Volume 11 Supplement 2016

MÆdiCA

a Journal of Clinical Medicine

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Address of editorial staff:
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Phone: +4031 101 13 221

Mædica J Clin Med.
www.maedica.org
ISSN: 2501-6903
ISSN-L: 2501-6903

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PRECLINICAL SPECIALITIES

(195) Oxytocin effects on mature hippocampal cultures during oxygen-glucose deprivation and reoxygenation

Diana Maria Chitimus, Ioana Florentina Grigoras, Mara Iesanu, Bogdan Ianosi, Leon Zagrean, Ana-Maria Zagrean

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Objectives: Oxytocin was found to increase resistance to anoxic episodes in immature neurons. We have previously shown that oxytocin exerts a neuroprotective effect on immature hippocampal cultures subjected to oxygen-glucose deprivation (OGD) and reoxygenation, effect mimicked by the NKCC1 inhibitor, bumetanide. In the present study we explore the oxytocin and atosiban effect on mature neuronal cultures exposed to OGD.

Methods: Primary cultures of hippocampal neurons were obtained from postnatal day 0 Wistar rat pups. Mature neuronal cultures, aged to 7-8 days, were subjected to OGD or control conditions, with or without oxytocin. To evaluate the effect of oxytocin in metabolic deprivation of different level of severity, we exposed the mature hippocampal cultures to 1 h, 1.5 h and 2 h control and OGD conditions. Assessment of cellular metabolism and viability was performed using resazurine during a 3-hour reoxygenation in a normoglycemic medium. We also tested the effect of a competitive oxytocin receptor antagonist, atosiban, on neuronal viability in both control and OGD conditions.

Results: Oxytocin was shown to decrease the cellular viability measured by resazurine, both in control and OGD conditions, this effect being maximal in the 2-hour exposures. The cells exposed to 2h OGD showed a 78.92±4.10 viability while those exposed to 2h OGD with oxytocin showed a viability of 54.54%±4.10% (n=21), p=0,0001. Atosiban seemed to significantly counteract the effect of oxytocin receptors in the neurons that were deprived from oxygen and glucose. 2h OGD cells treated with oxytocin and atosiban displayed a viability of 74.89%±5.14% (n=15), p=0.002.

Conclusions: Oxytocin may be detrimental to mature neurons under ischaemic conditions, whereas atosiban may increase cellular viability by competitively blocking oxytocin.

(171) Reductive stress for manipulating fibroblast proliferation

Ioana Sonia Iordache[1], Mihaela Mocanu[1], Elena Codrici[2], Simona Mihai[1], Daniela Ionela Popescu[2], Ana-Maria Enciu[1], Gina Manda[2]

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Background: The redox status is tightly controlling cellular morphology and function, and its pharmacologic manipulation may prove to be a valuable therapeutic tool in redox-mediated diseases.

Objective: to investigate the impact of reductive stress, experimentally induced by N-acetylcysteine (NAC), on fibroblasts proliferation.

Method: Cells: mouse L929 fibroblasts. Cellular proliferation: real-time impedance measurements using the xCELLigence system; flow cytometry with CFDA-SE; reactive oxygen species (ROS) production: flow cytometry with CM-H2DCFDA; signal transduction: phosphoprotein multiplexing using the Luminex200 platform.

Results: Preliminary investigations, performed for establishing the experimental settings, indicated that cell culture plates dedicated to impedance measurements should be coated with collagen for favoring L929 adhesion. Reproducible adhesion and proliferation of L929 cells was obtained for 10.000 to 20.000 cells / well (30.000 – 60.000 cells / cm^2).

Treatment of L929 cells with NAC reduced ROS production by L929 cells and consequently the level of oxidated thiols, probably through the increase of glutathione level. Real-time impedance measurements indicated that NAC exerted

an anti-proliferative effect on adhered L929 fibroblasts. The effect was dose-dependent in the concentration range (0.25 – 10)mM NAC. The inhibitory action was obvious 12 h after addition of 5-10 mMNAC to adhered L929 fibroblasts. Impedance data were confirmed by flow cytometry using CFDA-SE, showing the arrest of cells in earlier daughter generations as compared to the untreated control. Moreover, the study evidenced that L929 cells repeatedly treated with 10 mM NAC maintained a lower proliferation capacity even after NAC removal. The signal transduction assay indicated that the anti-proliferative effect of NAC on L929 fibroblasts was mediated by inhibition of the MAP kinases ERK and p38.

Conclusion: Proliferation of fibroblasts could be inhibited by repeated treatment with NAC. This therapeutic approach may show relevance for controlling the wound healing process or tumour progression.

Acknowledgment: This work was partially financed by the CERN-RO Programme through the project E05/2014 RADIOMED.

(331) Direct Cefoxitin challenge of Staphylococcus aureus ATCC 29213 and 43300 strains leads to rapid differentiation of antibiotic susceptibility pattern

Andrei-Alexandru Muntean, Dragos Cosmin Zaharia, Madalina Maria Florea, Adrian Poenaru, Octavian Costin Ioghen, Mihaela Roxana Huhu, Andrei Neagu, Ioana Andreea Ghita, Mihnea Ioan Gabriel Popa, Miron Alexandru Bogdan, Vlad Tudor Popa, Mircea Ioan Popa

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Objectives: To evaluate a microcalorimetric protocol for rapid differential diagnosis between methicillin susceptible and methicillin resistant Staphylococcus aureus (MSSA and MRSA).

Methods: Two reference strains of Staphylococcus aureus were used (ATCC29213 and ATCC43300). Overnight cultures of S. aureus in Mueller Hinton (MH) were pelleted by centrifugation (2x 3000rpm) and washed 3 times with fresh MH medium. The bacteria were then suspended to a concentration of 0.5 McFarland units, using a desktop nephelometer. 500 μL of bacterial suspension was co-incubated with different concentrations of Cefoxitin (FOX) suspended in 100 μL of fresh MH. Standard dilution antibiogram was done to confirm FOX susceptibility.

Results: S. aureus ATCC29213 had a FOX MIC of 4 μg, while ATCC43300 FOX MIC was 32 μg. Staphylococcus aureus ATCC29213 showed rapid growth (within 2 hours) when co-incubated within the 0-4 μg of FOX, showing a methicillin-susceptibility profile (MSSA). This was not true for higher concentrations of FOX. Staphylococcus aureus ATCC43300 showed rapid growth within a higher concentration range, showing rapid growth even in the 8-16 μg range and delayed growth (6-8 hours) in 32-64 μg range.

Conclusions: Microcalorimetry allows for the rapid differentiation of MSSA and MRSA. Clinical and Laboratory Standards Institute (CLSI) adapted antibiotic susceptibility testing was shown to diagnose a MRSA profile within 4-6 hours, but requires the use of multi-channel microcalorimetry. The investigational protocol uses a higher inoculum of bacteria and a direct FOX challenge taking advantage of the real-time nature of microcalorimetric monitoring. To this end, it can detect the rapid growth associated with bacterial resistance in less than 2 hours.

(153) Salivary biomarkers of inflammation: clinical significance in systemic lupus erythematosus

Iulia-Ioana Stanescu, Bogdan Calenic, Alexandra Totan, Daniela Miricescu, Radu Radulescu, Roxana-Maria-Justina Varlan, Maria Greabu

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Objectives: Saliva is a remarkable diagnostic fluid being used for monitoring a wide range of local and systemic diseases. However, the link between salivary diagnosis and the inflammatory process in autoimmune diseases has not yet been explored. In this context, the main aim of our study is to quantify salivary biomarkers specific for the inflammatory process in systemic lupus erythematosus (SLE) patients and to correlate these levels with their serum concentrations.

Method: The study included 9 patients fulfilling the Systemic Lupus International Collaborating Clinics (SLICC) diagnosis criteria and 5 healthy

subjects as control group. Salivary and serum levels of interleukin-6 (IL-6), leptin, monocyte chemoattractant protein-1 (MCP-1) and plasminogen activator inhibitor-1 (PAI-1) were determined using stochastic sensors.

Results: IL-6, leptin and MCP-1 (but not PAI-1) salivary and serum levels were higher in all SLE cases when compared to their respective controls. At the same time statistically significant correlations between serum and saliva were found only for IL-6 [med (inf; sup) 2.6(0.2 – 4.7) vs. 0.8(0.4 – 1.2) pg/mL; p=0.029, 2.7(1.7 – 5.3) vs. 1.2(0.5 – 1.7) pg/mL; p<0.001, respectively 118.9(53.5 – 182.2) vs. 51.4(32.4 – 137.2) ng/mL; p=0.029]. Positive correlations were also found for serum concentrations of leptin and MCP-1.

Conclusions: The positive correlation between salivary and serum IL-6 levels promotes salivary IL-6 levels as a useful marker to evaluate the inflammatory process in SLE. The present study supports the hypothesis that saliva is a mirror of the body, acting as a diagnostic fluid that can be used to detect and monitor both oral and systemic diseases.

(221) Anti-proliferative effect of curcumin in ER+ and ErbB2+ mammary cancer cell lines

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Objectives: Breast cancer is the most frequent malignancy in women world-wide and is also responsible for the most deaths. A polyphenolic compound derived from Curcuma longa roots, curcumin, displayed several anti-cancer activities. Our main objectives of the study were: to evaluate the effect of curcumin on cell cycle progression, to investigate the ability of curcumin to reduce the phosphorylation of intracellular proteins, to examine the effect of curcumin on cell clonogenicity, mitochondrial membrane depolarization and on production of the reactive oxygen species (ROS) in two breast cancer cell lines (MCF-7 and SK-BR-3).

Methods: MCF-7 (ER+) and SK-BR-3 (ErbB2+) cell lines were grown according to their specifications. Flow cytometry technique was used to analyze cell cycle progression (PI/RNase staining), mitochondrial membrane potential (JC-1 staining), reactive oxygen species (carboxy-H2DCFDA staining) and intracellular proteins after fluorescent staining (ERK/pERK, c-Fos). 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 time incubation was optimized for each assay.

Results: Administration of curcumin in culture for 72 h blocked the cancer cells in G2/M, more efficiently in MCF-7 cells compared to SK-BR-3 cells. The expression level of c-Fos, ERK and in a lower extent pERK was reduced after curcumin treatment, MCF-7 cells being more sensitive than SK-BR-3 cells. Curcumin reduced clonogenic survival for both MCF-7 and SK-BR-3, with greater potency in case of ErbB2+ cell line. A significant increase in ROS was noticed in both cell lines in correlation with mitochondrial membrane potential collapse after administration of curcumin.

Conclusions: Curcumin displayed anti-cancer properties in both breast cancer cell lines ER+ and ErbB2+, demonstrating that might be a useful therapeutic agent against such malignancies.

(117) Creating cheap affordable insulin pumps with innovative electronics and 3D printing

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Objectives: Technology comes with a price, and is this precise cost that limits its widespread use. The aim of our study was to obtain a proof of concept that an accurate, precise and cheap (under 300€) insulin pump can be created.

Methods: A small and compact insulin pump was created using innovative electronics and 3D printing technology. All communications are made through a Bluetooth LE connection with a mobile device running a dedicated App. Cybersecurity measures ensures safety against common threats. Accuracy and precision was tested against a 0.5U step insulin pen by air delivering of 15U of regular insulin for 15 times with both devices and counting the number of insulin drops obtained. The experiment was then repeated with new cartridges, finally obtaining 30 measurements for each device. Pump bolus programing was avail-

able in 0.15U incremental steps. The experiment was video recorded.

Results: There was no significant difference in number of insulin drops obtained for 15U insulin delivery with both the pen (44.8±1.3 drops) and the pump (45.5±1.7 drops, p=0.075). Similar results were obtained comparing mean number of drops obtained with first cartridge (45.3±1.1 drops pen vs. 46.1±1.5 drops pump, p=0.129) or the second one (44.3±1.4 drops pen vs. 45±1.7 drops pump, p=0.249). Within cartridge variation for 15U pump insulin delivery was not significant: 46.1±1.5 drops for first 7 commands (14 tests for 2 cartridges), and 45±1.6 drops for next 8 commands (16 tests for 2 cartridges, p=0.058). Similar results were obtained for pen delivery.

Conclusions: Investigational pump delivered similar number of insulin drops for a standard bolus (15U) as compared with a standard pen (precision). Similar amount of insulin was delivered at the beginning of the insulin cartridge compared with middle to advanced position of pump piston (accuracy). Precision and accuracy were stable when testing was repeated with new insulin cartridges. Building a precise, accurate and cheap insulin pump is possible, and might have remarkable consequences on those in need.

DENTAL MEDICINE

(318) Selective binding of Chitosan nanoparticles to cancer stem cells

Maria Justina Roxana Virlan[2], Daniela Elena Costea[1], Bogdan Calenic[2], Adrian Biddle[2], Ian Mackenzie[3], Cristina M. Sabliov[2], Alexandra Totan[4], Maria Greabu[2]

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Objectives: Oral cancer is the sixth most common cancer worldwide. Recent publications speak about the existence of cancer stem cells (CSC), a subpopulation of cells having tumor-initiating ability and heightened resistance to therapy. In oral squamous carcinoma (OSCC), CSC have been characterized by an overexpression of the receptor protein CD44 +. Nanoparticles (NPs) are capable of carrying substances to different body regions. Polymeric NPs are studied in various fields of dentistry, from periodontics to endodontics. Due to their controlled delivery proprieties, polymeric NPs might be used to specifically transport anticancer drugs to the oral CSC.

Objectives: The aim of this study was to verify the selective binding of the chitosan NPs to the oral CSC. CSC were isolated from the CA1 cell line (derived from a biopsy of OSCC of the floor of the mouth) using flow cytometry techniques. CSC were exposed for 24h to different concentrations of polymeric NPs: 5 μg/mL, 20 μg/mL and 200 μg/mL. Two types of polymeric NPs were used in this study: PLGA NPs and PLGAChi (chitosan covered PLGA NPs). Poly-lactic-co-glycolic acid is a synthetic biodegradable polymer, while chitosan is obtained from chitin, a polysaccharide found in crustaceans.

Methods: CA1 cells were seeded in 6 well culture plates for 24 h. Afterwards, cells were exposed for 24h at PLGA NPs and PLGAChi NPs. Fluorescence-activated cell sorting was used to measure the uptake of NPs by the cells. CSC were recognized using the antibody staining with CD44-PE (clone G44-26, BD Bioscience). The DAPI nuclear dye was used to exclude dead cells.

Results: There is supporting evidence of the selective binding and uptake of chitosan labelled-nanoparticles by cells expressing high levels of CD44+. This was observed mainly at the concentrations 20 μg/mL and 200 μg/mL. Interestingly, PLGA didn't seem to enter CSC, even at the highest concentration 200 μg/mL.

Conclusions: The specific incorporation of PLGAChi by CSC could be very efficient in oral cancer treatment. In the future, NPs loaded with anticancer drugs might be used to selectively kill only the tumor initiating CSC.

(263) Craniofacial skeletal development of obese children and adolescents

Dan Stefan Simota, Viorica Milicescu

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Objectives: The prevalence of overweight and obesity in most developed and developing countries has been markedly increasing in recent years. This is seen among all genders, ages, racial, ethnic groups, and educational levels.

The purpose of this study was to investigate craniofacial skeletal morphology in overweight and obese adolescents and to compare morphological data with the normal development of the corresponding age. In the same time the study was designed to establishing correlations between obesity ethiological factors (genetic, endocrine, hormones and nutrients) and the consequences on scheletal variations.

Methods: The study was based on 24 overweight and obese patients of Orthodontic Center Carol Davila Bucharest with a BMI from 25 to 34, aged between 7 and 16 years old, of which 13 are girls and 11 boys. BMI is calculated by dividing weight by squared height (BMI=kg/m^2). BMI calculation is different for individuals that are under twenty years old. It is calculated the same as adults, but is is compared with typical values for other children of the same gender and age (BMI percentile), allowing comparison with children of the same age and gender. Craniofacial values were obtained from lateral cephalometric tracings with linear and angular measurements and compared with normal standards of development.

Results: On the basis of the measurements of skeletal parameters obtained in correlation with normal standards of development for each age and gender, shows a hyper divergence profile types for 21 of 24 overweight and obese subjects with an increased sphenoid angle for 19 of them. Furthermore an oversized sphenoid angle corresponds with a deep palace (V-Nsp decreased). Posterior maxillary rotation presents 20 of 24 obese patients in association with dysfunctional etiology (56%), genetic (29%), endocrine factors (15%).

Conclusions: Both male and females overweight and obese exhibited significantly larger skeletal development of the cranium and face. Vertical jaw is wider and has an anteroposterior orientation. Based jaws, mandibular body and paranasal sinuses are characterized by massiveness with relatively greater measurements. Etiological factors of obesity can shape craniofacial skeletal morphology.

(238) Gingival involvement in autoimmune dermatoses with oral manifestations

Elena Ioana Tofan, Ioanina Parlatescu, Carmen Gheorghe, Lelia Mihai, Serban Tovaru

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Objectives: The gingival manifestations are frequently encountered in autoimmune skin diseases with oral involvement. They are usually named descuamative gingivitis. The oral signsvary from asymptomatic white lesions, mucosal atrophy, erosions and bullae to wide, painful ulcers. The aim of this study was to detect the frequency of gingival involvement in patients with autoimmune dermatoses.

Methods: We reviewed a number of 1440 medical charts of patients with autoimmune skin diseases examined and diagnosed in the clinical department of Oral Pathology Discipline (1999 - May 2015). In this study we included the patients diagnosed with oral lichen planus (OLP) or autoimmune blistering diseases. The inclusion criteria were the presence of gingival lesions and the confirmation of the diagnosis by clinical means and/or histology for OLP and clinical signs associated with histology and direct immunofluorescence for oral blistering diseases.

Results: From the total of 1440 patients with OLP 325 (23%) cases presented gingival involvement. From a total of 50 patients with confirmed oral blistering autoimmune diseases, 24 cases (48%) presented descuamative gingivitis. In OLP group the most of the patients were women 259 out of 302, the average age was 59,2 years and the mean age 58. In the autoimmune blistering diseases group 75% were women, the average age was 62.41 years and the mean age was 66. The presence of skin lesions was mentioned in 39 cases of OLP but in no case of autoimmune blistering diseases. The oral lesions are present at the onset of the blistering diseases and are followed by cutaneous lesions in a periodvariable from 3-6 months. An interesting fact is that in 27 cases the gingival lesions were the only oral clinical sign - 23 cases in OLP and 5 cases of blistering autoimmune diseases (3 pemphigus vulgar and 2 mucous pemphigoid). The remaining 302 OLP patients associated other lesions such as keratosis, atrophy, erosions located on other sites of the oral mucosa.

Conclusion: The descuamative gingivitis noticed in autoimmune dermatosis with oral mani-

festations is a frequently encountered entity which can raise a great challenge for the diagnosis mainly if it is an unique clinical sign.

(184) Clinical problems associated with the supernumerary teeth

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Objectives: Supernumerary teeth define the existence of one or more teeth (erupted or intraosseous), in addition to the current dental formula. Due to their high degree of morphological and topographical variability many complications may arise, with a great impact upon the adjacent teeth, guiding therefore the practician towards a radical treatment planning (consisting in dental extractions) or a conservative one (non-extractional). This study was designed to evaluate the prevalence of the complications induced by the supernumeraries.

Methods: We studied a group of 15 patients with supernumerary teeth, aged between 6 and 24 years, who applied for specialized check-ups at the Department of Orthodontics and Dentofacial Orthopedics at the Faculty of Dentistry of the Carol Davila University of Bucharest. The radiological investigations and medical records of each patient were analyzed in order to determine the clinical problems determined by the supernumerary teeth. Observations were also made on the number of supernumerary units that each patient presented, their distribution on the two maxillaries and presence on the dental arch or state of impactation.

Results: A total of 18 supernumerary teeth were found for the 15 patients included in the study: 13 of them had one supernumerary unit (86.6%), one (6.6%) - two supernumerary teeth and another one (6.6%) - three supernumeraries. Most supernumerary teeth were located in the maxilla (n = 13, 72.2%). A percentage of 94,4% of the evaluated supernumeraries caused disorders; the most common complication that we found is represented by displacements (50%), followed by impactations of the adjacent teeth (33.3%). 22.2% of the supernumerary teeth determined overcrowding. One supernumerary tooth (5.5%) resulted in a cystic degeneration - a residual follicular cyst.

Conclusions: Supernumerary teeth may induce many complications in the dental arches, of which the most common are: displacements, impactations, crowding of the adjacent teeth or cystic degenerations. Early detection of the disorders caused by supernumerary teeth is important in terms of drawing up a treatment plan, influenced mainly by the type, position, relationship and effects they have upon the adjacent structures.

(65) Association between oral health literacy for teenage students and self-reported health status and dental attendance

Mariana Caramida, Adina Dumitrache, Roxana Ilici, Ruxandra Sfeatcu, Ecaterina Ionescu

University of Medicine and Pharmacy Carol Davila, Bucharest, Romania

Objectives: This cross-sectional study in Bucharest aims to evaluate the relationship between the level of oral health literacy, reasons for dental visits and self-assessment health status in a group of 185 teenage schoolchildren with mean age 13.98 years (SD±1.64).

Methods: Were collected data on oral health literacy level with REALD-30, a word recognition tests, with score ranges from 0 to 30. Oral health literacy level was correlated with self-reported oral health status and problem-based dental attendance. The ethics committee of the UMP "Carol Davila" approved this study.

Results: Mean score for REALD-30 is 23.70 (SD±3.71). Only 27.6% of adolescents have an increased level of oral health literacy (scores between 26 and 30 points). For 43.2% self-reported oral health is good/very good. There is a statistically insignificant correlation between literacy level and self-reported health, students with low literacy level reported fair/poor oral health status (p=0.45). There is a statistically significant correlation between oral health literacy level and dental visits (p=0.04), those with high oral health level have regular dental check-ups. **Conclu-**

sions: Oral health literacy level was a risk indicator for fair/poor self-reported oral health domains and for dental visits in emergency or because of a problem. Oral health education in schools must be a component of the strategy to increase health literacy level among teenagers in order to improve dental knowledge and oral self-care behavior. This work was supported by "Carol Davila" University of Medicine and Pharmacy from research project number 33898/11.11.2014.

(148) Statistical considerations on facial asymmetry

Andreea Raluca Hlatcu[1], Elina Teodorescu[2], Elena Galan[1], Cristina Pomana[1], Ecaterina Ionescu[2]

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Objectives: facial asymmetry is associated with maxillary alveolar dental disharmonies which may belong to both transversal and vertical plans.

The research aimed to determine the primary installation plan of skeletal facial asymmetry and compensatory three-dimensional changes, generated by it in the maxillary dental anomalies.

Methods: the study was realized on a sample consisting of 41 patients aged between 7 and 37 years old, of which 22 are male and 19 female. Cephalometric analysis were performed, calculating defining parameters for development in the transverse and vertical plans on the frontal cephalograms using combined analysis Ricketts, Langlade.

Results: processing of the obtained data indicates a balanced and homogenous composition of the subjects selected. Permanent anatomic forms of the asymmetry occurring during growth, including those with dysfunctional etiology corresponds to 58.7% of patients in the group aged over 20 years.

Conclusions: development asymmetry never appeared primary in vertical plan. One third of investigated subjects developed asymmetry in vertical plan, second to a primary asymmetry in transverse plan. Development of asymmetry in vertical plan, in terms of the installation moment and coexistence with transverse development asymmetry appears as a compensatory fact of primary asymmetry.

MEDICAL SPECIALITIES

(62) 4D echocardiographic and arterial stiffness parameters and cardiac biomarkers in early diagnosis and prediction of chemotherapy-induced cardiotoxicity in nonHodgkin lymphoma patients

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Objectives: CHOP (cyclophosphamide, hydroxydaunorubicin (doxorubicin), oncovin, prednisone) use in non-Hodgkin's lymphoma (NHL) is limited by the risk of cardiotoxicity, favoring increased morbidity and mortality. To define new parameters of 4D LV deformation, arterial stiffness and biomarkers, for early diagnose and prediction of cardiotoxicity.

Methods: 48 patients (18 men, 60±13years), with NHL, with LVEF greater than 53%, scheduled to receive CHOP, were assessed at baseline, after 3rd and 6th cycle of CHOP (doxorubicin cumulative dose 344±49mg). 4D echocardiography (4DE) was used to assess LVEF and LV systolic deformation: longitudinal, radial, circumferential and area strain (LS, RS, CS, AS), Arteriograph to measure pulse wave velocity (PWV) and augmentation index (AIX) and troponin I and NTproBNP were measured as markers of cardiac injury and high overload. Cardiotoxicity was defined as a decrease of LVEF below 53%, with more than 10% from the baseline value. **Results:** After the 6th cycle, 12 patients (25%) (Group I) developed cardiotoxicity (LVEF=62±3 vs 50±1, $p<0.0001$), while 36 patients (group II) did not (LVEF=63±3 vs 55±2, $p<0.0001$). There was a significant reduction of all LV deformation parameters starting with the 3rd cycle and an increase of arterial stiffness, but group I had greater changes than group II ($p<0.001$). Univariate analysis showed a significant correlation between the LVEF reduction

and the decrease of LS, CS, RS, AS and increased PWV and troponin level after the 3rd cycle (r =0.490; r =0.335, r =0.422, r =0.418, r= -0.594, r =-0.314 respectively, all $p<0.05$). The reduction of the LS after the 3rd cycle was the best independent predictor for the decrease of LVEF after the 6th cycle (R2=0.241, p=0.0001). ROC analysis showed that a decrease of LS with more than 18% after the 3rd cycle predicted with a Sb of 100% and Sp of 71% the development of cardiotoxicity after the 6th cycle.

Conclusions: Assessment of cardiac biomarkers, arterial stiffness and 4DE myocardial deformation parameters are able to detect early chemotherapy-induced cardiotoxicity and to predict further decline of LVEF in patients with NHL. Further studies are needed in order to assess if these parameters can be used into routine clinical practice.

(333) Evaluation of bone mineral density and bone turnover in women with type 2 diabetes and postmenopausal osteoporosis

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Objectives: Type 2 diabetes (T2D) is associated with an increased risk of fractures although bone mineral density (BMD) seems to be normal or higher. The aim of this study was to evaluate markers of bone turnover and BMD in women with T2D and recently diagnosed postmenopausal osteoporosis.

Methods: Two groups of women have been evaluated at baseline and one year later, after bisphosphonate treatment (BT): a group of 60 women diagnosed with T2D and newly postmenopausal osteoporosis (diabetic group) and a group of 60 women only with postmenopausal osteoporosis (control group). The bone turnover markers such osteocalcin and alkaline phosphatase (AP) (bone formation markers) and cross laps (bone resorption marker) were used to evaluate bone metabolism and dual X-ray absorptiometry was used to determine the BMD at lumbar and femoral neck level. Other analyzed variables were body mass index, fasting plasma glucose and HbA1c.

Results: BMD at the lumbar spine (-3.37±0.75 vs. -3.17±0.67) and femoral neck level (-2.36±0.65 vs. -2.30±0.82) was higher in diabetic group than control group at baseline. After one year of BT significant increases in BMD, especially at the lumbar spine (-2.96±0.80 vs. -2.75±0.74), were noted in both groups. There was no statistically significant difference between two groups at baseline and one year later. Serum osteocalcin (22.26±14.49 vs 28.34±10.67 ng/ml) and serum cross laps (0.34±0.19 vs. 0.49±0.22 ng/ml) have been significantly lower compared to the control group at the start of the study. After a year of BT, serum osteocalcin and cross laps decreased in both studied groups, but with no statistical significance. Serum AP was lower in diabetic group than control group at baseline and decreased in both groups one year later. There was no statistically significant difference between studied groups at baseline and after one year.

Conclusions: In the diabetic women bone turnover is low. After one year of BT there was a significant benefit at lumbar spine BMD. The usage of the bone turnover markers in patients with T2D could represent a screening method of bone damage.

(201) Immunologic markers for coeliac disease monitoring

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Objectives: Our aim was to evaluate the utility of different serological tests in coeliac disease (CD) monitoring. At present, these tests are mostly used for diagnosing CD.

Methods: Altogether 63 newly CD diagnosed children were included in the study. The children were diagnosed at National Institute for Mother and Child Health according with current ESP-

GHAN CD diagnosis guidelines. Data regarding gender, age, investigations at diagnosis, compliance with a regular follow-up and adherence to gluten free diet (GFD) were collected for all. Quantitative determination of serum celiac specific autoantibodies: IgA-antitransglutaminase2 (tTG2-IgA, positive cut-off 20U) and antiendomisium (EMA, positive cut-off at serum dilution of 1:5) were done with the ocasion of their regular follow-up visits.

Results: Median age at diagnosis was 5 years with a sex ratio girls:boys of 1.86. Nineteen children did not require small-bowel biopsy for CD confirmation according with ESPGHAN criteria. Mean period of compliance for regular follow-up was 2 years. Transgressions from the GFD were declared by 8 children. Both tTG-IgA and EMA antibodies showed positivity 18 months after the diagnosis in up to 29% children declaring strict avoidance of gluten. The percentage of children with negative seroconversion is significantly higher in biopsy-proven than in serology based diagnosed children. After two years of GFD, only 31 (49%) children showed negative seroconversion of tTG2-IgA and 47 (74%) EMA.

Conclusions: Children with only serology based diagnosis seem to be less adherent to the GFD and to the regular follow-up. EMA is the first antibody to react to GFD, tTg-IgA being the last to seroconvert. The high proportion of patients with still positive antibodies after 2 years on GFD suggests the necessity of a frequent and regular follow-up. The discrepancy between the number of children that reported adherence to GFD and the number of children that became seronegative indicate the utility of the serological tests in long term follow-up of CD.

(205) Protective effects of *in vitro* preconditioning with sevoflurane on human endothelial progenitors

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Background: Endothelial progenitor cells (EPCs) have important roles in vessel and tissue repair; however, their regenerative potential is impaired by the poor survival in the ischemic microenvironment. Recent data suggest a promising potential of volatile anesthetics for improving stem cells biology. Thus, we hypothesized that in vitro exposure to sevoflurane could stimulate EPCs growth and viability.

Methods: Mononuclear cells isolated from human umbilical cord blood by gradient centrifugation were suspended in endothelial growth medium EGM2 and plated on fibronectin coated dishes. After five days in culture, the cells were exposed for one or two hours to sevoflurane 2% or 4% in air/5% CO2, or only to air/5% CO_2 (control) in a modular chamber. 24 or 48 hours postexposure, viability, proliferation and apoptosis were assessed using lactate dehydrogenase (LDH) leakage assay, methyl tetrazolium salt assay and FITC-annexin V/ propidium iodide staining.

Results: LDH leakage was discretely lowered, whereas the levels of formazan were increased ($p < 0.05$ for 1 h incubation with 4% sevo at 24 hrs, and with 2% sevo at 48 h postexposure, $n = 4$) in treated vs control samples. A 2 hrs preconditioning protocol indicated a prompter expansion of cultures exposed to 2% than to 4% sevoflurane. Early ($p < 0.05$, $n = 5$) and late apoptosis ($p < 0.05$ only for 2% sevoflurane, $n = 5$) were diminished in preconditioned samples.

Conclusions: Sevoflurane has protective effects on viability and proliferation of human EPCs, suggesting a promising potential of volatile anesthetics for improving the regenerative abilities of endothelial progenitors. The *in vitro* exposure to 2% sevoflurane for two hours seems to be an efficient priming protocol.

Financial support: Research grant PN-II-RU-TE-2012-3-0463, UEFISCDI Romania, University of Medicine and Pharmacy Carol Davila, Bucharest, Romania.

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(90) The influence of tobacco use among medical students from University of Medicine and Pharmacy Carol Davila

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Objectives: This study aims to investigate cigarette smoking among a sample of medical students and their attitudes towards smoking at the University of Medicine and Pharmacy Carol Davila, Bucharest, Romania: what students know about smoking, what is their level of addiction, and moreover, the reasons why they use cigarettes.

Methods: A questionnaire was distributed to the medical students of the University of Medicine and Pharmacy Carol Davila, Bucharest, Romania, from February 14 to March 18, 2016. This study was addressed to first year, fourth year and sixth year medical students. 969 medical students answered the questionnaire. The questionnaire was composed of 30 questions: 13 common questions (smokers and non-smokers), 11 questions for smokers, and 6 questions were represented by the Fagerstrom test for nicotine dependence. Data analysis was performed using descriptive statistics.

Results: A total of 969 (277 males and 692 females) completed and returned the questionnaire: 308 first year students; 454 fourth year students; 207 sixth year of students. Four hundred and thirty-two (44.6%) have smoked at least 100 cigarettes (5 packs) in their life. The mean age a student begins smoking was 15.8 years. The most important reasons for cigarette smoking were: decrease of anxiety (51.4%), pleasure (48.8%) and habitude (43.7%). One hundred and forty six (34%) need to light up a new cigarette after 1-3 hours from the previous one. The study shows that one hundred ninety-one (44.2%) of current smokers want to stop smoking and two hundred forty (56%) have already tried it, but they failed. Eighty (18.5%) medical students quit smoking and the main reason was because smoking is harmful to human health (62.7%). Two hundred twenty-six (52%) consider that they won`t quit and still be smokers the next year.

According to the Fagerstrom test, 59% were evaluated to have low dependence, 33% moderate dependence and 8% high dependence.

Conclusions: The results of current study indicate a need to provide comprehensive tobacco control programs among medical students, and smoking cessation programs. An unceasing effort is needed by all concerned to reduce the number of smokers between medical students.

(82) The reproducibility of 3D versus 2D echocardiography in measuring left ventricular volumes and ejection fraction according to the level in training in echocardiography

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Objectives: To establish if 3D echocardiography (3DE) provides more reproducible results in the evaluation of left ventricular (LV) volumes and ejection fraction (EF) of patients with heart failure with reduced ejection fraction (HFrEF) by comparison with 2D echocardiography (2DE), when used by fellows with different levels of training in 2DE and 3DE.

