were used in 34.88%, respectively 0.93% of patients. 81.40% of anastomoses were done manually and only 18.60% were done using a stapler, the majority of which(95,81%) in end-to-side manner, the rest (4.19%) being done end-to-end.

Results. The overall percentage of anastomotic leaks was 23.2%, of which at 33.33% at cervical level, 10.26% intrathoracic and 56.41% intra-abdominal. According to the leakage severity grade, 9.80% were grade I, 60.79% grade II, 25.49% grade III and 3.92% grade IV. Conservative treatment of anastomotic leaks was the chosen method for 74.51% patients, surgical re-intervention was necessary for 23.53% patients and endoscopic treatment was performed in 1,96% of patients. Overall morbidity was 39.53%, of which by leaks 21.39% and overall mortality was 8.84% of which 4.19% consequence of leaks.

Conclusions. Early anastomotic complications are relatively frequent after surgery for esophageal or gastric cancer which require a multimodal complex strategy, being one of the most important causes of postoperative morbidity and mortality . The management of anastomotic leaks includes both conservative and interventional procedures. Nowadays, endoscopic management associated with surgical approach is the method of choice for higher grade leaks.

(ID 102) Functional hand recovery after arm replantation in child (advantages and limits)

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Objectives: Posttraumatic amputation of the upper limb in a nine years old child is an absolute indication for replantation. Functional result is due to osteo-neuro-tendinous repair, while immediate result with survival of the upper limb is due to vascular microsurgical performance.

Methods: After evaluating the general status and assessment of severity of the injuries we decided to do the upper limb replantation. After stabilization of the bone support, vascular microsurgical anastomoses were performed (arterial and venous) and nerve sutures (radial, median and ulnar), muscle suture, skin suture.

Results: Favorable postoperative evolution was slow, encumbered by the occurrence of complications due to the mechanism of injury (torsion-avulsion) that required serial surgery, involving both plastic surgery and orthopedics. The final result was good from a functional perspective.

Conclusion: The replantation was a success despite the mechanism of injury and the complications occurred. It is important to note that regular evaluation is necessary to perform a treatment and recovery plan that will lead to a maximum functional outcome.

(ID 262) Lethal postoperative complication after radical cystectomy for bladder tumour – aortic thrombosis

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Introduction: Early postoperative complications after radical cystectomy are well documented and some of them are life threatening. We present an aortic thrombosis case associated with bilateral iliac (common, internal, external) and renal artery thrombosis. As far as we know this is the fourth reported case, arterial thrombosis itself being an extremely rare postop complication.

Case presentation: We present the case of a 78 year old male, ex-smoker, with a history of hypertension, pulmonary sclero-emphysema and a pT2G3 infiltrative bladder tumour (TUR-B in January 2017).

The patient was hospitalized in our clinic in March 2017 for radical surgical treatment of his bladder tumour. Radical cystectomy with cutaneous ureterostomy was performed. There was minimal intraoperative blood loss (300 ml), OR time was 5 hours, and the patient was normotensive throughout the operation. Postoperatively, the patient's evolution was good - mobilisation on day 1, bowel movement on day 3, and the NG tube and drainage tube were removed on day 3.

On the 5th post-op day, the patient had three diarrheic stools and pain in the left lower limb. A rapid test for Clostridium difficile was performed and it came out positive. The patient was isolated and specific treatment was initiated. A vascular surgeon was called for a consult and he confirmed the diagnosis of acute left lower limb ischemia - bypass surgery was contra-indicated and specific treatment was initiated. Twenty hours after the patient was isolated, abdominal pain and low intensity dyspnea occurred. He was transferred to the ICU, where NI C-PAP ventilation is initiated. Twelve hours later, his status worsens - he becomes oliguric and hemodynamically unstable and required OTI with MV, and treatment with Norepinephrine and Furosemide on infusers. The patient's abdomen becomes distented and the general surgeon raises the suspicion of toxic megacolon. Thoraco-abdomino-pelvic CT with contrast is performed which reveals complete thrombosis of the abdominal aorta and of the iliac and renal arteries bilaterally with bilateral renal infarction; large distention of the duodenum and of the lower GI tract, and signs of acute Clostridium difficile infection. The patient succumbed 6 hours later.

Discussion: This is the fourth reported case of aortic thrombosis. Although it's an extremely rare complication, patients presenting signs of arterial thrombosis must be treated swiftly, as it can be lethal in many cases.

(ID 195) Low grade myofibroblastic sarcoma of the larynx — case report

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Low grade myofibroblastic sarcomas of the larynx are rare tumours, accounting for less than 1% of all laryngeal malignancies. It has a slow-growing infiltrative pattern inside deep soft tissue and due to the fact that it is uncommon and the histopathological aspect is very plastic, the differential diagnosis can be difficult and it requires special techniques, such as imunohistochemistry or electron microscopy. The authors report the case of a 77 year old woman who was referred to the

ENT Clinic with increasing hoarseness for six months. IHC confirmed the diagnosis of low grade myofibroblastic sarcoma and a surgical excision of the tumour was performed. Radiotherapy was not indicated, as the margins of the lesion were malignancy-free. The patient is being regularly followed up and her voice is of good intensity. Although it has metastasizing potential, the prognosis is good comparing to other types of laryngeal malignancies and it is influenced by the size and location of the lesion and the health status of the patient.

(ID 142) Anatomical variations of the major duodenal papilla with implications in minimally invasive biliary surgery

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Objectives: The study at hand analyzes the implications of the variation in position of the major duodenal papilla and the variations in the way of convergence of the common bile duct and the major pancreatic duct in the Vater papilla in the endoscopic retrograde cholagiopancreatography (ERCP) used with diagnostic or therapeutic intent.

Method: 519 ERCPs that had been performed on patients admitted to the 1st Surgery Department of SUUB during the years 2007-2016 have been analyzed. In most cases, the major duodenal papilla is located in the middle third of the posterior wall of the second part of the duodenum. One of the golden rules of a successful ERCP is the correct positioning of the duodenoscope using the "face to papilla" method. This is difficult to achieve if the papilla has an ectopic position.

Results: 14 such anomalies have been found amongst the 519 patients: Three in the duodenal bulb, seven in the distal third of the second part of the duodenum and four in the initial segment of the third part of the duodenum. Failure of ERCP by the impossibility of selective cannulation of the common bile duct amongst the 519 patients was recorded in 25 cases (4.81%). In the group of patients with variations in the position of the major duodenal papilla there were 7 of those cases, which means that these variations reduce the chances of successful ERCP by 50%. Regarding the ways of confluence of the common bile duct and the major pancreatic duct, the variant that poses most often the greatest tactical and technical complications is the one in which the two ducts merge proximally and have a common portion that is longer inside the Ampulla of Vater (79 cases, 15.22%). The selectiv cannulation of the common bile duct has not been possible in 14 patients (17.72%). In 21 cases the repetead insertion of the cannula in the major pancreatic duct, sfincterotomy and accidental pancreatographies have been followed by a higher percentage of post-ERCP acute pancreatitis (30%), while on average only 7% amongst the 219 patients. A lower rate of the extraction of the calculi from the common bile duct has also been noticed in comparison with the whole group of patients (79% compared to 93%).

Conclusions: Anatomical variations of the major duodenal papilla have great significance in the rate of success of ERCP and its postoperative complications.

(ID 50) Medical and surgical complications due to hypertriglyceridemia in pregnancy

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Objective In pregnant patients, due to the need of nutrients transfer to the fetus we observe several alterations of the lipid metabolism. Some of the patients experience severe hypertriglyceridemia (caused by genetic predisposition or last trimester disgravidia). Severe hypertriglyceridemia is potentially life threatening, so prompt interventions are mandatory.

Method We studied seven pregnant women from the Clinic of Obstetrics and Gynecology, Emergency University Hospital Bucharest, with sever hypertriglyceridemia, which occurred during the third trimester of pregnancy. The accentuated lipolysis in this period of pregnancy results in increased free fatty acids, which are used in the liver for triglyceride synthesis and assembly of VLDL. The major risk of gestational hypertriglyceridemia is acute pancreatitis, with a possible complicated evolution to pseudocysts, pancreatic necrosis, acute respiratory distress, shock and death. The acute upper abdominal pain can be mistaken for complicated peptic ulcer, placental abruption or uterine rupture.

Results: Our patients were 32-37 weeks pregnant. Two of them were diabetic; another two of them had minor complex thrombophilia and last trimester disgravidia. Hypertriglyceridemia levels were situated between 1700-3000 mg/dl. In four cases, pregnancy termination was imposed by aggravated maternal condition and premature babies were born. It is important to systematically check for triglyceride blood concentrations during pregnancy, as well as for other signs of endothelial dysfunction. Follow up of patients with levels two-three times higher than normal is important. Dietary interventions are taken (low-fat (under 20% of daily caloric intake), low-carb diet, with avoiding essential fatty acids deficiency- supplements of omega 3 and omega 6 and fibrate may be efficient). Hospitalization is recommended when triglyceride levels exceed 2000 mg/ml or when other aggravating factors (preeclampsia, gestational diabetes) are present. Heparin therapy is added constantly. None of our patients required plasmapheresis. One of them developed pancreatitis which needed surgical intervention. All of the mothers and newborns survived.

Conclusions: Multidisciplinary care during hospitalization (obstetrician, nutritional support, intensive care, surgery) is essential for maternal and fetal wellbeing. Fetal maturation is indicated, as hypertriglyceridemia may aggravate and pregnancy termination may become necessary.

(ID 52) Gastroesophageal reflux disease in pregnant women

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Objectives: Gastroesophageal reflux disease (GERD) is commonly encountered during pregnancy. It is caused by abnormal esophageal motility, decreased lower esophageal motility and increased gastric pressure. The objective of our study is to assess the effects of interventions to relieve the effects of GERD during pregnancy

Method: We studied 225 gravidas presenting with symptoms of GERD during each trimester of pregnancy. Superior digestive endoscopy was performed in all of them, due to suspicion of complications of GERD. We managed them offering lifestyle modifications and pharmacological treatment.

Results: We diagnosed GERD in 67 patients during the first trimester, 68 during the second and 90 during the third trimester of pregnancy. The majority (198) were asymptomatic before pregnancy. Most of them presented with heartburn and regurgitation (184). When these symptoms appeared during the first trimester, they were accompanied by nausea and vomiting. The rest had as main symptom cough (21), sore throat (16) and wheezing (four). 74 of patients were multiparas, which already experienced GERD during their other pregnancy, 67 of them being also obese. Superior digestive endoscopy revealed mixed images: esophageal lesions in 81 patients, gastritis in ten, hiatal hernia in five and coexistent gastric ulcer in four patients. 22 patients tested positive for Helicobacter pylori. We recommended lifestyle modifications to all of them consisting of diet recommendations (avoiding spiced food etc.), eating small and frequent meals, refraining from ingesting food within three hour of bedtime, elevating the head of the bed (during the third trimester of pregnancy), avoid to bend, etc. The pharmacological interventions were highly efficient and safe: antacids and sucralfate (188 patients), histamine blockers (ranitidine, famotidine – 23 patients), proton pump inhibitors (we preferred lansoprazol, as a class B

drug in pregnancy), herbal teas (chamomile, goldenseal, ginger, fennel, peppermint).

Conclusions: The prognosis of GERD during pregnancy is good, due to lifestyle modifications and medication, similar to non-pregnant patients. Complications are possible, being more frequent in obese patients and multipara and also in Helicobacter pylori positive patients.

(ID 341) Reconstruction after upper lip cancer excision

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Introduction: lip cancer is the most common malignant lesion of the mouth, constituting 25-30% of cancers of the mouth.

The primary risk factor in the development of lesions is chronic exposure to solar radiation, this explaining why only 10% of tumors are located in the upper lip, there is a smaller exposure to UV radiation compared to the lower lip.

It is located initially vermillion or muco-cutaneous limit in most cases halfway between the midline and oral commissure and can arrive to loco-regional lymph nodes and distant metastases.

The most common histologic type is squamous cell carcinoma.

Objectives: Surgery remains one of the therapeutic methods that cannot be waived in the management of the oral oncologic patient.

Reconstruction of the upper lip goals are:

1. Preserving the integrity of the muscle and the opening mouth, reduction of more than 50% of preoperative stoma causing significant dysfunction
2. Communication
3. Cosmetic appearance

Choosing a method of reconstruction is based on the dimensions and depth of the defect.

Method: A 61 years old patent comes to our clinic for an exophytic, ulcerated tumor mass comprising ½, entire thickness, of the left upper lip, which presented a slowly progressive growing for about 5 years without loco-regional lymph nodes detected clinically. Following clinical and laboratory investigations, a first step surgery is decided, for surgical excision of the tumor, followed by reconstruction with the help of an Estlander flap; a second surgical intervention was performed for commissurothomy.

Results and conclusions: survival at 10 years it is 98%, due to their early diagnosis.

Fortunately the prognosis remains favorable, the malignant tumor lesions of the lips are the most curable within those of the head and neck.

(ID 51) Severe knee osteoarthritis associated with extra-articular femoral varus deformity

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Objectives: Total knee arthroplasty in cases with severe knee osteoarthritis, associated with extra-articular femoral or tibial deformities, may be challenging. The correction can be intra-articular, at the time of the arthroplasty or extra-articular by an osteotomy at the apex of the deformity.