Methods: Sixty patients with HFrEF (46 males, 58±17 years) underwent standard transthoracic 2D acquisitions and 3D multi-beat full-volumes of the left ventricle (LV), using Vingmed E9. One expert in both 2DE and 3DE and 3 trainees (beginner, medium and expert) in 2DE measured the 2D LV volumes and LVEF, using the same consecutive images.

After one-month training in 3DE, they measured 3D LV volumes and LVEF, using 4D auto-LVQ, Echopac BT 12. All measurements were compared with ones provided by the 3DE expert.

Results: Seven patients were excluded due to poor quality images. Mean LV end-diastolic volume (EDV) was 214±75 ml with 2DE, and 233±77 ml with 3DE. Mean LVEF was 35±10% by 2DE, and 33±10% by 3DE.

The trainees showed acceptable or good reproducibility of the 2DE measurements, according to their level of 2DE expertise (Table). However, after just one month training in 3DE, the trainees provided similar and more reproducible results of the LV volumes and EF measurements (Table).

Conclusions: 3D echocardiography is a fast-learning and more reproducible method compared with 2D echocardiography for the assessment of LV volumes and ejection fraction, regardless of the level of training in 2D echocardiography. This makes 3D echocardiography a more reliable method for the follow-up of patients with heart failure with reduced ejection fraction.

PHARMACY

(280) Antiproliferative assay of Euphorbia species extracts on human cancer cell lines

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Objectives: Euphorbia genus belongs to the Euphorbiaceae family and contains plant species spread all over the world. Regarding the chemical composition, these species are characterized by the presence of triterpenoids, diterpenoids, flavonoids and lipids. Studies on flavonoids and other compounds isolated from Euphorbia species revealed anti-inflammatory, anti-malaria, anti-urease, cytotoxic, apoptotic promoter and antiproliferative effects. In the present paper we assessed the cytotoxicity potential of some extracts obtained from three indigene species: E. platyphyllos (broadleaf spurge), E. stricta (upright spurge) and E. cyparissias (cypress spurge) on **Methods:** Extracts from aerial parts of the plant species were prepared using "green" solvents. The cell lines were exposed to four concentrations of plant extracts and MTT assay was performed on MCF7 (breast cancer), Caco-2 (colon carcinoma) and HeLa (cervical cancer) human tumor cancer cell lines.

Results: The plant extracts from Euphorbia species showed to have cytotoxic activity against MCF7 and Caco-2 cells in a dose-dependent manner, but not against HeLa cells. E. stricta extract exhibited the highest activity on Caco-2 and MCF7 cells, E. cyparissias on HeLa cells, whereas E. platyphyllos on all tested cells.

Conclusions: Euphorbia extracts display at least 50% cell death at 100 μg/mL and therefore are considered with anti-cancer potential. Further studies of the active extracts are necessary in order to establish the dose-response and the mechanisms involved.

Acknoledgements: The authors acknowledge the financial support offered by UEFISCDI, through PN-II-CT-RO-ZA-2014 grant, Romania – South Africa Joint Collaboration (project leader Olaru O. T.).

(307) New Al(III), Ga(III) and In(III) complexes as metallodrug candidates: synthesis, characterization and preliminary toxicity evaluation

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Objectives: The trivalent Group 13 metal ions are non-essential elements for the human body, but their complexes of biological interest are known: aluminium complexes are suitable compounds for toxicology and neuropathology with relevance to Alzheimer's disease, gallium complexes are used as diagnostic radiopharmaceuticals for SPECT and PET imaging or as anti-cancer agents, while 111indium complexes are widely used as radiopharmaceuticals for SPECT

imaging. This study aimed to obtain new potentially bioactive complexes of Al(III), Ga(III) and In(III) with the naturally flavonoid 5-hydroxyflavone and to evaluate their acute toxicity on the crustacean Daphnia magna.

Methods: The general method of synthesis consist in refluxing during 3 hours an alcoholic or hydro alcoholic solution containing the ligand and the appropriate metal salt in a 3:1 molar ratio, with pH adjusted at 6-7, until a yellow precipitate is formed. The complexes were characterized by elemental analysis, ESI–MS, IR, UV–Vis and fluorescence spectra, determination of molar conductivity in DMSO (dimethyl sulfoxide), and thermogravimetric analysis. Acute toxicity on crustacean Daphnia magna was evaluated using three concentrations (5×10-5, 5×10-6 , 5×10-7 M) both from starting materials and complexes, followed by the evaluation of median lethal dose, LD50 of the complexes.

Results: The methods used for characterization allowed us to establish the composition and the structure of the obtained compounds, which correspond to the general formula ML3 x nH2O (M: Al(III), n=2; M: Ga(III), n=1; M: In(III), n=1; L = deprotonated 5-hydroxyflavone), with 5-hydroxyflavone acting as an monoanionic bidentate ligand. Toxicity studies on Daphnia magna evidenced the low toxicity of the obtained complexes.

Conclusions: The study led to the synthesis of three new complex compounds of Al(III), Ga(III), In(III) with 5-hydroxyflavone, with low toxicity, suitable for further determinations of biological activity.

(265) Pharmacological research regarding the anti-inflammatory and analgesic effects of the fatty oil extracted from the seeds of Acer negundo L

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Objectives: In this paper we investigated the anti-inflammatory and analgesic effect of the fatty oil extracted from the seeds of Acer negundo L. (Box Elder) due to its composition rich in polyunsaturated fatty acids (γ-linolenic acid, stearidonic acid, α-linolenic acid) that reduce the synthesis of pro-inflammatory and algogenic eicosanoids and increase the synthesis of anti-inflammatory and analgesic eicosanoids.

Methods: The anti-inflammatory activity of the fatty oil (10 mL/kg bw, orally) was evaluated using the dextran-induced rat paw edema method. The activity of the oil was compared with that of phenylbutazone (100 mg/ kg bw, orally) and a control group, treated with distilled water. The analgesic effect was determined in mice, by means of hot-plate test and acetic acid induced writhing test. In both tests, the activity of the oil (10 mL/kg bw, orally) was compared with that of acetylsalicylic acid (100 mg/ kg bw, orally) and a control group, treated with distilled water.

Results: Acer negundo fatty oil exhibits anti-inflammatory effect when compared with the control group, with a maximum effect at 80 min after the administration of dextran. Compared with phenylbutazone, the anti-inflammatory effect of Acer negundo oil is lower. In the hot-plate test Acer negundo oil exhibits analgesic effect when compared with the control group (38.08%) and also when compared with the group treated with acetylsalicylic acid. The results are statistically significant only in the first case. In the acetic acid induced writhing test, the animals treated the fatty oil experienced fewer contortions than the control group, but more than those treated with acetylsalicylic acid.

Conclusions: From these results we can conclude that the fatty oil extracted from the seeds of Acer negundo L. exhibits anti-inflammatory and analgesic effects and it can be used as a complementary treatment for pain associated with several inflammatory conditions.

(22) Red raspberry leaves – a source of natural compounds with antioxidant activity

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The role of oxidative stress and free-radicals mechanisms in the pathology of multiple diseases (diabetes mellitus, cancer, stroke, non-alchoholic

fatty liver, Alzheimer, Parkinson) has become an area of intense interest.

Objectives: The aim of our study was the determination of chemical composition and antioxidant activity of indigenous red raspberry leaves (Rubi idaei folium).

Methods: Red raspberry leaves were collected in May 2012 from a private garden (Ilfov county, Romania), air-dried and stored in laboratory conditions. The chemical composition was determined by means of thin layer chromatography (TLC), high liquid chromatography (HPLC) and spectrophotometric methods. Using spectrophotometric assays we have determined the content of total polyphenols (g% gallic acid), flavonoids (g% hyperoside), phenolcarboxylic acids (g% chlorogenic acids), tannins (g% pyrogallol), proanthocyanidins (g% cyanidin chloride) and free/ hydrolysed/esterified sterols (g% stigmasterol). The scavenger activity against 2.2-diphenyl-1-picrylhydrazyl (DPPH) free radical and the reducing power were used for antioxidant activity evaluation. The EC50 (mg/mL), which represents the herbal product concentration that reduces DPPH free radical activity by 50% or the concentration for which the absorbance was 0.5 (for reducing power method) was compared to that of well-known antioxidants (ascorbic acid, catechin, gallic acid and hyperoside).

Results: TLC analysis revealed the presence of chlorogenic acid, rutin, stigmasterol, ursolic acid/ oleanolic acid in red raspberry leaves. According to our HPLC results Rubi idaei folium are an important source of: hyperoside (0.26 g %), quercitroside (0.25 g%), quercetin (96.0 mg%) and kaempferol (94.6 mg%). Using HPLC we have also identified rutin, caffeic acid, chlorogenic acid and ferulic acid. The spectrophotometric assays revealed a considerable amount of flavonoids (1.33 g%), phenolcarboxylic acids (1.74 g%), tannins (9.88 g%) and sterols (0.81 g%); moreover a small content of pronthocyanidins (0.05 g%) was also determined. The antioxidant activity (EC50 = 0.2886 mg/mL - DPPH method and 0.3754 mg/mL - reducing power assay) was weak compared to that of standard references.

Conclusions: Red raspberry leaves are an important indigenous source of bioactive compounds that might be used for obtaining several extracts with antioxidant properties.

(386) Study of Clopidogrel *in vitro* release kinetics using different biorelevant test setups

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Objectives: Present study evaluates the release kinetics of the BCS Class II antiplatelet agent clopidogrel from different commercial immediate release formulations, using two different approaches: a "classical" approach, using the USP compendial media simulating the gastric and intestinal environment, and a "biorelevant" one, simulating gastric and intestinal conditions of the fasted and fed state with media containing physiological surface active agents (sodium taurocholate, lecithin). In order to better reflect the physicochemical and hydrodynamic conditions that are likely to prevail during the in vivo dissolution-absorption process, a biphasic dissolution test was also developed and tested.

Methods: Drug release experiments were performed with USP Apparatus 2 (Paddle), at 50 rpm.

The compendial dissolution media used for clopidogrel release kinetics evaluation consisted in the followings: Simulated Gastric Fluid (pH 1.2) and Simulated Intestinal Fluid (pH 6.8 buffer). A set of four biorelevant media, proved in the literature to be representative for the fasted stomach (FaSSGF), the postprandial stomach (FeSSGF), fasting state conditions in the small intestine (FaSSIF) and postprandial conditions in the small intestine (FeSSIF) was also used. For the biphasic in vitro test, the dissolution system consisted of an aqueous phase (FaSSIF, 500 mL) and octanol (250 mL). Quantitative analysis of Clopidogrel was performed using a validated HPLC method, with UV detection at 220 nm.

Results: Results indicated a highly pH-dependent dissolution profile, with very rapid and complete dissolution in gastric medium, followed by a significant tendency to precipitate towards the higher pH of the intestinal media. Dissolution in intestinal media was incomplete in both fed and fasting conditions. Although bile salts were expected to increase solubility by the intermediate of micelles, this result appeared to be significant only under fed conditions (80% drug released within two hours versus 60% under fasting conditions).

The "plateau" obtained in FaSSIF after about 45 minutes suggested saturation of the dissolution medium, whereas in the biphasic setup no saturation was observed.

Conclusions: Experiments have led to results that provide useful information on both the in vivo release and absorption of clopidogrel, and provide some possible explanations on its high variability.

(143) Synthesis, crystal structure and biological activity of Cu(II) complexes with 1,5-bis(5-methyl-2-furaldehyde) thiocarbohydrazone

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Thiocarbohydrazones (R1R2C=N–N(H)–C(=S)–N(H)–N=CR3R4) are an important group of multidentate ligands and usually coordinate with the metal through the imine nitrogen and sulfur atoms with a self-assembled multinuclear square complex. Heterocyclic derivatives of thiocarbohydrazone are attractive targets of research owing to their presence in biological, pharmacological and other applications.

The ligand 1,5-bis(5-methyl-2-furaldehyde) thiocarbohydrazone (HL1) was synthesized through condensation of 5-methyl-2-furaldehyde and thiocarbohydrazide. Four copper(II) complexes [Cu(L1)2] (1), [Cu(HL1)(SO4)(H2O)2] (2), [Cu(L1)(NO3)(H2O)] (3), [Cu(L1)(ClO4)] (4) were synthesized using HL1 and different copper salts. The thiocarbohydrazone ligand was characterized by elemental analysis, UV-Vis, FT-IR, 1H and 13C-NMR spectral studies. The structures of the copper (II) complexes have been proposed by elemental analyses, molar conductance, spectral (IR, UV-Vis and EPR), magnetic and thermal studies. In addition, the structure of complex 1 was determined by single-crystal X-ray diffraction. The ligand HL1 and copper (II) complexes were tested for their antibacterial activity against gram-positive bacteria (Staphylococcus aureus ATCC 6538 and Enterococcus faecalis ATCC 29212), gram-negative bacteria (Escherichia coli ATCC 8739 and Salmonella enteritidis ATCC 13076) and Candida albicans ATCC 10231. The free ligand and the copper (II) complexes were screened for their antioxidant activity by free radical scavenging assays using 1,1-diphenyl-2-picrylhydrazyl (DPPH) and 2,2'-azino-bis(3-ethylbenzothiazoline-6-sulfonic acid) (ABTS) and compared with that of butylated hydroxytoluene (BHT) and butylated hydroxyanisole (BHA) standards.

The physico-chemical analysis confirmed the newly structures of the ligand and the copper (II) complexes. In the complexes 1, 3 and 4, HL1 acts as a mononegative bidentate ligand coordinating to the metal ion through the azomethine nitrogen and thiolato sulphur atoms. In complex 2 the ligand coordinates in a neutral bidentate manner. The values of μeff (1.76 - 1.94 MB) for complexes 1 – 4 suggest the presence of an unpaired electron and indicates the existence of monomeric species of copper (II). The EPR spectra of the complexes 1 – 4 recorded on powder at 298 K show signals with $g^{\perp}$ (2,003 - 2,090) and g// (2,256 - 2,279) values which indicate that the fundamental state is described by orbital. The copper (II) complexes exhibited better antimicrobial and antioxidant activities than those of the thiocarbohydrazone ligand.

SURGICAL SPECIALITIES

(342) Biopsy or debulking for retroperitoneal tumors?

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Objectives: Retroperitoneal tumors represent a heterogeneous neoplastic group that often develops insidiously, with frequent dimensions of more than 20 cm. However, their delayed diagnosis explains the frequent impossibility of achieving surgical interventions of curative radical intent, with negative resection margins. Altogether, surgical radicality remains the only positive prognostic factor that is unanimously recognized by authors. However, currently, there is no consensus between medical centers regarding the prognostic significance of other factors related to the tumor, patient or of therapeutic nature and disputes persist even in concern with the degree of aggressiveness required in the case of radical surgical interventions. As the frequency of non-radical surgical interventions is however high, the aim of the current study was represented by the anal-

ysis of the prognostic differences associated to various types of non-radical operations.

Methods: We conducted a detailed study, over a period of 15 years, on a group of 160 patients with retroperitoneal tumors, operated on in the First Surgical Clinic of Bucharest Institute of Oncology „Prof. Dr. Al. Trestioreanu". We analyzed the types of surgical interventions achieved for this group of patients and their frequency, the prognostic differences between various types of non-radical surgical operations.

Results: In the current study, as well, the radicality of surgical interventions represents the main positive prognostic factor for the operated on patients. No significant differences between the patients that underwent different types of non-radical surgical interventions (biopsy versus debulking) could be observed, although these have associated in exchange more frequently intra- and postoperative complications of negative impact on the immediate and long-term survival of the operated patients.

Conclusions: As radical surgical interventions can be achieved only in a relatively limited percent of patients (approximately 50%), it becomes essential the establishment of an optimal attitude when the intraoperative finding of impossibility in achieving a surgical resection of curative intent is made. The appearance of „therapeutic gain" when achieving a surgical intervention of cytoreductive type in comparison with a simple tumor biopsy is however not sustained by the ensuing results and should probably be discouraged, to decrease the rate of postoperative complications as well.

(300) Endometrial polyps, diagnostic aspects

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Objectives: Endometrial thickening represents a heterogeneous group with definitions induced by age and with a diagnosis and outcome depending on ultrasound and pathology. We are interested in researching the ultrasound aspects leading to the diagnosis of polyps and comparing them to the pathology results.

Methods: The necessary information was gathered from the data sheets and pathology results of patients treated in the Obstetrics and Gynecology Unit of the University Emergency Hospital Bucharest leading to a ongoing prospective study started in January 2015. The following ultrasound aspect were taken into account and evaluated : average endometrial thickening, endometrial thickness uniformity, homogeneity and aspect, dilated glands presence ,disruption of endometrial miometrial line, midline deformation, doppler aspect, tumor existence with shape aspect, hyperechoic line sign and free endometrial fluid presence.

Results: Starting from a number of 35 patients evaluated for endometrial pathology, 20% (N=7) were considered judging by ultrasound criteria to be polyps, the remainder of 80% branching out into fibromas (5%, N=2), and endometrial thickening (75%, N=26). The average endometrial thickness ranged from 13.45 mm for premenopausal women to 8.2 mm for postmenopausal ones. 77% of patients experienced regular thickening with echogenic aspect in 94% of cases and homogeneity of 83%. Dilated glandular aspects were detected in 9% of patients and with midline deformation for 20%. A single feeding artery was seen in 54% of cases despite a tumor existence of 50%, 49% out of which being of oval shape. The hyperechoic line sign was present in 34% of cases and free fluid in 6% respectively. The histology aspects rendered a higher number of polyps of about 35%, the extra 15% of cases having been previously mistaken for endometrial thickening.

Conclusions: The ultrasound aspect of endometrial polyps is a method of diagnosis worth to be taken into account but it is not fail proof despite its high rate of predictability. Pathology is considered gold standard as it is necessary for histological anomaly detection.

(366) Multidisciplinary approach in collective burn patients

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Introduction: Burn injury represents the most severe kind of trauma for the human body. The prognosis in burn patients depends on the total body surface area (TBSA), the burn depth and the presence of inhalation injury. At the same time, the number of simultaneous severe burn victims

is another prognosis factor. There are a lot of advances in burn care, but the treatment of this complex condition requires a multidisciplinary burn team that can improve the survival rate and the quality of life.

Objectives: This study aims to share our experience with multiple burn patients, all victims in a collective accident, an inside fire in "Colectiv" club.

Methods: We treated 16 patients with TBSA burn injury spanning between 8% and 60%, all of them presenting signs of smoke inhalation on the upper airway. We adhered to the strictest rules of asepsy and antisepsy from the beginning.12 patients with more than 20% TBSA burns were admitted in the intensive care unit, fluid rehabilitation being immediately started; all of these patients also necessitated emergency escharotomy incisions on the upper limbs. 8 patients required orotracheal intubation during the first hours from admission.

All the patients were treated with daily wound lavage with antiseptic solutions and sterile dressings with local antimicrobial agents (silver sulfadiazine), early necrotic tissue excision and split skin thickness grafting and early rehabilitation. The rates of wound contamination and infection with multi-resistant germs were similar to those reported internationally. All the patients benefited of continous professional psychological support. Bronchoscopy and aspiration were performed regularly in intensive care patients, with tracheostomy for those patients that required long-term intubation. One patient developed abdominal compartment syndrome that was treated with laparoscopy surgery.

Results: A large spectrum of medical and surgical specialties were involved in the management of these severely burnt patients, but, with considerable human and material effort, all the patients survived.

Conclusions: In burn patients, good survival rates and satisfactory rehabilitation perspectives are possible with a sustained effort and a multidisciplinary team approach.

(343) Restoring normal ACL anatomy through reconstruction using the outside-in femoral tunnel drilling technique with arthroscopic confirmation of tunnel positioning – early results

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Objective: Femoral tunnel drilling in anterior cruciate ligament (ACL) reconstruction has been incriminated for decreased clinical results postoperatively. The objective of the current study was to evaluate the results of ACL reconstruction using the outside-in femoral tunnel drilling technique with arthroscopic confirmation of tunnel positioning. The hypothesis was that this surgical technique improves clinical outcomes compared to the preoperative evaluation.

Methods: The study group included 52 patients who underwent ACL reconstruction using the outside-in femoral tunnel drilling technique with arthroscopic confirmation of tunnel positioning between 01.04-01.12.2014. The group, composed of 30 males and 22 females, with a mean age of 28 years. Preoperative and postoperative (12 months follow-up) clinical parameters (the Lachman and pivot shift tests, differential laxity measurement using the Rolimeter arthrometer, Lysholm Score, IKDC subjective and objective scores, and Tegner activity scale) of the group have been recorded and analyzed.

Results: The postoperative data proved consistent with a favourable evolution, in comparison with preoperative score values. All patients had positive preoperative Lachman (13 grade I, 31 grade II and 8 grade III). Postoperatively, 4 patients had positive grade I Lachman test. Pivot shift was grade I positive in 9 patients at follow-up compared to 50 patients pre-operatively. The average Rolimeter differential laxity improved from 6.63 mm pre-operatively to 1.67 mm post-operatively. Mean Lysholm score improved postoperatively to 92.83 from the preoperative value of 73.5.

The average subjective IKDC score increased from 73.44 to 91.77 at follow-up. Postoperative Objective IKDC included 47 patients in groups A & B and 5 patients in group C & D compared to the preoperative 9 patients in group A & B and 43 patients in group C & D.

The Tegner activity score remained constant – 4 with 75% of the group retuning to the pre-injury level of activity.

Conclusion: Outside-in femoral tunnel drilling technique with arthroscopic confirmation of tunnel positioning improves clinical outcomes by restorating normal ACL anatomy.

(274) True umbilical knot – the experience of the Department of Obstetrics and Gynecology of University Emergency Bucharest Hospital

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Objectives: This study was undertaken in order to evaluate the incidence of true umbilical knot between 01.01.2013 and 31.12.2015 in the Department of Obstetrics and Gynecology of Emergency University Hospital Bucharest and also to analyze the modality of establishing the diagnosis and the impact of this condition on the fetus and the way of delivery.

Methods: We conducted a retrospective study in which we included all the patients who delivered in the Department of Obstetrics and Gynecology of Emergency University Hospital Bucharest between 01.01.2013 and 31.12.2015 analyzing the number of patients diagnosed with true umbilical cord knot. We also evaluated how many of them were discovered prenatal and we analyzed the technique of establishing the diagnoses. All data was obtained from the patient's charts and the Department of Statistics of Emergency University Hospital Bucharest. SPSS was used for statistical analysis.

Results: Between 01.01.2013 and 31.12. 2015 10386 patients delivered in the Department of Obstetrics and Gynecology of Emergency University Hospital Bucharest. 57 newborns were diagnosed with true knot of the umbilical cord. 7 of these were diagnosed prenatal by ultrasound examination. 46 of these cases were delivered by Caesarian section. The Apgar score was equal or higher than 8 in most cases (n=51), but in 5 cases was less than 7, and in one particular case the Apgar score was 1.

Conclusions: Even though the prenatal identification of a true umbilical knot is challenging and difficult, all ultrasound departments should focus more on diagnose of this pathology.

(87) Uterine artery embolization – the most effective method of interventional treatment of metrorrhagia in patients with multiple uterine fibroids

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Objective: This study was undertaken in order to determine the effectiveness of uterine artery embolization in decreasing metrorrhagia in patients diagnosed with multiple uterine fibroids.

Methods: We retrospectively analyzed the medical records of all patients, diagnosed with multiple uterine fibroids in the Department of Obstetrics and Gynecology of Emergency University Hospital of Bucharest between 01.01.2014 and 31.12.2015, who underwent uterine artery embolization. All the patients were questioned about metrorrhagia 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 31.12.2015 298 patients underwent uterine artery embolization for multiple uterine fibroids. The mean age in the group of patients analyzed was 38.4 years. 67.45 % of the patients enrolled in this study (n=201) affirmed an important decrease or the absence of abnormal uterine bleeding in the first 3 months after the procedure.

Conclusion: We conclude that uterine artery embolization is an effective minim-invasive procedure for the treatment of metrorrhagia in patients diagnosed with multiple uterine fibroids.

(9) H-type rectovestibular fistula: a rare entity in the spectrum of anorectal malformations

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Objective: We report a case of a congenital rectovestibular fistula with normal anal opening successfully treated in a sagittal anterior approach and fistula excision. H-type rectovestibular fistulas are a rare situation in the wide spectrum of anorectal malformations. There are various surgical procedures suggested for this pathology, including simple fistula resection and extensive perineal dissection. However, the frequency of postoperative fistula recurrence lays between 5% and 30%.

Method: An infant with polymalformative syndrome, microcephaly is admitted in our unit for vulvar edema and perianal hyperemia associated with superficial ulcers. The diagnosis of H-type rectovestibular fistula was considered after clinical examination. We considered a three-stage surgical treatment due to the delayed presentation of the patient associating massive skin injury.

Results: The outcome is very good with no recurrence of the fistula 1 year after fistula excision by sagittal anterior approach.

Conclusion: The diagnosis for H-type rectovestivular fistula needs to be given after a thorough clinical examination of the patient. Due to its associated complications, a multi-stage treatment is preferred.

(40) A cross-sectional survey among Romanian pregnant women regarding attitudes and knowledge about rubella

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Background: Rubella virus, one of the pathogens causing the TORCH syndrome, is still prevalent in Romania, disregarding immunization programs. In 2013 and 2014, 84 suspect cases of congenital rubella have been reported by the National Institute of Public Health, some of them leading to death. Therefore, this thread to the public health should be better analyzed, in terms of causes and possible solutions. At the moment, there is not any national study regarding rubella awareness, in order to determine the current status and apply the best further strategies.

Methods: We created a survey consisting in 35 questions with predefined answers in order to assess awareness and knowledge of rubella in Romanian pregnant women. We collected data from 350 participants, from both rural and urban areas, after receiving their written consent (from March 2013 until February 2015). We continue to apply the questionnaire, in order to meet an acceptable national coverage. Statistical analysis was performed using Epi Info (version 7).

Results: Upon a preliminary assessment, the vast majority of the surveyed women have heard about rubella, but more than half of them were not aware neither of the risk of transmission during pregnancy and its potential effects, nor of the symptoms of the infection. Two thirds of the respondents knew about the causative agent of the disease, but more than 60% believed that congenital rubella can be efficiently prevented without vaccination. Less than half admitted to apply

protection methods against airborne diseases (such as rubella). Moreover, a small percent of the participants think that rubella can be caused by the anti-rubella vaccine. The rate of asking health-care providers for information about rubella is very low before pregnancy, but also during it.

Conclusions: There is a need for health education programs related to pregnancy, provided both by doctors and governmental institutions. Our study suggests that low adherence to preventive acts and unstable knowledge of the risks associated to rubella may influence in a negative way the perinatal outcome.

(51) The anatomic variants of the coeliac trunck and the clinical importance

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Objective: The knowledge of the anatomy of the coeliac trunck may be important during invasive procedures like chemotherapy, angiography, chemoembolization and other surgical conditions of the abdomen. This study has as main purpose to present the anatomic variants in the vascular pattern of branches of the coeliac trunk in cadavers for to prevent complication.

Methods: Images with anatomical dissection in cadavers of the coeliac trunk and the study about this. Dissection included surgical incision, followed by mobilization of the anatomical viscera, to observe and record the branching pattern of the coeliac trunk.

Results: The anatomic variants of the coeliac trunck was expose and it found 3 types: the left gastric, common hepatic and splenic arteries were found to arise from the coeliac trunk; was the origin of the gastric artery was proximal to the bifurcation of the coeliac trunk into the common hepatic and splenic arteries or all three branches arose directly from the abdominal aorta.

Conclusion: A thorough knowledge of the different vascular patterns of branches of the coeliac trunk is vital for radiological imaging in the upper abdomen, because this could facilitate more accurate radiological interpretations. Although it is important in surgical procedures like liver transplantation and splenectomy, because the complication like bleeding or necrosis may be minimize.

(59) Abrikossoff tumor – a rare presentation of granular cell nerve sheath tumor

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Objective: Granular cell tumor (GCT) also known as granular cell nerve sheath tumor, granular cell schwannoma or Abrikossoff tumor is a rare soft tissue neoplasm of neuroectodermal origin, first described by Abrikossoff in 1926. It affects mainly adults (age 30-60),but may occur at any age, with a predilection for females and African Americans. It appears as a superficial, usually benign, solitary, slow-growing tumor occurring mostly in the head and neck area, specifically the tongue (40%). Congenital presentation, as well as an extremely rare and aggressive malignant form, has also been reported in the scientific literature. Association with neurofibromatosis is uncommon.

Method: We report the case of a 56-year-old female presenting to the Department of Plastic Surgery of the University Emergency Hospital Bucharest with a 3.5/2/1 cm skin-colored, firm nodule located on the posterior thorax, which first appeared several months ago as a small papule. The nodule was surgically removed and sent to the Department of Pathology in the same clinic for histopathological evaluation.

Results: Histopathological examination revealed a non-encapsulated tumor mass located in the dermis and subcutaneous tissue, with pink-yellow cut-surface and finely granular appearance, composed of irregularly arranged clusters of large, round to oval cells with indistinct cell borders, brightly eosinophilic granular cytoplasm, small, uniform, round to oval, centrally located nuclei and inconspicuous mitotic activity. The granules were PAS-positive and formed larger masses, surrounded by a clear halo, which are referred in the scientific literature to as the 'pustuloovoid bodies of Milan'. As a result, the histopathological diagnosis of benign granular cell tumor (Abrikossoff tumor) was established and confirmed by immunohistochemical staining. The

overlying epidermis was normal and did not show pseudoepitheliomatous hyperplasia, which is a rather common finding in association with GCT.

Conclusion: We consider this case particularly interesting because of its unusual presentation on the posterior thorax. Due to the potential for recurrence and morphologic overlap between benign and malignant GCT, we emphasize the utmost importance of complete tumor resection followed by a thorough immunohistopathological examination, in order to establish an accurate diagnosis and ensure the best possible outcome for the patient.

(72) An interesting case of aggressive clear cell sarcoma of the toe with lung metastasis

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Background: Clear cell sarcoma of the toe is a very rare malignant soft tisuue tumor with unknown histogenesis. A case report of a 49 years old male patient is presented.

Method: Surgical specimen was grossly examined and processed in the pathology department. Hematoxylin eosin and van Gieson colored slides were examined under the microscope. For immunohistochemistry tests CK19, calretinin, caldesmon, actin, Leu7, desmin, HMB45 and S100 markers were used.

Results: The patient presented to the hospital for an infected hematoma of the first left toe following a local trauma. Presumably infected tissue is resected. Histopathology exam reveals a malignant neoplastic proliferation consisting in short fascicles of spindle cells with eosinophilic and clear cytoplasm. Therefore, surgical resection of the tumor with resection margins is performed. The tumor was white-yellow, infiltrative with a maximum diameter of 6 cm. The tumor developed from the subcutaneous tissue and invaded soft tissue and bone structures of the foot. Also, the tumor relapsed in a short period of time and CT exam revealed lung metastasis.On immunohistochemistry, neoplastic cells were positive for actin, HMB-45 and negative for CK19, calretinin, caldesmon, Leu7, desmin and S100.

Conclusion: Clear cell sarcoma of the toe is an extremely rare diagnosis with a poor prognosis because of relapse and metastasis high-risk.

(74) Fulminant evolution in a case of advanced acral melanoma

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Objective: Melanoma is an aggressive and highly metastatic disease responsible for 1% to 2% of all cancer deaths around the world which usually affects adults and elderly patients, with a peak incidence around the sixth decade of life. Acral melanoma is the fourth most common form of cutaneous melanoma, often diagnosed late in its evolution. Metastatic spread may become clinically evident during follow-up visits several years after excision of the primary tumor.

Method: We report the case of a 66-year-old male presenting to the Department of Plastic Surgery of the University Emergency Hospital Bucharest with an ulcerated nodule of 13/15/4 mm, located on his right sole. The mass was surgically removed and sent to the Department of Pathology in the same clinic for histopathological evaluation.

Results: A thorough microscopic examination of the specimen established the diagnosis of nodular-type melanoma with invasion of the reticular dermis (Clark's level IV), a Breslow thickness of 7.1 mm and negative margins. The tumor featured 21 mitotic figures per square millimeter, microscopic satellites, increased angiogenesis, no lymphovascular or perineural involvement as well as no tumor-infiltrating lymphocytes and no areas of regression. Positive immunostaining for HMB-45, S-100 and vimentin confirmed the diagnosis. The patient returned to our clinic 5 times in the following 9 months with several firm nodules scattered on the left calf and thigh, along the trajectory of the great saphenous vein. These nodules were diagnosed as cutaneous and subcutaneous metastases varying in size from 1 to 5 cm and involving the inner layers of the skin as well as the underlying muscular tissue.

Conclusion: Given the increased risk for metastasis and high mortality rates associated with this malignancy, we emphasize the importance of maintaining a high level of suspicion for all types of melanoma. Moreover, we strongly believe that a comprehensive pathologic assessment of all tumor parameters is essential not only because it ensures an accurate prognostic estimation and appropriate clinical management, but because it may also illuminate the path for future research regarding novel molecular therapeutic targets.

(77) Epithelioid leiomyosarcoma of the uterine corpus – an immunohistochemical study with unexpected results

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Objective: Leiomyosarcoma is the most common variant of pure uterine sarcoma, accounting for 1-2% of all uterine malignancies. Epithelioid leiomyosarcoma is an uncommon histologic subtype of leiomyosarcoma which lacks the severe cytologic atypia and high mitotic index of the typical spindle-shaped leiomyosarcoma. Preoperative distinction between leiomyoma and leiomyosarcoma of the uterine corpus may be extremely difficult, especially since their main signs and symptoms (abnormal vaginal bleeding, palpable pelvic mass, pelvic pain) are practically identical. Malignancy should always be taken into consideration when identifying tumor growths in menopausal women who are not on hormone replacement therapy.

Method: We report the case of a 68-year-old multiparous female, presenting to the Department of Obstetrics-Gynecology of the University Emergency Hospital Bucharest with abnormal vaginal bleeding. Transabdominal ultrasound revealed an intramural concentric, solid, hypoechoic mass displacing the echogenic endometrial stripe. The patient underwent a total hysterectomy with bilateral salpingo-oophorectomy and the surgically resected specimen was sent to the Department of Pathology in the same hospital unit for histopathological evaluation.

Results: Gross examination of the specimen revealed a relatively well-defined yellowish-grey intramural tumoral mass of 8/7/7 cm. The cut surface of the tumor was soft, bulging and diffusely hemorrhagic, presenting several small and irregular cystic degenerated spaces filled with serous fluid. Microscopically, the tumor was composed of round to polygonal cells, with central nuclei and abundant clear to eosinophillic cytoplasm, growing diffusely in sheets or nests, interspersed with focal spindle cells. Although nuclear pleomorphism was rather mild, the tumor featured 9 mitotic figures per 10 HPF and extensive areas of coagulative necrosis and myxoid degeneration. Immunohistochemical study included SMA, desmin, vimentin, AE1/AE3 pan-cytokeratin, CD10, ER, p53, HMB-45, S-100 and Ki-67. Except vimentin, immunohistochemistry as well as histology supported the final diagnosis of epithelioid leiomyosarcoma, stage pT1bNxMx.

Conclusion: We were intrigued by the lack of vimentin expression and we consider this particular case may represent a rare immunophenotypic variant of epithelioid leiomyosarcoma. We anticipate that our finding may aid future studies in establishing the oncogenic mechanisms underlying the development of this elusive malignancy.

(78) Immunohistopathological analysis of endometrial clear cell carcinoma in a hospital-based series of cases

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Objective: Endometrial clear cell carcinoma is a rare subset of type II endometrial carcinoma featuring an aggressive clinical behavior and high propensity for early extra-uterine spread, with less than 50% five-year survival rate, regardless of stage.

Method: In this retrospective analysis performed over the course of 1 year (January 2015 -

January 2016), we reviewed 5 cases of endometrial clear cell carcinoma from the medical database of the Department of Pathology of the Emergency University Hospital in Bucharest Romania. All patients were postmenopausal with a mean age at presentation of 71 years and had no past history of long-term drug intake, hormone replacement therapy, contraception, chemotherapy or radiation exposure. All women presented with postmenopausal bleeding and underwent transvaginal ultrasound and endometrial biopsy followed by radical hysterectomy with bilateral salpingo-oophorectomy and regional lymph node excision.

Results: All cases were diagnosed in early stages, with no lymph node involvement and no distant metastases. Three cases were limited to the endometrium invading less than half of the myometrium (T1a), one invaded more than half of the myometrium (T1b) and one invaded the cervical stroma but did not extend beyond the uterus (T2). Microscopic examination revealed large polyhedral and hobnail-shaped cells with clear or eosinophilic cytoplasm, enlarged and angulated nuclei with irregular, prominent nucleoli, arranged in papillary, tubular or solid patterns with various degrees of nuclear atypia. Three out of the five cases also presented densely eosinophilic extracellular hyaline bodies. Immunohistochemical studies revealed a high Ki-67 proliferation index, low immunoreactivity for p53 as well as lack of estrogen (ER) and progesterone receptor (PR). Immunostaining was also performed for: AE1/AE3 pan-cytokeratin, CK7, CK20, CA125, CEA, WT1 and vimentin.

Conclusion: Due to the lack of specific gross and clinical features to distinguish endometrial clear cell carcinoma from other subtypes of endometrial carcinoma, we emphasize the importance of a thorough immunohistopathological analysis and comprehensive surgical staging in order to establish an accurate diagnosis and facilitate adjuvant treatment and surveillance.

(94) How to use animal models for human pathology study – in the spotlight: knockout mice

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Fundamental research includes all methods used to demonstrate a hypothesis or mechanism using in vitro methods or animal models. There are animal models, ranging from very simple organisms, such as Saccharomyces cerevisae in mammals as close to the human body. Model complexity depends on the primary objective research and interactions between various cellular and molecular systems to be included in the interpretation of results. Complex animal models can be further modified to emphasize the role of a single molecule in a cell type, a tissue or the entire organism. A current practice for small mammals, such as mice laboratory, is the introduction of a human gene (transgenic mice) or gene removal (knockout mice) at the level of a single tissue or throughout the body, followed by the study of induced changes. This paper aims to present the advantages and disadvantages of a knockout mouse model, exemplifying them with caveolin-1 knockout mouse model, as well as alternatives for advancing the knowledge to human physiology and pathology.

Acknowledgment: This work was supported by CNCS- UEFISCDI, grant PN II-RU-TE-2014-4-1531.

(97) GLA nonsense mutation (c.485G>A) in a three-generation family with Fabry disease

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Background: GLA nonsense mutations seem to be associated with more severe clinical phenotype.

Main aims were to identify the disease-causing mutation, to screen high risk family members and to predict the severity of clinical phenotype and age of onset based on genotype-phenotype analysis.

Methods: Seven family members were clinically assessed and enzyme activity levels were evaluated as well. Genomic DNA was isolated from blood samples and analyzed for GLA gene mutation.

Results: The proband, a 34-year-old man, was misdiagnosed for years. At 25 years of age he was diagnosed with Fabry disease. He had a less severe phenotype failing to express cardiac, cerebral or renal symptoms. In addition, the patient presented a ventricular septal defect as an incidental finding which has not been reported previously in Fabry disease. His maternal uncle had a severe classic form and, in addition, osteonecrosis of femoral head rarely reported as associated findings. All females were heterozygous; 3 of them were asymptomatic and 2 developed milder symptoms, skin and heart predominantly affected. Fabry disease was caused by the presence of GLA nonsense mutation c.485G>A. All close relatives of proband had one copy of the mutation.

Conclusion: The family nonsense mutation c.485G>A known to predict the classic phenotype showed a wide range of clinical manifestations from severe to asymptomatic forms both in males and females supporting the intrafamilial phenotypic variability for Fabry's disease.

(100) Positive and differential imaging diagnosis of Immune Reconstitution Inflammatory Syndrome complicating Progressive Multifocal Leukoencephalopathy (IRIS-PML)

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Objectives: To demonstrate the main imaging features of Progressive Multifocal Leukoencephalopathy (PML). To define the criteria of Immune Reconstitution Inflammatory Syndrome (IRIS) associated to PML. To present the main differential diagnosis of IRIS-PML in the setting of an immunocompromised patient.

Method: A number of 23 patients with HIV infection, diagnosed PML and progressively deteriorating neurological and clinical status while under antiretroviral therapy have been examined between January 2013 and December 2015 on a 1.5T Magnetic Resonance Machine with a routine cerebral protocol including contrast media administration. Imaging findings were followed according to the patient's evolution and were correlated with the clinical setting.

Results: Twelve of the patients were concluded as being suffering from IRIS-PML after integrating all their imaging, clinical and biological data following the current standing guidelines. Several imaging parameters were used as criteria for evaluating disease progression such as T2 hyper intensity (overall signal intensity average), contrast enhancement, water diffusion restriction, mass effect and overall affected volume measurement. Non-infectious demyelination, glioma and other central nervous system tumors were formally excluded. Other non-conventional MR modalities like Magnetic Resonance Spectroscopy and Diffusion Tensor Imaging are also discussed.

Conclusions: Immune Reconstitution Inflammatory Syndrome may be triggered by the onset

of highly active anti-retroviral therapy in AIDS patients with low CD4 count, complicating progressive multifocal leukoencephalopathy. Prognosis is poor in most cases, with neurological decline, seizures and ultimately, death. Correlation of clinical, biological and imaging features successfully diagnoses the condition and, through quick and proper diagnosis and prompt treatment may potentially improve the patients' prognosis.

(103) Malignant melanoma developed on preexisting melanocytic nevus – case report

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Objectives: Malignant melanoma is a type of cancer that originates from melanocytes at the epidermal-dermal junction. The most important risk factors associated with this type of cancer are: sunlight exposure (either intermittent or chronic) and endogenous factors.

Methods: A 71 year old male patient came to the Plastic Surgery Department of the Emergency University Hospital in Bucharest for a pigmented tumor of the skin, located on the left scapular region. In the last three months, the tumor started to grow and became itchy.

The surgeon performed a wide excision for malignant lesions, due to its macroscopic appearance (to include "safety margin" of healthy-looking tissue). The cutaneous fragment was sent to the Pathology Department of the same hospital, for further procedures and histopathological examination.

Results: Gross findings revealed a cutaneous fragment (68/57/25 mm) with an asymmetric pigmented tumor (18/21 mm). The tumor had irregular borders and different colors: black and whitish-grey areas. At the periphery of the tumor was an exophytic, sessile and amelanotic structure.

Microscopic findings revealed that the lesion was an invasive malignant melanoma developed on preexisting melanocytic nevus, with no ulceration. The tumor had both radial and vertical growth phases. The Clark level of invasion was IV, and the Breslow index was 2.7 mm. Also, two atypical mitosis per mm^2 were described, with no lymphovascular or perineural invasion. The tumor staging was pT3a.

Conclusions: This case report shows a malignant melanoma with an important component of vertical growth phase, developed on preexisting melanocytic nevus. Most of the times, the benign part is transformed into a malignant one, so that the nevus disappears, especially when the disease is advanced (being explained by the vertical growth phase of melanoma). The particularity of this case is the association between the benign component (melanocytic nevus) and the malignant one, considering the advanced stage of the tumor.

(113) Assessing osteoporosis risk in young postmenopausal women – a well-chosen questionnaire

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Objective: to develop a simple screening tool, Self-Assessment Test for Osteoporosis (TAO), and compare it with the recommendations of the International Osteoporosis Federation (IOF) for bone mineral density (BMD) measure in women younger than 65-years.

Methods: A group of 47-women from Sanamed Hospital database was used to determine the performance of these screening tools in selecting subjects younger than 65-years-old for BMD testing. All participants completed the questionnaire that included demographic and risk factors for osteoporotic fractures of FRAX, including BMD. The group was divided into two subgroups based on age as follows: age ≤65-years, respectively aged >65-years. We analyzed risk factors for osteoporosis and it was followed the model of "Osteoporosis Tools for Asians Autoevaluation"(OSTA) to develop a risk index by multiple linear regression analysis and we used values of this index to form an algorithm for identification of women ≤65-years-old, who need BMD measurement. ROC curve and area under the curve (AUC) compared the sensitivity/specifity analysis of this model with the recommendations of the IOF.

Results: A total of 47-postmenopausal women were included and the index was derived from age and body weight based on the weighted

share of each risk factor and selected threshold value was set to"-1". There are 25 (53.19%)-women whose index value is below"-1" and whose risk of osteoporosis was 57.44% (27/47). AUC for TAO and IOF were 0.738 (95%CI, 0.728-0.749, p<0.001) and 0.618 (95%CI, 0.606-0.630, p<0.001). TAO sensitivity and specificity, for selected cutoff "-1" and IOF to identify osteoporosis were 72.1%; 64.0% and 77.6%; 45.6%.

Conclusions: The data presented may serve to evidence-based approach to target testing BMD in women younger than 65 years in IOF treatment guidelines since the BMD measurements are not widely available in some communities because of cost and lack of equipment. A simple questionnaire can help identify women at high risk for BMD measurements, thus avoiding the cost of measurement in women with low risk.

(116) A case of solid-type hepatocellular carcinoma associated with chronic C hepatitis and cirrhosis

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Objective: Hepatocellular carcinoma is the most common hepatobiliary malignancy that occurs mostly in the liver containing hepatitis virus. The neoplastic transformation often results from the accumulation of genetic changes during the repetitive cellular proliferation that occurs in the damaged liver.

Methods: A 72-year-old woman was admitted in our hospital with the following symptoms: increased abdominal volume and diffuse abdominal pain, dyspnea and vomiting and weight loss. The symptoms were with recent debut. The patient has been already diagnosed with viral C hepatitis for 7 years, obesity, type II diabetes mellitus, hypertension, esophageal varices and nodular goiter with hypothyroidism. We didn't identify history of smoking and alcohol abuse.

The patient has been hospitalized and the CT-examination reveals the following aspects: 56/53 mm hypodense expansive tissue with heterogenous aspect.

In the same day was performed a surgical procedure which revealed blood in the peritoneal cavity of approximately 3 liters, micronodular and macronodular liver cirrhosis and a 6 cm tumor located in the left hepatic lobe (III segment) with active hemorrhage. The type of this surgical procedure was atypical.

The post operatory evolution was stationary, without liver hemorrhage. Also, the patient needed renal dialysis, but didn't respond to it and died 4 days later.

Results:

Macroscopy

Partial resection of the left hepatic lobe measuring 8/5/4 cm with macroscopic aspect of micronodular and macronodular cirrhosis. Possible tumor, measuring 4/0.5/0.4 cm.

Microscopy

Solid type hepatocellular carcinoma. Low differentiated with high grade malignancy consisting of hepatocytes with marked nuclear pleomorphism and numerous atypical mitosis. There are numerous capillaries with carcinoma emboli. Also, there are lesions associated with hepatic cirrhosis and microvesicular and macrovesicular steatosis. There was no invasion of the round ligament and the surgical resection was complete. TNM classification was T2NxMx; Stage II

Conclusions: Hepatocellular carcinomas associated with virus C infection typically develop after 20-30 years of infection, being preceded by liver cirrhosis. The particularities of our case were the following: female gender, <7 years infection with hepatitis C virus, no alcohol and tobacco consumption. We have no data whether or not the hepatocellular carcinoma arose in the settings of HCV or other risk factors.

(142) Fort and ford evaluation in normal aging

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Objectives: The free radical theory of aging is based on the increase of oxidative stress level (SOx) which occurs with aging due to the oxidant-prooxidant imbalance. This imbalance is caused by the rise in the production of reactive oxygen species (ROS), the progressive decrease of the antioxidant capacity, and the permanent exposure to prooxidant factors of environmental origin. An important role is played by the mitochondrial aging process, as the level of ROS increases, whereas the antioxidant synthesis decreases, both in an age-dependent manner. Cell aging is the result of an accumulation of ROS-induced subcellular lesions at a protein/lipid level or in the DNA.

Methods: We evaluated SOx in 20 subjects (60 – 70 years old) that had an apparently healthy

status, with a glycaemic and lipid profile and a systolic blood pressure in conformity with their age, and compared them to a control group of 20 young subjects (20 – 30 years old), non-smokers, with a normal body mass index. We evaluated the level of ROS by the FORT test and the total antioxidant capacity by the FORD test with a CR3000 analyzer. A statistical analysis was performed, a p-value less than 0.05 being considered significant.

Results and conclusions: The FORT test revealed normal values in the control group and moderately high values in the elder group. The FORD test depicted normal values in the control group and low values in the latter. Statistically significant differences have been registered between the two groups (p-value <0.05). The normal aging process is associated with a progressive rise in the value of ROS, which may be caused by the electron leak induced by the deterioration of RedOx enzymatic systems, and also due to the decrease in the antioxidant capacity of the organism.

(145) Salivary biomarkers of oxidative stress and inflammation: a new diagnostic tool in oral cancer

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Background: Saliva can be utilized as a diagnostic fluid for a number of oral affections including oral cancer due to the high number of biomarkers contained and the ease of sampling. Oxidative stress (OS) and inflammation are important factors in cancer development. Despite new diagnostic tools, oral cancer incidence continues to grow. A key inflammatory factor is IL-6 regulating chronic inflammation, cell proliferation, bone invasiveness and apoptosis. OS can be generated by inflammatory cells. Total antioxidant capacity (TAC) encompasses all salivary antioxidant mechanisms and has an important significance in OS detection.

Objective: Evaluation of the diagnostic potential of salivary biomarkers IL-6 and TAC in oral cancer.

Methods: The present study included 30 patients (ages between 40 and 65), diagnosed with oral squamous cell carcinomas and 14 volunteers as control. IL-6 was detected using chemiluminescence while TAC detection was performed using the TEAC method (Trolox Equivalent Antioxidant Capacity).

Results: Salivary IL-6 levels showed a significant increase in the oral cancer group compared to the control group (2.9 pg IL-6 / mg albumin ± 0.4 vs. 0.8 pg IL-6 / mg albumin IL-6 ± 0.07). Salivary TAC showed a significant decrease in the oral cancer group when compared to respective controls (0.62 mmol / mg albumin ± 0.12 vs. 1.31 mmol / mg albumin ± 0.8). A statistically significant negative correlation was found between IL-6 and TAC levels.

Conclusions: The present study showed that IL-6 and TAC could be used in the future as biomarkers in diagnosing and monitoring oral cancer.

(150) The influence of haplotype HLA-A3/A11 in evolution after HSCT

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Background: It is known that some patients' haplotypes are ligands for inhibitors and activators donors KIR allele in HSCT. The same haplotype can be protective again post HSCT complication, like ligand or not.

Objectives: Haplotype HLA-A3/A11 is described in literature like ,,good" haplotype. In this study, 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 non-lymphoblastic and their genoidentics donors. Fifteen patients have HLA-A3/A11 haplotype. Following the impact of inhibitory KIR3DL2 and activatory KIR2DS4 on survival and complication development, we proved the protective efect of HLA-A3/A11 haplotype. 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 thrombocyte followed.

Results: HLA-A3/A11 haplotype is protective for both types of leukemia, the patients survival is much better (56 month, comparative with 10 month) with statistical significance (sig<0.05). Is protective against relapse, TMA, cGVHD and leucocytes recovery, with statistical significance. Like ligand for KIR2DS4 improve survival. Like ligand for KIR3DL2, also improve survival, so ,,missing ligand", theory in this case is not confirmed.

Conclusion: Like ligand or not, HLA-A3/A11 improve survival and protect against most complication at patients with acute leukemia and related donors with 100% allele match.

(151) Study of few cytokines genes polymorphism and evolution after HSCT

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Objectives: Cytokines gene polymorphism is part of transplant immunology with strong implication in evolution and development of early and late complication. This remain an open and acute problem for study and discussion.

Methods: We studied a lot of eighteen pairs, patients with acute leukemia, lymphoblastic and non-lymphoblasti, and their donors, for polymorphism genes of few cytokines. All related donors and recipients had 100% HLA alleles match. The source of HSCT was PBSC. The following cytokines are observed: IL-1α pos 889, IL-1RA pos mspa1 11100, γIFN pos 874, TGFβ1 codon 10, TNFα pos 308, IL-6 pos 174, IL-10 pos 1082, IL-10 pos 592. The method used was PCR-SSP (Dynal Genotyping SSP Kit). The complications like graft versus host disease acute and chronic, relapse, TMA and the recovery with leucocytes and thrombocytes are followed.

Results: IL-1α pos 889, absence of CC/TC, TNF-α pos 308 GA/GA, absence of GG/GG, IL-10 pos 1082 AA/AA are favorable for early recovery with thrombocytes (<17 days) with statistical significance. γIFN pos 874, absence of AT/AT are protective again TMA.IL-10 pos 592 AA/CA are also favorable for thrombocytes recovery. No influence, with statistical significance, was established in our study.

Conclusions: A study like this, a small number of pairs, genoidentical, with PBSC like HSCT source, proves us that some alleleles can influence the complication like TMA, and early thrombocytes recovery.

(207) Is the treponemal IgM ELISA useful for the diagnosis of congenital syphilis?

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Objective: To highlight the importance of the treponemal IgM ELISA for the diagnosis of congenital syphilis. It is known that the maternal treponemal antibodies belonging to IgM class do not cross the placenta. IgM are produced by fetus (newborn) only if fetal infection occurred.

Methods: Serological testing was performed in 22 children of 0-2 years, born of VDRL and TPHA positive mothers with treponemal infection acquired before or during pregnancy for which they received treatment or not. The following diagnostic tests were used: VDRL and TPHA for mothers; VDRL, TPHA and treponemal IgM ELISA for newborns and children.

Results: Five children of 1-2 years were negative for VDRL, TPHA and IgM ELISA. The results of these tests denied the diagnosis of congenital syphilis received at birth and which was based only on the positivity of VDRL and TPHA (due to the antibodies of IgG class transferred passively from mother). A child of one year and 14 newborns were positive for VDRL and TPHA, but negative for IgM ELISA, suggesting the passive transfer of maternal IgG. However, 2 newborns were positive for VDRL, TPHA and IgM ELISA, which suggested an active treponemal infection.

The diagnosis of congenital syphilis was denied in 20 (including 14 newborns) of the 22 children, based on treponemal IgM ELISA, while this infection was confirmed only for 2 children.

Conclusion: The treponemal IgM ELISA test is required to distinguish between active congenital infection and passive transplacentar transfer of maternal non-IgM antibodies. It eliminates false positive congenital syphilis diagnosis based only on positive VDRL and TPHA serology, common to mother and newborn.

(214) Burnout levels of hemodialysis nurses

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Burnout syndrome is a complex phenomenon related to a stressful working environment, is a syndrome that can be due to emotional exhaustion, depersonalization and decreased personal accomplishment. Providing care for patients with chronic disease such as end-stage renal disease, working in a technical environment exactly of machines and coping with the increased expectations of patients is stressful.

Objectives: The purpose of this study was to determine the burnout levels of nurses working in hemodialysis units.

Methods: Data were collected by means of the Maslach Burnout Inventory .40 nurses with more than 15 years of work experience completed the questionnaires.The Maslach Burnout Inventory was used to assess levels of hemodialysis nurse's burnout. The inventory is a 22-item measure that assesses the frequency of occurrence of three aspects of burnout: emotional exhaustion, depersonalization, and personal accomplishment.

Results: The results of the study revealed that nurses working in hemodialysis units experience a medium-level burnout in terms of subscales of emotional exhaustion, depersonalization, and a high-level burnout in terms of the subscale of personal accomplishment.

Conclusion: It is important to monitoring burnout level, in order to recognize susceptible subjects and implement timely organizational and supportive measures to increase the quality of working conditions in such environments, improving working lives of nurses, and thus preventing the deterioration of the quality of care.

(216) Functional inter-relations in neurovascular coupling in cerebral cortex

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Objectives: Adequate blood delivery of oxygen and glucose to cerebral parenchyma, characterized by an extremely increased metabolism, is capital for optimal neuronal functioning. The coupling, in a complex of finely regulated interactions, between neurons, astrocytes, interneurons, arterioles and parenchymal capillaries, known as neurovascular unit, ensures a blood flow that is proportional to neuronal activity in space and time. The current work aims to synthetize recent data that are sometimes contradictory, regarding signaling mechanisms in neuronal-glial-vascular unit. A correct understanding of signaling is a prerequisite for efficient therapeutic solving of dysfunctions in cortical microcirculation.

Methods: Several modern applications for graphical representation and visualization of complex networks, interpreted from the perspective of recent research works (2013-2016) have been employed in order to identify putative interrelations that deserve an experimental confirmation.

Results: By releasing neurotransmitters, neuronal synaptic transmission signal will determine a calcium wave in astrocyte processes that will cause the release of vasoactive factors (K+, EET, PgE2) from their endfoots towards parenchymal blood vessels. That will be followed by a blood flow in consonance with the level of neuronal activity. Astrocytes are in a bipartite relationship with neurons (they modulate neuronal activity by the way of gliotransmitters), but signals staring from parenchymal blood vessels can also modulate their activity.

Conclusions: Functional integration of the components of neurovascular unit, through an efficient, but sometimes redundant signaling system, is essential in providing extremely high energetic requirements, with the avoidance of hypoperfusion (ischemia, infraction) or hyperperfusion (edema) that would generate undesirable disorganizing functional consequences.

(218) Cerebrovascular myogenic tone

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Objectives: Cerebrovascular autoregulation provides proportionality between the level of neuronal activity and the supply of oxygen and glucose requirements by cerebral blood flow. As brain energetic reserve is reduced, oxidative metabolism is extremely high and this complex structure is located in an inextensible cavity, with delicate parenchymal capillary endothelium of blood-brain barrier, an adequate regulation of focal blood flow is essential. A fundamental component of cerebrovascular auto-regulation is the mechanic control, as an intrinsic feature of vascular tone, determined by blood transmural pressure that creates a relative independence of blood flow from blood pressure variations. The aim of the current work is to analyze the mechanisms that are at the base of myogenic tone, with their integration from an improved, updated perspective.

Methods: Recent research data have been represented and modelled with the help of several modern software used for graphical representation and interaction for biological networks in order to identify new targets for better therapies.

Results: The initiation of vascular myogenic tone is achieved through mechano-transducers from vascular smooth muscle cells. Receptors that are coupled to Gαq/11 proteins, such as AT1R, P2Y4 and P2Y6, CysLT1R without ligand have been proved to be mechanic-sensors of local arterial pressure variations. Ionic channels of TRP family, regarded as primary mechano-sensors until now, will trigger the activation of L- and T-type voltage dependent channels through a depolarizing influx. Ca^{2+} influx will initiate contraction by activating MLCK.

Conclusions: Myogenic tone ensures stability in cerebral blood flow despite variations in blood pressure, being based on a contraction degree on which several other autoregulation factors intervene with either vasoconstrictive or vasodilator effects. Disturbance in the myogenic tone of cerebral small blood vessels becomes of devastating functional consequences.

(219) The effect of curcumin in A-431 epidermoid carcinoma cell line

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Objectives: A-431 is a hypertriploid human epidermoid carcinoma cell line used in experimental medicine. A natural compound, curcumin might represent a potential alternative to classical therapy as a modality to inhibit the proliferation of cancer cells. The main objectives of our study included: to evaluate the effect of curcumin on cell proliferation and cell viability.

Methods: A-431 cell line was grown in DMEM supplemented with 10% FBS, 1% L-Glutamine, 100 IU/ml Penicillin and 100 μg/ml Streptomycin in a humidified atmosphere at 37°C with 5% CO_2. The cells were passaged twice per week. Cell cycle was evaluated after PI/RNase staining by flow cytometry using Gallios flow cytometer. Contrast phase microscopy and fluorescence microscopy were used to analyze the cell density after curcumin treatments. Cell viability and the ability to form colonies after curcumin treatment have been investigated by flow cytometry: dye exclusion method (7-AAD staining) and, respectively, clonogenic assay. Mitochondrial membrane potential (JC-1 staining) was evaluated by flow cytometry. The following concentrations of curcumin were applied: 5, 10, 25, 50 and 100 μM for different periods of time from 48 till 72 h.

Results: The highly proliferative A-431 cells have been blocked in G2/M phase after the treatment with curcumin for 72 h, in correlation with reduction in G0/G1 phase. Cell viability evaluated by dye exclusion method and flow cytometry indicated that A-431 cells are sensitive to curcumin at concentrations starting with 25 μM. Further data supported the previous results: concentrations of curcumin higher or equal to 25 μM inhibited colony formation, induced collapse of the mitochondrial membrane potential, and reduced cell density.

Conclusions: Our results confirm the anticancer activity of curcumin suggesting both chemopreventive and therapeutic outcomes.

(220) EGCG reduces partially the expression level of intracellular phosphorylated proteins in correlation with induction of cell death in epidermoid and mammary cancer cell lines

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Objectives: We aim to investigate the effect of epigallocatechin-3-O-gallate (EGCG), the main catechin in green tea, in two cancer cell lines with ErbB proteins overexpression: A-431, epidermoid carcinoma cell line and SK-BR-3, breast cancer cell line. In order to accomplish our aim we proposed the following main objectives: to study the ability of EGCG to inhibit intracellular signaling proteins hyperphosphorylated in cancer cell lines and to examine the capacity of EGCG to induce cell death using different techniques.

Methods: A-431 and SK-BR-3 cell lines were grown according to their specification. To evaluate the changes in the expression level of intracellular proteins (pAkt, pERK, pFAK) after 48 h of EGCG administration, flow cytometry technique was used. The changes in cell viability/ cell death after EGCG treatment was investigated by flow cytometry after staining the cells for reactive oxygen species (carboxy-H2DCFDA staining), mitochondrial membrane potential (JC-1 staining) and by clonogenic assay. Fluorescence microscopy was used to evaluate the nuclear morphology changes (Hoechst staining).

Results: Flow cytometry data demonstrated that 48 h treatment with 50 μM EGCG induced partial inhibition of pAkt (S473), pERK (Y204) and pFAK (S910) in both cell lines. We further studied the clonogenic potential of EGCG treated A-431 and SK-BR-3 cells for 48 h, which demonstrated growth inhibition in both cell lines at lower concentrations. EGCG treatment for 72 h showed dose dependent increase in ROS and subsequent cell death. These observations were correlated with the mitochondrial membrane depolarization induced by EGCG in the same treatment conditions. Since the mitochondrial depolarization can be associated with both necrosis and apoptosis, we evaluated the nuclear staining which showed chromatin condensation and nuclear disassembly in both cell lines suggesting apoptosis as the probable mechanism of cell death.

Conclusions: Our data suggests that EGCG administration might reduce the unfavorable traits associated with ErbB proteins overexpression, partially inhibiting activated key mediators of the ErbB signaling pathways, reducing the colony formation ability and promoting cell death.

(229) The role of the family doctor in increasing the compliance to the immunization program

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Objective: A decrease of the immunization coverage rates has been reported in the last years. The background of this phenomenon is very complex, but probably it is mainly caused by the fear of adverse effects, the lack of knowledge regarding the benefits of vaccination and the lack of efficient awareness campaigns from the public health authorities.

Our objective was to describe the factors that underlie the anti-vaccination movement in Romania, as well as to create a valid baseline for further improved strategies to solve this problem.

Methods: We designed a cross-sectional survey and applied the questionnaire to 475 people. Its aim was to verify participants' knowledge on the benefits of immunization, whether or not they vaccinated their children, and the sources of the information they possessed. Moreover, we evaluated people's perceptions of the attitude their family doctor has towards vaccination. Data have been processed using Epi Info (version 7.1.5.2).

Results: Out of the 475 participants, 409 were parents and 92.42% (95%CI: 89.30%-94.71%) of them had vaccinated the children according to the national immunization schedule. The great majority of the participants (95.15%;

95%CI: 92.70%-96.83%) affirmed that they were aware of the benefits of vaccination from various sources, like the internet, television, healthcare workers, family and friends. Most of them (82.83%; 95%CI: 78.89%-86.10%) had received information from their family doctor. However, 45.47% (95%CI: 40.95%-50.08%) of the respondents believe that vaccines imply risks which outgrow the benefits. A high percentage of the participants to the study, 80.72% (95%CI: 76.81%-84.12%), have been informed by their family doctor that immunization is absolutely mandatory, especially for the children.

Conclusions: In order to maintain the advances medicine has accomplished in fighting vaccine-preventable diseases, it is highly important to raise the awareness and compliance of the population to the immunization programs. General practitioners should reinforce the knowledge of their patients regarding vaccination benefits and attend their fears about potential risks. Even though vaccination is still a personal decision in Romania, people should be helped by the family doctors to understand that it is also a collective responsibility.

(235) Molecular characteristics of verocytotoxin-producing Escherichia coli O26 isolates originating from Romanian children

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Objective: Verocytotoxin-producing Escherichia coli (VTEC) is a food-borne pathogen that may cause severe human infections such as hemorrhagic colitis and hemolytic uremic syndrome (HUS). Worldwide, VTEC serogroup O157 strains are responsible for most human infections. However, VTEC serogroup O26 has emerged as a common cause of disease that is as severe as that caused by O157:H7, which is the VTEC prototype. Earlier this year, a VTEC O26 outbreak occurred among Romanian children, most of them from a Southern district. Our **objective**s were to define the molecular basis of virulence, the phylogenetic background, and the genetic relatedness of the autochthonous VTEC O26 isolates.

Method: The investigated samples included in the study originated from children with hemolytic uremic syndrome (HUS) and/or with a history of (bloody) diarrhea. E. coli VTEC O26 strains were detected and characterized using phenotypic (biotyping and serotyping) and genetic (PCR screening of virulence genes) methods. Phylogeny was assessed by using Multilocus Sequence Typing (MLST) and genetic relatedness by using pulsed-field gel electrophoresis (PFGE) of XbaI macrorestriction DNA fragments.

Results: The PCR assays showed that the autochthonous E. coli O26 strains carried at least one of the genes responsible for the production of VT1 (vtx1) and VT2 (vtx2), the toxins described to have a prominent role in the pathogenesis of VTEC bacteria. The vtx subtyping protocol indicated that all vtx1 genes corresponded to the vtx1a subtype and all vtx2 corresponded to the vtx2a subtype. The strains harbored additionally the genes encoding for the adhesin intimin (eae) and enterohemolysin (ehxA). MLST analysis revealed that all the VTEC O26 strains belonged to ST21 lineage. Multiple PFGE patterns were found among the tested strains.

Conclusions: The results confirm the circulation across our country of E. coli serogroup O26 members that qualify as VTEC. An enhanced national surveillance of such pathogens is needed considering their potential to cause life threatening human disease. The knowledge of the virulence profiles and genetic background of the clinical isolates is mandatory for a better understanding of the epidemiology of autochthonous infections.

(246) Oxidative stress assessment after PLGA nanoparticles administration in Wistar rats

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Objectives: In the recent years, engineered nanoparticles such as PLGA or poly-lactic-co-glycolic acid, have raised a substantial interest due to their possible medical applications in vaccination, diagnostic imaging procedures, cancer therapy or sustained delivery of drugs.The main aim of the present work is to evaluate key oxidative stress parameters in several organs following NPs administration in an animal model.

Methods: Polymeric nanoparticles of PLGA were prepared by emulsion-solvent evaporation method and were a kind gift from Prof. Sabliov, Lousiana State University, USA. The animal model involved rats divided in 2 groups as follows: 5 rats were used as control group and 5 rats were administered NPs at a concentration of 50mg/kg body weight. The NPs were given orally using a feeding canula; rats were sacrificed at 6 hours and tissue samples from spleen and liver were analyzed for oxidative stress indicators such as glutathione (GSH), malondialdehyde (MDA), total antioxidant capacity (TAC) and advanced human oxidation protein products (AOPP).