The main factors influencing the therapeutic decision are: type of deformity (varus/valgus, flexion/extension, malrotation), magnitude of the deformity and its distance from the joint.

Method: We present the case of a 62 years old patient with advanced knee osteoarthritis and mid-shaft femoral varus malunion (12□ of angulation). The angle between the anatomical axis of the distal femoral segment and the mechanical axis of the femur (IM) was 11.7□, the Hip-Knee-Ankle (HKA) was 163.1□ (16.9 degrees of varus). We performed an intraarticular correction with a femoral valgus cut of 11□ and soft tissue balancing. The total knee arthroplasty was performed using a posterior stabilized prosthesis; we did not resurface the patella.

Results: We obtained a stable, balanced, mechanically aligned knee with a full range of motion, without the complications of a diaphyseal osteotomy. Also, there was no need for a more constrained type of prosthesis.

Conclusions: For patients with a femoral deformity of less than 20□ in the coronal plane, especially if the deformity is not close to the joint, intra-articular correction is a very good option.

(ID 56) Modified McLaughlin procedure for chronic unreduced posterior shoulder dislocation

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Objectives: Chronic unreduced posterior shoulder dislocation is usually associated with significant anteromedial humeral head defect (reverse Hill Sachs). This defect can be a cause of recurrent instability and needs to be addressed at the time of surgery.

Method: We present the case of a 53 years old patient with chronic, unreduced shoulder dislocation. The patient was first seen over one month after a posterior shoulder fracture dislocation. On the CT scan we noticed a significant reverse Hill Sachs defect. After the open reduction of the dislocation we performed a modified McLaughlin procedure – transfer of the lesser tuberosity with the subscapularis attached into the anteromedial defect. Postoperatively, the shoulder was immobilized in an external rotation brace for 4 weeks. Afterwards, shoulder ranges of motion exercises were started and resistive strengthening was added at 3 months postoperatively.

Results: At 8 months postoperatively, the shoulder was stable, with a good range of motion and only a mild limitation of internal rotation. The patient returned to full activity (strenuous manual labor).

Conclusions: The modified McLaughlin procedure is a good indication for patients with chronic unreduced posterior shoulder dislocation and large reverse Hill Sachs defects, between 20-40% of the humeral head.

(ID 187) Axillary staging in breast cancer - from axillary clearance to sentinel node biopsy

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Introduction: Axillary lymph node dissection (ALND) has become a non-routine component of the staging and management of breast cancer. Sentinel lymph node biopsy (SLNB) is now widely accepted as first approach for women with early stage breast cancer. ALND is contraindicated nowadays for staging purpose in women with clinical negative axilla. We aimed to implement and evaluate the SLNB in our service, using periareolar or peritumoral injection with colloidal technetium-99m the day before the surgery, in order to evaluate the axilla, reducing the risks of lymphedema, paresthesia or shoulder pain.

Methods: We report a retrospective study from Filantropia Clinical Hospital, Bucharest, from May 2016 until April 2017 comprising of 20 patients with early breast cancer, T1 or T2 with clinically negative axilla, who underwent conservative breast surgery and biopsy of the sentinel node. Preoperative, all the patients had peritumoral injection with Technetium 99m and lymphoscintigraphy for identification of the number and localization of sentinel lymph nodes. Intraoperative, the sentinel lymph node was identified using Gamma Probe and specimen was sent to histopathology for frozen section.

Results: Demographic analysis of our cohort showed a 10% rate of family history of breast cancer, all of our patients have had at least one pregnancy. Results of our study showed a rate of 90% identification of sentinel lymph node with Gamma Probe, 95% of the patients had no metastasis in the sentinel node, 5% of the cases identified invaded sentinel nodes and further surgery was performed – axillary lymph node dissection levels I and II. In 2 cases, there was no lymph node to evaluate in the specimen. Final pathology diagnosis revealed 10% of the cases were lobular invasive carcinoma, 5% mucinous carcinoma and 85% was ductal invasive carcinoma of the breast.

Conclusion: Sentinel node biopsy is currently the standard technique for identification and evaluation of the axillary status in clinically node negative breast cancer, in order to limit the side effects of extensive axillary dissection.

(ID 186) Ovarian yolk sac tumor - rare pathology of young woman: a case report

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Ovarian yolk sac tumor, also known as endodermal sinus tumor, is a primitive malignant germ cell tumor. It is rare and very aggressive, occurring frequently in adolescents and young adult women and only rarely in menopause. Consequently, conservative surgery with fertility preservation has to be taken into account as initial management, depending on patient's desire for procreation; adjuvant chemotherapy is added to the management plan considering disease stage and characteristics.

Case report. A-31-years old woman presented in our hospital for distended abdomen with ascites, pelvic adnexal mass, and diffuse abdominal pain, without rebound tenderness or guarding. The ultrasound examination revealed a left lateral uterine mixed echogenic mass measuring 10/9.2 cm and a high volume of ascites. Serum human gonadotropin hormone level was normal, serum level alpha fetoprotein (AFP) was frankly abnormal (over 300 UI/ml), LDH was 169U/L and CA-125 was 233,3U/ml. The pelvic MRI exam revealed a 91/92 mm left adnexal mass, apparently well defined, heterogeneous with solid and cystic components, two suspicious images posterior of the uterus (probably peritoneal metastasis) and large volume of ascites. After clinical and imaging examination, surgery for suspect left ovarian tumor was undertaken with frozen section pathological assessment. The surgery consisted in median laparotomy with evacuation of 5 liters of serocitrin ascites, sampled for cytology evaluation, total abdominal hysterectomy with bilateral salpingo-oophorectomy, omentectomy, bilateral pelvic lymphadenectomy (external iliac and obturator lymph nodes) and serial peritoneal biopsies. Pathological diagnosis was ovarian yolk sac tumor stage I, with peritoneum, pelvic lymph nodes and omentum free of metastases and negative cytology. The postoperative course was without complications and AFP levels were 3100 UI/ml. Adjuvant chemotherapy with etoposide and cisplatin was started postoperatively. Patient follow-up will include serum level of AFP and clinical examination every 2-4 months and yearly after 2 years.

Yolk sac tumor is one of the most aggressive; the prognostic is unsatisfactory if the treatment is delayed. Conservative surgery with fertility sparing is required as a first step, followed by adjuvant chemotherapy considering the patient's desire for procreation. The outcome depends on the stage of the disease at the time of the diagnosis.

Key words: ovarian yolk sac tumor, fertility, surgery.

(ID 114) Incidence of ureaplasma species and maternal and neonatal morbidity

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Objectives: Ureaplasma urealyticum and Mycoplasma hominis are among the most frequently isolated microorganisms in the amniotic fluid or the surface of membranes in women with clinical and histological chorioamnionitis. These microorganisms are found in the uterus and associated with premature rupture of membranes or preterm labor. Unlike the lower genital tract infection with Ureaplasma urealyticum and Mycoplasma hominis, the infection of amniotic fluid or of the membranes was associated with chorioamniotitis, premature birth and neonatal side effects.

Material and Method: The fetal and neonatal infection with Ureaplasma and Mycoplasma has been associated with a number of adverse neonatal effects: bronchopulmonary dysplasia, pneumonia, damage to the cortical white matter, cerebral palsy and neonatal death. Meta-analysis of the literature of the past 10 years, highlights studies showing the effects of mycoplasma species on premature birth and the fetal outcome. At the same time correlation has been shown between the positive cultures in the amniotic fluid or cord blood at 25-32 weeks of gestational age, placental histological diagnosis, the level of IL-6 and obstetrical diagnosis and adverse fetal effects.

Conclusions: The most frequent cause of preterm labor is bacterial chorioamniotitis, while histological chorioamniotitis is an important marker. The association between the infection with Ureaplasma urealyticum and Mycoplasma hominis with bronchopulmonary dysplasia and respiratory distress syndrome, makes reasonable the need of an early diagnosis of these infections followed by an effective antibiotic regime in case of women with ruptured membranes and preterm birth risk.

(113) The efficiency of a new antibiotic therapy in pregnant women with premature ruptured membranes

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Introduction: Preterm premature rupture of membranes (PPROM) complicates 2% of pregnancies and accounts for 40% of the causes of premature birth. Pregnant women with chorioamnionitis give birth earlier than those without infection, and infants with sepsis have a mortality rate four times higher than those without sepsis. Amniocentesis performed even if PPROM has occurred, has the potential to detect subclinical infection before any other signs of chorioamnionitis.

Material and method: The meta-analysis of the literature from the last 8 years shows that antibiotic prophylaxis is indicated for PPROM, the association between Clindamycin, Cephalosporin and Metronidazole shows the most favorable results in the later years. The supporters of amniocentesis in PPROM, stress the fact that antibiotics should be given to the pregnant women only in certain clinical circumstances in order to minimize the potential negative effects of prolonged antibiotic therapy, represented by the overgrowth of very virulent germs.

What is the optimal antibiotic regimen? Nowadays, a correlation is noted between amniocentesis as a diagnostic method of subclinical infection and a new antibiotic regim represented by the association between Clindamycin, Cephalosporin and Metronidazole, this scheme significantly reduces the incidence of chorioamniotic infection / inflammation in patients with PPROM. During 1993-2003 Ampicillin and / or Cephalosporin or association between them has been used widely in different European countries (regime 1). During 2014-2016 we use the new regimen 2 in 48 patients with positive results concerning the morbidity of pregnanacy and neonates.

Results and Conclusions: Currently, this new antibiotic regime (regime 2-Clindamycin, Cephalosporin, Metronidazole) is proposed in cases of premature ruptured membranes and the results obtained are superior in terms of reducing the incidence of chorioamniotic inflammation, respiratory distress syndrome, bronhopulmonary dysplasia.

(116) The benefits of the intraamniotic infection diagnosis using rapid tests in premature rupture of membranes

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Introduction: The analysis of amniotic fluid (AF) is used for the diagnosis of chorioamniotic inflammation /infection in premature rupture of membranes (PROM). It contributes to the assessment of the benefit by either prolonging the pregnancy in order to reduce neonatal morbidity or by assessing the need of fetal extraction in case of chorioamniotic infection. Traditional tests do not always have a remarkable sensitivity for the diagnosis of amniotic infection.

Material and method: Recently there have been introduced in clinical practice tests that are based on PCR in association with spectrometry (PCR/ESI-MS), identifying early the presence of bacteria and viruses in the AF in women with PROM. These tests are capable of identifying in 8 hours the microorganisms in the amniotic cavity therefor increasing by 50% the detection rate when compared to cultures from AF. A meta-analysis of the literature from the last eight years highlights the usefulness of these new tests. The determination of matrix metalloproteinase-8 (MMP-8) has been introduced in clinical practice and can give results as fast as in 15 minutes from extraction, with an 80% specificity and a 90% sensitivity. The determination of IL-6 is particularly useful for the prediction of amniotic infection in pregnancies with premature rupture of membranes.

Results and conclusions: In conclusion, rapid tests for determining chorioamniotic infection in case of premature rupture of membranes is an extremely useful method for identification of optimal intervention moment in order to reduce perinatal complications.

(ID 228) Total nose reconstruction

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Objective: The aim of oncologic surgery is complete resection of the tumor with disease free resection margins. Following these resection extensive tissue defects can occur and reconstruction surgery is mandatory. Depending on the location of the tumor, its size, and extension of the tissue defect the reconstruction procedures can be applied within the initial surgery after ablation of the tumor is performed or can be accomplished in subsequent surgery. Reconstruction surgery techniques are usually realized in complex, multiple step surgeries. Total nasal reconstruction is considered the most complex facial reconstruction due to the three-dimensional arhitecture of the nose and its position in the center of the face. Frontal muscular flaps are successfully used for total nasal reconstruction.

Method: Presenting a clinical case where we used tissue expansion techniques and frontal musculo-cutaneous flap for total nasal reconstruction after oncologic resection of extended nasal carcinoma.

Results: Tissue expansion technique is a valuable surgical method for reconstruction surgery. It allows the surgeon to obtain adequate, good quality tissue to close large facial defects after extensive oncologic resection.

Conclusion: Good results in total nasal reconstruction can be achieved if the selection of patients is thoroughly done, the preoperative preparations of the future flap are carefully realized and the surgical strategy is well established. One should keep in mind that reconstruction of the facial structures, including the nose, is an important aspect of improving the quality of life and the social reintegration of patients with head malignancies.

(ID 49) Mid-face reconstruction with platysma flap after squamous cell carcinoma wide resection

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Objective: To illustrate a case of squamous cell carcinoma managed by large resection and early mid-facial reconstruction with a platysma flap.

Method and Materials: Case report and review of mid-facial reconstruction methods of English language literature

Results: A 53-year old male patient, old smoker with no familial history of cancer was referred for surgical resection of a large ulcerative mid-face tumor.

The local clinical exam of cervico-facial region disclosed a large, smooth and mobile submadibular lymphadenopathy.

The general clinical exam was normal.

The MRI revealed a 48/36/50 mm tumor which infiltrates the skin, underlying soft tissue, levator anguli oris muscle, orbicularis oris muscle, masseter muscle and includes the facial artery and mandubular branch of facial nerve.