Results: A significant difference was found in GSH and TAC levels between the two groups in both analyzed organs: spleen 0.60 ± 0.18 vs. 0.93 ± 0.02 and liver 0.84 ± 0.04 vs. 0.93 ± 0.04 in PLGA group vs control group. For TAC the results showed: in spleen 92.6±3.46 vs 93.4±3.46, in liver 114±9.58 vs 101.93 in the PLGA group vs control group. MDA levels between the two groups were reported as follows: spleen 0.01 ± 0.01 vs 0.09 ± 0.01 in PLGA group vs control group; liver 0.04 ± 0.01 vs. 0.02 ± 0.01 in PLGA group vs control group AOPR levels detected in spleen: 1.44±0.47 vs 2.06±0.46 and liver: 1.88±0.1vs 1.88±0.1, for PLGA vs control group respectively.

Conclusion: Present data shows that acute oral administration of a high concentration of PLGA NPs induces a change in the antioxidant status in both rat liver and spleen but may not induce oxidative stress damage to cell structures such as lipid or protein oxidation.

Acknowledgment: D.M. would like to thank for the Young Scientist Grant 2014-2016 received from University of Medicine and Pharmacy Carol Davila, Bucharest, Romania.

(262) Nomophobia. Half of us suffer from it. Do you?

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Objectives: Nowadays technology has greatly changed the way humans perform their daily tasks. But among the great advantages of using technology, new pathologies either physical or psychiatric are starting to emerge. Nomophobia is one of them. It can be described as the fear of being out of mobile phone contact. People who suffer from this phobia start being anxious when they are either away from their mobile device or lose it. It can also be triggered by situations like running out of battery, or losing network coverage.

Methods: The study was carded out on a group of 210 individuals, with ages between 15 and 60 years old. Each person had to complete a survey containing a series of simple questions. In addition to this, a number of smaller groups were selected and divided by age and gender. The groups were also separated into test and control in order for us to compare the different results.

Results: Based on the data we gathered, we managed to notice that more than 62% of the people we enquired suffer from nomophobia. By further analyzing their feedback we concluded that anxiety, stress, and even concentration issues were present among individuals with nomophobia. What is more, 32% of all the individuals in the test group manifested an increase in their heart rate, high blood pressure, shortness of breath and even panic attacks while being away from their mobile device. We also discovered that women are more affected than men.

Conclusions: Nomophobia affects a great number of individuals which is continuously rising especially among young people who tend to heavily rely on modern communication means. Although it may seem harmless, nomophobia can cause serious pathologies such as panic attacks, severe stress, shortness of breath, accelerated heart rate, dizziness, chest pain and nausea. Most of the people who suffer from this phobia can rely on self-help methods as treatment. Our belief is that a phobia that can be easily ignored such as nomophobia can rapidly expand into a serious global health risk if left unstudied.

(264) Endometriosis related with pregnancy

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Objective: Endometriosis is a common complication after pregnancy. The perineum, and perianal region are areas of obstetric trauma, most commonly episiotomy scars and can develop external endometriosis.

Method: In a 3 year retrospective study on 282 cases with endometriosis we identified 39 cases of pregnancy related external endometriosis (abdominal wall, pelvis, peritoneum, omentum) and 16 cases of pregnancy related internal endometriosis (ovarian and fallopian tube).

Results: The clinical signs were localized pain with redness, edema and a brown-blue patch or nodule and pelvic pain synchronized with the menstrual cycle. During pregnancy visible endometriotic lesions frequently undergo initial enlargement, with occasional ulceration and bleeding, followed by shrinkage and stromal decidualization. Within the endometriotic lesion the endometrial epithelium can suffer Arias-Stella reaction. With time the endometriotic deposits change their gross appearance. On gross findings most often we identified brown to yellow-brown lesions that indicates the presence of hemorrhage, "powder burns" on the omentum and old lesions (white) with fibrosis and scarring that can determine infertility. From the microscopic point of view the endometriotic lesions fulfilled the triad: endometrial glands, endometrial stroma and the presence of hemorrhage and hemosiderin. At the abdominal wall we identified endometriomas-blood filled space lined by a flat epithelium and underlying stroma. On low-power magnification, the endometrial epithelium is thin, dark layer sharply delineated from the underlying paler stroma. On high-power examination, the endometrial epithelium is one cell layer thick. The cells are tall and columnar with elongate cigar-shaped nuclei showing regular vertical orientation. The cytoplasm is with multiple cytoplasmic vacuoles and stroma generally resembles the normal stroma found in the endometrium, and consists of small round to spindle-shaped cells with inconspicuous cytoplasm. Immunostaining for CD10 can facilitate the recognition of the stromal cells, particularly when sparse and when glandular epithelium is minimal or absent.

Conclusions: The overall frequency of post-Cesarean scar endometriosis is increased with the risk of incisional endometriomas that may result from failure to close the parietal and visceral peritoneum with sutures. Internal endometriosis is the most obvious reason for infertility caused by direct involvement of adnexal organs or by its secondary effects.

(268) Data regarding the distribution of seasonal 2015-2016 influenza vaccines among family doctors from the South of Romania

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Background: Primary care settings, where influenza vaccination is usually promoted and implemented in Romania, are a key aspect in achieving satisfactory immunization coverage. Influenza surveillance data from the European Centre for Disease Prevention and Control shows that previous seasons were severely affected, with high rates of complications and mortality. Our study aimed to explore family doctors` attitudes towards the seasonal influenza vaccination this year, and also their cooperation with the public health authorities for providing patients with the best preventive strategies.

Methods: We developed a questionnaire for a cross-sectional survey study, and sent it to family doctors from the South of Romania (Bucharest and other 17 counties), starting from November

2015, until March 2016. Data analysis was performed using Epi Info (version 7).

Results: Following a preliminary analysis of the data, the response rate was about 80%, as some colleagues sustained that the information we were asking for is confidential. Almost two thirds of the participants received the first vaccines later than the recommended immunization time (October), therefore some patients refused to use them. The second vaccines were shipped by the public health authorities also extremely late, in January and February, in many cases. Only 14% of the family doctors have ordered supplementary immunization doses.

Conclusions: Influenza vaccines shipment should be better performed, according to the optimal immunization time. For this reason, we should count again on the national supplier for vaccines, Cantacuzino Institute. In Romania, there is a need for improving the immunization awareness, from the healthcare providers' perspective, but also from the patients' one. Moreover, the public health authorities should endeavour to work together with family doctors and ensure the proper procurement and distribution of vaccines.

(269) Stroke volume changes during pregnancy in healthy woman

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Objectives: Impedance cardiography is a noninvasive method that evaluates the hemodynamic profile. It has a long history but there are new studies that prove it's applicability in new medical fields including obstetrics.

Methods: We performed a prospective study that included healthy women in all trimesters of pregnancy. We evaluated their hemodynamic profile using impedance cardiography.

Results: Our study included a number of 141 healthy pregnant women. We evaluated the stroke volume in each trimester of pregnancy. We observed that stroke volume decreased in the last trimester of pregnancy compared with the first trimester of pregnancy ($Z= -4.852$, $p<0.0001$) and the second trimester of pregnancy ($Z= -4.528$, $p<0.0001$). The mean values decreased during pregnancy from 80.6 ml to 65.7 ml. We obtained strong correlation with cardiac output, heart rate and sistemic vascular resistance.

Conclusion: Impedance cardiography offered the hemodynamic profile of all trimesters of pregnancy in healthy woman. Impedance cardiography can evaluate stroke volume during pregnancy in a feasible and noninvasive way.

(277) Appendiceal mucocele: what lies beneath a clinical diagnosis?

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Objectives: Appendiceal mucocele is a rare finding, occurring more frequently in women and elderly people. This term comprises both benign and malignant appendiceal mucinous neoplasms, but it also associates frequently colon and ovarian cancer. The most feared complication of this disease is perforation with subsequent development of pseudomyxoma peritonei. Appendiceal tumors invading beyond the muscularis mucosae are categorized as adenocarcinomas. If the tumor associates pseudomyxoma peritonei and ovarian involvement, the differential diagnosis from an ovarian primary is made considering the greater amount of gelatinous ascites with very few tumor cells, larger peritoneal nodules and cells positivity for PAS-Alcian and MUC2 suggestive of the appendiceal origin.

Methods: We present six cases of appendiceal mucocele: five appendiceal mucinous adenocarcinoma and one appendiceal mucinous adenoma. All tumors manifested clinically as acute appendicitis. Histological examination and immunohistochemical tests revealed five cases of appendiceal mucinous adenocarcinoma, one limited to the subserosa, three with pseudomyxoma peritonei, and one with synchronous serous cystadenocarcinoma of the ovary. The other case

was an appendiceal mucinous adenoma with synchronous serous cystadenocarcinoma of the ovary with mesoappendiceal metastasis.

Results: Of the five cases of appendiceal mucinous adenocarcinoma one is poorly differentiated, with peritoneal spread with pseudomyxoma peritonei; the remaining four are well differentiated, with peritoneal spread and pseudomyxoma peritonei in two cases, serosal invasion in one case while one only invades the subserosa; there is also an appendiceal mucinous adenoma with synchronous serous cystadenocarcinoma of the ovary.

Conclusions: Appendiceal mucinous tumors are usually an incidental finding during surgical procedures for a presumed acute appendicitis. Correct diagnosis, based on specific macroscopic aspects and, sometimes, intraoperative extemporaneous examination are the keys for a proper treatment (hemicolectomy).

(301) Staphylococcus aureus clones in community and hospital settings, 2013-2014

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Objectives: Staphylococcus (S.) aureus is recognized as a frequent cause of Healthcare Associated Infections (HAI). In community it is mainly involved in Skin and Soft Tissues Infections (SSTIs), most of which recurrent. Therefore, SSTIs are considered a reservoir of S. aureus strains. Our study objectives consisted of comparing molecular, virulence and antimicrobial resistance profiles of strains isolated from community recurrent SSTI with those of strains isolated from HAI outbreaks.

Methods: 42 S. aureus strains isolated in Cantacuzino Institute Laboratory from patients with recurrent SSTI in January – November 2014 and 50 strains isolated from outbreaks in two pediatric hospitals, during 2013-2014 interval. Strains identification: classical bacteriological tests and PCR for: nuc gene, according to a protocol optimized in our laboratory (Dragulescu and colab., 2007). Detection by PCR of genes coding for: Panton-Valentine Leukocidin (PVL/ lukS/F), exfoliative toxins (ETA, ETB/ eta, etb), toxic shock syndrome toxin (TSST/ tst), protein A (spa); spa-typing by sequencing.

Results: SSTI strains – spa-types distribution: t127 (13), t044 (5), t008 (3), t284 (3), t019 (2), t2881(2) and other 14 spa-types with 1 strain each; 20 strains positive for lukS/F genes, 2 positive for tst; 59.52% MRSA. HAI strains – spa-types distribution: t127 (24), t008 (11), t015 (3), t002 (3), other 9 spa-types with 1 strain each; 13 strains positive for lukS/F genes, most of which of spa t008 type; 58% MRSA.

Conclusions: Spa type t127 S. aureus strains predominated, both in CA-SSTI and in pediatric hospitals, followed by spa type t008, most of which were PVL positive. As the predominant clones have been initially recognized as Community-Associated, our results proved the introduction from community to hospital of these clones that are currently successfully evolving in pediatric hospitals. These findings support the need to improve infection prevention interventions and to strengthen surveillance and control programs.

(309) Primary dural high grade follicular lymphoma: a rare malignancy

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Objectives: Primary central nervous system lymphomas are extra-nodal non-Hodgkin lymphomas that arise from brain parenchyma, eyes, meninges, or spinal cord in the absence of systemic disease. Primary dural lymphoma is a rare subtype of primary central nervous system lymphoma that arises from the dura mater and biologically differs from other central nervous system lymphomas.

Methods: We report a case of a 63 year old immunocompetent female patient diagnosed with a high-grade follicular lymphoma presenting as a primary lesion of the intracranial dura. Based on the preoperative MRI, our patient was presumed to have a meningioma, as the extra-axial

lesions appeared isointense on T1-weighted MR images and diffusely enhanced after gadolinium administration. Meningiomas are far more common than high-grade follicular lymphomas and according to the MRI our patient had a very significant chance to have one.

Results: The patient was surgically treated and the excised specimen was sent to a histopathology exam. After special immunohistochemistry techniques, the patient was diagnosed with primary dural high grade follicular lymphoma. The patient followed radiation therapy, initially achieving a complete response with good local disease control. Unfortunately, her condition subsequently worsened and eventually the patient passed away.

Conclusion: Our clinical case is so extraordinary because primary dural high grade follicular lymphoma is indeed a very rare malignancy. Moreover, we can present the MR images which strongly suggest a meningioma and the histopathology slides which eventually put the definite diagnosis of primary dural high grade follicular lymphoma.

(310) Mature hippocampal cultures response to oxytocin treatment during oxygen-glucose deprivation and reoxygenation

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Objectives: Oxytocin was found to modulate GABA-A activity in developing neurones by reversibly changing intracellular chloride concentration. This was previously shown to have a neuroprotective effect on immature neurones during ischaemic conditions in vitro. In the present study we explore the effect of oxytocin treatment on mature neuronal cultures exposed to OGD.

Methods: Primary cultures of hippocampal neurons were obtained from postnatal-day 0 Wistar-rat pups. Cultures at 7-8 days in vitro (DIV), were exposed to OGD or control conditions, with or without oxytocin treatment. Assessment of cellular viability was performed using a resazurine assay after 3-hours of reoxygenation in a normoglycemic medium. We evaluated the neuroprotective effect of oxytocin after incremental OGD exposure periods of 1, 1.5 and 2 hours. We also tested the effect of the GABA-A receptor antagonist gabazine on neuronal viability in OGD conditions.

Results: Oxytocin was shown to decrease cellular viability measured by resazurine only in OGD conditions (47.85% ± 3.90%, n=16, ***$p \leq 0.0001$). Gabazine was shown to increase cellular viability/metabolism (81.44% ± 7.30%, n=8, ***$p \leq 0.0001$), which was not decreased significantly by adding oxytocin (82.48% ± 4.062%, n=13, ***$p \leq 0.0001$).

Conclusions: Oxytocin may be detrimental to mature neurons under ischaemic conditions, whereas inhibition of GABA-A channels by gabazine may be neuroprotective. Further studies are needed to research intracellular chloride dynamics under pathological conditions.

(320) Anatomical study and clinical milestones posterior cranial fossa

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This topic was chosen because of the complexity of anatomical posterior cranial fossa region and numerous relationships between cranial nerve and vascular structures at this level .

This paper is a study focused specifically on posterior cranial fossa anatomical approach due to the fact it brings data to support the development of therapeutic procedures related to pathology at this level.

Posterior cranial fossa contains vital structures of the central nervous system: the brainstem and cerebellum and also the pairs of 10 cranial nerves (3 to 12). At this level there are ways of cerebrospinal fluid drainage from the ventricular system in the subarachnoid cisterns.

Objective: The objective of this paper is to describe in detail the anatomy of the posterior cranial fossa and anatomical landmarks at this level which have a great importance in surgery.

Methods: Dissections were performed on posterior cranial fossa highlighting the relationships at this level on three anatomical specimens of the Anatomy Department at University of Medicine and Pharmacy Carol Davila and MR imaging investigations related to posterior cranial fossa from 10 subjects. Subsequently, the ob-

tained data were correlated anatomically and paraclinically.

Results: Following the results, we conclude posterior inferior cerebellar artery variability and trigeminal artery are the most common variants with significant clinical implications in the posterior cranial fossa. Also, a clinical implication with major importance is the asymmetry of venous sinuses at this level.

Conclusion: Posterior cranial fossa anatomy has great clinical importance because its pathology is extremely diverse: traumatic , vascular, infectious, congenital malformations all these entities requiring different surgical approaches according to location, size and complex relations with nerves and adjacent vascular structures. Failure in detailing the anatomical relations in some surgical procedures may lead to severe complications.

(322) Anatomical landmarks for the forehead flap

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Objectives: The forehead flap is used for nasal reconstruction. The most common artery of this flaps's pedicle is the supratrochlear artery, but the literature describes additional arterial sources represented by branches of the supraorbital artery and even the angular artery.

There are several landmarks that can be used for identifying the course of the supratrochear artery such as the glabellar frown line or the medial canthus. The width of the pedicle must take into account these landmarks for a good result both functional and aesthetic.

Methods: For this study we dissected 5 formaline fixed faces in the Anatomy Department of „Carol Davila" University of Medicine and Pharmacy. We identified the supraorbital and supratrochlear arteries, measured the diameters and the distances form the arteries to the several anatomical landmarks.

Results: The mean diameter of the supratrochear artery was 0,92 mm, and the mean distance from the supraorbital rim to the emergence of the supraorbital arteries varies between 11 and 27 mm.

Conclusions: The throughout knowledge of the forehead anatomy is the key for a successfull nasal reconstruction using the forehead flap. Even if this flap was first used three centuries ago, the experience of the surgeon depends on the correct mapping the pedicle and the right placement of the flap.

(325) Ultrasonographic diagnosis of the umbilical cord abnormalities

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The incidence of umbilical cord pathology is high in abnormal course of the delivery. Due to the evolution of ultrasonographic technology, many of these anomalies are being diagnosed in utero.

It is reported that prenatal detection of umbilical cord abnormalities shall reduce the number of emergent cesarean sections and intrauterine fetal death. In this study we analysed the ultrasound diagnosis and management of several umbilical cord abnormalities.

Objectives: One of the main aims of routine antenatal care is to identify the fetus at risk, in order to apply clinical interventions, which could result in reduced perinatal morbidity and mortality.

Methods: The Color Doppler ultrasound is used to examine the umbilical blood flow, leading to an early diagnosis of important congenital and functional anomalies. This examination can assess the cord thickness and coiling, the number of vessels and their blood flow.

Results: For the persistent right umbilical vein, the diagnostic criteria are: portal vein curved towards the liver, fetal gall bladder located medially to the umbilical vein ,which is abnormally connected to the right portal vein instead of the left.

Vasa previa is a rare condition which occurs when the fetal vessels in the membrane are situated in front of the presenting part of the fetus and its cause is unknown.

Single umbilical artery is believed to be caused by atrophy of a previously normal artery, presence of the original artery of the body stalk, or agenesis of one of the umbilical arteries.The diagnostic criteria is finding only two vessels on a cross section of the cord, or a vessel seen on only one side of the fetal bladder.

Conclusions: The integrity of the umbilical cord plays an essential role in fetal development and must be very carefully assessed at ultrasound examination. Some of the cord abnormalities are associated with other fetal malformations. After detecting an umbilical cord abnormality, further imaging and genetic studies are needed in order to manage this condition and the associated pathology, a combination which can lead to intrauterine growth restriction and fetal demise.

(326) Genetic diversity of Mycobacterium tuberculosis rpoβ-mediated resistance in a tertiary pneumology hospital in Bucharest

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Objectives: To characterize the genetic diversity of rpoB mutations and performance characteristics of 3 antibiotic susceptibility assays for the diagnosis of RIF and INH resistance.

Methods: A retrospective study was carried out on all mycobacteria strains of isolated from inpatients hospitalized in the Marius Nasta Pneumology Institute, in the first half of 2011. Drug sensitivity testing was carried is increasing out through molecular methods (INNO-LiPA Rif.TB and Geno Type MDRTBplus) as well as phenotypic methods (antibiotic-containing Lowenstein-Jensen).

Results: A total of 50 distinct strains were isolated from positive cultures. One of the strains tested negative for Mycobacterium tuberculosis complex and was excluded from the analysis. The INNO-LiPA Rif.TB revealed 28 rifampicine-inducing mutations in the rpoB gene. The GenoTypeMTBDRplus system detected a RIF and INH resistant inducing mutation in 26, and 25 strains respectively. One mismatch between susceptibility profiles was resolved through the use of phenotypic testing. One low level resistance to INH was evident only through genetic means, as it lacked phenotypic expression. An extensive catalogue of resistance mutations is provided.

Conclusions: Resistance to rifampicin is accompanied, in over 90% of cases by resistance to isoniazid, serving as a useful surrogate for MDR strains. Yet, monoresistance does occur and can potentially lead to incorrect classification and treatment in some strains in which first line drugs may still be useful. While there was disagreement between the 3 methods of susceptibility testing, both molecular methods had high sensitivity and specificity and were in high agreement with the phenotypic assays. GenoType MDRTBplus has the advantage of providing results for both RIF and INH resistance.

(329) Hox genes and their importance in the development of limbs

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Objective: Nowadays, thousands of children all over the world are born with limbs malformations. Given the role that genes have in the evolution of the fetus, the aim of this study is to emphasize the importance of Hox genes in limbs development during fetal life.

One study has shown that in vertebrates Hox genes are located in four clusters on different chromosomes: HoxA-7p15,HoxB-17q21.2, HoxC-12q13, and HoxD-2q31. During the embryonic development, Hox genes are expressed in the gastrulation period when the evolution of the cranio-caudal axis takes place. These genes define patterns in limbs evolution in vertebrates. Poor genetic expressions or Hox-DNA mutations can lead to malformations such as Synpolydactyly, Brachydactyly, Hypodactyly or hand-foot-genital syndrome.

Methods: In order to study Hox genes it is necessary to obtain samples from fetal genome via amniocentesis. Thus the karyotype and genetic cartography of the fetal genome can be obtained.

DNA, RNA and proteins profiling must be performed. For DNA study there are several methods that can be used: DNA sequencing, PCR, in situ hybridization or Southern-blot method. For RNA study: Northern-blot, RT-PCR, in situ hybridization and for protein analysis: Western-blot method, histochemical analysis.

Results: Studies have shown that Hox genes contain two exons and one intron that varies from 200 bases to several kilobases. The second exon has a 180 nucleotide sequence called homeobox which encodes 60 amino acids that form the ho-

meodomain, a common DNA-binding structural motif. Genes expression is oriented in the craniocaudal direction so that the 3′ genes that specify the cranially located structures are expressed earlier than the 5′ genes which specify caudal structures. The expression of these genes is modulated by retinoic acid, 3′ genes being more responsive to this active substance.

Conclusion: The research presented in this study is of great importance in monitoring the fetus development considering that even the smallest flaws in Hox-DNA linkage can produce severe limbs malformations.

(330) Antibiotic susceptibility profiles of potential respiratory pathogens in samples taken from inpatients of the „Marius Nasta" Institute in Romania 2010-2013

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Objective: To evaluate the antibiotic susceptibility profile of respiratory pathogens in infections from adult inpatients in the biggest tertiary Pneumology center in Romania.

Methods: We evaluated the diagnostic yield and antibiotic resistance profile of all Streptococcus pneumoniae, Haemophilus influenzae, Moraxella catarhalis, as well as the ESKAPE group pathogens (Enterococcus faecalis, Staphylococcus aureus, Klebsiella pneumoaniae, Acinetobacter baumanii, Pseudomonas aeruginosa, Enterobacter spp) isolates obtained from respiratory samples in adults hospitalized in the "Marius Nasta" National Institute for Pneumonology in Romania (MNNIP) between the years 2010 and 2013.

Results: We identified over 50 isolates of Stretococcus pneumoniae for each year of study; there is an increasing trend of diagnosis of Penicillin resistant pneumococcus Haemophilus influenzae was isolated in a wider range of isolates, spanning from 150 to over 350 isolates per year. Haemophillus influezae is less likely to the isolated from patients in the ICU but is still a formidable pathogen. The resistant ESKAPE pathogens were more likely to be isolated from patients with underlying comorbidities hospitalized in the ICU. A detailed analysis of the antibiotic susceptibility of these isolates follows.

Conclusions: There seems to be an increase in the number of isolates with increased resistance. The "Marius Nasta" Institute handles both acute infections (pneumonias), exacerbations of chronic diseases (such as COPD), as well as chronic colonization by respiratory pathogens.

To our knowledge, this is the first report which spans such a significant amount of time from inpatients of a specialized tertiary center from Romania.

(334) Listeria monocytogenes infection associated with hip prosthetic implant

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Objectives: Listeria monocytogenes is an important pathogen in pregnant patients, neonates and immunosupressed patients. It is also a common veterinary pathogen, being associated with abortion, encephalitis and mastitis in dairy cattle. The most common cause of this zoonotic infection is represented by contaminated food ingestion, but also a cutaneous path for this ethiological agent was documented in healthy individuals who had direct contact with infected animals. This study is focused on Listeria monocytogenes infections associated with the hip prosthetic implant.

Methods: A 61 years old woman, who lives in a rural area, returns to the hospital, after being subjected to surgery 3 years earlier, presenting signs like high fever, shivers and a right hip abscess. Three weeks before, the patient presented a cutaneous lesion on the arm, after cattle milking. For this lesion, the patient hadn't been clinically examined, because the wound was non-painful, non-pruritic and self-limited.

Results: After the hospital admission, laboratory testing results showed inflammatory syndrome: leukocytosis 13.86 x103/ul (RR 4-10.000/ul), the sedimentation rate was 102 mm/h (RR 3-10 mm/h), and C reactive protein had a peak value of 215 mg/L (RR 1-5 mg/L). Blood cultures were not made. Surgery was performed and the abcess was punctured and drained, then the purulent matter was sent to the laboratory. After microbiological examinations: smears, cultures and identification we obtained the ethiological pathogen of this infection – Listeria monocytogenes. The antimicrobial susceptibility testing was made in accordance to EUCAST, and showed that ampicillin, penicillin, eritromicin and trimethoprim-sulphamethoxazole were sensitive, and meropenem was resistant. The evolution under treatment was positive, but removal of the hip prosthetic device was necessary, throught surgical procedures for debridement of the necrotic and infected tissues.

Conclusions: Although human listeriosis is especially known as a foodborne disease, this case shows that infection via direct contact with infected animals (in this case, cattle) is also possible. Using fast diagnostic procedures, the result for the purulent matter culture was released in only 48 hours, this having a great impact on prediction and evolution of the infection (disease).

(336) Predictive value of attachment style and perceived social support for the onset of somatic complaints in adolescents

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Objective: To investigate the association between attachment style, perceived social support and the onset of somatic complaints in adolescents referred for psychiatric evaluation.

Method: Participants included 55 adolescents (13-18 years old), sex ratio females: males 2.44: 1, referred to the Obregia Psychiatric Hospital – Bucharest for affective disorders (depressive episodes, anxiety disorders, reactions to severe stress, adjustment disorders). The somatic complaints were assessed through one administration of the GBB Questionnaire, while their perceived social support and attachment style were measured through Social Support Survey Instrument and Vulnerable Attachment Style Questionnaire (VASQ).

Results: Higher dominance of anxious attachment style was met in 45.45% of participants and it correlated significantly with the onset of somatic complaints ($p<.05$). No direct correlation was identified between perceived social support and somatic complaints. Multiple regression analysis confirmed the single predictive value of the dysfunctional anxious attachment style ($p<.01$).

Conclusions: These results confirm the important role of a healthy attachment style in preventing early onset of somatic complaints. This supports in turn the idea of physicians and psychologists working together for an early identification of dysfunctional attachment styles and their consequences.

(341) Screening for colistin resistance in Gram negative bacilli isolated in one pediatric hospital, Bucharest, Romania

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Objectives: Antibiotic resistance is a worldwide problem. Some of the older antimicrobial drugs come back as therapy of infections caused by multiple resistant organisms. Our aim was to analyze colistin resistance of Gram-negative bacilli strains isolated from pediatric pathology in one hospital in Bucharest.

Methods: Strains of Gram-negative bacilli obtained from processing urine cultures, blood cultures and tracheal aspirates were studied. Samples were processed as soon as they were taken, according to internal working procedures. For cultures we used conventional culture media and P plus pediatric bottles, with incubation in the BACTEC system. Bacterial identifications were carried out by mass spectrometry (Maldi Biotyper). Antibiotic susceptibility testing was performed using NM 40 (MicroScan WalkAway) panels, while respecting the EUCAST recommendations.

Results: From the urine cultures, a total of 111 strains were isolated:E.coli 63.9% (n =71), Klebsiella pneumoniae 27.1% (n = 30) and Pseudomonas aeruginosa 9% (n= 10). Colistin resistance of these isolates was 33.3% for Klebsiella pneumoniae (n= 10) and 0% for E. Coli and Pseudomonas aeruginosa.

From blood cultures Klebsiella pneumoniae (n = 10) was isolated; all strains were sensitive to colistin. From tracheal aspirates we isolated: Klebsiella pneumoniae 33.9% (n = 42) and Pseudomonas aeruginosa 66.1% (n =82). Colistin resistance of Klebsiella pneumoniae isolates was 50% (n= 21). In the case of Pseudomonas aeruginosa resistance was 31.7% (n= 26). Although gender distribution shows a predominance of positive cultures for males 57.3% (n=47) versus 42.7% (n= 35) in women, the percentage of colistin resistance was higher for strains isolated from females 42.8% (n =15) compared to 23.4% (n = 11) from males.

Conclusions: Colistin resistance of Gram-negative bacilli in this study varied from 0% to 50% depending on the isolates and the pathological products examined. We want to further evaluate the differences between the data obtained by us and some of the literature reports as well as to detect some molecular mechanisms involved in resistance/sensitivity ratio for Polymyxin E (Colistin) in the current therapeutical approach.

(355) Gene expression of inflammatory markers involved in sudden (cardiac) death associated with chronic myocarditis

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Asymptomatic chronic myocarditis is a rare cause of sudden (cardiac) death. In this case, minimal or absent symptoms do not contribute to the diagnosis, and as such diagnosis can only be sometimes established postmortem.

Objective: The aim of the pilot study presented here is to evaluate whether a predefined set of proinflammatory markers are differentially expressed at mRNA level in chronic myocarditis, compared to cases without a histopathologically proven cardiac pathology.

Methods: The study was initiated in two cases of myocarditis and two controls, identified at autopsy. The expression of inflammatory genes was quantified using the MLPA method (Multiplex Ligation-Dependent Probe Amplification). MLPA allowed the relative quantification of more than 40 mRNA molecules in a single reaction.

Results: Compared to the two controls, the myocarditis probes have shown an increase in the expression of genes coding for proteins included in the following functional classes: coagulation factors (F3 and THBS1), transcription factors (NFKBIA), growth factors (MYC and PDGF), and chemokines (MMIF).

Conclusions: MLPA has been proven to be a sensitive, robust and fast method for molecular screening in nonspecific chronic myocarditis. Further studies should validate the results and identify their usefulness in legal medicine.

(358) Screening for cystic echinococcosis in rural areas from Arges county – results from HERACLES project

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Background: Cystic echicococcosis (CE), a chronic and complex parasitic disease, continues to be endemic in Eastern Europe and represents a major public health problem. The aim of the current study is to assess the current epidemiology of CE in Romania, identify its incidence and prevalence, understand the main causes of its distribution and outline the need for adequate measures to fight this disease.

Methods: As part of HERACLES collaborative project (Human cystic Echinococcosis ReseArch in Central and Eastern Societies), we organized several field activities in rural endemic areas from Romania. We present here data collected from Arges county, where our work consisted in clinical, imagistic and laboratory screening for CE, during one week of June 2015. We used four ultrasound equipment and collected blood samples from suspected CE and control cases. We also emphasized on raising awareness on CE, by telling people about the disease and teaching them how to prevent it.

Results: The participants included in the screening were selected from four rural areas (villages) in Arges: Slanic (184), Domnesti (630), Berevoieşti (292), Aninoasa (471). From a total of 1577 persons in the studied population, we determined 22 positive cases of CE (1.4%), with a gender ratio men: women of 1:4.5 (4 males and 18 females). The most frequent localization of the cysts was in the liver. We will present data on cysts` characteristics, including dimension, WHO classification and co-morbidities. The patients with suspected cases of CE have been invited to Colentina Clinical Hospital to confirm the diagnosis and receive personalized treatment.

Conclusions: National reports are needed in order to determine the real epidemiological status of CE. This neglected disease is both preventable and treatable, due to the recent medical advances. However, in order to develop efficient prevention and control programs, screening activities should be performed in the endemic communities, considering also all the related factors. Moreover, screening for CE in rural areas is beneficial for the population included in the study, as it can reveal other pathologies and help people who do not count on a high-quality healthcare system.

(362) The use of real time methods for in vitro studies

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A variety of biological processes require interactions between cells and their extracellular matrix, as well as the adequate regulation of these interactions. Cell adhesion, spreading and migration play an important part in physiological processes, such as embriogenesis, but also in repair mechanisms (wound healing) and in pathology (cancer). Real time studies of live cells allow the observation of cellular dynamics over long periods of time, in order to obatin a better understanding of the complexity of biological functions. During the last two decades, many techniques have been developed and improved for real time cell studies, especially for live cell imaging (wide field microscopy, confocal microscopy, FRAP, FLIP, FRET, etc.). Other methods, that don't use microscopy techniques or fluorescent markers, have also been developed: SPR (Surface Plasmon Resonance), impedance spectroscopy. This paper aims to present the advantages and disadvantages of using two real time monitoring devices – a time lapse videomicroscope (BioStation IM) and equipment that measures the electrical impedance of the cell layer in real time (xCELLigence) – in investigating the effect of UVA radiation on cultures keratinocytes.

(367) Psychological and hormonal markers of distress in healthy undergraduate medical students

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Objectives: To assess the prevalence of high perceived stress, self-reported depression and self-reported anxiety, and their association to hormonal markers of distress (salivary cortisole) in a sample of undergraduate healthy medical students, being subject of academic stress.

Methods: The participants were 95 undergraduate medical students (age = 19.02, SD = 2.71) in the University of Medicine and Pharmacy "Carol Davila" – Bucharest, randomly selected from the first year students and about to confront themselves for the first time with academic stress (in the form of the first exam session). Instruments used were the measurement of salivary cortisole (24h before the exam) and a single administration of the Perceived Stress Scale (PSS), the Zung Self-rating Anxiety Scale (ZSAS) and the Zung Self-Rating Depression Scale (ZSDS).

Results: The mean of the salivary cortisole values was situated between 6.91 ng/ml (men) and (7.04 ng/ml) (women), with a trend to increase in mild and severe depression (cortisole mean for the whole sample: for ZSDS ≥48: 7.48 ng/dL; for ZSDS <48: 6.88ng/dL).

46.42% of the subjects showed higher perceived stress. 75% of all students obtained scores that suggest pathological anxiety, with a higher frequency in female students. In contrast, male participants had a higher frequency of depression. Perceived stress was more prevalent (58.23%) in male students and correlated to both anxiety ($p < .001$) and depression ($p < .05$). Higher values of cortisole were significantly correlated ($p < .05$) to perceived stress only in male subjects.

Conclusions: These data suggest a high prevalence of perceived stress in medical students, which is expressed merely as anxiety and, more rarely, as depression. Even if depression is not as prevalent as anxiety, it has strong hormonal correlates, in the form of the increase of salivary cortisole. Male subjects seem more hormonnally sensitive to perceived stress. Efforts should be made for prevention of stress amongst first year students, in order to prevent the onset of clinical anxiety and depression and alteration of the hormonal homeostasis.

(133) Correspondence between S stage on the hand-wrist radiographs and mandibular canine stage G on panoramic X-rays

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Hagg and Taranger have designed a method using the hand-wrist radiographs to correlate certain maturity indicators to the pubertal growth spurt.

The sesamoid bone is a small nodular bone, most often present embedded in thumb's tendons area. S stage usually corresponds to the pubertal growth spurt(ONSET-PHV).

Most authors agree that peak height velocity follows adductor sesamoid appearance by approximately 1 year.

More than one study shows that the canine stage G (proposed by Demirjian) for both sexes coincides with the S stage, and indicates the onset of a period of accelerating growth (Chertkow-1979, Coutinho, Buschang, Miranda-1993).

Objectives: The aim of this study is to verify the possibility of correspondence between S stage on the hand-wrist ra-diographs and the left mandibular canine stage G on panoramic X-rays.

Methods: 120 hand-wrist radiographs were analyzed, for 108 patients with ages between 6-18. For this study were selected 24 subjects (12 girls and 12 boys). The selection criterion was the presence of S stage on the analyzed hand-wrist radiographs.

For subjects in the study group they were analyzed panoramic X-rays, performed in the same date with the hand-wrist radiographs with S stage present. It was evaluated the degree of mineralization of mandibular left canine according to Demirjian's method.

Results: In this study we have found correspondence between S stage on the hand-wrist radiographs and the left mandibular canine stage G on panoramic X-rays.

Conclusions:

The findings of this study indicate that completion of root formation of mandibular canine, prior to apical closure may be a maturity indicator of the pubertal growth period.

Human growth shows considerable variation in the chronological ages for individuals who reach similar developmental events.

Because of the wide variation among individuals in the period of the pubertal growth spurt, chronologic age cannot be used for the evaluation of growth potential.

In average, pubertal growth spurt occurs nearly 2 years earlier in girls than boys

Further research is required on a larger sample.

(137) Microscopic aspects of subgingival plaque in patients with chronic periodontitis, before and after the initial treatment

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Objectives: Comparison of microscopic aspects of the subgingival plaque smears in patients with chronic periodontitis with deep pockets before and after initial periodontal therapy, based on local mechanical treatment and antibiotic administration.

Method: Subgingival plaque samples were collected using 0.001 ml disposable loop from deep periodontal pockets in 16 patients with chronic periodontitis at a private dental practice in Bucharest, from September to December 2014. Gram and Giemsa stained smears performed from subgingival plaque before periodontal treatment were marked as smears-1 group. The smears-2 group consisted of Gram and Giemsa stained smears done one week after a 14 day-period of oral administration of amoxicillin and metronidazole, in addition to scaling and root planning. The microscopic interpretation was based on the semiquantitative scoring sys-

tem: 1+ to 4+ for polymorphonuclears and microbial flora, and the relative proportion of Gram-positive and Gram-negative bacteria.

Results: The smears-1 from 15 patients showed high amount of polymorphonuclear leukocytes and microflora with various morphotypes (e.g. spiral-shaped bacteria, Gram-negative bacilli and coccobacilli, Gram-negative diplococci, Gram-positive cocci in pairs, chains and clusters, Gram-positive bacilli and branched/non-branched filaments). Gram-negative bacilli and spirochaetes were predominant. In all 15 cases, smears-2 showed inflammatory cells and flora reduction compared to the microscopic aspect of smears-1 of the same patients. In one patient, it was observed in both smears-1 and 2: a monomorphic flora showing Gram-negative reniform diplococci, within leukocytes. Frequent trophozoites of Entamoeba were detected in 10 cases of generalized chronic periodontitis, in smears-1. After therapy, the amoebae were not detected in smears-2 in 3 cases. In 7 cases the trophozoites number recorded a significant decrease.

Conclusions: The decrease in polymorphonuclears and flora (especially the spirochaetes) in smears-2 suggested a good patient response to the initial periodontal therapy. Further research is necessary to assess the role of protozoa in periodontal pathology.

(185) Changes in oral health-related behavior among first and last grade dental students

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Objective: This study was to analyze the influence of the professional education on the oral health behavior of senior students, as compared to junior students from the Faculty of Dental Medicine, „Carol Davila" University of Medicine and Pharmacy.

Methods: A self-administered questionnaire was applied for 293 students, divided into two groups: 156 first grade students (65.4 % females, mean age 19±2.59); and 137 last grade students (32.8% males, mean age 25 ±1.82). The hypothesis of this study was that the level of the oral health behavior is different between the two groups, is improved with increasing level of education. Stata 11IC (version 2009) was used for data analyses. To test the influence of the year of study on their oral health attitudes and behavior, Pearson Chi-squared Test was used.

Results: Tooth brushing twice per day and use of dental floss were scored significantly higher for the senior-year students (96%, respectively 84%, p=0.001) versus junior-year (85%, respectively 48%, p=0.000). Regarding the diet, consumption of cariogenic food and carbonated drinks were significantly higher for the first year students (p=0.001). The same group was associated with the absence of preventive actions after meals because of the lack of knowledge in this respect.

Conclusions: Even if the method used in this survey has some limitations (dental health behavior is self-reported and subjects can overestimate the proper behavior or underreport the negative behavior), the results showed that oral health behavior and treatment demands of students in the late phases of their studies reflect the importance of specialized years of dental education gained during the faculty. The expertise gained may positively influence the oral health behavior of senior students, making them able to change unhealthy behaviors of their future patients.

(232) The relationship between positive psychological well-being, academic demand and performance: a prospective study on dental students

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Objectives: This study evaluated the change of positive psychological well-being of second year dental students across the academic semester, in regard to the different levels of academic demand (1) and the relation between academic performance and dental students' positive psychological well-being (2).

Method: A prospective study was conducted on second year dental students from Carol Davila University of Medicine and Pharmacy. Data was collected during the second semester of 2014-2015 academic year, three times during the teaching period (in the beginning of the semester during a period of coursework without assess-

ments, after a mandatory intermediate written theoretical examination, and after a mandatory practical examination), and one time during the semester evaluation period (after a final exam). Positive psychological well-being was assessed using WHO-Five Well-being Index (WHO-5). Student's academic performance was assessed through their grade-point average, attendance to all final exams, and ability of passing all final exams.

Results: One hundred and forty-six dental students were included. Repeated ANOVA showed a significant decrease of the level of positive well-being over the academic semester (mean of WHO-5 of 66, 65 and 61 during teaching period, and 56 during semester evaluation period; $p<0.001$), which was concordant with the progressive increase of academic demand in this time span. Thirty-one (21%) of dental students in in the beginning of the semester, and fifty-nine (40%) dental students in the semester evaluation period, were recommended to be tested for depression, according to WHO-5 interpretation. Students with better performance in the semester evaluation period had higher positive well-being levels at the beginning of the semester, during which focus is on teaching basic theoretical knowledge and practical skills of the semester's courses, and examinations are scarce.

Conclusions: Based on this research, considering its limitations, a relationship between positive well-being, academic demand and academic performance is suggested. Therefore, making dental students aware of the risks involved by the lowering of the level of positive well-being, and implementing interventions for sustainment and enhancement of well-being in university settings, seem beneficial on short- and long-term, at a both personal and professional level.

(233)Composite resin vs. glass ionomer cement for orthodontic bracket bonding – an in vivo spectrophotometric study

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Objectives: To evaluate the differences in the distribution of tooth colour after orthodontic bracket bonding with light-cured composite resin (CR) vs. light-cured glass ionomer cements (GIC).

Methods: An in vivo observational study was conducted on a convenience sample formed by patients with previous fixed orthodontic appliances, bonded either with glass ionomer cement (GIC) or composite resin (CR), and patients without previous orthodontic appliances (WOA). The VITA EasyShade intraoral spectrophotometer was used for assessment of tooth colour of maxillary incisors, canines and first premolars. The difference of lightness (ΔL^*), Chroma (ΔC^*), hue (Δh^*), red/green coordinate (Δa^*), yellow/blue coordinate (Δb^*), and total colour difference (ΔE^*) between the cervical and middle third of the labial surface was analysed.

Results: Thirty-three patients, nine in which orthodontic brackets were bonded with GIC, thirteen in which orthodontic brackets were bonded with CR, and eleven without previous orthodontic appliances were included, 264 teeth being measured. Greater similarity with natural teeth (i.e., teeth without previous orthodontic treatment) was observed when bracket bonding was done with GIC for ΔL^* (GIC:1.50; CR:2.05; WOA:1.44), and when bracket bonding was done with CR for ΔE^* (GIC: 3.93; CR: 5.81; WOA: 5.51). These results suggest that by bracket bonding with CR the lightness differentiation between middle and cervical third of labial surface of the tooth increases. Similar results after bracket bonding with GIC and CR, but rather different from the ones of teeth without previous fixed orthodontic appliances, were found for ΔC^* (GIC:2.25; CR:2.38; WOA:3.43), Δh^* (GIC:-1.58; CR:-1.92; WOA:-2.80), Δa^* (GIC:0.78; CR:0.71; WOA:1.10) and Δb^* (GIC:2.27; CR:2.48; WOA:3.42).

Conclusions: Considering study's results and limitations, there is suggested that orthodontic bracket bonding associates changes of the distribution of tooth color, which seem to be related to the type of bonding material used. Prospective studies are needed in order to better quantify the extent of these colors alteration, identify best treatment alternative in terms of lowest side effect in this direction, considering also acknowledgment on their perceptibility by the lay person and impact on the treatment outcome.

(283) New digital technologies approach in prosthetic planning and rehabilitation of complete edentulism

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Objectives: Since the introduction of dental implants, the treatment of full edentulism has evolved from conventional complete denture to implant-supported prosthetic restorations (over-dentures, "Fast & Fixed", "All on 4", fixed restorations). More recently, the new era of digital technologies in dentistry has brought important progress in treatment planning and improved final results' predictability.

The aim of this study is to explore the advantages offered by the digital technologies to the prosthetic treatment of the complete edentulous patient.

Method: In order to select the most suitable treatment alternative (over-denture / removable implant-supported restoration / fixed prosthetic restoration on implants) for a bi-maxillary fully edentulous 76 years old patient a specific protocol was applied, including: a complete clinical examination, a set of common imagistic exams (panoramic X-Ray; digital photos), a CBCT with a stent made with radio-opaque teeth. The resulting imagistic data, combined with functional and esthetic criteria (provided by clinical tests - speech, deglutition, anthropometric points, facial harmony, face-scan analysis, etc.), allow different configurations for implant placement.

Results: A precise and functional treatment planning was obtained, on the basis of the processed imagistic data that were related to clinical aspects. The decision on the optimal implant-supported restoration (mobile versus fixed) was made by analyzing clinical and digital data, thus allowing also a minimally invasive implant placement.

Conclusions: The new digital technologies facilitate the prosthetic treatment planning in complete edentulism cases, providing data for performing a precise implant placement and for obtaining a proper implant-supported restoration (fixed or removable, provisional or final). Considering these aspects, a thorough approach to digital technologies, both by students and post-graduates in dental medicine, should be an integrated part of the modern educational strategy.

(390) New miniplate involved in favorable distribution of the perifocale forces at a mandibular angle fracture

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Introduction: A new miniplate with different design and reduced thickness compared to those used in current practice has been designed with a FEA model and verified on experimental stage. The shape of the new miniplate provides superior stability of bone fragments to bar type plates used in current practice.

Methods: The first stage, the development of the design, was carried out using 3D FEA of a human mandible with angle fracture. The fractured segments were fixed with the new miniplate near the upper border of the mandible. The load considered was 200N applied perpendicular to the occlusal plane at the position of the incisive teeth. After solving the model with MSC Nastran, the results for displacements and contact forces between the fasteners and cortical bone or miniplate indicated that the goal of the design has been achieved: the control of direction for fastener reactions and minimisations of these forces are immediately near the fracture line.

The experimental stage was aimed towards verifying the miniplate capability in segments stability and bypassing across the fracture line and the required internal loads developed in the mandible during biting. This stage was carried out in three series of load tests and was conducted on sheep mandibles. Two CNC miniplates were machined to specification from Ti6AlV4.

The new miniplate has the ability to transfer away from the bone fracture line the internal forces developed during biting.

Results: During the entire testing program it was noticed that both miniplates have good malleability, fact shown by their ability to confirm closely to the surface of the cortical when the screw were tighten to the customary torque values (70Ncm).

The miniplate geometry is effective in determining the direction and magnitude of the forces.

Conclusions: The aim of creating this new miniplate is to allow the premises for a better healing. This healing is possible by directing the direction and magnitude of forces developed in the interface between the fixing screw and cortical bone during mastication and occlusion.

(24) Phytochemical research regarding frozen juices of fruits and vegetables

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Objective: The identification and quantitative determination of ascorbic acid from frozen juices of raspberry, strawberries, white and red beetroot.

Methods: The raw material was harvested from ecologic cultures, in Berceni village, Ilfov County, Romania in 2015. The fruits were harvested in July and the vegetable were collected in September. The juice was obtain shortly after harvest, using mechanical squeezer (in order to preserve the ascorbic content) and frozen at - 18°C for 2 months. Prior to chromatografic and spectrophotometric analysis, the juice was stored for a day at 4-5°C.The content of ascorbic acid was determined by chromatografic means, using an HPLC MD-2015 with UV detector, an inverse phase and a gradient system of solvents. The calibration curve has five points and is linear between 13.20 mcg/mL – 246 mcg/mL. The antiradicalar activity was determined using the reducing ferric assay. In this method, the antioxidant compounds reduce potassium ferricyanide (Fe^{3+}) to ferrocyanide (Fe^{2+}), which reacts with ferric chloride to form ferric ferrous complex. The ferric ferrous complex absorbance is directly proportional with the extract reducing power. The results were expressed as μg/mL extract that provide 0.5 of absorbance (EC50).

Results: Ascorbic acid was identified in the fruits juices, but not in the beetroot juices. The quantification of the ascorbic acid was possible only in the strawberry juice (73.51 mcg/mL). In the raspberry juice although, the ascorbic acid was identified, its quantity was below the method detection limit. The higher antioxidant activity was found for strawberry juice and the lowest for white beetroot juice. Red beetroot juice has a higher antiradicalar activity than raspberry, although ascorbic acid was not identified in the vegetable juice. Ascorbic acid influence the antiradicalar activity of the extracts, but its presence is not determinant. The presence of other compounds with antiradicalar activity, like flavonoid heterosides, anthocyanidins or betaine (mentioned by scientific literature) may be responsible for the antiradicalar activity of the extracts.

Conclusion: Ascorbic acid was found in the frozen fruit juices, but not in the fruit form vegetables. The presence of ascorbic acid influence antioxidant activity of the extracts, but is not determinant.

(36) Synthesis, structure elucidation, characterization and anti-staphylococcal activity of new thioureas derivatives

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Objectives: Staphylococcus aureus is the principal hospital pathogen that is becoming increasingly virulent and resistant, developing a defense mechanisms against most antibiotics.

The objective of this study was the synthesis of seven new thioureas derived from 2-thiopheneacetic acid, the characterization on their physical properties (melting point, solubility) and the antimicrobial testing by quantitative methods on Staphylococcus aureus ATCC 25923 and Staphylococcus aureus ATCC BA 1026 in order to identify the most active compound.

Methods: 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.

For the antimicrobial activity determination, the seven thioureas derivatives were evaluated by their Minimal Inhibitory Concentration (MIC) values using the microdilution procedure against the Staphylococcus strains.

Results: We synthesized and analyzed seven new thioureas derived from 2-thiopheneacetic

acid, which were characterized by phisico-chemical and spectral methods. We put into evidence the identity and purity of these compounds.

The new thiourea derivatives proved to have anti-staphylococcal activity with MIC values of 0,25 and 0,31μg/ mL.

Conclusions: From the antimicrobial study it was noted that N-(2 trifluoromethylphenyl)-N-(2-thienyl)-thiourea and N-(4 trifluoromethylphenyl)-N-(2-thienyl)-thioureas, have been the most active on Staphylococcus aureus strains.

(44) Research concerning the development of new amide antifungal agents

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Objective: Knowing that the frequency of fungal infections and also the resistance to the used antifungal drugs have continued to increase, the development of new molecules is still necessary in order to ensure a successful clinical treatment of opportunistic fungal infections. In this direction we designed an active amidic structure and synthesized a series of novel amide derivatives which were tested as new potential antifungal agents.

Method: The benzanilides which have the nitrogen atom derived from an aromatic amine substituted by a dialkylaminoalkyl chain and a (un)substituted benzoyl radical are obtained as hydrochlorides having the advantage of good water solubility, a favorable element subsequent to biological tests. All the obtained compounds were characterized through proton and carbon nuclear magnetic resonance spectroscopy, infrared spectroscopy, and elemental analysis

The antifungal activity testing was conducted through qualitative methods (disk diffusion) and quantitative (microdilution method) and are expressed by values of minimum inhibitory concentrations (MIC, μg/ mL) using Candida albicans strains.

Results: We synthetized 6 new benzanilides, derived from 3-chloroaniline, which were analyzed in terms of physicochemical and spectral (1H-NMR, 13C-NMR, FT-IR) properties to confirm the structure of synthesized molecules. Preliminary antifungal activity test showed that some of the synthesized compounds exhibited moderate antifungal activity against Candida albicans.

Conclusions: The amide derivatives may be promising leads for the development of new antifungal agents. Their activity was correlated with structural aspects, pointing out the benefit of methyl or methoxy substitution on benzoyl moiety.

(55) New 2-((4-chlorophenoxy) methyl)-N-(arylcarbamothioyl) benzamides: synthesis and CNS pharmacological evaluation

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Objectives: We present the design, synthesis, structural characterization and CNS pharmacological tests of some new 2-((4-chlorophenoxy) methyl)-N-(arylcarbamothioyl)benzamides.

Methods: These compounds were prepared by reaction of 2-(4-chlorophenoxymethyl)benzoyl isothiocyanate with different anilines. Structure of new compounds has been supported by IR, NMR spectral analysis and elemental analysis.

We tested the motor activity for 80 NMRI male mice, in order to select the animals for research. We formed six groups of twelve mice. The four compounds, named CTC-7→CTC-10, were administered p.o. in dose of 100 mg/kg, for seven days. As reference drug, we used sulpiride 50 mg/kg, p.o. We performed pharmacological tests after 1 and 7 days of treatment:

- the horizontal and vertical motor activity test, with Activity cage Ugo Basile, Italy;
- the suspended + maze, Ugo Basile, for evaluation of the effect on mice anxiety;
- the forced swimming test (FST)/ the tail suspension test (TST), for antidepressant action evaluation.

Results: We obtained new benzamides with high purity and good yields, and their structures were confirmed by elemental analysis, IR, 1H-NMR and 13C-NMR. The new compounds have

been characterized by their physical constants such as melting point and solubility. The compounds chemical structures were in full agreement with the proposed structures.

The four benzamidic compounds had no significant influence on motor activity. In suspended + maze, the compounds increased the number of entries in open arms, comparing the control group, the effect of CTC-8 being 94.87% after acute administration ($p<0.05$; ANOVA + Bonferroni posttest). The same compound produced an increase of number of exits outside open arms, with 31.75% comparing the control group. These results can sustain a potential anxiolytic effect.All substances reduced the immobility time in FST after acute administration, the antidepressant effects being between 10.58-23.45%. CTC-9 had the most intense action. In TST, the only compound that significantly reduced the immobility time was CTC-8, the effect being 24.94% ($p<0.05$, *t* Student).

Conclusions: The new compounds have a high potential of CNS actions, proving some significant effects in pharmacological tests that we performed. For any further research, the interest compounds seem to be CTC-8 and CTC-9.

(71) Synthesis of new pyrazole derivatives as AKT inhibitors

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Akt, known also as protein kinase B, functions as a pivotal point of converging signaling pathways involved in cell growth, proliferation, apoptotis, and neo-angiogenesis and has been validated as a therapeutic target in many cancer types. The development of inhibitors of PIP3/PH domain binding of Akt emerged as an alternative strategy. PIT-1, and the more soluble dimethyl analog, DM-PIT-1, inhibit Akt activities, and thereby decreasing tumor growth without significant general toxicity. The objective of the study was to design and synthesize a series of new pyrazole thiourea chimeric derivatives as potential anticancer agents targeting the PIP3/PH domain based on the PIT-1 scaffold. The target compounds were obtained using basic organic synthesis methods starting from various pyrazole amines. The structures of the newly synthesized compounds were confirmed by IR and NMR spectroscopic and elemental analyses. The compounds presented good antiproliferative effects and apoptosis inducting properties. The authors acknowledge the financial support offered by Romanian National Authority for Scientific Research, UEFISCDI, through grant PN-II-RU-TE-2014-4-1670, no. 342/2015.

(93) Interactions between some herbs and conventional drugs

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Nowadays, more and more people use phytopreparations (including herbal medicines and nutritional supplements) to treat various diseases, frequently as an adjunctive therapy. Phytopreparations association with convention drugs may cause a series of interactions.

Objective: The present paper aims to draw attention to the possible risks that may occur in concomitant use of phytopreparations and convention drugs, and to recommend the therapeutic attitudes.

Method: A number of herbal drugs that are commonly used in therapy were selected. Scientific data about their chemical compositions, therapeutic uses and interactions with conventional drugs (based on preclinical and clinical studies) were searched and systematized.

Results: Scientific date about the following herbal drugs were collected: Echinaceae radix et herba (Echinacea), Ginkgonis folium (Ginkgo), Ginseng radix (Ginseng), Hyperici herba (St. John's wort), Liquiritiae radix (Liquirice), Menthae folium / herba (Peppermint), Medicaginis herba (Alfalfa), Plantaginis ovatae semen (Ispaghula), Schisandrae fructus (Schisandra), Terminaliae arjunae cortex (Arjuna) s.a. Many of pharmacological studies were related to interactions of these herbs and their extracts with anticoagulants (warfarin and related drugs) and immunosuppressants.

St. John's wort was appeared to be one of the most studied vegetal species. Due to its composition, including naftodiantrones (hypericines), prenylated-phloroglucinols (hiperforine), polyphenolcarboxilic acids (caffeic acid derivatives),

flavones (kaempferol, quercetin and luteolin heterosides), carotenoids and tannins, this herbal drug is a well-known antidepressant, cholecystokinetic and healing agent. Experimental and clinical reports have revealed dangerous interactions between St. John's wort extracts and some general anaesthetics, antiepileptics, benzodiazepines, calciu-channel blockers, cardiotonics, centrally acting muscle relaxants, anticancer agents, hormonal contraceptives, anticoagulants, immunosuppressants and antifungals.

Conclusion: Associating phytopreparations (herbal medicines and nutritional supplements) with convention drugs can be life–threatening. Because of this, some combinations should be avoided, and in other cases the dose adjustment and monitoring of treatment needed.

(163) Research concerning the improvement of bioavailability of mebendazole

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Objectives: Objective of the research was the increase of bioavailability of mebendazole, in order to assure its effect not only local, but in liver and other internal organs also.

Methods: It were prepared three solid formulations containing croscarmellose, an internally cross-linked sodium carboxymethylcellulose for use as a superdisintegrant in pharmaceutical formulations, in 1%, 2% and 3 %. Tablets were controlled using pharmacopeal methods it concerns content in active substance and physico-chemical properties. For assay of mebendazole was developed and validated an HPLC method. Bioavailability was estimated by in vitro release kinetics using USP XXIII apparatus 1, in acidic medium plus sodium lauryl sulfate (LSS) and in Fasting System Simulating Intestinal Fluid) (FASSIF).

Results: Obtained formulations corresponded to compendial conditions for tablets. After 2 hours release kinetics was poor in FaSSIF (around 10%) and complete in HCl + LSS. Both rate, estimated by initial slope of the release curves, and extent, defined as maximum release and as Area Under Dissolution Curve (AUC), increased linearly with concentration of croscarmelose.

Conclusions: Croscarmellose and direct compression might be an effective way of improving oral bioavail¬ability and therapeutic activity of mebendazole.

(175) Microbicidal and antibiofilm activity of new dibenzo[b,e]thiepine derivatives

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Objectives: The rising tide of antimicrobial drug resistance has nullified the effects of many conventional agents. The prognosis is worsened by the formation of bacterial biofilms on the biomaterials used in medicine due to their phenotypic resistance, even if the component cells tested in suspension are susceptible to some antibiotics Therefore, there is a particular interest to develop new strategies to control the infectious diseases. Recent studies have shown the antimicrobial activity of a number of non-antibiotic drugs, not only against planktonic cells, but also on biofilms. Among the different chemical compounds reported in the literature for their inhibitory activity on microbial growth, the tricyclic psychotropic drugs, including dibenzothiepine derivatives, have been found to exhibit besides their specific activity, an antimicrobial one. These observations and particularly the antipathogenic potential of dibenzothiepines reported in our previous works, prompted us to synthesize new compounds and to assess their microbicidal and antibiofilm properties.

Methods: The new compounds, dibenzo[b,e] thiepines and dibenzo[b,e]thiepine-5,5-dioxides, were synthesized following a multi-stage synthesis and were characterized by elemental analysis and spectral studies (1H-NMR, 13C-NMR, IR). The antimicrobial activity was performed using reference and clinical microbial strains belonging to Escherichia coli, Klebsiella pneumoniae, Acinetobacter baumanii, Pseudomonas aeruginosa, Staphylococcus aureus, Bacillus subtilis, Candida albicans and Aspergillus niger species.

Results: The new compounds exhibited a broad spectrum of antimicrobial activity (superior for the 5.5-doxide derivatives) being effective against a wide range of infectious microorganisms, including Gram-negative, fermentative strains, Gram positive bacteria and fungi. Some of the new compounds exhibited microbicidal activity against the Gram-negative, non-fermenta-

tive A. baumanii. Some of the compounds also inhibited the ability of these strains to form biofilm on the inert substratum.

Conclusions: This paper presents the synthesis, spectral characterization, microbicidal and antibiofilm activity of new compounds with dibenzo[b,e]thiepine scaffold. The new compounds can be used in the design of more effective inhibitors of biofilm development.

(276) Toxicity evaluation of Polygoni Cuspidati Rhizoma

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Objectives: Polygonum cuspidatum syn. Fallopia japonica (Polygonaceae), a perennial species with spreading rhizomes is common in Northern Hemisphere. The plant is used in traditional Chinese medicine for its anti-inflammatory, hepatoprotective and antitumor activities. The plant rhizomes contain mainly resveratrol and emodin, two compounds with proved anticancer activity. In the present work we evaluated the toxicity of extractive solutions using a quick, economical and relevant bioassay using Triticum aestivum. The inhibition of the root length and the cell cycle mitosis modification represents together an efficient method to evaluate plant extracts anticancer potential.

Methods: The extractive solutions were obtained under reflux from 2.5 g of herbal material and a water-ethanol mixture. The cytotoxicity assessment was carried out by determining the maximal dilution of the extractive solutions which influences the root elongation and the karyokinetic film. The biological material consist of 1 cm long embryonic roots of Triticum aestivum and the root elongation was measured at 24 h during the exposure period and the evaluation of karyokinetic film was performed after 24 h of exposure. The bioassay was conducted at 25±1°C, 75% RH, in the absence of light, in a plant growth chamber (Sanyo MLR-351 H). A negative control sample was prepared with distilled water.

Results: Both extractive solutions inhibited the root elongation at concentrations above 0.03%, the aqueous solution being more active than the ethanolic solution. The concentration-inhibition correlation was observed only at lower concentrations. The evaluation of the kariokinetic film revealed cytotoxicity at higher concentrations and alterations of the mitosis with modifications of metaphases, anaphases and telophases.

Conclusions: Two extractive solutions from Polygonum cuspidatum were tested using Triticum aestivum bioassay. The research revealed that both extractive solutions are cytotoxic at concentrations ranging from 0.33 to 5%.

Acknoledgements: The authors acknowledge the financial support offered by "Carol Davila" University of Medicine and Pharmacy Bucharest, through Research Grant 33883/11.11.2014.

(372) The comparison of *in vitro* dissolution profiles of spironolactone from immediate release oral solid dosage forms

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Objectives: The new BCS-based biowaiver draft guidance issued by FDA in 2015 extended the applicability of the *in vitro* dissolution methodologies. At the same time, it introduced new testing parameters, such as an increased stirring rate of the paddle apparatus, combined with a reduced volume of standard buffer systems of 500 mL. The aim of the current work was to evaluate the consequences of this new hydrodynamic context on the dose - dissolution relationship for a low solubility drug.

Methods: The in vitro dissolution studies of immediate release solid dosage forms of spironolactone (25, 50 and 100 mg strengths) were performed in compendial buffers (pH=1.2, 4.5 and 6.8, degassed by filtration under vacuum; 500 mL). Detailed sampling was performed for 60 minutes. All tests were conducted on 6 dosage units at 37 degrees Celsius. The amounts of spironolactone dissolved were determined using a spectrophotometric method. The experimental data was cross-analyzed with the available data on the qualitative composition. The compendial metrics f1 and f2 were calculated for the evaluation of *in vitro* similarity between the several strengths of the same product of across various products with the same dose.

Results: The mean dissolution profiles were strongly dependent upon the low solubility of the

drug. Although no obvious plateau region was observed, after the initial burst in release (10-15 minutes), the rate kinetics decreased dramatically. The presence of sodium lauryl sulfate as an excipient accelerated the disintegration, but had little if any effect on the quantity of spironolactone dissolved at the end of the test. The most significant differences, as indicated by the values of the compendial metrics, were concluded between the extreme strengths.

Conclusions: The reduced volume as proposed in the new BCS-based biowaiver draft guidance has a considerable impact on the in vitro comparison between different strengths. Moreover, the differences in qualitative composition between various products, especially for critical excipients such as tensioactives, may have a more pronounced effect on the in vitro dissolution.

(384) Development and characterization of some new phytocomplex containing nanoparticles with antimicrobial activity

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Objectives: Microbial pathology represents a growing public health threat, as resistance to common bacteria has reached alarming levels, indicating that many of the available treatment options are becoming ineffective. As a direct result, intensive research is directed in order to develop new approaches to antimicrobial therapy. Investigations are directed either towards identifying new antimicrobial molecules, or development of innovative formulations of known antimicrobial agents in order to decrease minimum inhibitory concentration (MIC), to lower toxicity and antagonize installation of antimicrobial resistance. Plant extracts represent a viable alternative, and their encapsulation into various types of nanostructures can enhance their antimicrobial activity while decreasing toxicity. There are two groups of natural compounds with antimicrobial properties: the single-acting compounds, with intrinsic antimicrobial effect, and phytocomplexes, in which all the component acts synergistic, resulting a combined effect greater than the sum of the individual ones. This paper presents the antimicrobial effect of the essential oil obtained from the Anethum graveolens fruits encapsulated into two different types of nanoparticulate transporters: liposomes (L) and solid lipid nanoparticles (SLN).

Methods: Two different types of nanocarriers (liposomes and solid-lipid nanoparticles -SLN) containing the Anethum graveolens oil were prepared. The lipid film hydration method was used for obtaining of the liposomes, whereas for the SLNs lipid mixture emulsification method was employed. The influence of various technological parameters on the characteristics (i.e. particle size, physical stability, morphological appearance and encapsulation efficiency) of obtained nanosystems was studied.

Results: Using the proposed methods, spherical particles with sizes ranging between 50 and 430 nm have been obtained. By increasing the proportion of unsaturated lipid, we mostly obtained a decrease of the particle size and polydispersity index.

Encapsulation efficiency was significantly influenced by the type of lipid, the lipids weight ratio, the hydration temperature, temperature and duration of the cooling phase, stirring speed, temperature and time of sonication.

Conclusions: The use of bioactive plant extracts may result on one hand the manifestation of their intrinsic activity, and on the other hand the enrichment of the nanocarrier lipid matrix may allow potentiation of the effect of the encapsulated bioactive compound.

(385) Absorption behavior of surfactants mixtures at interfaces: a contact angle approach

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Objective: Wettability of solid surfaces by surfactants plays an important role in surfaces characterization for basic material research, since they are known to modify the solid/liquid and liquid/vapor interfacial tension. The present study describes a method of absorption behavior evaluation for surfactants mixtures with application in pharmaceutical formulation and optimization of novel surfactant-based delivery systems.

Methods: An experimental model describing the equilibrium behavior of surfactants mixtures at interfaces is presented. Mixed composition of sorbitan fatty acid esters (Spans) and the corresponding polyoxyethylene (Tweens) were designed and analyzed. Contact angle and surface energy measurements on coconut/cocoa butter hydrophobic treated surfaces were performed using a goniometer CAM 101 with digital camera. Pendant drop shape method was applied.

Results: Important relationships between the composition of the surfactant mixtures, the required HLB value for the hydrophobic material (coconut/cocoa butter) and the superficial/interfacial characteristics were established.

Conclusions: Surfactant mixtures are responsible for changing the interfacial tension at the air/water and solid/water interfaces and this variation is related to contact angle and surfactant absorption. The experimental model proposed could be applied to explain the absorption behavior of any component in surfactant-based delivery systems, drug emulsions, microemulsions design and optimization.

(21) The effect of transition from basal-bolus to insulin pump therapy in a patient with severe hypoglycemia unawareness

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Objective: Hypoglycemia unawareness (HU), defined as the onset of neuroglycopenia before the appearance of autonomic warning symptoms, occurs in 40% of patients with type 1 diabetes mellitus (T1DM). Possible mechanisms include chronic exposure to low blood glucose, antecedent hypoglycemia, recurrent severe hypoglycemia, failure of counter-regulatory hormones.