The wide resection was performed under general anesthesia. The large defect of the cheek was covered with a myocutaneous (platysma) flap. The second defect created after raising the myocutaneous flap was covered with a split-thickness skin graft harvested from the mid-anterior aspect of the thigh.

After two weeks the Burow's triangle was resected and the ipsilateral oral commissure was closed by creating an advancement flap from the malar region.

The pathology report of the resected tissue revealed cornified squamous cell carcinoma with areas of necrosis and acute inflammation, submandibular lymph node with reactive aspect and free of tumor cells.

Conclusions: Wide surgical resection to allow negative margins while reconstructing the local defect with a well designed flap should be the aim of every surgeon.

There are a few methods of mid-face reconstruction like skin grafting, local flaps, pedicled myocutaneous flaps or free flaps but an experienced surgical team must choose the must proper one, the one that fits the patient status and the local cosmesis.

(ID 220) Giant abdominal tumor-ovarian fibroma

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The present case is of a patient aged 37 years without a history of significant pathology that was hospitalized for enlargement, progressive and asymmetric abdomen. Clinically, the abdomen volume increased more asymmetric from pelvic level of the costal margin and extended up to the flanks, by a giant tumor formation, hard, well-defined. Laboratory biological findings aren't significant and CT abdominopelvic indicate the presence of about 20/22 cm formations, which occupies the left pelvis and abdomen, hyperdense.

Intraoperative, smooth tumor formation, with the starting point to the genitals, with a pedicle. Given the patients age and premenopausal status, it was practiced tumor excision with ovarian preservation and histo-pathological examination (ovarian fibroma).

The final diagnosis is fibroids, ovarian tumor-specific mesenchyme originated, the most common solid benign ovarian tumor, with the origin in the hormone-inactive stroma. This type of tumor is 5% of ovarian tumors and is most commonly found perimenopause. While it is considered an inactive tumor, it can accompany infertility and menstrual disorders. Grossly, 90% are unilateral and have a pedicle, with smooth surface and tend to keep looking macroscopically normal ovary. They are solid on section, and have areas of calcification after ischemia due to repeated torsion around the pedicle. The differential diagnosis of uterine leiomyoma, Brenner tumor, dysgerminoma and gonadoblastoma. Therapeutical attitude varies depending on the hormonal status: premenopausal it is preferred a conservative excision, postmenopausal radical hysterectomy with bilateral anexectomie.

(ID 92) Important factors in preoperative assessment of retroperitoneal tumor patients

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Currently, there is no satisfactory treatment for retroperitoneal neoplasias that associate poor survival rates, even after radical surgery. The radicality of the surgical intervention has been found to be the most important controllable prognostic factor. However, tumor frequent involvement of neighboring organs limits surgical radicality. Still, there is insufficient knowledge on factors that should guide the selection of operable patients and parameters that could explain a poor survival rate even after radical surgery. The aim of the current study was to identify useful factors for the selection of operable patients and for an individualized therapeutic decision. In this regard we were particularly interested in finding useful tools to predict the extent of preoperative organ dysfunctions and especially of kidney function for retroperitoneal tumor patients.

Patients and methods: We performed an extended study on a group of patient diagnosed with retroperitoneal tumors and operated on in the First Surgical Clinic of Bucharest Institute of Oncology "Prof. Dr. Al. Trestioreanu" over a period of 15 years. We conducted a detailed patient survival analysis, paying particular attention to the significance of kidney dysfunction for patient operability and survival. We applied several equations to predict preoperative glomerular filtration rate and analyzed its significance for patient prognostic.

Results: The radicality of the surgical interventions was of 47%. Signs of preoperative kidney dysfunction were found in 75% of operated on patients. Renal dysfunction was associated with a poor/mediocre general state of health on patient admission, with poorer surgical results and lower survival rate after radical surgery. The use of equations to predict preoperative glomerular filtration rate along with thorough CT examinations were found to be extremely useful in predicting operative results and patient prognostic.

Conclusions: Performing radical surgery on retroperitoneal tumor patients does not equal necessarily with a good prognostic. Gaining knowledge on controllable factors that would influence short and long-term surgical results could be achieved by a more detailed preoperative assessment and selection of the patients. In this regard, the exploitation of various tools to predict the degree of preoperative renal dysfunction and its impact for patient prognostic becomes of obvious importance.

(ID 94) Improved surgical strategies for retroperitoneal tumors based on vascular proximity description

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Despite progress in modern medicine, a constant interest for a better knowledge of retroperitoneal tumors has remained over the years. This continuous preoccupation is due to the complexity of retroperitoneal tumor surgery and still unsatisfactory results of therapeutic measures, reflected in mediocre overall patient survival. In the present study we aimed to find significant preoperative tumor parameters to guide a better surgical approach of the tumor and to analyze their prognostic power for retroperitoneal tumor patient survival.

Patients and methods: We carried on a study on a group of 160 patients with primary and secondary retroperitoneal tumors that have been treated in Bucharest Institute of Oncology "Prof. Dr. Al. Trestioreanu", the first Surgical Clinic, over a period of 15 years. We conducted a detailed analysis to identify prognostic factors in order to improve surgical results and patient survival. Among potential prognostic factors we evaluated retroperitoneal tumor proximity or involvement of blood vessels and the ability of preoperative CT examinations to predict these relationships.

Results: The radicality of the surgical intervention represents the major positive prognostic factor for retroperitoneal tumor patients. However, surgical radicality is limited by tumor involvement of important blood vessels. Retroperitoneal tumors that developed closer to major blood vessels expressed a more aggressive pattern of growth by contrast with the others. A thorougher preoperative CT evaluation of the distance between the retroperitoneal tumor and important blood vessels, with a better gain of tumor relationships to blood vessels and organs in a 3D space rather than 2D descriptions has proved to be of particular significance for a better surgical approach and preoperative selection of operable patients.

Conclusions: As the radicality of the surgical intervention is the most important prognostic factor for patient survival and tumor vascular involvement represents the most significant limiting factor, an improved preoperative description of tumor- blood vessel relationships becomes of particular importance. In this regard, 3D reconstructions of the tumor and its surrounding structures become a pre-requisite, as they can guide a correct surgical approach. Also, knowledge of the tumor biological behavior dependent on blood vessel proximity brings space for future design of individualized therapies.

(ID 96) The actual significance of volume for the operability of retroperitoneal tumors

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Retroperitoneal tumors, a rare group of very aggressive and histopathologically heterogeneous neoplasias, are characterized by impressive dimensions. However, maximum tumor diameter, frequently used to describe these tumors, is not necessarily a good indicator of tumor operability or patient overall prognostic. The aim of the current study was: to evaluate how preoperative medical imaging data can be used to obtain improved definitions of the tumor that would guide a better operative strategy; to examine the degree of correlation between tumor medical imaging descriptions and the actual intraoperative and histopathologic findings; also, to determine the significance of tumor dimensions for patient survival.

Patients and methods: We conducted a detailed study on a group of 160 patients with retroperitoneal neoplasias, operated on in the first Surgical Clinic of Bucharest Institute of Oncology "Prof. Dr. Al. Trestioreanu" over a period of 15 years. We focused our research on the patients that had several types of medical imaging examinations performed on, with CD of the investigations ready available. We evaluated the CT appearance of the retroperitoneal tumors, we calculated tumor volumes and we analyzed the degree of correlation with the actual intraoperative findings of the surgeon. Also, we analyzed the significance of a better preoperative tumor definition for the therapeutic act and the impact on patient survival.

Results: The average dimension of the resected retroperitoneal tumors was 15 cm. Usually, there was a good correlation between CT description of maximum tumor diameter and intraoperative and histopathologic findings. However, we discovered that not the maximum dimensions of the tumors hold a particular significance for the operability, but the overall volume of the neoplasia and moreover, the way it is disposed in a real 3D space. Also, the rate of growth of retroperitoneal tumors had an unexpected significance for operated on patient survival.

Conclusions: A better definition of the 3D disposition of retroperitoneal tumors and relationships with neighboring structures must be obtained preoperatively, as it is of higher significance for the therapeutic act result. Knowledge of tumor maximum diameter is less important by comparison with tumor volume that should be assessed preoperatively based on CT examination data.

(ID 131) Timing of distant metastases from retroperitoneal tumors- does it matter?

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The overall survival rate, even after complete tumor surgical resection, is relatively low in the majority of the reported studies. Retroperitoneal tumors are characterized by a pronounced tendency to local recurrence, while distant metastases are rare. As there are only a few reports regarding this aspect, the aim of the current study was to determine the impact of the development of distant metastasis from initial retroperitoneal tumors on patient evolution and survival, with temporal reference to the initial diagnosis or surgical act.

Patients and methods: We performed a study on a group of 160 patients with retroperitoneal tumors that have been treated in the First Surgical Clinic, Bucharest Institute of Oncology "Prof. Dr. Al. Trestioreanu" for a period of 15 years, with a long follow-up period. We recorded the time intervals when distant metastases were diagnosed in relation to the initial diagnosis and time and type of the surgical act; we analyzed the significance of the metastatic event for patient prognosis.

Results: 33.9% of the patients presented distant metastases, either at the initial diagnosis or after a variable period of time after the surgical resection of the retroperitoneal tumor. Distant metastases appeared more frequently in the group of patients that have undergone radical surgery for the initial tumors. The development of distant metastases in the group of radically operated on patients was associated with lower survival rates than the others.

Conclusions: Due to their rarity and pronounced histopathologic heterogeneity, the biological and metastasizing behavior of retroperitoneal neoplasias remains, to an important degree, elusive. Although these tumors express a greater tendency to local recurrences rather than to distant metastases, the latter will negatively impact on patient survival after radical surgery. Therefore, an attentive follow-up after radical surgery should be done, with precocious operation of distant metastases. As metastases develop more frequently after radical surgery, it is probably that the low metastasizing rate described by other studies is due to an overall low survival time of the patients that do not live enough to this event.

(ID 344) The importance of prevention of postoperatory infection in abdominal surgical procedures

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Objectives: Every surgical procedure involves the probability of a postoperatory infection. This probability is increased in abdominal procedures because of the microbial flora existing in the gastrointestinal tract. There are many procedures which ensure the prophylaxis of postoperatory infections, or at least reduce their incidence. The aim of this review is to highlight these procedures and to present the consequences of not respecting them.

Methods: A systematic literature search was performed using PubMed, Google Scholar, ScienceDirect and Public Library of Science for studies comparing antibiotic prophylaxis or prophylaxis and abdominal surgical procedures. I combined database-specific search terms for prophylaxis (antibiotics, prevention, antibioprophylaxis, infection) and abdominal surgery (laparoscopy, histerectomy, appendicitis, appendectomy, gastric surgery, gastrostomy, pancreatitis).The search was then extended to related articles suggested by the databases and supplemented with manual searches for reference lists of all relevant articles.

Results: A total of 1285 references were identified through electronic database searches. 1261 searches were excluded based on the titles and abstracts because they did not match the target of the search. The remaining twenty four publications underwent full text article review. The results of the research showed that the prophylaxis of a surgical infection involves the antibiotic administration and preparations on the surgeon's side. The optimal time for the administration of preoperative doses is 60 minutes before the surgical incision. The most commonly used antibiotics in abdominal surgery are ceftriaxone, cefoxitin and cefazolin and are administered in a single dose one hour before the surgery. There are studies in which the patients were divided into two groups: one was administered antibiotics before the surgery, while the other one was not. The incidence of surgical site infection was much higher in the second group than in the first one.

Conclusions: Both the patient and the surgeon have to be prepared before a surgery to avoid a surgical infection. The surgeon has to go through the process of disinfection which involves washing their hands very carefully using special substances and putting on the surgical gown. The patient has to be administered a dose of antibiotic one hour before the surgery and the type of antibiotic depends on the procedure.

(ID 357) Ovarian torsion due to an increased mass in the pelvis of a young patient

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Introduction: Ovarian torsion is an infrequent but significant cause of acute lower abdominal pain in women. This condition is usually associated with edema, internal hemorrhage or a mass that can compromise the ovarian artery and vein, leading to ovarian necrosis.

Case presentation: 22 y/o patient presents to the E.R. with abdominal pain in the left lower quadrant, nausea and vomiting, symptoms that started earlier that day. Patient is only known with diabetes and irregular menstrual cycle, conditions she has not carefully monitorized. Clinical examination reveals pain both spontaneously and under palpation, increased heart and respiratory frequency, afebrile and a palpable mass in the left lower abdomen, mobile and with increased consistency. Emergency abdominal ultrasound reveals a tumor mass integrating the left ovary, fallopian tube and possibly the uterus. Also, it was revealed that the left ovary was contorted. The admission diagnosis was concluded to an ovarian torsion and a tumor mass of an unknown and unpredictable evolution. The patient is stabilized and a CT of the abdomen was performed. It showed an ovarian cystic mass with a thickened left inferior wall with the diameter of 16/12 cm AP and 14 cm length, that incorporates the left fallopian tube. Also the uterus appeared within normal limits, but deviated to the left side of the pelvis and with diffuse heterogeneous structure. CT of the thorax revealed no other masses and no tumor adenopathy was observed. The patient undergoes total hysterectomy and total left anexectomy. Histological exam was performed and the diagnosis was settled to fibroadenoma of the ovary with focal epithelial proliferation.

Conclusions: Fibroadenoma is a benign tumor which grows slowly if left untouched. This patient is a typical case of "delay presentation to the doctor". She only came when her ovary contorted and symptoms were exacerbated. Ergo, from a simple procedure of a small ovarian cyst removal, the patient underwent a hysterectomy and left anexectomy at such a young age. Prevention of complications and medical education of people are important for having successful medical results and less aggressive courses of treatment.

(ID 230) The analysis of weight gain variance related to the presence or absence of gestational diabetes and associated risk factors

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Gestational diabetes (GD), as a glucose metabolism disorder, is defined as any form of glucose intolerance that occurrence during pregnancy or is discovered first time in gestation.

Materials and methods: The paper reveals elements of a clinical research regarding the analysis of weight gain related to the presence or absence of gestational diabetes and the risk factors associated to its occurrence. It is based on a retrospective study that was held in the Obstetrics & Gynecology and Diabetes, Nutrition & Metabolic Diseases Departments of Nicolae Malaxa Clinical Hospital. It included a number of 109 pregnant women, among them 13 (11.92%) diagnosed with gestational diabetes and 96 (88.07%) without the disease.

The objectives of the paper consists in demonstrating the relation between increased weight gain and the occurrence of gestational diabetes, triggering risk factors and the follow up of body mass index, as well as the relation between gestational diabetes and an increased risk in developing postpartum type II diabetes.

Results: The study demonstrated a significant relation between the two risk factors (the diagnosis and the presence of at least one risk factor), p value 0.041. Both variables and their interaction justify 20.9% of the weight gain variation, which shows that those variables have a stronger impact together (diagnosis alone justifies 6.2%, while the presence of the risk factors justifies for 9.1% of the weight gain variation). Pregnant women presenting at least one risk factor had a weight gain significantly more increased, 13.42 IC 95% (11.34-15.93) comparing to those without risk factors, who had a gain of 7.29 IC 95% (3.86-10.41). As result from this study, weight gain in the context of gestational diabetes is significantly increased in pregnant women with at least one risk factor comparing to those without diabetes. 12 weeks postpartum, 5 out of 15 women were diagnosed with type II diabetes.

Conclusions: Taking into consideration the increased risk of developing gestational diabetes during pregnancy, it is relevant to identify the factors that may influence its occurrence, as: maternal obesity, excessive weight gain and moderate increase of glucose blood levels.

(ID 312) Polymorphic eruption of pregnancy - case report

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Background: Many skin changes in pregnancy are the result of physiologic adaptation (melasma, generalized hirsutism, secondary areola, etc.). Polymorphic eruption of pregnancy (PEP) is the most common benign dermatosis of pregnancy that mainly occurs in late pregnancy of primigravidae and patients with multiple pregnancies. The skin lesions vary from urticarial papules and plaques, vesicles, eczematous lesions to polymorphic lesions, nonurticarial erythema or targetoid lesions. There are no specific tests to decide whether a woman has PEP. Maternal and fetal prognosis is unimpaired. We present the case of a 32 years old primigravida with a severe form op PEP, that needed high doses of systemic corticosteroids to control the disease.

Case report: A 32 weeks with singleton pregnancy primigravida developed during her third trimester skin rash and pruritus that rapidly transformed into papules and plaques, and spread from the abdomen – the original site of eruption – to the trunk and extremities, sparing the face, palms, soles and mucosae. Maternal fever and malaise and fetal tachycardia completed the clinical picture. All laboratory findings were in normal ranges. Dermatologic assessment excluded other pregnancy related skin conditions. The initial treatment with topical steroids failed to control the symptoms and was necessary a two weeks treatment cure with systemic corticosteroids in high doses in order to lower the fever and calm the skin itching. The patient gave birth to a normal 2650 g, 49 cm, Apgar 8, female fetus at 36 weeks of gestation, the cause of the premature birth not being related to the skin condition.

Conclusions: Although PEP is the most common pregnancy-specific dermatosis, most often seen in primiparae women and in the last trimester of pregnancy, with self-limited evolution and with no impact of the fetal outcome, systemic corticosteroid treatment may be sometimes necessary for a proper management of symptoms.

(ID 222) Negative pressure wound therapy for diabetic foot lesions

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Diabetic foot wounds span the spectrum from simple, superficial cellulitis to chronic osteomyelitis or extensive soft-tissue infections. The diabetic foot lesions are very difficult to treat due to association of compromised blood supply from microvascular disease, with neuropathy. Negative pressure wound therapy (NPWT) is a therapeutic technique using a vacuum dressing to promote healing in acute or chronic wounds and enhance healing. This involves the controlled application of sub-atmospheric pressure to the local wound environment, using a sealed wound dressing connected to a vacuum pump.

We will present a case series of 10patients with diabetic foot infections treated by negative pressure. 4 of this case had extensive infections of the foot associated with severe sepsis. NPWT was applied for a period between 4 and 14 days. All patients had a favorable outcome with two exception: two patients with severe arteriopathy in which NPWT was ineffective and the wound remained the same. Regarding the 4 patients with extensive infections in all cases the limb affected was saved and the wounds had healed.

In conclusion NPWT may play an important role in healing the diabetic foot wounds and may have a significant impact on limb salvage, which is evident also from existing literature.

(ID 365) IS Hynes Anderson pieloplasty the best surgical approach for both intrinsic and extrinsic ureteropelvic junction obstruction in pediatric population?

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Objectives: Congenital ureteropelvic junction (UPJ) obstruction is one of the most common renal pathology in children, and has two major causes, known as intrinsic and extrinsic stenosis. In order to define whether the Hynes Anderson pieloplasty is still the best surgical approach when it comes to ureteropelvic junction obstruction in pediatric population, in comparison to Hellstrom vascular hitch technique, we thoroughly analyzed all cases presenting intraoperative crossing vessels and UPJ pathologic findings, and tried to establish a relationship between the two entities.

Methods: We performed a retrospective analysis of 53 pediatric patients, that were submitted to the Department of Pediatric Urology of "Marie S. Curie" Emergency Hospital for Children in Bucharest, between 01.09.2016 – 15.03.2017. All patients underwent Hynes Anderson pieloplasty, and pathologic samples were provided in 49 cases. The presence of muscle and collagen fibers was analyzed and all the patients enrolled were divided into one of the following histologic categories: 1. Normal muscle and collagen fibers; 2. Low muscle and collagen fibers; 3. Absent muscle and collagen fibers. The statistical analysis was performed using SPSS.

Results: From the 49 histologic samples retrieved for analysis, 27 were identified as crossing vessels (55.1 %) and 22 (44.9 %) had pure intrinsic obstruction. Of the 27 cases with crossing vessels, 9 samples were categorized as group 1 (33.33%), 14 as group 2 (51.85%) and 4 as group 3 (14.81%).

Conclusions: No statistical significant data was observed while analyzing the mechanism of UPJ obstruction in pediatric patients, thus emphasizing the fact that when it comes to crossing vessels , no surgeon can surely determine, based only on clinical evidence , that the obstruction is pure extrinsic. Therefore, up to this day, we strongly believe that Hynes Anderson pieloplasty is still the best surgical approach for both intrinsic and extrinsic ureteropelvic junction obstruction in pediatric population.

(ID 362) A rare case of coexisting bladder and uterine leiomyoma

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Although uterine leiomyoma, also known as uterine fibroids, is one of the most common gynecologic disorders affecting women during their reproductive years, up to 3 out of 5 women being affected by the age of 50. However leiomyoma of the urinary bladder is a rare benign tumor that accounts for less than 1% of all bladder tumours. Uterine fibroids can cause significant morbidity and may adversely impact fertility. The majority of them are usually asymptomatic and require no intervention, but for such as those causing irregular bleeding or pelvic pain, the treatment is represented by hysterectomy. As the tumor ages, the smooth muscle cells and collagen fibers loose their detail and appear to fuse, a process called hyalinization caused by gradual decrease in the blood supply.

We report the case of a premenopausal 48-year-old woman with a medical history of uterine leiomyoma adimited in the Deparment of Obstetrics and Gynecology of University Emergency Hospital with complaints of pelvic pain, dysuria, frequent urination and abnormal uterine bleeding that denied any history of hematuria. No significant findings, beside a firm, irregular pelvic mass was detected during physical examination. We performed a transvaginal ultrasound and detected several hypoechoic well defined masses in the uterus, presenting some posterior acoustic shadowing, the largest with 4cm in diameter. A tumor with the same characteristics was detected in the posterior wall of the bladder, using 3D echography. The blood test showed mild anaemia (8,8mg/dl). We decided to perform total hysterectomy with bilateral adnexectomy. The tumor in the gall bladder was also removed. Histopathology report of the surgical specimen revealed multiple uterine leiomyoma and congestion with interstitial hemorrhage necrobiosis and the bladder specimen showed a hyalinized leiomyoma. The patient presented a favorable outcome and was discharged after 5 days.

Bladder leiomyomas are very rare urinary tumors, with only 250 cases reported worldwide and complete surgical resection provides a very good outcome, leaving a very low recurrence rate with excellent prognosis.

(ID 363) Uterine artery embolization is ineffective in releasing mass-related symptoms in patients with multiple large uterine fibroids

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Aim: This study was undertaken in order to determine the effectiveness of uterine artery embolization in decreasing mass-related symptoms (urinary and intestinal symptoms) in patients diagnosed with multiple large uterine fibroids.

Material and Methods: We retrospectively analyzed the medical records of all patients, diagnosed with multiple uterine fibroids in the Department of Obstetrics and Gynecology of University Emergency Hospital of Bucharest between 01.01.2014 and 31.12.2016 who underwent uterine artery embolization. All the patients were questioned about mass related symptoms (dysuria, urinary urgency and frequency, constipation) and chronic pain prior to and at a follow-up visit in the first 3 months after the endovascular procedure. Data was obtained from medical records and the Statistics Department of University Emergency Hospital in Bucharest. The statistical analysis was performed using SPSS™ and Microsoft Excel 2010™.

Results: Between 01.01.2014 and 31.12.2016 429 patients underwent uterine artery embolization for multiple uterine fibroids. However in this study only 98 voiced mass related symptoms. The mean age in the group of patients analyzed was 41.2 years. Although 91.84 of the patients enrolled in this study (n=90) affirmed an important decrease or the absence of abnormal uterine bleeding in the first 3 months after the procedure, 80.61% of the patients (n=79) affirmed persistent mass related symptoms.

Conclusion: We conclude that uterine artery embolization is an effective minim-invasive procedure for the treatment of metrorrhagia in patients diagnosed with large multiple uterine fibroids, but inefficient in releasing mass-related symptoms

(ID 163) BTB versus Hamstring graft in ligament surgeons of the knee

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Objectives: For choosing the ideal method and graft in the reconstruction of the anterior criss- cros ligament of the knee, we must consider the structural and biomechanical native properties of the ligament thus the chosen method allow a quick and safe biological integration.

The present study follows the aesthetic and functional results in ligament surgeons of the anterior crisscros ligament of the knee, thereby making a comparison between the method "Bone to bone" and "Hamstring graft."

Method: The study is a retrospective type, for a period of six years (01.01.2010-01.01.2016), where 50 patients were included, 31 men and 19 women, aged between 18 and 45 years, the average age being 31.5 years. There were created two groups of interest, namely: GI – operated/ surgery patients with ischiogambieri graft and GII operated/ surgery patients operated with BTB method, being excluded the patients who came to examination/ control. As a rating scale postoperative it was used the Lysholm knee score, patients being evaluated at 3 and 6 months postoperatively.

Results: In the group G I were fit 32 patients and in the group G II- 18 patients. In the case of G I patients, 22 patients obtained more than 90 points, fits at "very good" and 8 patients were rated between 55-79 points, so the results was good. In the case patients in group (GII) 3 of them had a very good score (>90 points) and 15 good results (between 55-79 points).

Also, in GII was found an increase in pain score and a decrease in area of skin sensitivity.

Conclusions: There were no major differences between clinical outcomes/ results between GI and GII, but the great advantage which the hamstring graft has is that it let integrity of the extensor apparatus of the knee. In conclusion, the hamstring method is superior the BTB method, because in the BTB method the functional performance is diminished due to the disruption of the activity of the extensor mechanism.

(ID 296) Ambulatory blood pressure monitoring (ABPM) improves pregnancy outcome in women with gestational hypertension

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Introduction: Gestational hypertension was and remains the leading cause of maternal, fetal and neonatal morbidity and mortality worldwide, this being the most common medical disorder complicating pregnancy. Gestational hypertension and preeclampsia causes the most antenatal hospitalisations.

Aim: To assess the benefits of ABPM in the diagnosis and follow-up of gravida with gestational hypertension and de effect of pregnancy outcome.

Method: We performed a retrospective study of patients with gestational hypertension and preeclampsia from a total of 7253 women who deliverd 2014 - 2016. They were divided into two groups according to the pregnancy follow-up: conventional prenatal care and the use of ABPM.

Results: The incidence of gestational hypertension was 10.87%. Uninvestigated pregnancy rate was relatively important 23%. Since 2014 about 60% of followed-up pregnant women with gestational hypertension or preeclampsia underwent ABPM.