Methods: We report the case of a 40-year-old female, diagnosed with T1DM at the age of 4 years old. She was admitted to our department with high glucose variations (26 to 389 mg/dl) and severe hypoglycemic crisis with loss of consciousness. She was on basal-bolus therapy, fast acting insulin, lispro (6IU-4IU-5IU) and long-acting insulin, glargine 12IU. She had no diabetic complications. From her medical history we note total thyroidectomy for Graves' disease in 2008, now on replacement therapy with levothyroxine 100 mcg/day. During admission blood tests showed HbA_{1c}=7.5%, TSH=0.842 mIU/ml, normal lipid profile, renal and liver function. Several episodes of asymptomatic hypoglycemia were confirmed, the patient having no autonomic symptoms at glucose levels of 26 mg/dl. She was still able to speak and give personal correct information despite the severe hypoglycemia. We decided to use an insulin pump therapy in order to get better glycemic control and the disappearance of severe hypoglycemic events. The quality of life of the patient and her family improved. After three months the patient had better glycemic control, with no hypoglycemic events and a decrease in insulin doses of more than 30%.

Conclusions: HU is a complex phenomenon that carries with it great risk to patients. Our case supports previous studies that have shown a reduction in HU and better glucose profile with insulin pump therapy. Treatment of HU is challenging requiring a combination of both strategies, behavioral and educational, along with the use of technology, such as therapy with continuous insulin pump and online glucose monitoring.

(27) Diagnosis of autosomal recessive polycystic kidney disease: morphological and histopathological aspects

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Autosomal recessive polycystic kidney disease (ARPKD) is an important inherited cause of chronic kidney disease with an estimated incidence of 1 in 20.000 live births. It results from a mutation in the pKHD1 gene located on chromosome 6p. This results in bilateral symmetric microcysts disease occurring in the distal convoluted tubules and collecting ducts. This entity usually associates pulmonary hypoplasia resulting from oligohydroamnios and hepatobiliary disease (40%-60% of infants have hepatobiliary abnormalities). Genetic testing can often support a diagnosis, although it is not routine and is usually made when parents already had a child with ARPKD.

In the last year, we report two cases of fetuses with ARPKD at the Emergency University Hospital in Bucharest. In this study we will elaborate a positive diagnosis for this rare entity based only on the macroscopic and histological findings.

In our study, we performed autopsies on both fetuses suspected of ARPKD. One fetus was aborted at 17 weeks and the second fetus was born alive before term and died of multiple organ dysfunction. Gross examination of the kidneys was performed on both of the suspected cases of ARPKD. Both kidneys were symmetrically enlarged and had a uniform distribution of microcysts throughout the cortex and the medulla. Furthermore, we analyzed the histological aspects of the kidney and liver of both cases with ARPKD on hematoxylin and eosin stain. We note that a final diagnosis for ARPKD can not be put without a liver biopsy.

The histological results can put in most cases the positive diagnosis. Microscopically, we found characteristic aspects in both ARPKD cases at the kidney biopsy, such as elongated cysts that were radially arranged, the few remaining glomeruli that were not involved by the cysts and the decreased intervening parenchyma. Both cases with ARPKD associated congenital hepatic fibrosis with dilated embryological bile ducts and parenchymatous organ dysplasia.

ARPKD is known as a rare disease, but in the last years it had shown an increasing incidence. We presented a complete histolpathological examination which led us to a positive diagnosis of ARPKD.

(28) The neurobiology of sleep: cause, catalyst and mirror for a diverse pathology

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Objectives: Sleep as a neurobiological process has been credited in literature for its underlying complexity regarding integration of vital functions in the human organism. The first part of the presentation will focus on brief examples from various medical specialities in order to establish a common ground with the audience. However, the main purpose of this study is to propose the usage of actigraphy as an alternative method of measuring parameters during sleep, allowing for higher patient compliancy and comfort while offering important clues to a more complete diagnosis.

Methods: The study uses instances of sleep gathered using an actigraphy software on an Android®-powered device. The device was placed next to the subject before the onset of sleep and using the build-in accelerometer, the movement throughtout the instance was measured and was equivalated to the respective sleep cycles (alternating REM and non-REM).

Results: A total of 170 sessions of sleep were gathered, with the most frequent duration of 8 to 9 hours of sleep per instance (46 instances out of the total) and the most frequent efficency of 30% to 35% (40 instances out of the total). Efficency was compared to a less than 8 hour and more then 8 hour sleep duration yeilding a weak association between efficency and higher number of hours slept - Spearman's rho: 0.241; 95% Confidence interval: [0.094...0.378].

Conclusions: The study sucesfully measured total sleep time and quality of sleep, expressed as a percentage of alternating REM and non-REM cycles, as well as providing a solid stepping stone for follow-up experimentation in the field.

(30) Peri-interventional complications in respiratory pathology

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Approximately 7000 new cases of respiratory disease are recorded annually, most prevalent of which being a cause of restrictive, obstructive or mixed ventilatory dysfunctions. Investigations are frequently required, not only for treatment, but also for diagnostic purposes. Some of the most performed invasive procedures that have associated complications are bronchoscopy, evacuatory or exploratory thoracentesis and arterial puncture. In this study, our objectiv is to evaluate the peri-interventional risk. We collected the data of 55 patients hospitalized at "Marius Nasta" Institute of Pulmonology, Bucharest. We analyzed the frequency of intervention-associated complications, the pathologies in relation to the complications that appeared, the treatment administered for the management of resulting symptoms and the evolution of the general state of the patient under treatment. Peri-interventional complications occurred in 76% of the cases. Arterial puncture was performed on 34.55% of the patients, 68.42% of them presenting complications (most frequently involving radioulnar hematoma). Bronchoscopy was carried out in 83.64% of the cases, 58.70% of which ending up with at least one complication, most commonly oxygen desaturation, recorded by pulse oximetry. Thoracenteses were performed in 16.36% of the cases, and complications arose in 77.78% of them (primarily pain). Rare severe complications in patients with high morbidity were encountered. Isolated cases of complications might have been a result of medical malpractice. The majority of peri-interventional complications were noted in patients presenting associated comorbidities to their respiratory disease. Proper treatment was promptly administrated, ensuring an improvement in patient's state throughout hospitalization.

(31) Macrophage activation syndrome in systemic lupus erythematosus

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Background: Macrophage activation syndrome (MAS) has scarcely been described in association with systemic lupus erythematosus (SLE). Despite poorly understood, it is now recognized that this condition belongs to a group of diseases known as hemophagocytic lymphohistiocytosis (HLH). Treatments of several cases of MAS have led to the observation that the use of high dose corticosteroids associated with cyclosporine A has proven its benefit in the management of this disorder.

Objectives: The purpose of this case presentation is to increase the awareness about this rare complication of several rheumatic diseases such as: systemic onset juvenile arthritis, adult-onset Still disease and rheumatoid arthritis.

Methods: A brief case report of MAS which occurred as onset of SLE induced by sulfasalazine.

Results: We present the case of an 18 years old woman who was admitted to hospital with a 4-week history of malaise, weight loss and lethargy. Her medical past was remarkable for autoimmune thyroiditis and rheumatic syndrome treated with sulfasalazine (SSZ). Her family history was positive for discoid lupus erythematosus. Her physical examination was inconclusive but her lab results showed pancytopenia, hypertriglyceridemia, hyperferritinemia, hypofibrinogenemia, raised values of AST, ALT and GGT. Hepatitis B and C test came out negative. The immunological screening was positive for ANA, anti-dsDNA, anti-histone, anti-ribosomal P protein and anti-nucleosome antibodies. Antibody profiles for the diagnosis of antiphospholipid syndrome were present. Serum C3 complement factor and ESR were low, while the level of CRP was elevated. The urinalysis revealed proteinuria with RBCs, WBCs and hyaline casts. A mildly enlarged spleen was found at abdominal ultrasound evaluation. After further evaluation the diagnosis of drug induced SLE (probably by SSZ) with MAS onset was established. The patient received pulse therapy with methylprednisolone (1g/day), cyclophosphamide (500 mg/m^2), platelet transfusions and FFP. Treatment was continued with oral prednisolone (0.8 mg/kg) and cyclosporine A (2 mg/kg) daily. A favorable clinical and laboratory outcome was achieved.

Conclusions: SLE-associated MAS is a rare entity. Due to its clinical and laboratory resemblance with a SLE flare differential diagnosis might be challenging. An early expert consultation and proper therapy are the key components of improving the patient's outcome.

(34) Acute kidney injury – mortality-related risk factors in an emergency clinical hospital – one center experience

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Objectives: AKI represent a frequent complication in critical-ill patients, associated also with unfavorable short-term prognosis. Therefore, the aim of the current study was to assess all admitted patients in our hospital and to determine the most common causes of AKI onset, associated comorbidities and to evaluate the short-term prognosis in AKI subjects.

Methods: A retrospective study was performed that included all admitted patients in our emergency clinical hospital, between January and December 2014 that were diagnosed with AKI, according to KDIGO diagnosis criteria (n = 97 individuals).

Results: In our trial, female gender was more affected, with a mean age of 69 ± 7.6 years. 78% of patients (~ 75 cases) had no previous history of renal impairment, and 22% were known with different stages of CKD. When assessing our data, infection events represented the main cause of AKI, observed in 44% of cases from which 23% developed sepsis associating multiple organ dysfunction syndrome. Other important AKI causes were: nephrotoxic administration (drugs – 11%, iodine contrast substances – 9%), perioperatory complications, cardiovascular disorders (massive heart attack – 6%, decompensated heart failure – 12%) and acute pancreatitis (5%). Most of our patients were diabetics (24%) and with different

cardiovascular disorders (53%) – hypertension and heart failure. In 21% of cases different types of neoplasia was identified – uro-genital tumors represented the most common cause of AKI (13%), noticed especially in the female population. Consequently, most of the AKI individuals required renal replacement therapy – 1-3 hemodialysis (HD) sessions per week. Furthermore, it was noticed that 55% of them regained complete renal function, 6% remained in chronic HD program, and 39% deceased (especially from the patients that needed dialysis treatment). Another important feature was that AKI in known CKD patients developed mostly in elderly subjects with a longer period of dialysis requirement, compared to de novo AKI noticed especially in younger patients.

Conclusions: Our study emphasized that infection episodes represented the most cause of AKI development, and that short-term prognosis (including also the number of HD sessions) was influenced by etiology, preexistent renal failure and associated comorbidities.

(35) Taurolidine-citrate-heparin versus heparin – efficient hemodialysis catheter lock solution for improving hemodialysed patients outcome

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Objectives: Hemodialysis catheter-related bacteremia and thrombosis represent frequent causes of increased morbidity in hemodialysed (HD) patients. According to European Renal Best Practice, the use of antimicrobial catheter locks represent a viable and efficient solution of bloodstream infections prevention, especially the use of 4% citrate locks – present decreased rates of associated risks. Furthermore, there are data highlighting the antithrombotic effect of 4% citrate locks, but failed to prove a better catheter permeability when comparing to common heparin dose administration (5000 IU/mL). Therefore, the aim of our study is to underline and compare the effects of heparin versus taurolidine-citrate-heparin as hemodialysis catheter lock solutions.

Methods: Between January 2014 and April 2015, a 16 months observational study was performed that included all chronic HD patients directly on long-life catheters (LLC) or central venous catheters (CVC), admitted in our hospital. In the first 8 months, 5000 IU/mL heparin dose was administrated as catheter lock solution, and in the following 8 months, taurolidine-citrate-heparin was used – catheter lock content: 1.35% taurolidine, 4% citrate, 500 IU/mL heparin.

Results: When comparing the 2 periods of administration, the use of taurolidine-citrate-heparin as catheter lock solution was more efficient as antimicrobial and antithrombotic agent compared to heparin single use: 15 thrombosis events versus 18 episodes, 20 bloodstream infections (75% Gram-positive, 25% Gram-negative) versus 41 events (63% Gram-positive, 37% Gram-negative) – $p < 0.001$. Additionally, in the first period of our study, 198 catheters (CVC and LLC) were used versus 188 in the following 8 months that highlights a better CVC/LLC permeability when 4% citrate locks are used.

Conclusions: Our findings emphasized the beneficial effects of taurolidine (1.35%)-citrate (4%)-heparin (500 IU/mL) as catheter lock solution in increasing catheter permeability and decreasing thrombosis and infections events, especially the Gram-negative bacterial episodes, but further long-term clinical trials are required for a better assessment of these data.

(38) Endovascular treatment in a case of acute embolic mesenteric ischemia

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Objectives: Acute mesenteric ischemia is associated with a very high mortality rate if it is not rapidly diagnosed and treated. Treatment of arterial occlusive acute mesenteric ischemia has historically involved primary surgical exploration, revascularization, and resection of infarcted bow-

el. However, recent reports suggest that endovascular revascularization is associated with very high procedural success, relatively favorable outcomes as compared with a more traditional open approach.

Methods: We present the case of a 66 years old male patient with poorly anticoagulated atrial fibrillation admitted for left lower leg pain for two days and abdominal pain for 4 hours. An abdominal and pelvic computer tomography scan was made, that showed occlusion of the superior mesenteric artery without sign of bowel ischemia and occlusion of the left external iliac artery. The superior mesenteric artery was revascularized using a complex endovascular stenting technique and the external iliac artery was revascularized using fogarty catheter by a mixed interventional-surgical team. After an initial good clinical course, the patient developed systemic inflammatory response syndrome and multiple organ dysfunction syndrome with exitus.

Results: After the revascularization of mesenteric arteries we should take into account the risk of reperfusion injury with systemic inflammatory response syndrome and worse clinical outcomes.

Conclusions: Acute mesenteric ischemia is a life threatening disease that can be managed by surgery or endovascular therapy. The endovascular therapy showed great efficacy and good clinical outcomes even in technically demanding interventions, and it becomes an alternative to surgery. Prevention and treatment of the reperfusion syndrome is essential for a good clinical evolution after mesenteric revascularization.

(43)The clinical utility of MR imaging in diagnosis and follow-up of myeloma multiple: old and new approaches

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Objectives: In multiple myeloma (MM), the most common primary malignant bone disease, may result in osteolytic lesions, bone fractures, and osteoporosis, with attendant morbidity and mortality. We aimed to review and illustrate the MRI current findings used for the correct staging of patients with multiple myeloma.

Methods: Patients with MM are explored in our department by MRI in the purpose to evaluate bone lesions, complications and to follow up the disease under treatment. In all patients, MRI evaluation correspond to a standardize protocol: spin-echo (T1-weighted and T2-weighted), STIR, diffusion weighted (DW) and contrast material-enhanced spin-echo (with and without fat suppression) sequences.

Results: In most of the cases, the patterns of bone marrow infiltration at MRI can have a diffuse or focal appearance, showing low signal intensity on T1-weighted images, high signal intensity on T2-weighted/STIR images and generally showing enhancement on gadolinium contrast-enhanced images. MRI evaluation allowed detecting and characterizing different infiltration patterns: focal involvement, homogeneous diffuse infiltration, combined diffuse and focal infiltration and "salt and pepper" pattern with inhomogeneous bone marrow signals due to multiple fat islands.

MRI has a high prognostic significance. The presence of more than seven focal lesions with a diameter of more than 5 mm was correlated with a poorer prognosis and the presence of normal bone marrow in patients with stage III disease of the Durie and Salmon staging system has been associated with a significant increase in survival rate.

Conclusions: MR provides accurate information regarding the specific pattern of marrow involvement, helps to detect asymptomatic lesions, the sites of focal disease for safe bone biopsy, its complications and the results under treatment.

(46) Aggravation of a renal congenital malformation – case presentation

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Objectives: Renal congenital malformations involving reduction of renal tissue lead to glomerular hypertension and hyperfiltration, which, in turn, may lead to glomerular sclerosis. In these cases, early diagnosis of the malformation and continuous monitoring are essential in order to

prevent renal failure and to avoid any additional risk factors that may aggravate the condition.

Methods: A 21-year-old male patient, diagnosed with unilateral renal agenesis at the age of 11, is admitted to the Nephrology Department of Bucharest University and Emergency Hospital with peripheral and palpebral edema. His mother was diagnosed with systemic lupus erythematosus (SLE) at the age of 33. Upon admission, physical examination reveals normal blood pressure. Further investigations reveal nephrotic-range proteinuria (12g/24h), hypercholesterolemia, hypertriglyceridemia, hyperfibrinogenemia, high hematocrit and high erythrocyte sedimentation rate. Immunologic tests are positive for anti-SS-A, anti-Ro-52 and anti-SS-B antibodies, which are highly indicative of genetically inherited SLE. The patient's severe proteinuria and normal urinary cellularity together with SLE point to lupus glomerulonephritis (probably class V – membranous lupus glomerulonephritis). Renal biopsy is needed to confirm this diagnosis, but the patient refuses the procedure. Specific treatment for the autoimmune glomerulopathy consisting of methylprednisolone and cyclophosphamide is proposed. Hypocholesterolemic and anticoagulant treatment is initiated.

Conclusions: The particularity of this case consists of the association of a congenital renal malformation with an autoimmune disorder. Furthermore, solitary kidney is considered a relative contraindication to renal biopsy and cyclophosphamide is known to induce sterility, which is particularly troublesome in a young childless individual. The difficulty in establishing the exact type of glomerular lesion and the adverse effects of the treatment add to the complexity of this case, especially from an ethical point of view. The patient's decision whether or not to start immunosuppressing treatment is awaited.

(47) Multiple cutaneous leiomyomas – an atypical case of a 72 years old woman

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Objectives: A leiomyoma is an uncommon, benign tumour of smooth muscle. Although the skin is the second commonest location for leiomyoma after uterus, it accounts only 5% of cases. Regarding the etiopathogenesis, it remains unknown.

The treatment is dictated by the number of lesions and the degree of discomfort.

Methods: We report the case of a 72 years-old female patient who addresses our clinic complaining of multiple raised skin lesions on the face and neck. The lesions had been gradually increasing in number over the last 20 years. Over the last five years, the patient had started observe intermittent pain over the lesions, especially on exposure to cold, pressure, or emotional stimuli. The local examination revealed numerous well circumscribed red to brown, skin colored papules and nodules, over the forehead, cheeks and extensive lesions over the neck.

Clinical diagnosis of cutaneous leiomyomas was confirmed by multiple skin biopsies over the last years. The patient received treatment with calcium channel blockers (nifedipine) without significant amelioration.

Results: Due to the large number of lesions and the anatomic location, the total surgical excision could not be performed. The patient continues the treatment with nifedipine and we made several sessions of cryotherapy, without any improvement. Gabapentin was another option.The basic aim was to do something for relieving the patient's pain..

Conclusions: This case presents several important particularities. Firstly, cutaneous leiomyomas represent a very rare pathology, especially in the elderly, generally occuring in the age group of 10-30 years. Secondly, the anatomical area where lesions have developed is unspecific. The most common sites of involvement remain the extremities and the trunk.

In our case, the patient was not affected by the aesthetic component and all the treatments for pain relief were useless.

(50) Emotional intelligence and proactive role in HD therapy

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Emotional intelligence (EI) is defined as the ability to identify, express and control emotions comprising self-awareness and social awareness.

EI it is important for success and satisfaction at work and influences a person's attitude towards work, his/her ability to effectively work as a team effectively, and manage stress.

Our unit focusses on high-quality training and personal development of the medical staff to ensure that the therapeutic roles in dialysis are performed with empathy and compassion.

Objectives: Developing emotional intelligence skills, to measure nurses' EI and assess it in association with their work abilities.

Methods: Relationship Management influences, inspires and creates a strong bond between employees and employers via effective communication. Therefore, in order to improve our EI, we must cultivate effective communication skills.

Data were collected by means of the Emotional Intelligence tests (Bar-On and Goleman) and personality questionnaires.

50 nurses with more than 5 years of work experience completed the questionnaires.

Results: Evaluation of the questionnaire showed that 80% of nurses had an average score of 125-175 points and 20% an average score of 100-125 points. Nurses were aware of the importance of EI and matched the following personality types: Phlegmatic, choleric, and passionate temperament. There was a strong correlation between the EI score and the ability of stress management, self-evaluation of a good performance in communication and with job satisfaction.

Conclusions: All studied nurses were aware of the importance of EI. They achieved an average of 100 or more points for EI, with 80% scoring between 125 and 175 points. A high EI seems to be associated with stress management ability, perceived communication performance, and job satisfaction. Emotional intelligence is a skill that anyone can improve with a little patience and effort. Peter Stark put it that way: "Emotional intelligence is when you finally realize it's not all about you!"

(54) A rare association of synchronous chronic lymphocytic leukemia and essential thrombocytemia with different clonal origins

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Objective: The first study that investigated the association of simultaneous chronic lymphocytic leukemia (CLL) with myeloproliferative neoplasms (polycythemia vera, essential thrombocytemia-ET, primary myelofibrosis or chronic myeloid leukemia) was done in the GIMEMA cohort. Until april 2016 there are described only 8 cases with synchronic CLL and ET. In this case-report we present the coexistence of CLL and ET with distinct clonal origins and associated comorbidities.

Methods: A 67-year-old man was admitted to Coltea Hospital for a routine control. The clinical examination was unremarkable, but the hemogram showed Hb=14.1g/dL (normal values 13.5-17.5g/dL), leucocytes=10.290/mm^3 (4500-11.000), lymphocytes=5453/mm^3 (600-3500/mm^3), platelets=800.000/mm3 (150.000-400.000/mm^3); the remainder of the paraclinical data was within normal limits. The peripheral blood smear showed 53% small lymphocytes, normal erythrocytes and large groups of thrombocytes. Contrast enhanced CT of the chest and abdomen revealed small, laterocervical adenopathies. No hepatosplenomegaly was noted. The diagnostic procedures were an immunophenotyping of peripheral blood and bone marrow aspiration and an osteomedullary biopsy.

Results: The immunophenotyping showed 59% lymphocytes B, CD19+, CD3+, CD5+, CD23+, FMC7-, CD79a+, k+/-, CyIgM+, CD20+, CD38+, CD43+, CD11c +/-, CD65 and CD35 low positive, myeloperoxidase low positive, which sustains the diagnosis of CLL with atypical presentation due to the coexistence of both type of markers: myeloid and lymphoid. The osteomedullary biopsy unveiled atypic hyperplasia of the megakaryocytic lineage, a slight increase of reticulin fibers and left deviation of

granulocytopoiesis, consistent with ET. FISH for t(9:22) was negative as well as the BCR-ABL transcript, but with JAK2V617F positive and normal caryotype. The final diagnosis was: CLL RAI 0-1, intermediate risk (ZAP70-, CD38+, IgVH mutated), Chronic Myelodysplastic Syndrome-Essential Thrombocythemia-meeting OMS criteria, high risk (age >60, cardiovascular risk factors). In accordance with international therapeutic guidelines, the pacient was managed with a "watch and wait" approach for the CLL and with hydroxyurea and aspirin for ET. In evolution, two years after diagnosis, the pacient developed myeloid metaplasia with myelofibrosis grade I secondary to ET.

Conclusion: We describe the case of one patient with concurrent two different hemoproliferations, CLL and ET, and furthermore we prove by FISH, immunophenotyping and molecular analysis the independent origin of the two diseases in unrelated clones.

(57) Eating disorders: is depression leading to aggression?

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Objective: Feelings of anger, hostility and aggression are frequently co-occurring in patients with Eating Disorders (EDs), and this correlation augments when affective disorders are involved. We aimed to explore how depressive symptoms alter both perception and expression of anger in every type of EDs, in order to improve the understanding of the association between various manifestations of anger and clinical presentation.

Methods: We assessed 113 ED patients admitted to Institute of Psychiatry "P. Ottonello" University of Bologna–Eating Disorders Unit with the following psychometric tests: Beck Depression Inventory (BDI), a self-report questionnaire that evaluates the severity of depression, and State-Trait Anger Expression Inventory 2 (STAXI-2), a tool that distinguishes between various components of anger by defining intensity of anger (State-Anger), disposition to experience angry feelings (Trait-Anger), anger expression (Anger Expression-Out), anger control (Anger Control-Out) and provides an overall measure of anger expression (Anger Expression Index). According to the EDs classification, most of the patients were diagnosed with ED not otherwise specified (NOS) (31%), followed by Bulimia Nervosa (BN) (25.7%), Anorexia Nervosa (AN) (21.2%) and Binge Eating Disorder (BED) (17.7%).

Results: Among patients with AN, higher scores in BDI are associated with a statistically significant increase of State-Anger ($p=0.008$), Trait-Anger ($p=0.035$), Anger Control-Out ($p=0.026$) and Anger Expression Index ($p=0.008$). Among subjects with BED, a severe state of depression is often associated with Trait-Anger ($p=0.002$), Anger Expression-Out ($p=0.003$) and Anger Expression Index ($p=0.057$). Similar observations were made among subjects with ED NOS, where high scores of State-Anger ($p=0.040$), Anger Control-Out ($p=0.011$) and Anger Expression Index ($p=0.013$) are found in depressed patients.

Conclusion: Depressive patients diagnosed with AN, BED or ED NOS experience more problems regarding anger control, anger expression and express higher levels of aggressiveness compared to ED patients without depressive symptoms. Moreover, patients with depressive symptoms associate different modalities of expressing anger, correlated with the type of ED they are diagnosed with. These findings draw attention to the importance of evaluating patients with EDs for depression, as well as for aggressiveness, in order to provide the proper therapeutic approach.

(60) The predictive value of NT PRO BNP in patients with intermediary-high risk pulmonary embolism

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Objectives: The main objective of the present study is to assess a correlation between the Nt pro BNP value on admission, as a marker of RV dysfunction, and early mortality in patients with intermediary-high risk PE. As a secondary objective we assessed the effect of thrombolytic therapy – t-PA- on NT pro BNP values (value on admission vs value on 7 day) compared to the effect of unfractionated heparin.

Methods: We selected 75 pts with intermediary high risk PE. The Nt pro BNP value was determined in all patients on admission and on 7 days.

The patients were divided: study group was treated with t-PA (10mg bolus and 90mg in 90 min) and unfractionated heparin while the control group was treated with unfractionated heparin alone (aPTT guided). Patients older than 75 y.o, severe renal failure (Creatinine clearance <30 ml/min), anemic syndromes and contraindications for thrombolytic therapy were included in the control group.

Results: The mortality rate in the study group was 7.14% while in the control group 21.6% (p 0.09), statistically insignificant but the difference between the two groups was very important. Using ROC curves and t test with unequal variances the Nt pro BNP was determined as a strong predictor for early mortality in the study group (AOC 0.884), with a cut-off value of 8420pg/ml, while in the control group it was not correlated wih the mortality rate (AOC 0.48). Meanwhile the Nt pro BNP on 7 days was reduced by 66.28% in the study group vs 28.44% in the control group compared to admission Nt pro BNP (p-0.02)

Conclusions: The predictive value of Nt pro BNP in patients with intermediary risk PE is present for patients with thrombolytic therapy and the effect of this therapy compared to anticoagulants on mortality and Nt pro BNP value is very important and should be studied further.

(66) Does postoperative supervised medical exercise therapy lead to a significant functional improvement in patients after arthroscopic surgery of degenerative meniscus of the knee? A randomized controlled trial with 6 months and one year follow-up

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Aim: Since there is no consensus on a postoperative rehabilitation program for patients who have undergone arthroscopic surgery for medial meniscus damage, the aim of this trial was to evaluate if there is any significant functional improvement when patients adhere to such a program. In this respect, the functional status following two rehabilitation approaches after arthroscopic surgery in patients with degenerative meniscus were compared. One of them consisted in supervised medical exercise therapy versus unsupervised treatment.

Method: A prospective randomized controlled trial with 6 months and one year follow-up was conceived. Over 3 months, 67 participants were randomly assigned into either a supervised medical exercise therapy group (n = 35) or in a control group/unsupervised therapy (n = 32). Pain was evaluated by score of a visual analogue scale (VAS) and function was asses by functional tests and recorded within functional assessment questionnaire.

Results: Prognostic variables were almost similar between the groups at baseline, with (6 %) patients dropping out during the first 6 months of the treatment and (9 %) before the one-year follow-up. After 6 months, the supervised medical exercise therapy group achieved significantly better outcome effects than the control group in respect to pain and function. The results after the one year follow-up indicated the same trend.

Conclusion: Postoperative supervised medical exercise therapy lead to a significant functional improvement in patients after arthroscopic surgery for degenerative meniscus of the knee according to visual analogue scale and functional tests assessment.

(69) Early subclinical cardiac dysfunction in gestational hypertension and preeclampsia

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Background: Gestational hypertension (GHT) and preeclampsia (PE) are the most frequent medical complications in pregnancy. Direct effects of these conditions on cardiac function are insufficiently studied.

Objectives: To evaluate subclinical changes in cardiac function in pregnant women diagnosed with GHT or PE compared to a normal group matched for age and pregnancy duration.

Methods: We studied 28 pregnant women with GHT or PE, no other cardiac or medical diseases and 22 normotensive pregnant women as control. Systolic left ventricle (LV) global function was assessed by 4D LV ejection fraction and longitudinal systolic function by TDI S wave. For diastolic LV global function we used multiple spectral and tissue Doppler parameters. Left atrial (LA) function was assessed by volumetric measurement of total, passive and active emptying fractions (LAEF).

Results: There were no significant differences between GHT/PE and normal groups regarding mean age (32.1±6.1 vs. 32.3±3.9 years), pregnancy weeks, primi-/multiparity or heart rate (90.3±12.1 vs 83.9±11.2 bpm). Mean BP in GHT/PE group was 161.14±25.1/104.4±31.7 mmHg while in normotensives was 107.9±11.2/65.9±9.8 mmHg (p=0.0001 for both systolic and diastolic BP). In hypertensive group, decrease in 4D LVEF significantly correlated with increased actual weight (R= - 0.500, p=0.02), increased pre-pregnancy weight (R=-0.460, p=0.03) and BSA (R=-0.410, p=0.02). Comparison between GHT/PE and normotensive groups showed significant correlation of GHT/PE with pre-pregnancy body mass index (30.1±4.9 vs 25.5±2.9 kg/m^2, p=0.004). Both systolic global and longitudinal function were significantly decreased in GHT/PE group: LVEF (53±5.9 % vs. 58.7±6.4%, p=0.008) and TDI S wave respectively (10.1±2.7 vs. 12.9±2.1 cm/s, p=0.001). Global diastolic LV parameters (E/A, TDE, e'/a', E/e', Vp) did not differ between groups while isovolumic relaxation time was prolonged in GHT/PE (86.7±14.7 vs. 74.6±15.8 ms, p=0.02). Active LAEF did not differ, while total and passive LAEF were significantly lower in GHT/PE group (67.8±8.2% vs 73.5±6.8%, p=0.02 and 39.8±11.3% vs. 50.2±8.8%, p=0.003 respectively).

Conclusions: Subclinical early cardiac systolic and diastolic dysfunction was recorded in this group of pregnancy-induced hypertension. Whether this condition is transitory or it maintains after discharge, increasing risk to evolution to early heart failure in these patients should be established in further studies.

(76) Management of dysphagia at the elderly patient – case presentation

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Objectives: Dysphagia represents one of the important symptomes in geriatric population. The management of those patients requires a multimodal approach because of multiethiological causes of this swallowing disorder.

Methods: A 69 year old male patient with a known history of hypertension, ischemic stroke and osteoarthritis is admitted to our clinic with diffuse joint pains, dry cough, pain in the upper abdomen and a recently installed selective dysphagia (esogastric). Clinical examination: conscious, well oriented, anxious, pallor of skin, loss of appetite, BP=150/80 mmHg, pulse=80/min, BMI=19.26 kg/m^2(weight loss ~7 kg/month), pain in the upper abdomen, no signs of peritoneal irritation.

Results: Upper endoscopy: Esophagus-stenos circumferential formation 25 cm from the top that didn't allow the endoscope to pass. Thoracic and abdomen CT(+intravenous contrast agent) highlights: Nodular image in the upper segment of LID, well-defined, diameter=8/7 mm, central calcification–possibly a sequel nodule; Images of lymph nodes situated paraaortic, in the Barety lodge and parathracheal, diameter=21 mm.The lower esophagus shows a circumferential parietal thickness protrusion in the lumen, length=5.5 cm, situated cranial from the cardia orifice, with a thickness=23 mm, partially obstructing the lumen, with an irregular outline; the protrusive formation also expands from the opening of the cardia orifice to the fornix. No intraperioneal free fluids. Numerous images of precave and periaortic lymph nodes, diameter=12 mm. Psychogeriatric consult: Mini Mental State Examination=25/30 points; Geriatric Depression Scale=12/15 points. Primary diagnostic: Esogastric tumor stenosis (indication for surgery and histopathological analysis), Secondary diagnoses: hypertension, depressive anxiety disorder accompanied by cognitive impairment for which we initiated antidepressants. Surgical procedure:

superior esogastrectomy with end to end esogastro-anastomosis by double approach, thoracic and abdominal lymphadenectomy. Histopathologic result from esophageal mucosa fragment: tumoral proliferation of squamous cell carcinoma. Postsurgical evolution was favorable, no complications and the fluoroscopic control showed the integrity of the anastomosis.

Conclusion: Dysphagia associated with unintentional weight loss is a frequent health problem increasing morbidity in elderly population. A comprehensive geriatric assessment can detect the causes of dysphagia which would be not only gastrointestinal illnesses but also depression, dementia, diabetes mellitus, different types of cancer.

(79) Effects of superoxide dismutase in mushroom poisoning – case report

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Objectives: Mushroom poisoning occurs frequently by falsely identifying the species. Toxic effects are carried through a variety of toxins that each mushroom type contains. Latest studies highlighted the presence of a correlation between alfa-amantine and lesions induced by oxygen reactive species. Superoxid dismutase (SOD) has a protective role on the liver function.

Methods: We present the case of a 41 year old female admitted in the Critical Care Toxicology Unit six hours after mushroom ingestion exhibiting gastro-intestinal manifestations.