The risk factors were: family history of hypertension 70%, primipara 38% , extreme ages 43%, congenital or acquired thrombophilia 15%, gestational hypertension in previous pregnancies 39%, obesity 30%, polycystic ovarian syndrome 20%, type I diabetes 50%, history of infertility 20%, multiple pregnancy 5%, pregnancy after *in vitro* fertilization 8%.

The use of ABPM in pregnant women with risk factors for gestational hypertension proved to be an early diagnostic tool.

Repeted ABPM allowed also the adjustment of antihypertensive therapy, maintaining maternal blood pressure values at a safe level without compromising uteroplacental perfusion and fetal condition.

The premature birth rate was similar in the 2 groups about 20%, but the incidence of intrauterine growth restriction was lower in the ABPM group. Eclampsia: 5 cases, all occured in patients with conventional follow-up. All cases of abruptio placentae (6) occured in the convensional followed-up group.

Conclusions: Ambulatory blood pressure monitoring in women with gestational hypertension proved superior to conventional measurements in terms of diagnosis and therapeutic attitude, so the use of this method, from the time of diagnosis, turns judicious. Maternal, fetal and neonatal complications were comparable in the two groups of followed-up patients but were more common and severe in pregnant women with conventional prenatal care.

(ID 294)The use of misoprostol in obstetric patients

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Each drug is approved for a specific use with well-established indications. In particular situation, when in a country a drug is not approved for one pathology, the physician can use it if he can prove that the effect brings benefit for the patient. He must explain the patient what are the risk and that that particular drug is not approved to be used in that case by the national drug administration.

Objective: we studied the use of misoprostol in our hospital and tried to establish the efficiency, the outcomes and the adverse effects.

Methods: We analyzed all the patients that received misoprostol in our clinic during 2015-2016. We analyzed the indications, the theoretical aspect of the utilization and the outcomes for each patient.

Results: Misoprostol was administered in association with mifepristone for induction of first trimester abortion where the pregnancy would have aggravated the mother's pathology (sever cardiac disease, congenital cardiac malformations or systemic erythematosus lupus) and of second trimester abortion in cases of malformed fetuses or intrauterine fetal demise. It was also used for labor induction, for first trimester miscarriage or for post curettage bleeding. We found more uses for misoprostol, all according to international standards and clinical trials. We found that the use of this drug was safe and efficient in up to 95% of cases and that there were no other adverse effects than the ones quoted in the label and that these were less than 2%. The result of the use of these drugs was as expected with multiple benefits for the patient.

Conclusions: administering a drug for indications that are not on the label but are proven by studies can bring an improvement in the health care and in the outcome of the patient.

(ID 297) Off-label options in active management of labor in preeclamptic patients

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Introduction: Diazepam, first brand name Valium, is a benzodiazepin derivative that is commonly used as an anxiolytic, sedative and antiepileptic drug. It's used also in obstetrics mainly during labor. When taken in late pregnancy, Diazepam can cause withdrawal syndrome in the neonate and sedation. It appears in many clinical studies for the last 40 years, especially during the treatment of prolonged labor. In our clinic, diazepam is used off-label during the onset of labor and the active stage of labor.

Aim: A clinical analysis of the off-label use of Diazepam in preeclamptic women in labor.

Methods: All 31 patients were primigravida, 37 – 39 weeks with gestational hypertension or mild preeclampsia, with cephalic presentation and intact membranes, with no fetopelvic disproportion and no uterine scar, with misoprostol induced labor and no epidural anaesthesia. Two doses of 10mg of Diazepam were administered intramuscular during the first stage of labor. We assess the duration of the first stage of labor, the rate of cervical dilatation, maternal blood pressure values, neonatal outcome, maternal and neonatal adverse reactions. The potential effect of Diazepam on pain relief was not evaluated. The results were compared with a control group of 35 primigravida with the same features and no administration of Diazepam.

Results: All 31 women delivered vaginally with no complication of the second and third stage of labor. In the group treated with Diazepam the first stage of labor was shorter and the rate of cervical dilatation significantly faster than in the control group.

Median maternal blood pressure values were slightly lower in the group of women treated with Diazepam. None of the patients presented any adverse reactions like: confusion, drowsiness, tremor, muscle weakness, diplopia, nystagmus, blurred vision, respiratory depression or skin rush. The neonatal outcome was similar in both groups.

Conclusion: Diazepam during labor leads to faster and more effective dilatation of the cervix. Its use in the dose administered in our study is safe for both mother and infant. The use of Diazepam during labor in women with preeclampsia is an option of active management of labor to consider in these cases.

(ID 370) Hysteroscopic approach of abnormal uterine bleeding in women receiving anticoagulant therapy

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Introduction: Abnormal uterine bleeding affects more than 20% of women taking oral anticoagulants. Patients with deep venous thrombosis require long-term anticoagulant therapy to prevent recurrent thromembolism; the most common used oral anticoagulant is vitamin K agonist. Hysteroscopy is the gold standard of evaluation of the cervical canal and the uterine cavity, it provides the most accurate diagnostic for endocervical and endometrial pathology and intracavitary masses.

Aim: To assess the use of hysteroscopy in the management of uterine bleeding.

Method: We perform a prospective observational case series of 14 women receiving oral anticoagulant therapy with vitamin K antagonists (acenocumarol) for over 18 month after major deep venous thombosis that presented with abnormal uterine bleeding (intermenstrual bleeding and menorrhagia). All the 8 women were parous, age between 36 and 43 years, with ereditary thombophilia, with no gynecologic history and were regulary followed-up by the cardiologist. After physical examination and transvaginal pelvic ultrasound, hysteroscopic exploration was decided. In order to perform it, bridging therapy with low-molecular-weight heparin was decided. Oral anticoagulants were stopped 5 days before the procedure and continued 1 day after. In all 14 patiens endometrial and endocervical biopsy was performed.

Results: Diagnostic hysteroscopy revealed intrauterine pathology in 10 of 14 patients: submucosal fibroids in 1 patients, endometrial hyperplasia in 4 patients, endometrial polyps in 3 patients, multiple small intramural fibroids in 1 patients, endometrial atrophy in 1 patients. The hysteroscopic findings correlated with the histopathologic findings (endometrial fragments obtained by endometrial biopsy and fibroids and polyps trated by hysteroscopic resection) : endometrial hyperplasia 4 cases, endometrial atrophy 1 case, endometrial polyp 3 cases, submucous myoma 1 case, normal endometrium - proliferative or secretory in 4 cases. In 3 cases of endometrial hyperplasia we performed hysteroscopic endometrial ablation, in 7 cases progestin therapy was initiated and in 4 patients a levonorgestrel intrauterin device was inserted.

Conclusions: The management of uterine bleeding in high-thromboembolic-risk patients on oral anticoagulants is challenging. Hysteroscopy represents for these women an accurate diagnostic tool and also provides important therapeutic options.

(ID 322) Clinical and biological predictors of severity in cranio-cerebral traumatic injuries

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Objective: Cranio-cerebral traumatic injuries (CCTI) represent a real public health issues as long as they are associated with a high rate of death and disability among young adults. The ideal cerebral monitor would be a noninvasive system of markers able to provide quantitative hemodynamic and metabolic information at multiple sites.

Our study tried to describe the complex context of the post - traumatic brain and to identify clinical, biological/ biochemical parameters helpful in selecting the therapeutic options.

Methods: In the present study we compared 51 patients between 18-70 years old of both gender: divided in three groups - mild, medium and severe cranio-cerebral trauma - according to Glasgow Coma Scale, versus control group -12 cases. Analyze included clinical elements (heart rate, blood pressure, body temperature) and biochemical features (plasma electrolytes, red blood cell count, white blood cell count, glucose, cholesterol total and fractions). Statistical analyze was performed using Microsoft Excel; data were reported as the mean ± standard deviation (mean + SD). *t* test (Student) was used to compare variable in two groups. *P*-value <0.05 was considered statistically significant and SPSS 22.0 to

Results: We identified an increased body temperature ($p<0.05$) in patients with severe CCT versus control, a significantly increased heart rate and blood pressure ($p<0.05$) in patient with CCT (mild, medium and severe) versus control.

WBC showed significantly increased values ($p<0.05$) for both total WBC, granulocytes and lymphocytes for severe CCT versus control. Blood hemoglobin and hematocrit and plasma Na were significantly reduced ($p<0.05$) only in patients with severe CCT versus control. Total cholesterol showed reduced values in medium CCT ($p<0.05$) but increased values in those with severe CCT ($p<0.05$).

Conclusion: We may appreciate that clinical parameters (increased heart rate, blood pressure) are associated with a severe evolution.

Biological parameters associated with severe evolution were: plasma Na decrease, plasma glucose increase, plasma cholesterol reduction.

(ID 232) Vacuum-assisted therapy for wound closure after pericardial drainage in a patient with left ventricular assisting device

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Objective: Although known in cardiac surgery as the newest therapy option for the treatment of deep sternal wound infection, there is no data available in the literature about the use of vacuum-assisted therapy (VAT) after surgical treatment of pericardial effusions.

Methods: We report the case of a 43-year old patient with severe left heart failure due to dilative cardiomyopathy and multiple myocardial infarctions, status 10 months post implantation of left ventricular assisting device (LVAD), who presented for progressive dyspnea on exertion and fever. Clinical examination showed a hemodynamically stable, oliguric patient, with LVAD parameters within the normal range. Biologic findings revealed moderate anemia, acute inflammatory syndrome with mild leukocytosis and neutrophilia, and mild renal dysfunction. Echocardiography detected a large pericardial effusion anterior to the left ventricle, with mild hypokinesia of the right ventricle and severe left ventricular dysfunction. Empirical antibiotic therapy was initiated with Ceftazidime and Gentamicin. Computer tomography confirmed pericardial fluid in large amounts with mass effect on the right ventricle, located anterior to the Polytetrafluoroethylene membrane previously implanted in front of the right ventricle for protection in the event of reintervention for heart transplantation. Pericardiocentesis and decompression of the right ventricle was performed by extraction of approximately 600ml of bloody fluid, with relieve of patient's symptoms. Recurrence of pericardial effusion after one week lead to the decision to perform surgical drainage via a subxiphoid pericardial incision and use of VAT.

Results: VAT was used for 2 weeks by constant dressing change at 1-3 days with local and systemic antibiotherapy, until significant decrease of pericardial fluid and wound secretions was noticed. Echocardiographic assessment revealed minimal residual fluid, while lack of edema and proper granulation of the surrounding soft tissue allowed for secondary wound closure.

Conclusion: VAT can be safely used after surgical management of pericardial effusions in patients with LVAD, by continuous removal of residual or recurrent secretions, while aiding wound closure by stimulation of soft tissue granulation and local circulation.

(ID 246) Management of colonic polyposis in case of malignant degeneration

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Introduction: Colorectal cancer is the second most common in women and first malignancy in men in the world. This neoplasm usually begins as a "polyp", a nonspecific term to describe a growth on the inner surface of the colon. Polyps are often non-cancerous growths but some can develop into cancer, such as in our case.

Materials and methods: A 39-year-old patient presented with right iliac fossa pain with palpable abdominal mass, intestinal transit disorders, dyspepsia, anemia of unknown cause and weight loss (20 kg in the past 8 months). From his medical history data we know that he underwent appendectomy 5 months ago. The family history revealed no significant pathology.

Imagistic investigations are represented by abdominal echography followed by CT-scan for the better evaluation of the neighborhood relations and of locoregional spreading and colonoscopy with biopsy and histopathological exam (the only one that can sign the diagnosis for malignancy). The last one revealed many colonic polyps at the caecum-ascending colon with invasion to ileum, anterior and posterior abdominal wall and mesentery.

The best surgical option for cancers located in the right colon remains controversial between segmental resection or subtotal colectomy.

Results: Our patient underwent subtotal colectomy. This procedure requires resection of the primary tumor with adequate proximal and distal margins, and appropriate en bloc regional lymphadenectomy with complete mesocolic excision. Digestive continuity was restored by mechanical side-to-end ileo-sigmoid anastomoses.

Conclusion: The rationale of this approach is the lower risk of leakage through a well-vascularized and tension-free anastomosis and the relatively good function and quality of life provided if the recto-sigmoid junction and its vascular supply can be oncologically preserved.

(ID 239) Reduction of anterior table frontal sinus fractures using an endoscopic approach

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Introduction: The frontal is a solid bone, able to resist significant forces. However, severe craniofacial trauma can result in fracture lines, affecting especially the anterior table of the frontal sinus. Untreated, it can lead to complications, such as persistent sinusitis, mucocele formation due to mucosa entrapment or important facial deformities. The gold standard in treating displaced or comminuted fractures is a surgical intervention that aims to restore the natural shape and function of the sinus, including the drainage.

Materials and method: The normal approach consisted in a bicoronal incision with a wide exposure of the fractured area and an eyebrow incision. This intervention may lead to esthetic problems and a longer recovery time. Our aim is to propose a minimally invasive endoscopic approach, that allows us to efficiently reduce the fracture and stabilize it using plates and screws. For selected patients, this technique offers good results using a less extensive intervention.If the patient suffered a complex trauma, with other fractures line that need intervention, this approach however does not offer a good exposure and the classical open intervention is advisable.

Results and conclusions: We consider this method to be an efficient one, that can provide valuable results using a minimally invasive approach with less trauma and a shorter recovery period for the patient. Although not suitable for every case, in selected patients the results are similar with the ones obtained using the classical method and the esthetic aspects are superior. Another advantage is the shorter time spent by the patient in the hospital, with less associated costs. However, further experience with this method is necessary, to allow us to better select all patients suitable for the intervention and know the exact limitations for the intervention.

(ID 225) Results after arthroscopic stabilization of acute AC separation using suspension system

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Objective. Acromio-clavicular joint dislocation represents a very common shoulder injury characteristic for young and active individuals. The scope of this work is to evaluate the short term results after arthroscopic stabilization of the acute type AC separation using a suspension system for fixation.

Material and method. A number of 15 cases of acute AC dislocation treated in our department using the arthroscopic method and a single TightRope® device fixation were evaluated. The patients were evaluated perioperatively, at 6 weeks and 6 months after surgery using shoulder radiographs, Constant-Murley Score and the Visual Analogue Scale.

Results. A significant reduction in pain perception between the prepoperative moment and 6 weeks after, with a statistcally significant iprovement of the CMS scores at 6 months compared to 6 weeks after surgery were noted. No mechanical or other types of complications were recorded so far with an overall good level of satisfaction.

Conclusions. The arthroscopic stabilization procedure of acute AC dislocation with TightRope® represents a safe and reliable option with some suggested advantages which remain to pass the test of time.

(ID 134) A new minimally invasive technique - MoCAT - a modern way of treatment in the hydatic hepatic disease

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Background: Minimally invasive techniques are considered in this moment standard methods of treatment for hydatic hepatic cysts larger than 5cm. The type CE I and CE3a cysts, according WHO-IWGE clasification, are treated using PAIR (Puncture, Aspiration, Injection, Re-Aspiration). Placing a catheter at the end of the procedure (PAIR-D) is recomended for larger cysts. The great step forward is made by Akhan, in Turkey, who has modified this technique increasing the catheter's diameter, then washing under pressure and suctioning the cyst's content (MoCAT). Akhan has used successfully it for type CE 2, CE3b, and even selected CE4 cysts. We try to present our experience using this new technique.

Material and methods: During 03.2014 – 12. 2016 period, 24 Mo-CAT and 27 PAIR procedures have been performed at 37 patients (3 patients have had 2 hydatic hepatic cysts and 2 procedures were performed ; other 5 patients needed a second procedure during the surveillance; 1 pacient had a giant splenic cyst and multiple hydatid hepatic cysts, and she needed 2 series of 3 procedures).

Results: The course of the disease was favorable, and the pacients remained under surveillance the next years post-intervention. There were minor adverse effects, especially cutaneous reactions. In 4 cases who underwent MoCAT procedure, an abscesses of the residual cavity have been developed, which have been drained percutaneously, too. Using MoCAT for other 2 pacients who were diagnosed with relapse of the hydatic cyst, we were able to prove and also to treat abscesses of the residual cavities. The same type of drainage was used to treat a residual cavity after PAIR, maintained by a biliary fistula. The results were also good.

Discussion: The minimally invasive techniques are important methods to treat the hydatic hepatic cysts. Especially MoCAT is a major step forward to treat hydatid cysts as CE2 and CE3b, which were assigned for surgery until this technique.The results are good and invite us to use these techniques as the first choice; the role of the open surgery remains for those cases with severe complications. Even the difficulties during the evolution of the remaining cavities (abscesses, lack of remission) could be solved with the minimally invasive techniques.

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(ID 198) Inguinal lymph node metastasis after relapsed sole melanoma

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Background: Melanoma is the most serious form of skin cancer. Detected and treated early, it is almost always curable. Left untreated, it can advance and metastasize, become harder to treat and can be fatal.

Material and method: We present the case of a female patient of 64 years old, with operated left sole melanoma (tumor formation excision - 03.2016) history, hypertension, coronary heart disease, dyslipidemia and chronic obstructive pulmonary disease who received chemotherapy after initial surgery. The patient was hospitalized for recurrence of sole node tumor formations and asthenia. Clinical examination revealed the presence of two tough painless achromatic nodular sole formations of about 2/1.5 cm, respectively 1/0.5 cm, adherent to the plane of skin and deeper plans. Laboratory analysis detected only an inflammatory syndrome. Computed tomography and magnetic resonance imaging have raised the suspicion of one left inguinal lymphatic node metastases in the context of a left sole tumor recurrence, as well as the existence of lung and bone metastases. Excision of a left inguinal lymph node for biopsy purposes was performed, in the same operator time with excision of left sole nodules. Lymphoscintigraphy performed postoperatively showed on delayed images a small area of hypercapture in left inguinal region, interpreted as a satellite lymph node, correspond the adjacent area of lymph node surgically removed.

Results: Postoperative evolution was favorable. Pathological examination revealed metastatic melanoma and lymphatic node metastatic melanoma. Currently, the patient is undergoing chemotherapy in the oncology department.

Conclusions: Melanoma is a serious disease with poor prognosis. Untreated early has great lymphatic and vascular metastatic potential. Only close oncology and surgical postoperative supervision can control evolution of the disease, leading to increased survival and improved quality of life.

(ID 99) Transcatheter chemoembolization with doxorubicin drug- eluting beads in non-resectable hepatocellular carcinoma

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Objective: Our paper presents the methods and results of selective liver chemoembolizations in patients with intermediate or advanced stage of hepatocarcinoma which are not candidates for surgery. It were analyzed the adverse reactions, time-to-progression and quality of life.

Methods: We present a retrospective study in which were included 147 patients with liver chemoembolization given in a period of 18 months (2015-2016). In group, 68% (100 patients) were males,32% (47 patients) females. 87% (128 patients) had liver cirrhosis related to B or C-virus. Assessment of the feeding vessels before the intervention was done by angio-CT. During the chemoembolization procedure were used TANDEMTM absorbable microspheres loaded with 100 mg Doxorubicine. The follow-up was done at fixed periods (initially at 2 months after the last session of chemoembolization),then at every 3 months) in the Radiology Diagnostic Department, by CT or multiphase-MRI. Radiographic response was assessed by Modified Response Evaluation Criteria (m-RECIST) in solid tumors criteria.

Results: The objective response (OR) was 64% (94 patients) with a prevalence of adverse reactions (minor in majority) of 47% (69 patients); the most common was mild post-embolization syndrome (71% - 49 patients), consisting of pain, nausea, fever; management of these complications was conservative and only 2 patients required further interventions. From OR group, 32% (30 patients) had complete response (CR), 35% (33 patients) had partial response (PR) and 33% (31 patients) had stable disease (SD). The control rate of the disease was better in patients which associated Sorafenib at liver chemoembolization.

Conclusion: Liver chemoembolization with absorbable microspheres pre-loaded with Doxorubicin is a feasible and efficient treatment in non-resectable primary liver tumours with a high rate of oncological success: standardized procedure with a defined endpoint. The survival rate in patients with HCC non-surgical in intermediate stage is over 60% at 1 year. Meanwhile, multidisciplinary management in the optimal treatment of hepatocarcinoma becomes far more complex and collaborative.

(ID 350) Using microcalorimetric thermograms to identify pathogen agents in the orthopedics field

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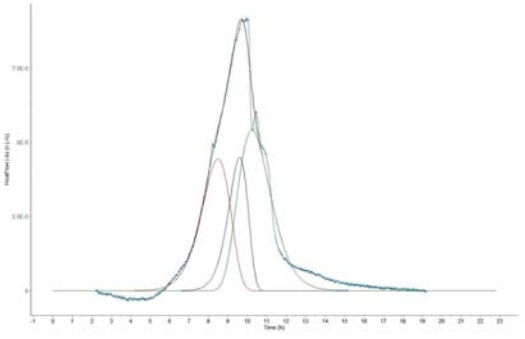
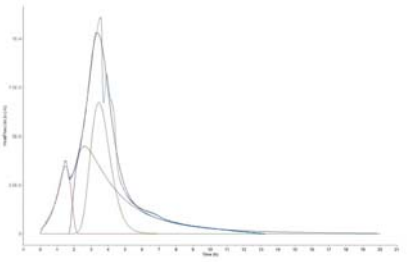
Objectives: *Staphylococcus aureus* (Staff) is one of the most frequent agents involved in the orthopedic field infections, causing in neglected cases wide infections with important tissue destruction. The classical diagnosis includes tests requiring up to 24-48 hours. Our aim is to find and perform a faster and effective diagnosis technique in order to better support the patients.

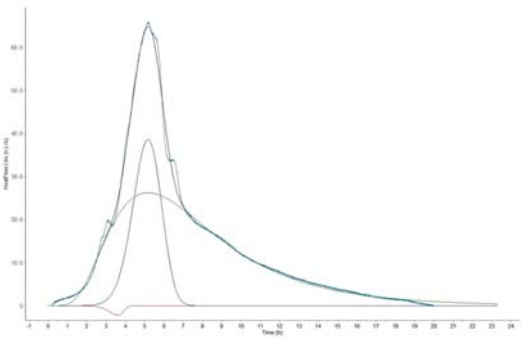
Method: We present the case of a 70 year old female patient admitted to our ward with an infection in the right hip after a hemiarthroplasty in another medical service. We performed surgery and harvested samples from the infectious site then we continued with the surgical treatement. First we performed surgical debridement of all the infected and necrotic tissues followed by chemical debridement. The samples were examined in the hospital laboratory which identified Staff and at the same time we used a microcalorimetry technique in order to evaluate the bacterial growth.

Results: Using the harvested material from the patients we performed 3 different tests which came out very similar to each other. For the first test we inoculated 600 μl of Muller-Hinton (MH) liquid medium with the sample and then tested it in a special microcalorimeter cell. The second test was performed using an isolated colony that was diluted in MH medium and for the third test we use bacterial grown for 24 hours in MH medium. The microcalorimeter thermograms were complete in 10 hours, faster than the classical microbiological diagnosis.

Conclusions: Using microcalorimetry technique we could describe the growth thermograms for Staff in 10 hours, less than half time in comparison with classical microbiology diagnosis. We will extend experiments aiming to use this technique in more complex situations, as for the testing for antibiotic susceptibility.







(ID 218) Facial reconstruction in burn injury - a case report

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Introduction: The burn injury represents the worst trauma of the human body. The prognostic in the thermal injuries depends on the depth of burn, the total body surface area, the patient's age, the anatomical structures involved etc. Sometimes, although the patient life is not in danger, the challenge in surgery approach consists in functional and aesthetic units involved.

Objective: This case report aims to present the calamitous effects of the facial burn injury, a region with a high density of gentle structures, either functional or cosmetic units.

Method: It is a case of a 58 years old patient, with a hemi facial third degree contact burn after a transitory stroke episode. After one week of conservative treatment we proceed to escharotomy which includes the cheek till mandibular bone, partial depth of the upper lip and full thickness of the lower lip. At this stage, we choose to cover the mandibula with a rotation-advancement cervical flap and apply a barrier skin graft in the rest of the defect.

The next stage, after 5 days, we completed the excision of the necrotic tissues, displaced the barrier skin graft with a thick skin graft for good aesthetic result of the cheek, and we reconstructed the lower lip with a contra lateral Karapandzic flap.

The complications that appeared were a portion of skin graft loss and wound dehiscence, both of them resolved in a third procedure.

Results: At this time, the patient has a good aesthetic result in cheek and lips, and most important a good functional reconstruction.

Conclusion: The reconstruction of the facial aesthetic units should be performed individually for each other. Innervated Karapandzic flap is preferable due to its functional and cosmetic advantages.

(ID 292) Data regarding the behavior impact of cars' passengers on their health as well as the potential public health impact

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Objective: The improving of transportation offers many benefits, but also can bring some changes in the peoples' health. A part could have an immediate impact while the others have a long-time influence. We evaluated the behavior of the cars' passengers in order to analyze what could influence their health, with potential effect on public health.

Method: We designed a descriptive study and applied it on Romania territory, on the passengers of more than 1,500 cars. We intend to extend this type of surveillance. The study consisted in evaluating different aspects of the drivers and their passengers' behavior. Among the evaluated characteristics we noted the driver or his passengers' gender, approximate age, if they wear the seatbelt, talking on the phone, eating, drinking or smoking. We analyzed the data using Epi Info 7.1.5.2.

Results: The majority (97.91%, 95%CI: 96.86%-98.63%) of the cars were registered in Romania. Of all cars, 83.38% were personal, 4.44% were taxis, and the rest were from work. Most of the drivers were men 80.57% (95%CI: 78.14%-82.80%) and only a part (24.30%, 95%CI: 21.87%-26.19%) of them wear seatbelts. Some of the drivers (8.08%, 95%CI: 6.60%-9.84%) were using the phone, few of them were smoking (3.21%, 95%CI: 2.30%-4.45%), while others were eating or drinking. In what concerns the passengers from the right front seat, less than a quarter were using the seatbelt (22.59%, 95%CI: 18.62%-27.10%) and a small part of them were smoking (0.61%, 95%CI: 0.27%-1.13%).