Results: On admission she presented an altered state, abdominal pain, she was somnolent, with visual hallucinations, hemodinamically and respiratory stable, present diuresis. Laboratory data revealed hepatic cytolysis, dyselectrolytemia, cholestasis, hyperammonemia, altered coagulation tests and an increase in the SOD level. Volemic and electrolytic repletion was initiated, gastric protection, antiemetics, digestive decontamination, vitamins and diuretics. We applied the protocol of antioxidant therapy with SOD capsules of 6000 units McCord/Fridovich. Patient evolution was favorable with normalization of clinical and laboratory parameters at 72 hours after admission, including the SOD levels.

Conclusions: Mushroom poisoning induces a liver pro-oxidative status with progressive consumption of antioxidant enzymes and a higher vulnerability of liver cells. Supplementary therapy with SOD might help improve the hepatocyte defense mechanisms when faced to toxic injury.

(81) Interdependence of insulin sensibility and heart failure in patient with diabetes mellitus

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Objectives: are to assess abnormalities of myocardial metabolism in pacient with diabetes mellitus and to correlate progression of heart failure with impared insulin sensitivity.

Methods: We examined 52 pacients with cardiac insufficiency – left ventricular systolic dysfunction and diabetes mellitus from Cardiology Clinic of Bagdasar-Arseni Emergency Hospital, from January 2015 until now. Patients have been analyzed for heart failure by humoral measurement (NTproBNP value) and echocardiographic parameters. The assessment of insulin resistance (HOMA-IR: homeostatic model assessment of insuline resistance) index was calculated from fasting glucose and insulin using the following equation: (glucose [mg/dl] x insulin [μIU/ml])/405. Logistic regression was used to examine characteristics that were associated with insulin resistance (HOMA-IR $\geq$2.5), adjusting for age, sex, body mass index, insulin dosage units (as continuous variable). In order to assess the relationship between HOMA-IR values and heart failure staging, multiple Cox proportional hazards models were fit in each case.

Results: Compared with control subjects, patients with heart failure have similar glucose levels, but increased insulin levels, predictive for insulin sensitivity. In multivariate analyses of subjects, age, insulin and NTproBNP levels, left ventricular ejection fraction and heart failure stage were independent predictors of impared insulin sensitivity.

Conclusions: Neurohumoral activation in heart failure increase free faty acid metabolism and myocardial and systemic insulin resistance, ensuing detrimental myocardial energetic perturbations. Understanding the aberrant metabolism in general and cardiac energetics in particular, in

diabetic pacient, may offer promising targets for heart failure therapy.

(84) Is 3D interchangeable with 2D echocardiography in establishing the indication for resynchronization therapy in patients with heart failure with reduced ejection fraction?

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Objective: To determine if three-dimensional echocardiography (3DE) is interchangeable with two-dimensional echocardiography (2DE) in establishing the indication for resynchronization therapy in patients with heart failure with reduced ejection fraction (HFrEF), when used by trainees with different levels of expertise in 2DE and 3DE.

Methods: Fifty-one patients with symptomatic HFrEF and regular cardiac rhythm (46 males, 58±17 years) underwent standard transthoracic 2DE acquisitions and 3DE full-volumes of the left ventricle (LV), using Vingmed E9 (GE Ultrasound, Horten, Norway).

One expert observer with more than 2 years of training in both 2DE and 3DE (Expert) and 3 trainees with different levels of expertise in 2DE (Beginner, Medium and Advanced), after one month-training in 3DE, measured the 2D and 3D LV volumes and ejection fraction (EF) on the same consecutive images, using Echopac BT 12 (GE Ultrasound, Horten, Norway).

Results: Average FPS of the 2DE images was 70±8, and average VPS of the full-volumes was 34±7. Mean LVEF was 35±10% by 2DE, and 33±10% by 3DE.

There was a substantial agreement between 2DE and 3DE classification of the LVEF (below and above 35%) for all the levels of training in 2DE and 3DE (all kappa >0.60, but below 0.80). However, using 3DE, the expert observer did not re-classify any patients into having a LVEF more than 35%, but reclassified almost 15% of the patients into having LVEF below 35% and therefore, indication for device implantation.

Conclusions: There was substantial agreement between 2D and 3D echocardiography measurements of LV ejection fraction in patients with heart failure with reduced ejection fraction, regardless of the level of training in echocardiography. However, more than 10% of the patients were reclassified into having indication for device therapy when using 3D instead of 2D echocardiography. Further studies should assess the need for new cutoffs when using 3D echocardiography evaluation of the LV ejection fraction in patients with heart failure with reduced ejection fraction.

(85) Pseudomonas Aeruginosa infection, a clue for Bruton's disease?

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Objective: To present a case of pediatric hereditary agammaglobulinaemia and mention the difficulties in diagnosis, complications, treatment, prognosis, and evolution.

Methods: A two year and two month old male child was hospitalized in the Pediatric Emergency Department of Constanta, Romania, for erythematous maculopapular rash on the upper and lower limbs, oedema and necrosis of nasal wings, rhinorrhea, and fever. Physical examination revealed one erythematous lesion on the right thigh with a necrotic center and a necrotic lesion in the palatine raphe. The patient's medical history was significant for recurrent episodes of upper respiratory tract infections (8 per year) and persistent high fever of unknown origin that lasted more than 8 but less than 11 days at a time. Nasal cultures were obtained which revealed the presence of Pseudomonas Aeruginosa. Due to the extent of the lesions, the patient was transferred to the "Grigore Alexandrescu" Emergency Children's Hospital in Bucharest with a suspected diagnosis of Steven Johnson's syndrome and unknown immunodeficiency. The lesions progressed and the patient had an episode of Ectyma Gangrenosum. The patient was subsequently transferred to "Alessandrescu-Rusescu" Institute for Mother and Child Health for further investigation and specialized treatment. Upon performing flow cytometry, analyzing bloodwork results, and con-

ducting further diagnostic tests suspicion was raised for a diagnosis of X-linked hereditary agammaglobulinaemia (Bruton's Disease). Genetic testing was performed and the results are currently pending. The patient was started on intravenous immunoglobulins, 10 g/kg of bodyweight/month, and prolonged antibiotics for the Pseudomonas Aeruginosa infection. It was concluded that the patient did not have Stevens Johnson's syndrome but that the maculopapular rash and necrosis was due to the Pseudomonas Aeruginosa infection in an immunodeficient child. The patient returned once per month for follow up. Upon 4 months follow up, the patient reports no recurrent infections or associated disability.

Conclusion: Due to the rarity of Bruton's Disease (1 in 100,000 males) as well as its unspecific clinical presentation, the suspicion for this diagnosis is rarely made. It is important to include this disease in the differential diagnosis in a pediatric male patient with recurrent infections and other immunodeficiency-related symptoms.

(86) Apical hypertrophic cardiomyopathy: from midventricular obstruction to apical aneurysm

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Apical hypertrophic cardiomyopathy is rarely confined only to the left ventricular apex. Mid-left ventricular hypertrophy is responsible for the unique pathophysiology of this condition in which the impedance to flow occurs at the mid-cavitary level. Development of an apical aneurysm from midventricular obstruction (MVO) may be observed during follow-up period or may be observed at the initial evaluation.

We report the case of a 67 years old male patient presenting with exertional dyspnea and persistent dry cough for four months. Medical history revealed apical hypertrophic cardiomyopathy diagnosed 7 years back. Current echocardiographic evaluation revealed midventricular and apical hypertrophy, midventricular obstruction with a peak instantaneous gradient of 50 mmHg and an apical aneurysm. Coronary artery disease was excluded as a cause of apical aneurysm formation. Left ventriculography confirmed the presence of the apical aneurysm. The patient has beed referred for surgical evaluation for mid-left ventricular resection.

Our case illustrates the natural evolution of apical hypertrophic cardiomyopathy with MVO and apical aneurysm development during follow-up 7 years after the initial diagnosis.

In one study the presence of MVO was identified as an independent determinant of unfavorable outcomes. Moreover, apical aneurysm formation in patients with MVO strongly predicted HCM-related adverse events. The main problems are the arrhythmogenic substrate and the risk of fatal and nonfatal thromboembolic events.

(88) Zika virus disease outbreak in the Americas, 2015 – is Romania at risk?

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Objectives: On the 1st of February 2016, the World Health Organization declared that the clusters of microcephaly cases and neurological disorders in areas affected by Zika virus (ZIKV) constitute a Public Health Emergency of International Concern (PHEIC). ZIKV disease is caused by an RNA virus transmitted to humans by Aedes mosquitoes, mainly Aedes aegypti and potentially Aedes albopictus. There is no specific treatment or vaccine currently available.

Our aim is to evaluate the risk of ZIKV introduction and transmission in Romania.

Methods: We reviewed the medical literature on the epidemiology of ZIKV, as well as relevant risk assessments and guidelines. Available statistics on the number of Romanian travellers to affected countries were also examined.

Results: As of April 6th 2016, Zika virus transmission was documented in a total of 62 countries and territories. To date no autochthonous ZIKV transmission has been reported in the continental EU, but 17 EU/EEA countries recorded at least 359 imported cases.

The Romanian population is thought to be immunologically naïve. In Bucharest, entomological investigations have revealed local established populations of A. albopictus since 2012. In urban areas, viraemic individuals appear to serve as the primary vertebrate host. The risk of transmission through sexual contact or substances of human origin is hard to estimate for our country due to the low number of cases reported internationally.

Mass gatherings can increase the transmission of the virus; however, Rio de Janeiro Olympics will be held during Brazil's winter when the risk of infection is low. Of all outbound Romanian tourists in 2013, at least 2548 (0.004%) visited Central and South America.

Conclusions: The risk of autochthonous transmission of ZIKV has been considered extremely low during winter, although transmission is possible during summer if viraemic travellers return to Romania. The relatively low competence of A. albopictus as a vector for ZIKV may indicate that a high density of human-biting mosquitoes and a large number of infected persons would be expected for an outbreak to occur. Early detection, vector control measures and public awareness are essential for the prevention of ZIKV outbreaks.

(98) Adult-onset Still disease with atypical cutaneuos features

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Objectives: Adult-onset Still's disease (AOSD) is a rare idiopathic inflammatory disorder with varied clinical manifestations.

Its diagnosis is one of exclusion and often difficult and delayed. The four cardinal features of the disorder include polyarthritis/polyarthralgia, high spiking fevers, leukocytosis with neutrophilia, and evanescent skin rash. Skin manifestations are often a critical component of disease recognition.

Methods: We present the case of a 63 years old female patient who had initially been diagnosed with Still's disease (polyarthritis with polyarthralgia, high spiking fevers, evanescent rash and pruritus, persistent neutrophilic leukocytosis, elevated ferritin serum level) two years ago in the Reumatology Clinic. She was treated with Prednisone and Methotrexate until July 2013. The cutaneous eruption and pruritus rapidly disappeared. In January 2014, she presented with a disease flare that including spiking fevers, polyarthralgia, a leukocytosis and markedly elevated ferritin and pruritic, persistent erythematous papules on the upper back and chest. Due to the persistent (fixed), pruritic papules and plaques which were different from the initial rash, she was referred to our clinic.

Results: The biopsy of the persistent papules from the chest showed: acanthosis, local parakeratosis, dyskeratosis confined to the upper layers of the epidermis as well as a sparse superficial dermal infiltrate containing scattered neutrophils and rare eosinophils. There was no significant dermal mucin deposition. Direct immunofluorence microscopic studies were negative. The patient was treated with 60 mg daily dose of Prednisone and 15 mg weekly dose of Methotrexate and her systemic symptoms eventually resolved approximately 1.5 months after onset. The persistent skin lesions faded within 10 days and did not recur during subsequent slow tapering of the steroid treatment.

Conclusions: Still's disease is generally considered a disorder of youth, but there are several reports of new cases of AOSD in older people. The diagnosis of AOSD can be made in the absence of the typical Still's rash but in the presence of other atypical cutaneous features. This case confirms the characteristic clinical and histopathologic findings of persistent papules and plaques of Still's disease and show the potential for this eruption in the adult age groups.

(101) The use of balneo and physical therapy in neurogenic bladder

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Objectives: Neurogenic bladder is a multifactorial syndrome, with many possible clinical symptoms. One of the etiologic cause could be the cauda equine syndrome in lumbar spinal diseases with neurologic implications and it represents a severe complication and one of the most important causes of repeated acute pyelonephritis which if untreated and neglected, can cause in time, chronic pyelonephritis and then, chronic kidney disease.

Methods: We conducted a study on 30 patients aged 20-70 years old, diagnosed with cauda equine syndrome, with repeated anamnestic acute pyelonephritis episodes. They were not in

an acute episode when hospitalized in our clinic, they needed catheters a demeure and underwent a specific physical medicine therapy (medium frequency current applied lombo-suprapubian with variable intensity between 0-100Hz, 20 minutes/day, 20 days) and general bath with sapropelic Techirghiol mud (at 37 Celsius degrees, 20 minutes/day, 20 days), twice during a year.

Results: The recurrence of acute pyelonephritis episodes was significantly lower (p= 0.0001) after this balneo-physical treatment compared to the period before hospitalization for 65% of the patients of the study. There were no statistical significance depending on the gender of the patients of the study, but it was important the age of the patients (better results for 20-50 years old comparing with 50-70 years, p=0.0001).

Conclusions: The use of physical medicine and balneotherapy methods in cauda equine syndrome with neurogenic bladder seems to be useful in reducing the number of acute pyelonephritis episodes, especially for patients younger than 50 years old and could be apply as an alternative treatment to help preventing chronic pyelonephritis and chronic kidney diseases.

(102) Epidemiologic study regarding the aseptic osteonecrosis of femoral head in rheumatoid arthritis patients

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Objectives: The aseptic osteonecrosis of the femoral head (AOFH) is a very severe disease due to the rapid damage of the cartilage and the bone architecture, with major disability and decrease of the quality of life for the affected patients. There are a lot of incriminated risk factors related with the appearance of this disease; we studied the relations between AOFH and rheumatoid arthritis (RA).

Methods: We conducted a retrospective study on 365 patients diagnosed with RA between 2012-2015 (based on ACR 1987 or ACR EULAR 2010 criteria), divided in two groups: a group A with patients with AR and confirmed with AOFH on IRM examination and a group B with patients with AR and no AOFH. The statistical analysis was based on SPSS 20.0 and we studied the relationship and risk factors between AR and AOFH.

Results: The results respect the existing epidemiological data available from international studies – the demographic distribution, age of diagnosis moment, gender. There were no significant differences between the two groups, with statistic association for initial onset of the disease, total dose of corticoids and blood sedimentation rate (BSR).

Conclusions: There were 24 cases with AOFH (6.58%) diagnosed at AR patients. The treatment with corticoids was not statistically associated with AOHF appearance; the logic statistic regression of significant data demonstrated that the only association as a risk factor for AOHF in AR patients are the young age at the onset of AR and the high levels of BSR.

(106) Rare cause of pulmonary hypertension due to proximal pulmonary artery obstruction – case presentation

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Objectives: Chronic pulmonary embolism is a possible cause of pulmonary hypertension treatable with long term anticoagulation. Severe cases with unfavorable evolution and proximal location may benefit from thromboendarterectomy. Although the diagnosis is often made radiologically, there are several rare etiologies, as in this case.

Methods: A 63-year-old male patient is admitted to the "Marius Nasta" National Pneumophtisiology Institute with dyspnea on moderate exertion and repeated episodes of hemoptysis. The patient had a history of tuberculosis, deep vein thrombosis and recurring pulmonary embolism and was under treatment with oral anticoagulants. The patient had previously undergone two contrast enhanced thoracic CT (CETCT) scans

which showed a lacunar image indicative of a thrombus at the bifurcation of the pulmonary arterial trunk. Upon admission, the physical examination is normal and the INR is within the therapeutic range. Echocardiography suggests pulmonary hypertension (PAPs = 65 mmHg) and reveals signs of right heart decompensation and a hyperechogenic structure at the bifurcation of the pulmonary arterial trunk. The patient is transferred to the "C.C.Iliescu" Institute of Cardiovascular Diseases for right cardiac catheterization and coronary angiography. Pulmonary hypertension is confirmed (PAPm = 34 mmHg). Given the proximal location of the lesion and apparent failure of anticoagulation treatment, thromboendarterectomy is performed. Infiltrative masses are extracted from both pulmonary arteries. Pathological examination and Immunohistochemistry establish the diagnosis of leiomyosarcoma. After 2 months, a CT scan reveals pulmonary nodules and mediastinal adenopathies. The patient begins polychemotherapy. After 3 months a follow-up CT shows a macronodular lesion in the left upper lobe. Bronchial aspiration reveals acid-fast bacilli and directly observed therapy is initiated. The evolution is unfavorable and a cerebral CT scan reveals a solitary metastasis. Exitus occurs after 3 months.

Conclusions: This case is noteworthy due to the non-embolic cause of pulmonary hypertension and the unusual location of the leiomyosarcoma, which usually occurs in the inferior vena cava. Lack of resolution in the setting of correct antithrombotic therapy was an initial clue. Clinicians should be aware that the differential diagnosis of lacunar images on CETCT also includes malignant etiologies and should refer patients to a specialized center for further investigation.

(107) Asymptomatic multiple vascular occlusion in a patient with false anaphylactic shock

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Objectives: Anaphylactic shock or anaphylaxis is an immediate type of allergic reaction that are threatening the life of the affected person.

Methods: We report a case of a 61 years old male patient, smoker, with a history of ischemic heart disease and LBBB, who came to the emergency room for generalized erythema, accompanied by itching, swelling lips and eyelids, occurred several hours after oral ingestion of NSAIDs for thoracic trauma.

Results: Clinical examination revealed: generalized rash, scratching injuries in legs, swelling lips and eyelids, dyspnea, aortic systolic murmur, absent peripheral pulse in the arms, BP 60/30 mm Hg, 100 bpm. Blood tests: inflammatory syndrome, serum glucose 117 mg/dL, creatinine 1.3 mg/dL, blood urea nitrogen 51 mg/dL. Clinical diagnosis was anaphylaxis, allergy to NSAIDs, ischemic heart disease, LBBB, chronic heart failure. The patient was admitted in internal medicine department of an emergency hospital. At admission: BP 60/30 mm Hg in upper limbs, 140 mmHg in lower limbs. ECG: sinus rhythm, 100 bpm, LBBB. Transthoracic echocardiography: hypertrophy of the left ventricle, LV diastolic dysfunction type I. Cervical Doppler ultrasound reveals occlusion of the left and right subclavian arteries and left commune carotid artery. Thoracic and cervical CT confirmed the diagnosis. Arteriography: 50% stenosis of the left anterior descending artery, 80% stenosis at origin of circumflex artery, and 90% stenosis at the origin of marginal branch 1. Right coronary was dominant, with occlusion in the segment II, and recharged by terminal branches. Occlusion of the right subclavian at origin, recharged in the medium segment. Right vertebral artery occlusion. 75% stenosis of the right internal carotid artery. Left common carotid artery occlusion after origin, recharged by highly developed collateral branches. Left subclavian artery occlusion at origin, recharged in the medium segment.

Cutaneous allergic signs in a patient with no prior history of allergy have coincided with asymptomatic severe vascular disease. This led to a false clinical diagnosis of anaphylactic shock.

Conclusions: Detailed clinical examination raised the suspicion of a vascular disease in a patient with typical symptoms of anaphylaxis. Ultrasound is a gold standard investigation for the differential diagnoses into the emergency room.

(108) The role of imaging in stroke differential diagnosis: mimics and pitfalls

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Objectives: To present typical and atypical clinical and imaging features encountered in stroke. To discuss and illustrate the CT and MRI technics used to diagnose ischemic and hemorrhagic stroke. To list, comment and illustrate the principals chameleonic non vascular conditions which can mimics stroke.

Methods: Retrospective study of 6720 patients aged from 2 to 83 years old with sudden onset of a focal neurologic deficit, explored by CT (nonenhancing CT and in particular cases also with iodinated nonionic contrast iv injection) and /or MRI (T2, Flair, diffusion and ADC map, SWI, T1, 3D TOF or 3D PC to evaluate Willis polygon arteries, and in particular cases 3D T1 EG pre-/ post Gd acquisition) in Fundeni Clinical Institute in the last 5 years.

Results: Besides ischemic and hemorrhagic true stroke (52.5 of cases) we have found 4 principals categories in which the clinical presentation mimicked a stroke (17% of cases): unrecognized seizures with postictal deficits; systemic infections; brain tumors; toxic-metabolic disturbances. More rare entities were involved: migraine, trauma, subdural hematoma, multiple sclerosis, positional vertigo, syncope (3.5% of cases). In about 27% of cases the CT and/or MRI brain evaluation did not reveal any acute ischemic or hemorrhagic lesions.

Conclusions: The diagnosis of acute stroke remains a clinical diagnosis in the initial phase of patients, particular in patients with with cerebrovascular risk factors. There is a differential diagnostic process between real stroke and pseudostroke. The neuroimaging methods starting with nonenhancing CT scanning and than/or with MRI permit the delineation between the true stroke and chameleonic stroke conditions.

(109) Atraumatic rupture of a noncoronary sinus of valsalva aneurysm into the right atrium

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Objectives: Sinus of Valsalva aneurysm (SVA) is a rare congenital or acquired condition. Unruptured aneurysms are mostly discovered fortuitously, being completely asymptomatic. Others present with mild symptoms due to compression of adjacent structures in the heart, whereas a ruptured SVA usually leads to progressively worsening heart failure due to acute volume and pressure overload.

Methods: We report the case of a 35 year-old woman with no history of cardiovascular disease, who addressed to our clinic with progressive dyspnea on exertion, cough and worsening swelling of the lower limbs. She had partial thyroidectomy for follicular thyroid carcinoma in 2014 and radioactive iodine therapy 6 months prior to admission. No chest trauma was reported.

On physical examination, she was intolerant to supine position and had striking peripheral edema, with normal BP and a HR of 110 bpm. She had no vesicular breath sounds in the base of the right lung, and the heart sounds were masked by a 6/6 continuous machinery murmur best heard at the left sternal border. The laboratory data and the ECG were unremarkable, except for sinus tachycardia. However, initial chest X-ray revealed right pleural effusion.

TTE showed dilation of the right cavities and left atrium, secondary pulmonary hypertension, preserved systolic function of both ventricles and mild pericardial effusion. A large aneurysm of the noncoronary sinus of Valsalva was seen protruding into the right atrium. TEE was immediately performed and confirmed the ruptured aneurysm sized 28/17 mm, with continuous flow towards the right atrium above the septal tricuspid foil, with a peak systolic gradient of 60 mmHg. Angiography revealed normal epicardial coronary arteries.

Results: High-dose diuretic therapy was initiated during hospitalization, with significant improvement of symptoms and congestion and cvasicomplete remission of pleural effusion.

Our patient underwent surgical intervention with successful excision of the aneurysmal pouch and closure of the aortocardiac fistula.

Conclusions: This is a rare case of ruptured noncoronary SVA which was diagnosed in time and treated successfully by surgical means. Atraumatic rupture of the SVA is uncommon. TEE plays a major role in the diagnosis. Surgical intervention is the definitive cure for this anomaly.

(110) New genetic diagnostic tests in microcephaly

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Objectives: New genetic tests as array CGH (comparative genomic hybridization) increased continuously the knowledge concerning the underline causes of genetic syndromes. Because this method could identify submicroscopic genomic imbalances, we demonstrate efficacy of this test for accurate diagnosis in a case with microcephaly.

Methods: Conventional karyotype from peripheral blood revealed a 12p terminal deletion. Discrepancies between clinical findings and karyotype results required additional investigation using comparative genomic hybridization method.

Results: Array CGH revealed a 5Mb terminal deletion on the long arm of chromosome 10, result that matches with the clinical findings of our patient. The molecular result was verified by FISH analysis. This finding is consistent with a complex chromosomal rearrangement involving insertion of genetic material from chromosome 12p to chromosome 10 and consequent deletion of terminal region on the long arm of chromosome 10.

Parental karyotypes are normal, suggestive of a "*de novo*" rearrangement and consequence low recurrence risk for other siblings.

Conclusions: This case report illustrates the importance of considering genotype-phenotype correlation for each patient and the advantages and the limits of genetic diagnostic techniques in our practice.

In conclusion, clinical judgment complementary to genetic tests provides an accurate diagnosis, prognosis and recurrence risk evaluation

(115) Acute axonal sensoriomotor polyneuropathy in SLE hemodialyzed patient – case presentation

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Background: Systemic lupus erythematosus (SLE) is an autoimmune disease. SLE is most common in women between 20 and 40 years. Lupus nephritis, one of the most serious manifestations of SLE, usually arises within 5 years of diagnosis. Approximately 10 to 30 percent of patients with proliferative lupus nephritis progress to end-stage renal disease (ESRD) and needs dialysis. Acute axonal sensoriomotor polyneuropathy is not common associated with SLE, even when the sistemic disease is active. Moreover, after a patient starts dialysis, SLE activity is much attenuated.

Methods: A female 48 years old was diagnosed with SLE in 2002, and treated with Medrol and Plaquenil, complicated with aseptic necrosis of the bilateral femoral neck and treated total hip arthroplasty treated in 2004. In 2007 was start haemodialysis (spurt severe lupus nephritis, intolerant to treatment with Cyclophosphamide, antiphospholipidic syndrome - deep left leg thrombosis and left cilioretinal artery and secondary hypertension). In 2014 was associated monoclonal gammopathy in the context of persistent hypercalcemia (multiple myeloma was denied, although the patient refused bone marrow biopsy).

An extreme asthenia, important pain and muscle weakness, initial motor deficit of the lower limbs followed then by the upper limbs and right peripheral facial paresis (paresis of a frigore) appeared in Jan 2016. These symptoms were initially interpretated as a spurt of SLE activity (IgG, C3, ANA, Antibodies DNAds positive), being mycophenolate and methylprednisolone therapy recommanded.

The patient was referred to the Neurology Clinic, where acute axonal sensorimotor polyneuropathy was diagnosed. ENG/EMG (acute demyelinating polyneuropathy, motor amplitudes reduced by driving blocks distale), albumin-cytologyc dissociation of the cerebrospinal fluid (LCR) sustained acute polyradiculoneuritis. CT (native brain) showed no evidence of space-occupying processes. A right femoral central venous catheter vein was inserted and 5 plasmapheresis sessions were conducted with improvement of symptoms.

Conclusions: The first particularity of the case is the sustaining of SLE activity in HD patient. Usually, after start dialysis autoimmune systemic disease shows no activity (immune deficiency status).

The second feature of the case is the association of acut axonal sensorimotor polyneuropathy with SLE, whose causal relationship has not been definitely established.

(119) Troponin level and outcome in acute heart failure

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Cardiac troponin provides diagnostic and prognostic information in acute coronary syndromes, but its role in acute decompensate heart failure is unclear.

Objectives: The purpose of our study was to describe the association between elevated cardiac troponin levels and adverse events in hospitalized patients with acute decompensate heart failure.

Methods: We examined 242 consecutive patients with acute decompensate heart failure, hospitalized in our clinic between 01.01.2015 - 01.07.2015. Entry criteria included a troponin level that was obtained at the time of hospitalization (for decompensated heart failure) in patients without acute coronary syndrome and with a serum creatinine level of less than 2.0 mg/dl (177 μmol per liter). A positive troponin test was defined as a cardiac troponin I level of 0.1 ng/ml or higher. Were used to compare Student t test and chi square and P values <0.05 were considered significant.

Results: Troponin I was measured at the time of admission in all of 242 patients who were hospitalized for acute decompensate heart failure. Of these patients, 206 (85.12%) had a creatinine level of less than 2.0 mg/dl. From these (with serum creatinine bellow 2.0 mg/dl), 47 patients (22.81%) were positive for troponin. Patients who were positive for troponin had higher 30 days mortality (10.63% vs. 3.14%, P<0.001) than those who were negative for troponin. Also, these patients (with elevated troponin) had lower systolic blood pressure on admission and a lower ejection fraction than those with normal troponin.

Conclusions: In patients with acute decompensate heart failure, a positive cardiac troponin test at admission is associated with higher short term mortality and worse outcome. Thus, a parameter easily determinable (troponin I) can be used in the initial evaluation of severity of acute heart failure and to select the best management for this.

(120) Fujinon thin caliber endoscope in daily practice: uses for therapeutic application based on the review of 600 cases

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Objective: Thin caliber endoscopes are versatile and useful in various conditions. However, only limited data exist on the actual daily clinical use of such scopes especially in therapeutic purposes. The aim of our study was to present our experience using the Fujinon thin caliber scope.

This scope was used with the support of Sofmedica Romania that provided the equipement.

Methods: We performed a six months retrospective analysis of our database of procedures with 600 endoscopies in 567 patients. All procedures were carried out in the University Hospital Bucharest, between August 2015 and March 2016. In these procedures, the Fujinon (Tokyo, Japan) EG-530 endscope was used and the Fujinon 4450 processor.

Results: Mean (standard deviation [SD]) age of patients was 60 (20) years, and most (56%) of the patients were men. Contrarily to most studies with small calibers scopes we used the endoscope for all the procedures diagnostic and therapeutic performed in our unit and not only for the esophageal conditions. Of the procedures performed, 42% were therapeutic. Hemostasis with needle

injection, clips, polipectomies, PEG-gastrostomies, esophageal stenting, dilations were performed.

In comparison with regular endoscopes, the most important advantage of the small caliber scope was the ability to pass esophageal stenosis and placement of percutaneous endoscopic gastrostomy (PEG), stents for esophageal tumors and even inspection of ileal and colonic stenosis (post surgery or in Crohn's disease). Routine use for the clipping, injections and even band ligation (using some adhesive band to stabilize the barrel on the tip of the scope) was facile.

Conclusions: In everyday clinical practice, the Fujinon small caliber scope has specific advantages over conventional endoscopes because of its small caliber. The main advantages are introduction of high-grade strictures; introduction of fistulas, including PEG fistula; and increased patient comfort.

The endoscopist should appreciate these advantages and consider use of the small caliber scope accordingly.

(121) The role of capsule endoscopy in obscure GI bleeding: experience of a tertiary center in Romania

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Objective: Obscure gastrointestinal bleeding OGIB represents about 5% of the digestive hemorrhages. The introduction of the endoscopic videocapsule in the current clinical practice caused a major change in the diagnostic and treatment paradigm of these patients.

Aim: In Romania capsule endoscopy is not reimbursed and although available in many centers is not an investigation readily accessible in all patients. Also, device assisted enteroscopy is performed in few centers only. We present a series of forty patients with obscure GI bleeding and the role of capsule endoscopy in their diagnosis, treatment decision and follow up.

Methods: This is a retrospective, single center study. Examinations were performed using second and third generation small bowel capsules SB2/SB3 and the second generation of colon capsule PillCam Colon 2. The choice of capsule was arbitrary decided by their availability in the unit at the moment of the examination.

Results: The source of bleeding was identified in 33 patients (83% of the cases). The most frequent lesions were angiomas in 14 patients, small bowel Crohn's disease in 9 cases and NSAID's enteropathy in 4 cases. Endoscopic therapeutic procedures were used in five patients, three undergone surgery, medical treatment was initiated in 11 patients, gluten free diet in one, and discontinuation of NSAID's in three.

Conclusion: Capsule endoscopy was useful in the diagnostic and the therapeutic decision in the majority of cases. Angiomas, ileal Crohn's disease and NSAID enteropathy were the main causes for obscure bleeding. Due to capsule endoscopy examination costs, a careful and complete exploration of the patients with routine ileoscopy before capsule is advisable.

(123) Capsule endoscopy in young patients with iron deficiency anaemia

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Background: The diagnostic yield (DY) of small bowel capsule endoscopy (SBCE) is increased in older patients but some recent data imply that patients ≤50 years are at higher risk of sinister SB pathology. Our centre was a part of the Capsule Endoscopy in Young IDA Patients research group(19 European centres) with the goal to investigate the DY of SBCE in a large cohort of young patients with iron deficiency anaemia (IDA), and (b) factors associated with neoplastic pathology in this patient cohort.

Methods: We provided retrospective data of 27 patients ≤50 years undergoing SBCE for IDA between January 2011 and January 2015. Exclusion criteria: overt-obscure gastrointestinal (GI) bleeding (ongoing or previous); age >50 or <19 years; comorbidities associated with IDA e.g. inflammatory bowel disease (IBD), coeliac disease. For each patient, data regarding age, gender, indication for SBCE, investigations prior to SBCE [haemoglobin (Hb), mean corpuscular volume (MCV), ferritin, faecal calprotectin(FC) levels, imaging, upper and/or lower GI endoscopies, biopsies and/or coeliac serology], medications

(NSAIDs, antiplatelets, warfarin/heparin), SBCE findings and final diagnosis were recorded.

Results: Patients were grouped according to final diagnosis into the following groups: neoplastic pathology (1/27); non-neoplastic, albeit clinically significant, findings (13/27); normal or non-clinically significant findings (13/27).

Conclusion: In our patients ≤50 years old with IDA, the overall DY of SBCE (for significant findings) is 51.8%. However, our results were more promising that those of the study group were the DY was 32,3%. More prospective studies with a larger sample of patients with this pathology are required.

(124) Pituitary macroadenoma following diabetes insipidus onset decades apart – case presentation

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Objectives: Pituitary adenomas are the most common etiology of sellar masses and they usually present with neurologic symptoms, hormonal abnormalities or are found incidentally on magnetic resonance imaging (MRI). The tumors can arise from any type of cell of the anterior pituitary and may result in increased secretion of the hormone(s) produced by that cell and/or decreased secretion of other hormones due to compression of other cell types.Central diabetes insipidus is a pathology often idiophatic, but it can also occur in cases of pituitary tumors compressing the pituitary stalk.

Methods: We describe the case of a 53 years old male patient diagnosed with central diabetes insipidus at the age of 3, who developed a GH secreting pituitary macroadenoma in 2010. The patient had acromegaly symptoms since 2009 and an MRI scan performed in 2010 showed a pituitary macroadenoma (10/8.6/7.8 mm) located on the right half of the gland. The hormonal profile showed elevated levels of IGF1= 169.4 nmol/L (12.2-32.8) and GH=0.25 mUI/l (0.15-2.4). The patient received medical treatment with Sandostatin and was scheduled for surgery.