Conclusions: The most important characteristic observed was the small number of passengers wearing the seatbelt, an aspect that could have an important impact in a car accident. Another dangerous behavior was represented by the drivers using their phone. The health and safety of the passengers can be influenced also because they are eating and drinking in the car, behavior that distracts their attention, they could choke in a car accident and could get a gastrointestinal infection because of eating in an inappropriate environment. On long term the incorrect positioning of their chair could affect their back. We intend to continue the study and to extend it in some counties from where we have fewer data.

(ID 256) Acute pancreatitis in peritoneal dialysis and haemodialysis: risk, clinical course, possible etiology

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Background: It has been suggested that the incidence of acute pancreatitis in patients with end stage renal failure is increased. The primary aim of this study is to determine if patients with end-stage renal disease on peritoneal dialysis have a higher risk of developing acute pancreatitis than patients on hemodialysis

Methods: Retrospective cohort study. Standardised ratios (as an approximate relative risk) between the incidence of acute pancreatitis in haemodialysis or peritoneal dialysis and the general population were calculated. Possible risk factors were identified..

Results: In 269 patients on haemodialysis, 5 patient developed an attack of acute pancreatitis. Patients on haemodialysis did not show an increased risk for acute pancreatitis compared with the general population. In 128 patients on peritoneal dialysis, seven patients had nine attacks of acute pancreatitis. Patients on peritoneal dialysis had a significantly and highly increased risk for acute pancreatitis. There was no observed difference in length of hospital stay and ICU stay. All cases of acute pancreatitis were interstitial. There were no complications or deaths related to acute pancreatitis.

Conclusion: Peritoneal dialysis is a risk factor for acute pancreatitis. There is no statistical difference in acute pancreatitis-related mortality and morbidity between haemodialysis and peritoneal dialysis. The risk of acute pancreatitis in patients on long term peritoneal dialysis is significantly and highly increased compared with the general population. The underlying causal mechanisms remain to be elucidated.

(ID 259) Factors of failure in incisional hernia's surgery

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The incisional hernias occur as frequent as 20 years ago even if we use modern technologies in terms of suture. Sutures techniques, either primary repair or applied after failure of primary repair are characterized by high rates of recurrence. Using the hernia mesh has become essential in repairing of all types of hernias -. inguinal, ventral or incisional. Implantation of the mesh is a relatively well coded surgical procedure. But surgery is only first step in the process of healing. Implantation starts a strong response with haematological mechanisms: protein absorption, complement activation, coagulation, platelet activation, neutrophils activation and tissue mechanisms: proliferation, adhesion, fibrosis.

Recurrence rates are consistently lower when replacement meshes are used and a variety of meshes have been developed for this purpose. How embedding mesh by the human body is realized and how the biomechanical limits of abdominal wall are restored is still subject of debate for surgeons. Histopathological studies and progress in the design and materials are only keys to solve this problem. Also pathological studies should determine the right material for personalized repair according to each patient's biology. This paper try to analyze the molecular failure factors in incisional hernia surgery, different from errors in surgery procedures.

Complications can be avoided or reduced by an appropriate selection of the type of place in a particular case and by doing a meticulous technique. Incisional hernias are considered at this moment a biological progressive phenomenon, not only a strictly technical one, a "simply hole of abdominal wall " who has to be firmly sutured.

(ID 174) Lower lip reconstruction after squamous cell carcinoma excision: series of cases

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Objective: The lip is an important part of the face, playing a significant role in oral competence, visual look, speech articulation and also as a tactile sensory organ.

The most frequent malignacy related to the lips is squamous cell carcinoma (90%), which involves more commonly the lower lip. Reconstruction is a surgical challenge especially for extended and advanced lesions.

This presentation case outlines the surgical treatment of a series of patients with advanced cutaneous lower lip tumor, placing emphasis on the reconstruction methods after surgical excision.

Material and method: We present the clinical data and postoperative results of patients with tumoral etiology of the lower lip admitted in our Plastic Surgery Department between February 2016 and January 2017. The tumoral lesions were extended in one patient in the left commisure and in another patient on the left commisure and one quarter of the upper lip. Surgical excision was realized followed by reconstruction of the lower lip.

Results: Histopathological examination revealed squamous cell carcinomas with negative margins. Reconstruction of the defects were realized using different local flaps as Estlander flap and unilateral Bernard-Webster flap and in one advanced case using a regional flap (deltopectoral flap).

Postoperative results were favorable, the patient with early stage tumor recovered within three weeks after surgery. The patient with advanced tumor presented postoperative complications as oral incontinence.

Conclusions: Lower lip reconstruction represents a challenge for plastic surgeons, especially large defects, when reconstitution of the oral sphincter competence is very important.

Early recongnition and treatment of squamous cell carcinoma of the lip is critical for a good outcome, the reconstruction process having an important impact on the patients ability of resuming their personal and profesional life.

Acknowledgment: This paper was part of the "Research project on the establishment, management and functioning of a surgery excellence center in cutaneous malign tumors" co-financed through the research grant number 128/01.08.2016,offered by S.C. Medical Prestige S.R.L., coordinator University of Medicine and Pharmacy "Carol Davila", Bucharest, Romania.

(ID 196) Total lower eyelid reconstruction after excision of an invasive basal cell carcinoma: case report

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Objective: In spite of being a small organ, the eyelids contain numerous histological elements that can be the origin of benign and malignant lesions. Basal cell carcinoma is known as the most common type of skin cancer with a rapidly rising incidence, 90 % of the cases occurring in the head and neck region. The eyelids are involved in 10% of these cases, making it the most prominent eyelid malignancy.

The aim of this paper is to present the therapeutic management of a basal cell carcinoma of the lower eyelid.

Method: We report a case of a 75-year-old male patient presented to the Department of Plastic Surgery of "Prof. Dr. Agrippa Ionescu" Emergency Clinical Hospital with a 1.5/0.9/0.3 cm ulcerated tumoural mass located in the lower eyelid region. The tumour excision resulted in a full thickness defect covering about 2/3 of the eyelid. The reconstruction of the canthus was possible using a periosteal strip elevated from the orbital rim and reflected medially, followed by a Tenzel flap.

Results: The histophatological result revealed a nodulocystic basal cell carcinoma with safety margins. There was no complication such as ocular irritation, orbital haematoma or postoperative epiphora because of ectropion or entropion. The patient healed uneventfully, with a functionally and cosmetically satisfactory outcome.

Conclusions: We highlight this case because eyelids are complex structures and pose a challenge for reconstruction. The eye, being the main sensory organ, its proper function is unquestionable; as the focal point of the face, acceptable cosmetic in reconstruction should be a major requisite.

Acknowledgment: This paper was part of the "Research project on the establishment, management and functioning of a surgery excellence center in cutaneous malign tumors" co-financed through the research grant number 128/01.08.2016,offered by S.C. Medical Prestige S.R.L., coordinator University of Medicine and Pharmacy "Carol Davila", Bucharest, Romania.

(ID 141) Sequestred thrombus in foramen ovale - an unexpected complication after a coronary artery bypass grafting surgery

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Introduction: A thrombus sequestered in a patent foramen ovale is a particularly rare form of paradoxical embolism. It implicates the halting in travel of a thrombotic embolism at the point of patent defect in the interatrial septum with subsequent thrombus obtrusion into both atria. Such an embolism presents with a high risk of stroke or pulmonary embolism indicating the need for an interdisciplinary team to guide treatment.

Case presentation: 53 year old male presents with acute ischemia of the right arm. The patient had undergone bypass surgery 3 weeks prior. His ischemic symptomatology remits under heparin treatment but days later he experiences recurrent bouts of hemoptysis. Thoracic CT shows acute bilateral PE. Doppler echo shows DVT in the right leg, unnoticed prior to the bypass surgery. TEE shows a patent foramen ovale with a sequestered thrombus extending into both atria of significant dimensions. Emergency surgical intervention is decided upon. A spiral, adherent thrombus roughly 7x2cm lodged in the formane ovale extends into the right atrium, through the tricuspid valve and into the ejection tract of the right ventricle. Trans-septal excision of the left atrial extension is performed and the patent septum is sealed. The patient is discharged a week later in sinus rhythm and under anticoagulation and antiaggregation therapy.

Discussions: This case is indicative of the possible complications after myocardial bypass surgery even in a patient with a good post-operative evolution Lab tests indicate a thrombophilia with hyperhomocysteinemia related to a MTHF gene mutation, background condition which explains the onset of DVT despite of the post-operative heparin therapy.

(ID 329) Umbilical cord pathology - report of three cases

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Background: Pathological features and abnormalities of the umbilical cord play an important role in perinatal morbidity and mortality. Because the umbilical cord is the lifeline of the fetus, any disruption of blood flow through the umbilical vessels can lead to severe fetal consequences. Umbilical cord abnormalities are numerous and include: true or false knot, abnormal coiling, abnormal length, constriction, velamentous insertion and vasa praevia, single umbilical artery, thrombosis, hematoma and cord rupture, hemangiomas and teratomas, cord cysts or varix and cord wrapped around the fetal neck.

Aim: To evaluate umbilical cord abnormalities and their relationship with the pregnancy outcome.

Material and methods: We present three cases of umbilical cord pathology. The first of them is a case of quintuple nuchal cord (cord wrapped five times around the fetal neck). The second is a case of true umbilical cord knot. Both babies were delivered by C-section with excellent outcome. The third is a case of umbilical vein thrombosis with vascular obstruction and negative pregnancy outcome (term stillbirth).

Results: Umbilical cord abnormalities are numerous, ranging from false knots or nuchal cord, which may have no clinical significance, to umbilical vein thrombosis, which often leads to fetal death.

Conclusions: Many pathologic features of the umbilical cord affect fetal well-being adversely. In case of known umbilical cord complications we have to use all the available courses of action to avert their associated morbidity and mortality.

(ID 83) Abdominal wall necrotizing fasciitis – clinical and therapeutic aspects

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Introduction: Soft tissues diffuse necrotic infections are rare. They are severe pathologies, with significant mortality. These types of pathologies often occur in immunocompromised conditions, being characterized by an insidious onset and rapid progression, with poor prognosis and high risk of serious functional sequelae. The abdominal wall localization of this disease is rare.

Material and method: We present the case of a 51 years old male patient, obese and with neglected type II diabetes mellitus history, treated with oral hypoglycemic agents, who was hospitalized for inferior abdominal pain with extension in the left flank, fever, chills and impaired general condition, symptoms that appeared five days before presentation to the hospital with gradually increased intensity. Clinical examination reveals an area of about 10/5 cm suprapubic skin necrosis, edema, erythema and crepitus in the lower abdominal wall, with extension on the left flank, with skin integrity preserved. Biological examinations showed significant leukocytosis, moderate anemia, thrombocytosis, hyperglycemia, hyponatremia, moderate hepatic cytolysis syndrome, impaired renal function and dyslipidemia. Emergency surgery consisted of wide incisions, debridement and excision of necrotic tissues.

Results: After sustained antibiotic therapy and repeated excision of necrotic tissue, the patient's evolution was favorable. Bacteriological examination revealed Acinetobacter spp. We performed secondary suture 18 days after the initial surgery, with good functional and aesthetic results.

Conclusions: Despite antibiotic therapy and extensive surgery, the mortality of necrotizing fasciitis remains high. Close supervision of the surgical wound evolution is required. Usually, serial excisions of devitalized tissues are necessary. Early diagnosis and immediate intensive treatment have great importance for the evolution of the disease.

(ID 215) Laterocervical tumor at a patient with multinodular goiter- surprisingly a schwannoma

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Introduction - Schwannomas of the head and neck are very uncommon tumors that arise from the sheath of any peripheral, cranial or autonomic nerve in this region and they are slow-growing lesions. They almost never undergo malignant change.

Objectives – We will present our experience and the outcome in managing a patient with hypothyroidism, admitted in our ENT Department for a laterocervical tumor.

Materials and methods – A 66 year old woman presented in our clinic with six months history of anterior cervical pain, intermittent dysphagia to solids, left laterocervical, hard and painful lump. The patient was monitored in Endocrinology Department for multinodular goiter, substituted hypothyroid, hypertension and dyslipidemia.

Clinically, a firm consistency nodule of about 5 cm in diameter could be palpated on left laterocervical region. The ultrasound investigation describes the right thyroid lobe with multiple micronodules, and at the lower pole of the left thyroid lobe with a dividing line between it shows a nodular hypoechogenyc with mixed content of about 6 cm diameter mass. The neck tomography raised the suspicion of a branchial cleft cyst.

Left laterocervical cervicotomy with the dissection and extirpation of a 7.5/4.5/4 cm mass was performed. The tumor appeared like an encapsulated branchial cyst, placed along the front edge of the left sternocleidomastoid muscle and it was easily lifted off the great vessels of the neck. The section tumor appeared heterogeneous, yellowish-white with areas of bleeding, firm consistency.

Results - The histopathological evaluation was surprisingly compatible with schwannoma.

Discussions and conclusions - Schwannomas are rare and usually solitary benign encapsulated tumors. Surgery is the treatment of choice. Adequate imaging should be carried out preoperatively to gain as much information as possible both on tumor localization and extension and about potential risks of surgical intervention. In this case the older thyroid pathology led to an initial diagnosis of goither and adenopathy, the CT scan based on its mixed content raised the suspicion of a branchial cyst and the surgical appearance pleaded for another pathologic entity with a final pathology result of schwannoma. The solution to this puzzle maybe could have been a preoperative ultrasound guided FNAB.

(ID 109) Gastrointestinal stromal tumor of lesser curvature

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Introduction: Gastrointestinal stromal tumors account for less than 1% of gastrointestinal tumours, but it is one of the most common malignant mesenchymal tumors of the stomach. Early diagnosis is very important because they are either asymptomatic or associated with nonspecific symptoms. Most of this are diagnosed during endoscopic, radiologic exam or another procedures which are performed to investigate the gastrointestinal tract disease. The frequenty manifestations of gastrointestinal stromal tumors are: abdominal pain, gastrointestinal bleeding or signs of obstruction

Method: The date was recorded at Agrippa Ionescu Hospital were I have been in the clinical experience. Another date were research work on then medical literature by searching datebases selected articles published.

Results: Gastrointestinal stromal tumors is a pathology which require attention from different medical specialities: gastroenterology, surgery, emergenty and radiology. The computed tomography scans of the abdomen is essential for the diagnosis and staging of gastrointestinal stromal tumors. Another usefull investigation for gastrointestinal stromal tumors diagnosis is endoscopy. The endoscopic biopsy results yield a diagnosis in less than 50% of cases. Endoscopic ultrasonograpy is a very important investigation which is complementary with CT. It is more accureate than CT in differenting benign from malignant lesion. For a good cure the best tratment is surgery. This represent radical and complete extirpation of tumor. Laparoscopic resection is more freqent used, because there are more advantages.

Conclusion: Gastrointestinal stromal tumor is a common tumor of gastrointestinal tract for which the best tratment is surgery. It is very hard to have early diagnosis because this phatology is asimpthomatic or the symptoms are not specific. It could be observe during the procedures performed to investigate the gastrointestinal tract disease.

(ID 123) Combined reconstruction of anterior cruciate and medial collateral ligaments for multiple knee ligamentous lesions: case report

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Objective: The purpose is to present the indication and surgical technique for extra-articular and arthroscopic surgical ligament reconstruction in a patient with complex ligamentous pathology around the knee.

Method: At presurgical clinical examination, grade III valgus stress and grade III Lachman testing was identified with confirmation on MRI examination and Radiological stress examination. The ipsilateral semitendionsus muscle tendon was harvested and used for extraarticular collateral medial ligament reconstruction whilst the anterior cruciate ligament was arthroscopically reconstructed using the ipsilateral patellar tendon with outside-in tunneling technique. Interference screws were used for anterior cruciate ligament graft fixation and a mixed cortical anchor and interference screw fixation was used for the medial collateral ligament.

Results: After skin closure, the ligament reconstructions were tested, resulting in negative valgus stress and Lachman tests. The postoperative result was further assessed at 6, 12 and 24 weeks of follow-up with consistent negative valgus stress and Lachman tests.

Conclusion: The combined reconstruction of the Anterior Cruciate and Medial Collateral Ligaments in the setting of multiple ligamentous lesions of the knee improves stability as shown through clinical testing.

(ID 125) Combined reconstruction of anterior cruciate ligament and proximal tibial osteotomy for complex knee cartilage and ligamentous lesions: case report

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Objective: The purpose is to present the indication and surgical technique for axial correction through medial open wedge proximal tibial osteotomy and anterior cruciate ligament reconstruction in a patient with medial compartment arthritis and antero-posterior instability of the knee.

Method: At presurgical clinical examination, medial compartment pain and grade III Lachman testing was identified with confirmation on Radiological and MRI examination and patient self-assessed questionnaire scoring. The ipsilateral gracilis and semitendionsus muscle tendons were harvested and used for the anterior cruciate ligament arthroscopic reconstruction using the outside-in tunnel drilling technique followed by the corrective tibial osteotomy. Interference screws were used for anterior cruciate ligament graft fixation with subsequent plate fixation for the osteotomy.

Results: After skin closure, the ligament reconstruction was tested, resulting in negative Lachman test. The postoperative result was further assessed at 6, 12 and 24 weeks and follow-up with consistent negative Lachman tests and improvement of self-assessed questionnaire scores.

Conclusion: The combined reconstruction of the Anterior Cruciate Ligament and Medial Open Wedge Proximal Tibial Osteotomy in the setting of complex knee cartilage and ligamentous lesions improves stability and pain scores as shown through clinical and questionnaire testing.

(ID 128) Posterior decompression and segmental instrumentation fixation of thoracic pyogenic discitis after late onset of neurologic symptomatology: case report

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Objective: The purpose is to present the surgical technique and case follow-up of a patient who presented late onset of neurological deficit after empirical antibiotic therapy for suspected pyogenic discitis in the thoracic T5-T6 disc.

Method: Upon clinical examination, the patient presented positive bilateral Babinsky sign, clonus and motor (1/5) and sensory (2/5) deficit below waist level with history of 7 weeks of empirical antibiotic therapy (Linezolid, Rifampicin and Cotrimoxazol). The diagnosis was confirmed through MRI and Radiology. The patient benefited from posterior abscess debridement, posterior T5-T6 arch decompression and transpedicular screw segmental fixation. Intraoperative cultures were negative, probably because of prolonged antibiotic regimen.

Results: The neurological symptomatology improved the second day after surgery with persistent bilateral sensory and motor deficit (3/5), with full sensory recovery at 4 days after surgery and further 21 days till full motor deficit recovery with no complications at 6 weeks after surgery.

Conclusion: Posterior decompression and segmental instrumentation fixation is a viable treatment option in the treatment of thoracic pyogenic discitis with neurological phenomena providing favorable functional and clinical outcomes.

(ID 129) Open reduction and internal fixation of complex proximal humeral fractures using dynamic compression plating: case series

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Objective: The purpose is to present the indication and surgical technique for complex proximal humerus fractures using dynamic compression plating for open reduction and internal fixation.

Method: Fracture pattern was evaluated using Digital Radiology or Computed Tomography. Open reduction and internal fixation was used, with intent of relative stability for the extra-articular fracture fixation. All patients benefited from the delto-pectoral approach distally extended as needed with dynamic compression plate osteosynthesis in lack of angular stable implants. After fracture fixation, all patients benefited from 3 weeks sling immobilization followed by 3 weeks passive range of motion exercises and further 3 weeks active range of motion.

Results: At 12 weeks follow-up, all patients presented with minimal pain, full range of motion below the shoulder and radiologically stable implants.

Conclusion: Open reduction and internal fixation of complex proximal humerus fractures using dynamic compression plating proves to be a viable alternative in lack of angular stable implant options, with acceptable outcomes at 12 weeks follow-up.

(ID 155) Large hepatic hydatic cysts with multiple localization and biliary fistulae: case presentation

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Objectives: To present a 31 years old male patient with multiple voluminous hydatic cysts in the liver, with biliary fistulae successfully treated by endoscopic retrograde cholangiography and cholangitis remitted under antibiotics..

Methods - case presentation: A 31 years old male present in a parasitology clinic and diagnosed biological and imaging with multiple hydatic cysts.Treatment with an antiparasitic drug, Albendazole was initiated, for 90 days. Three weeks later the patient present in our clinic with slight abdominal pain, nausea and fatigue. Ultrasonography and computer tomography (CT) confirmed the two hydatic cysts occupying almost the entire left hepatic lobe, the last one being exteriorized extra-hepatic, on the visceral face of left hepatic lobe and on the anterior gastric wall.Intraoperatively the second cyst presented a biliary leakage and the biliary fistulae could not be found due to its deep location. Postoperative, persistent biliary drainage, about 750 – 1000 ml per day, required an endoscopic retrograde cholangiography (ERCP) on day 7 that reveled suprahilara fistulae. The patient develops cholangitis,remitted under antibiotics.

Results: Clinical evolution of the hepatic hidatidosis is non-specific, and the diagnose is generally late. It is made evaluating symptoms and signs, biological tests (eosinophilia, hepatic parameters, indirect immunofluorescence assay, enzyme-linked immunosorbent assay), ultrasonography, endoscopy, chest X-ray and CT or magnetic resonance. CT It is essential for planning the surgical treatment. ERCP has both diagnose and therapeutic role, providing information about the communication between the cyst and the biliary tract and also treating it.The ideal therapy for hydatic liver disease should aim to cure it by eliminating the parasite with a low morbidity and zero mortality.

Conclusion: This case represents an advanced hydatic disease with multiple localizations hepatic and extra-hepatic. Medical treatment with antiparasitic drug must be initiated before surgery and continues it immediately postoperative. CT scan is essential for planning the surgical treatment. Because of the big dimension of the cyst, the biliary fistulae was expected and it could be treated by ERCP, so it is very important to have both surgery and ERCP departments in the same unit. Surgery remains the gold standard treatment for this disease that favors rapid disappearance of the residual cavity and prevents recurrence.

(ID 27) Comparative analysis of neonatal outcome of premature infants and infants with intrauterine growth restriction

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Even if the advancement in neonatal care unit increased significantly the outcome of preterm infants, prematurity remains a major contributor to infant mortality next to low birth weight. Infants born with the low gestational age and birth weight have the largest impact on infant mortality. Only 20% of all preterm birth results from intervention for maternal or fetal problems, 80% of preterm delivery occur spontaneously following preterm labor or preterm rupture of membranes. Infants with intrauterine growth restriction superimposed on prematurity have an increased risk for perinatal and long-term outcome than fetuses who are appropriately grown. Starting from this premise, we studied the incidence of prematurity and of infants with intrauterine growth restriction in the Bucharest Emergency University Hospital for a period of three years. During this amount of time 12987 births were registered, cases of prematurity and dysmaturity representing 10% (1405 cases). Fetuses with gestational age lower than 28 weeks represented 4.3% of all prematurity and dysmaturity cases, preterm infants with gestational age lower than 32 weeks represented 15.8%. In our trial, the studied group was divided in normal growth preterm infants and preterm infants with low birth weight for gestational age. For each studied group, we analyzed and compared distribution by gender and gestational age, Apgar score and the incidence of the main short term complications of prematurity (respiratory and cardiovascular failure, necrotizing enterocolitis, cerebral or pulmonary hemorrhage, associated infections, hypoglycemia, retinopathy, hyaline membrane disease and need of neonatal intensive care unit). The presence of one or more of prematurity complications increases the risk of mortality and of long-term complications, this risk is significantly amplified by low birth weight.

(ID 156) Protective ileostomy – retrospective study

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Objectives: To review the indications, the efficiency and morbidity of protective ileostomy after colorectal surgery in general and especially after low anterior resection, considering that anastomotic leakage is the most feared complication.

Methods: Five years retrospective study including 233 patients with colorectal pathology for which were practiced 166 left colectomies, 53 anterior resections of the rectum and 14 low anterior resections and only 7 protective ileostomies.

Results: Between 2011 and 2015 in our clinic were made 166 left colectomies, 53 anterior resections of the rectum and 14 low anterior resections. In the same period there were only 7 protective ileostomies performed, from which one was for a total proctocolectomy and six for low anterior resections of the rectum. The number of anastomotic leakages after left colectomies, anterior resections and low anterior resections of the rectum was small, the complication occurring only in 11 cases (5%). Only 3 patients needed a re-intervention. We consider that protective ileostomy for left colectomy in malnutrition patients or in those with a technical difficult resection is "abusive". In all 6 cases of low anterior resection with protective ileostomy, no postoperative leakage occurred, so the proposed protection was effective. In the other 8 patients with low anterior resection and no protective ileostomy, there were 2 anastomotic leakage from which one needed surgery for acute diffuse peritonitis. We believe therefore that protective ileostomy is useful for low anterior resection.

Conclusion: We believe that protective ileostomy must enter in the low anterior resection protocol. Further studies on a larger number of cases are necessary to evaluate the utility of protective ileostomy.

(ID 284) Thrombophilia and the risk of thrombosis

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Introduction. Pregnancy is associated with an increased risk of venous thromboembolism (VTE). This condition remains an important cause of maternal morbidity and mortality. Pregnancy increases the risk of venous thromboembolism 4- to 5-fold over that in the nonpregnant state. The most important risk factor for pregnant women is prior personal history of venous thromboembolism.

The purpose of this study is show the link between thrombophilias and venous thrombembolism.

Material and methods. 100 pregnant women were included for the present retrospective study. Patients were hospitalized in Bucharest Emergency University Hospital and diagnosed with pregnancy over 33 gestation weeks. Patients included in the study had one of the following risk factors for thrombosis: prior personal history of VTE,obstetric history of venous embolic events, deep venous thrombosis , history of pulmonary embolus,obesity, family history of thrombophilia and smoking. All patients included in the study were tested for hereditary thrombophilia.

Results. In the absence of other risk factors, pregnant women with a heterozygous factor V Leiden mutation have thrombosis risk of only 0.5%. The risk increases to 3.7% if the family or personal history is positive. Homozygous factor V Leiden have relative risk for thrombosis up to 18% with a positive family history of thrombophilia. The heterozygous prothrombin G20210A mutation increases the risk of a pregnancy-related VTE to 3% when the family history is positive. Also in our study, 25% of pregnant women were active smokers and 12% were obese.

Conclusion. The risk of venous thromboembolism associated with inherited thrombophilias is amplified by risk factors, personal and family history of thrombophilia being the most important risk factors for thrombosis.