Results: Transsphenoidal adenomectomy was performed. After surgery IGF 1 and GH levels normalized, but the patient developed secondary adrenal insufficiency and hypogonadotropic hypogonadism, thus he received replacement treatment with Prednison 5 mg daily and testosterone treatment (Nebido 1000 mg/4 ml, one vial every 12 weeks).

Conclusions: Central diabetes insipidus is a well-known complication of pituitary tumors or surgical treatment of pituitary gland. In this case though, the patient had developed an idiophatic central diabetes insipidus in his childhood and the secreting pituitary adenoma decades after, so there is no link between the two pathologies. The patient presented postoperative complications (pituitary insufficiency) that require long term hormonal replacement therapy and medical follow-up.

(131) Management of pulmonary hypertension in a patient with rheumatoid arthritis – case report

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Objective: Pulmonary hypertension (PH) is an uncommon complication of rheumatoid arthritis (RA), usually in the setting of parenchymal lung involvement or like isolated pulmonary hypertension.

Methods: We present a case of 61-year-old female, diagnosed with RA, without history of cardiovascular diseases, admitted for dyspnoea. Transthoracic echocardiography detected right cavities dilatation with right ventricle free wall hypertrophy and mild right ventricular longitudinal systolic dysfunction. Based on moderate tricuspid regurgitation we estimated a value of 103 mmHg for PAPs. Ventilation/perfusion lung scan showed multiple bilateral hypoperfusion areas, predominantly right and pulmonary CT angiography detected parietal thrombosis of right lobar pulmonary arterial branches and dilatation of the pulmonary artery. Compression venous ultrasonography did not identify signs of deep vein

thrombosis and thrombophilia tests were negative. The cardiac catheterization confirmed the presence of precapillary PH with increased pulmonary vascular resistance (582 dynes/cm5) and the pulmonary arteriography revealed right pulmonary artery thrombosis with the lower and middle lobar branches amputation.

In the presence of thromboembolic PH even without affected main branches, but with increased pulmonary vascular resistance in a patient with NYHA functional class III, without major comorbidities, pulmonary endarterectomy was performed. After surgery, persistent PH was detected and was initiated sildenafil with favorable hemodynamic and clinical evolution.

Results: Patients with RA have high levels of TNFα and homocysteine, that favors thrombotic events, including thromboembolic PH. Despite apparently successful pulmonary endarterectomy, some patients may have persistent PH. The most probable cause is concomitant small-vessel arteriopathy, which was favored in our case by proinflammatory status of RA. Treatment with PAH-approved drugs is recommended for patients with persistent PH after surgery, as well as for technically non-operable patients or in the presence of an unacceptable surgical risk: benefit ratio.

Conclusions: Pulmonary endarterectomy should be recommended to all eligible patients with thromboembolic PH. Correct diagnosis (by cumulating clinical data with imaging and invasive evaluation) to differentiate thromboembolic PH from other types of PH is particularly important.

(135) Assessment of advanced therapy in Parkinson disease

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Objective: Parkinson's disease (PD) is one of the most common neurodegenerative diseases, and currently, thanks to advances made by medical research, patients benefit from a variety of the latest generation therapies. This paper addresses the therapy with levodopa / carbidopa intestinal gel.

Methods: we performed a retrospective cohort study of 20 patients with PD (12 men and 8 women) who were hospitalized during 2012-2015, treated with levodopa / carbidopa intestinal gel. We analyzed demographic, clinical and laboratory data of the subjects and also those related to the therapy.

Results: The average age of patients was 68.05 years and the mean duration of the evolution of the disease before the therapy with intestinal gel was initiated was 10.55 years, so forms of the disease with onset before the age of 65 years.

The maximum dose in the continuous infusion of levodopa was on average 1500mg / day (excluding morning dose and possible overdose).

Initiation of this treatment was due to the occurrence of motor complications.

In terms of increased incidence of comorbidities we noticed anxious depressive disorders.

Therapy complications studied were persistent occurrence of dyskinesias and psychiatric disorders with hallucinations, thought disorder and psychomotor agitation type delusional interpretations.

Local level stoma complications were encountered in 10% and could be quickly resolved without causing abandoning treatment.

Conclusions: The therapy was generally well tolerated and patients reported improved quality of life, improving functionality, disposition, and relationships with tutors.

(140) Hairy cell leukemia: favorable and unfavorable prognostic factors

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Objectives: Hairy cell leukemia (HCL) represents a chronic, malignant, lymphoproliferative disorder characterised by splenomegaly, pancytopenia and neutropenia. Through electronic or phase contrast microscopy, in the peripheral blood or red bone marrow, hairy cells, peculiar B-lymphocytes of the spleen or red bone marrow which can enter the bloodstream, can be observed. We aim to record the therapeutic results and prognostic factors for a favourable evolution of the disease and the factors which favour an adverse evolution.

Methods: We conducted a retrospective study on 16 patients with HCL in the Clinic of Hematology from Craiova in between 2009 and 2013. We analysed the global response rate to specific therapy, mean rate of survival based on therapy and the disease free interval based on the

observation sheets, histopathological bulletins, immunohistochemistry results and therapeutic protocols. The patients were divided into groups based on age, sex, clinical types of disease. We recorded the therapeutic effects, complications, relapses, prognostic factors which influenced the therapeutic response. The patients were treated with interferon (IFN) alpha-2 (3 x 106 international units x 3 / week). The results were statistically analysed using the Kaplan Mayer method.

Results and conclusions: 68.75% of the patients responded to therapy: 31.25% complete response, 12.5% partial response and 25% stable disease. The complete response appeared after the first three months of therapy and lasted for 3-5 years. The main adverse effects of therapy have been weight loss, depression, flu-like syndrome. After therapy, the favourable prognostic factors were a decrease registered in the need of blood transfusion (63%), the number of hairy cells in the bone marrow/peripheral blood (55%), the incidence of infections (72%), and an increase in the number of thrombocytes (64%), leukocytes (61%), hemoglobin value (84%) and polymorphonuclear cells (55%). Unfavourable prognostic factors were the presence of ascites, abdominal adenopathies, opportunistic infections with Mycobacterium or Gram-negative bacteria, the coexistence of autoimmune hemolytic anemia, the development of a secondary neoplasm. Treatment with IFN alpha-2 was useful in 27% of the patients previously treated through other therapies.

(141) Prolonged febrile syndrome caused by tuberculosis of the hematopoietic organs in a patient with refractory anemia with excess blasts, autoimmune hemolytic anemia and polyserositis

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Objectives: Refractory anemia with excess blasts (RAEB) is a myelodysplastic syndrome in which the percentage of blasts in the bone marrow ranges from 5% to 19%. We aim to report the case of a patient with RAEB-II with febrile episodes that alternated with hypothermia.

Methods: The patient was admitted to the Clinic of Hematology from Craiova, Romania, for pallor, fever (39.50 C), hydrosis, type II malnutrition, several bruises on the legs, liver edge palpated 2 cm from the costal margin, impalpable spleen. Diagnostic tests revealed RAEB-II, autoimmune hemolytic anemia (AIHA) and polyserositis.

Results and conclusions: Bone marrow smear revealed megaloblasts and giant erythroblasts. All tests depicting a suprainfection with fungi were negative. The tomography of the thorax uncovered retrosternal and paratracheal adenopathies with central necrosis. The patient developed thermoregulatory disorders, followed by a confusional state. The MRI scan showed demyelination of the subcortical white matter. Despite treatment with antibiotics (Cefort + Gentamicine, then Meropenem + Vancomycin) combined with Exjade therapy, the disease evolved unfavorably. The specific therapy was with cytarabine in mini-doses and dexamethasone. The patient remained febrile, in spite of antiviral and antifungal treatment. After two months, the CT scan revealed adenopathies in the mediastinum. The analysis of saliva, pleural and ascitic fluid eventually highlighted infection with Mycobacterium tuberculosis, confirming the diagnosis of polyserositis, in addition to RAEB-II and AIHA.

Despite antitubercular treatment with a scheme of four different drugs (Isoniazid 300 mg, RMP 450 mg, Pyrazinamide 1250 mg, Ethambutol 1800 mg), the patient continued to be febrile and pancytopenic (RAEB-II treated with Cytosar). The evolution and prognosis remained reserved. The case peculiarity is that tuberculosis of the hematopoietic organs was correlated with pancytopenia and did not have a leukemoid origin due to an association with RAEB-II.

(146) The importance of unified comprehensive BRCA databases in next generation sequencing clinical interpretation

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Background: BRCA1 and BRCA2 gene mutations account for 20-25% of hereditary breast cancers and about 5-10% of all breast cancers. In addition, mutations in these genes account for about 15% of all ovarian cancers. The BRCA1 and BRCA2 have been the most studied and reported genes in the human genome over the past decades.

Objective: The using of cutting-edge genetic analysis technologies imposes the existance of large comprehensive genomic databases for an accurate clinical interpretation. At the same time, these modern diagnostic techniques lead to the identification of novel variants with unknown or controversial clinical significance which raise great challenges for the clinicians in the analysis.

Methods: A review of the main BRCA databases (1000 genomes, ClinVar, NCBI, SNPedia, PharmGKB, OMIM, COSMIC, UCSC Genome Browser, BioGPS, etc.) and professional workgroups' guidelines and recommendations has been performed for a comprehensive outline of the current knowledge on BRCA variants associated with hereditary breast and ovarian cancer. Different classification categories proposed by leading national and international professional societies have been taken into consideration.

Results: By analyzing the above-mentioned databases and variant classes we observed slight differencies between the variant clinical correlation classification criteria, number of classes and especially terminology used to define these classes. These discrepancies tend to produce confusion when in terms of analysis and clinical interpretation, some variants with uncertain significance being extremely difficult to categorize, with consequences in managing the patients.

Conclusions: In conclusion, establishing a unified BRCA database would be of great value in the assessment of the multitude of data provided by modern genetic technology. The existance of a large database containing all the current BRCA knowledge would not only help physicians in accurately interpreting the implications of these variants in cancer etiopathogeny, but would also lead to the correct identification of novel pathogenic variants.

(147) Utility of array Comparative Genomic Hybridization (ACGH) in the accurate evaluation of patients with unspecific dysmorphic features and multiple congenital abnormalities

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Background: The array comparative genomice hybridization technique (aCGH, molecular karyotype) has become one of the most important diagnostic tools in identifying genomic abnormalities associated with developmental disabilities (congenital malformations, cognitive impairment and behavioral disorders, microdeletion and microduplication syndromes).

Objective: The purpose of this presentation is to describe the optimal medical genetics evaluation and diagnosis of the child with intellectual disability and global developmental delay.

Method: Study group consists of 8 children with epileptic enephalopathy, hypotonia, psychomotor impairment, different forms of epilepsy, microcephaly, intellectual disability.

Constitutional karyotyping has been performed in all the cases with normal findings.

The next diagnostic step in the management of the patients has been the molecular karyotype (aCGH) on an Agilent platform using SurePrint G3 CGH ISCA v2 Microarray, 8X60K. Data analysis and clinical interpretation have been completed using the Agilent CytoGenomics 3.0.2.11 Software, ADM-2 algoritm.

Results: The results revealed pathogenic variants in 4 cases:

Microduplications with pathogenic significance (correlated with the clinical indications) - 2 cases: 1p36.32; 8p23.1.

Microdeletions with pathogenic significance (correlated with the clinical indications) - 2 cases: 14q31.1; 1p36.33-p36.23.

Microdeletions and microduplications with benign or uncertain significance (according to current genetics knowledge) - 4 cases.

Conclusions: Although array-CGH is currently being used as a complementary test to standard cytogenetic techniques, it is likely to become the genetic test of choice, especially in cases of idiopathic developmental delays, epilepsy, multiple congenital anomalies microdeletion and microduplication syndromes.

(149) Cerebral venous thrombosis – a rare complication of nephrotic syndrome

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Objective: Nephrotic syndrome is associated with a hypercoagulable state and an increased risk of thromboembolic complications. Cerebral venous sinus thrombosis is a rare complication of the nephrotic syndrome, with few cases described in the literature, although the disease may be underdiagnosed. The true incidence of cerebral venous sinus thrombosis may be underestimated because many events are asymptomatic or are not diagnosed in time.

Here, we describe the case of a female child, 6 years old, presenting with nephrotic syndrome, who complained of serious headache during hospitalization.

Methods: A 6 year old pacient is hospitalized in our clinic with: eyelid edema for the past 3 days, cough and seromucous rhinorrhea in the context of a viral infection suggested by the respiratory symptoms of both parents.

Clinical examination reveals eyelid and peripheral edema. Laboratory investigations show nonspecific inflammatory syndrome, severe proteinuria, hypercholesterolemia, hypertriglyceridemia, hypoproteinemia with hypoalbuminemia and hyper-alpha-2-globulinemia.

In the 10th day of admission, the patient complains of intense frontal headache and photophobia. These symptoms persisted over the next 4 days, so a cerebral MRI with contrast agent was performed showing thrombosis of the right transverse and sigmoid venous sinus. The diagnosis is supported by elevated D-dimer values and by the altered coagulogram.

Nephrotic syndrome was resolved during hospitalization with diuretic and corticosteroid treatment. For the thrombotic complications, the patient is receiving anticoagulant therapy.

Conclusions: The particularity of the case lies in the possibility of existence of a viral infection as a trigger of the nephrotic syndrome, the mother being confirmed with AH1N1 influenza type in PCR examination, as well as the the occurence of venous sinus thrombosis as a complication of this syndrome. The diagnosis of the venous sinus thrombosis should be considered in patients with nephrotic syndrome and neurological symptoms, as early diagnosis is correlated with favorable results.

(152) Benefits of beta blockers in patients with chronic heart failure

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Heart failure has a growing prevalence in the world, approximately 1-2% of the adult population in developed countries and over 10% among persons of 70 years or older.

Objectives: To summarise evidence about treatment with beta-blockers in heart failure with reduced ejection fraction.

Method: Our review is based on the data collected from three clinical trials: The Cardiac Insufficiency Bisoprolol Study II (CIBIS-II), Effect of carvedilol on the morbidity of patients with severe chronic heart failure: results of the carvedilol prospective randomized cumulative survival (COPERNICUS) study and Effect of metoprolol CR/XL in chronic heart failure: Metoprolol CR/XL Randomised Intervention Trial in Congestive Heart Failure (MERIT-HF).

Results: Patients with II–IV NYHA heart failure, already receiving appropriate medical thera-

py, including diuretics, angiotensin converting enzyme inhibitor (ACE inhibitor) or angiotensin II receptor blocker (ARB), nitrates and digitals, started Bisoprolol 1.25mg daily, progressively increased to the target dose of 10 mg per day (CIBIS-II) showing 11.8% decrease in mortality and 3.6% reduction in suden cardiac death. Treatment with carvedilol 3.125 mg per day, gradually rising to 25 mg daily (COPERNICUS) demonstrated reduced risk of death and 27% reduce in hospitalisation. Patients treated with Metoprolol 25 mg per day up-scaled to the target dose of 200 mg daily (MERIT-HF) had 7.2% lower all-cause mortility and 11%, decrease in sudden cardiac death.

Conclusion: All data concluded that beta-blockers are well tolerated and have a beneficial effect on patients with II-IV NYHA heart failure reducing hospitalization, morbidity and mortality.

(158) *In vitro* fertilization: maternal side effects and risks

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Objectives: We want to discover all the risks that a future mother assumes when she decides to get birth to a baby using *in vitro* fertilization. Of course in vitro fertilization has a lot of benefits, but how many comparing to all the risks? Our primary concern was to answer to this question.

Method: We studied the articles and the latest research appeared in the international publications.

Results: The maternal risks determined by in vitro fertilization procedure know a wide range of symptoms which can lead to further severe complications. Firstly, the hormonal treatment used for follicle stimulation represents the etiology of ovarian hyperstimulation syndrome (OHSS). Moreover, the frequency of ectopic or multiple pregnancies, spontaneous abortion or premature birth in the first trimester of parturation is relatively high (12-20%). There is also a concern about the emotional implications involved in the in vitro fertilization method. The medical society emphasizes not only the clinical problems but also they give value to the psihical issues which can diminish the rate of succes of the procedure. The benefits resulted from in vitro fertilization are clear and they have an important social impact by supporting the idea of family. Understanding this fact, the medical society runs studies in order to minimize or even to eliminate the maternal risks. In this case, it was developed a tehnique of a long term freazing of the embryo which reduces the hormonal treatment complications. Introducing this procedure in all in vitro fertilization cases it is also minimized the risk determined by the age of the mother. Therefore, the viability of the embryo increases.

Conclusion: The latest studies underline the maternal risks after in vitro fertilization and also they show that this tehnique is still developing towards a minimalization of the side efects. Knowing that almost 2% of the babies born every year are the result of in vitro fertilization it is necessarily to society to invest money and effort into human assisted reproduction field.

(159) K-RAS gene status in metastatic colorectac carcinoma patients

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Background: K-ras gene has a major role in the anti-EGFR therapy of metastatic colorectal carcinomas (mCRC). The purpose of this study is to identify possible correlations between the K-ras mutation status and clinical and histopathological findings of patients with mCRC.

Methods: Our study included formalin-fixed paraffin-embedded tissue samples from 256 patients with mCRC, aged between 33 and 79 years old, sex ratio 1,4:1, with different metastatic localizations (liver, pulmonary, ovarian, uterine, lymph nodes, mandibular, muscle, peritoneal and cutaneous metastases). The Ki67 nuclear protein, associated with cellular proliferation, was analyzed 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: K-ras mutations were present in 39 % of the cases, 90 patients with mutations in codon 12 (35%, sex ratio 1.14:1) and 10 patients with mutations in codon 13 (4%, sex ratio 1.5:1). Immunohistochemical expression of Ki67 protein was positive in half of all cases, with values between 1% and 90%. The majority of mCRC were moderately differentiated adenocarcinomas, de-

spite the type of the K-ras gene, wild or mutated, or the mutation position. Compared analysis, including presence and localization of K-ras mutations, the patients' sex and age, localization of primary tumour and metastases, histological tumour grading and the Ki67 protein IHC reaction, did not reach statistical significance.

Conclusions: Finding no important correlations between clinical and histopathological characteristics of patients with mCRC and the mutational status of the K-ras gene demonstrates once more the major role of molecular tests in optimized selection of mCRC patients eligible for anti-EGFR therapy.

(162) The utility of conventional cytogenetics and FISH analysis in the diagnosis of the products of conception

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Approximately 15% of all clinically recognized pregnancies are spontaneously aborted.

With respect to the various possible etiological factors of developmental defects in early abortion specimens, cytogenetic analysis is an important component in the assessment of human malformation in early failed pregnancies.

Objectives: The objective of our study was to determine the frequency of chromosomal abnormalities in miscarriages.

During November 2012 - April 2016, 165 samples were analyzed by conventional cytogenetic methods or FISH (fluorescence in situ hybridization) technique.

Methods: The analyses were performed for early miscarriages or for induced pregnancy termination due to severe fetal ultrasound abnormalities. The samples evaluated were from products of conception between 6 and 23 weeks of pregnancy, in patients aged between 23 and 43 years.

Depending on the biological sample received from the gynecologists, either, chorionic villi, epithelial tissue, amniotic fluid or fetal cord blood was used for analysis. The conventional cytogenetics or the FISH method was successfully achieved in 160 cases. FISH was mainly used for samples who did not meet the preanalytical conditions established by our laboratory.

Of the analyzed cases, 84 (52.5%) had an abnormal karyotype and in 76 cases (47.5%) no structural or numerical chromosomal abnormalities were identified.

Among the abnormal cases we identified: 47 homogeneous autosomal trisomies, 4 mosaic abnormalities, 4 unbalanced structural chromosomal abnormalities, one balanced translocation, 1 case with trisomy and unbalanced structural chromosomal aberration, eight triploidies, two tetraploidies, 13 monosomy X, 2 double autosomal trisomies, one triple trisomy and one clonal chromosomal instability.

Results: The results of our study sustain the importance of cytogenetics analysis for miscarriages. Depending of the results, the recurrence risk for the chromosomal abnormality identified may be estimated. In addition, the results are useful in the counseling of couples who are trying to understand why their pregnancy ended in miscarriage. Genetic counseling is best provided before the next pregnancy, so all options may be explored and appropriate planning may be assured.

(164) Inoperable medullary thyroid carcinoma: a case report

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Objectives: Medical attitude in the case of a 73-year-old female with inoperable MTC, euthyroid status, and an elevated calcitonin value, with nonspecific ultrasound aspect, but with specific scintigraphy aspect and with confirmation of the diagnosis through fine needle aspiration, without apparent metastases.

Methods: We report the case of a 73-year-old woman, hypertensive, cardiac, and recent diagnosis of atrial fibrillation, who addressed our department for thyroid/ anterior cervical level discomfort, breathlessness, fatigability, and weight loss. There was no relevant family history of thy-

roid disease. The patient presented euthyroidism, with elevated ATPO value, and elevated calcitonin value 23.200 pg/ml. Thyroid ultrasound revealed a goitre increased in size along with the presence of a thyroid node at the level of the left lobe, hypoechogenic, inhomogeneous, heavily vascularized of about 2/3 cm, and a second thyroid node at the level of the right lobe, hypoechogenic, inhomogeneous, with peri- and intranodular vascularity, minim adenopates unless 1cm. We performed thyroid scintigraphy, cytopathology examination by fine needle aspiration and a CT scan of the neck, thorax, mediastinum, and abdomen to disclose the thyroid aspect and potential secondary determinations.

Results: From an endocrinology point of view a surgical cure is indicated, but the opinions of both a cardiology and intensive care specialist are to postpone the surgery in order to perform cardiologic reevaluation and stabilize the patient from this perspective. The current indication, given that the tumour is inoperable at this time due to the associated pathology, is according to some studies external cervical radiation. In this context we request oncologic opinion.

Conclusions: We present the case of a 73-year-old female with inoperable MTC, euthyroid status, and an elevated calcitonin value, with nonspecific ultrasound aspect, but with specific scintigraphic aspect and with confirmation of the diagnosis through fine needle aspiration, without apparent metastases. The recommended treatment because of the associated diseases seems to be external local radiation therapy.

(173) Metabolic abnormalities associated with Parkinson disease

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Objectives: The main objective of the study is to identify possible correlations among different metabolic abnormalities and the pathophysiological and clinical characteristics of Parkinson's disease (PD).

Methods: We have studied in a retrospective research, the medical documents of all patients hospitalized with the diagnosis of PD during 2015, in the Neurology Department – University Emergency Hospital Bucharest. We have collected data on clinical stage of PD, motor and non-motor manifestations, the presence of cardiovascular comorbidities, the values of glycaemia, Hb1Ac, lipid profile and other co-morbidities. Statistical correlations among these parameters have been calculated.

Results: We have identified 92 PD patients (59 men, 33 women) between 56 – 73 years-old, among 61 (66.30%) had a severe Hoehn & Yahr stage (4-5), and 51 (55.43%) had significant cognitive deterioration (mild cognitive impairment or dementia); 50 (54.35%) patients had associated HTA. A high incidence of cardiovascular comorbidities and vascular risk factors in patients with PD has been found. The most significant correlation ($p=0.04$) was between the clinical severity of Parkinson's disease and the presence of the biologic inflammatory syndrome.

Conclusions: Our study indicate that there is a significant correlation between the presence of an inflammatory syndrome and the severity of Parkinson's disease, both related to the motor and non-motor signs, including neurocognitive impairment and to the presence of cardiovascular comorbidities. In a further study, we shall look if the level of vitamin D also correlates with these abnormalities, given the recent scientific data indicating low vitamin D level as a risk factor associated with PD, and also a possible correlation between the low level of vitamin D and microglial hyperactivity. These results could imply the need to extend the therapeutic protocols for PD patients, for a specific CNS anti-inflammatory strategy in parallel with the treatment of the potential peripheral causes of inflammation.

(174) A case of metatypical carcinoma in a patient without evident risk factors

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Objectives: Metatypical carcinoma (MTC), also known as basosquamous carcinoma, is an invasive slow growing tumour with increased capacity of recurrence and metastasis, accounting for 1.5% of skin neoplasms. Clinically, it does not display specific characteristics, but often resem-

bles basal cell carcinoma (BCC), therefore the diagnosis is based on histopathological examination. MTC was more frequently diagnosed in older persons, especially in the seventh decade of life, with a male predominance.

Method: A 75-year-old woman presented to the dermatology department of our hospital with a 5 months history of a round-oval proliferative, asymptomatic lesion located on her chin, which slowly increased in size. Her medical history was unremarkable. She was not chronically sun exposed and she never smoked.

Results: The physical examination showed a healthy appearing patient with the vital parameters within the normal range. The dermatological examination revealed a round-oval proliferative lesion, 0.5/0.7 in size, with a translucent surface and several peripheral small nodules, located on the right side of her chin. The superficial lymph nodes were not enlarged. The clinical appearance of the tumour raised the suspicion of BCC. The tumour excision and a biopsy were performed. The histopathological examination revealed tumour cell proliferation with characteristics of both BCC and SCC, evoking the diagnosis of MTC. The patient underwent radiotherapy with favourable evolution. She remains under the supervision of the dermatology department in order to diagnose recurrences or metastases in an early stage.

Conclusion: We present the case of MTC in a patient without evident risk factors. The tumour being diagnosed in an incipient stage, an excision with clear histologic margins, without aesthetic implications, was performed.

(176) Pseudoaneurysm of the mitral-aortic intervalvular fibrosa – a rare complication after aortic valve replacement

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Objectives: Pseudoaneurysm of the mitral-aortic intervalvular fibrosa (PMAIVF) is a rare, potentially life-threatening complication, associated with infective endocarditis, aortic valve surgical procedures or, less frequently, with chest trauma. The course of PMAIVF is presently unpredictable with possible complications determined by compression or rupture into nearby anatomical structures, although, in some cases, no significant clinical events were reported.

Methods: A 71-year old male with aortic valve replacement for severe regurgitation due to aortic bicuspidy is admitted for palpitations, chest pain and shortness of breath, which started one week before presentation. ECG revealed a heart rate of 150 bpm due to atrial flutter, converted to sinus rhythm after 5 days of antiarythmic treatment. Blood tests showed therapeutic values of INR, elevated BNP and negative blood cultures. Transthoracic echocardiography was performed, with normal prosthetic aortic valve movements, left atrial, aortic root and ascending aorta dilation. Posteriorly to the aortic ring, TTE revealed a pulsatile cavity, followed by transesophageal echocardiography confirming a pseudoaneurysm of the mitral-aortic intervalvular fibrosa, with left ventricle communication (observed by color and continuous Doppler). We couldn't identify a communication to the ascending aorta by TEE, ruled out by thoracic CT scan, which was also useful for precise localization and measuring of PMAIVF.

Results: Negative blood cultures results, lack of specific echocardiographic and clinical findings, were arguments against infective endocarditis. The surgical option was debated, although reintervention was considered high-risk procedure (Euroscore II). Conservative management was chosen considering lack of local complications and previous experience documented by small-sample studies and case reports, although periodic reevaluation through TEE is required. Surgical approach will be considered in case of rapid progression or development of complications.

Conclusion: Diagnosis of pseudoaneurysm was established late after aortic valve replacement (13 years after the procedure) and though the PMAIVF dimmensions were significant, no local complications appeared.

(178) The multidisciplinary evaluation of an acromegaly patient

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Objectives: The report I am bringing to your attention focuses mainly on the importance of the para-clinical aspects and differential diagnosis in a case report. This investigation is not only an endocrinological case where a hormone is not released properly, and a random treatment is given to replace it, it's much more. We have to look deep, in between the lines. How do this condition and its diverse symptoms affect the rest of the body and the quality of life? How deep does Acromegaly go into our system? We may even go as far as how does it influence cortical activity when taking into account paraclinical evaluations. Even looking on a pathological slide of the hypophyseal macroadenoma it's a start of a discussion. In simple words, the objectives are to prove the relevance of paraclinical aspects, except clinical aspect, in a case of acromegaly.

Methods: its starts off with the physical and endocrinologic examination trying to put accent on the patient's medical history. One of the most important implications is the hypophyseal macroadenoma of size of 40/25 mm. This was remediated by a trassphenoidal adenomectomy leaving a 15/4 mm tumoral rest and a transitory gonadotropic insufficiency; this is further treated with gamma-knife radiation. Another important aspect of the patient's medical history is the total thyroidectomy that has been irradiated on with iodine treatment to correct the follicular thyroid carcinoma. As a result CTs continued to be performed in order to control the hypophyseal tumoral rest, the echography for the examination of the thyroid fossa and regular ophthalmologic and cardiologic check-ups.

Results: as a differential diagnosis of this investigation we have: Ectopic secretion of the GH-RH, MEN1 syndrome. Furthermore, the objectives of treatment are to control the biochemical indicators of activity have a substitution for the hypothyroidism and HTA treatment, preventing complications.

Conclusion: Through this report it is presented the global view of an acromegaly case, studying both clinical and para-clinical side. Looking into the unique case from both anatomical, physiological and pathological view of the case.

(179) Telocytes (ultra) structural changes in psoriatic skin

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Objectives: In 2012 telocytes (TCs) were described into the dermis of the normal skin as a new type of stromal cells. Dermal TCs were documented to do networking, defense (immunologic targets), secretion (paracrine) and nursing for stem cells. Although dermatology encompasses mode than 2000 diseases, TCs were previously described in systemic sclerosis, only. This study aims to present the dynamics and distribution of TCs in the psoriasis vulgaris. We also aim to investigate the (ultra)structural changes of dermal TCs of patients with psoriasis vulgaris.

Methods: 10 patients diagnosed with psoriasis vulgaris were punch-biopsied 3 times, each from: a) mature lesion;

b) distant uninvolved skin and

c) after the clearance induced by topical therapy. The entirely treatment was topic using ketatolytic and cytoreduction, followed by calcipotriol and local steroids. For documenting psoriatic skin TCs distribution and also their spatial arrangement several microscopy techniques were employed: transmission electron microscopy, immunofluorescence, immunohistochemistry.

Results: In psoriasis vulgaris TCs were particularly affected, they became dystrophic and get lost. The dystrophy consists in apoptotic nuclei, nuclear extrusions, cytoplasmic disintegration and fragmented telopodes (cellular prolongations of TCs). Moreover, no homocellular junctions between TCs were found in psoriatic skin, but there were documented contacts between apoptotic TCs and dendritic cells. The basement membrane of epidermis was interrupted in many points. Also vascular smooth muscle cells in psoriatic dermis acquired synthetic phenotype.

Conclusions: In the mature lesions of psoriasis vulgaris the TCs are lost and dystrophic, but recovered after clearance (by topical treatment). Unlike systemic sclerosis, where the dystrophy was cased by ischemia changes, in psoriasis vulgaris the mechanism is linked to the accelerated keratinocyte turnover. The presented data complete the group of cells involved in psoriasis pathology. Affected TCs are presumably involved as

trigger of the ample vascular phenomena in psoriasis. Due to psoriasis vulgaris incidence (2-8%), the description and documentation of these new interstitial cells can open new insights of possible cellular targets.

(180) Predictors of pregnancy outcomes in patients with systemic lupus erhytematosus

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Objective: To identify predictors of negative pregnancy outcomes in patients with active systemic lupus erhytematosus.

Method: Retrospective evaluation of 32 pregnant women with active or stable systemic lupus erhytematosus.The study was conducted at the Obstetrics and Gynaecology department at the Emergency University Hospital of Bucharest. We examined the relation between the biomarkers of disease activity and pregnancy outcomes. Negative pregnancy outcomes were spontaneous fetal miscarriage, fetal loss, preterm birth, low birth weight, intrauterine growth restriction and neonatal death.

Results: The mean age at pregnancy was 28+- 4.5 years old. 30 pregnancies resulted in live births. Preterm delivery occured in 32% of pregnancies and intrauterine growth restriction was observed in 20% of pregnancies. The miscarriage rate was 13.5%. The most important predictors of negative pregnancy outcomes were: age at pregnancy, disease activity at the onset of pregnancy, low platelet count, the presence of lupus anticoagulant, maternal flares and renal disease.

Conclusion: Systemic lupus erhythematosus can determine pregnancy complications, but pregnancy as well can cause lupus flares. In stable/moderate disease or inactive disease, without risk factors, pregnancy outcomes are favorable. Pregnancy in lupus is a complex matter, but yet manageable.

(181) Unusual presentation of papillary thyroid carcinoma in a patient with Graves' disease

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Objective: Graves' disease is characterized by a thyroid gland hyperfunction due to excessive stimulation of the thyroid-stimulating hormone receptor by thyroid autoantibodies.The clinical manifestations are specific to thyrotoxicosis (tachycardia, sweating, weight loss, trembling extremities) together with ophthalmopathy and dermopathy. Graves' disease does not prevent the existence of an associated thyroid cancer but this situation rarely occurs in only 1-2% of patients.

Methods: We present the case of a male patient of 43 years old with no particular familial or personal medical history, who presented at National Institute C.I.Parhon with classical signs of Graves' disease consisting of tachycardia, sweating, trembling of the extremities and enlarged thyroid gland.

Results: Hormonal evaluation revealed elevated free thyroid hormones, FT4 of 25 pmol/l, FT3 of 20 pmol/l, suppressed TSH value of 0.004 microUI/ml and elevated TSH receptor autoantibodies. Thyroid ultrasound showed a heterogeneous goiter by the presence of many nodules, the largest of 19/16 mm with increased vascularity without associated lymph nodes. The patient was prescribed 20 mg of thiamazole daily and metoprolol 50 mg per day, obtaining the control of the thyrotoxicosis in two months. Subsequently the patient underwent total thyroidectomy and histopathological examination showed a neoplasm comprising of cells arranged in papillary pattern. Furthermore, radioiodine therapy consisting in a dose of 100 microcuries was administered in order to prevent recurrence and to destroy remnants of the thyroid tissue.The patient evolution was favorable, with no reccurence of Graves' disease and without papillary thyroid carcinoma secondary determinations.

Conclusions: We present the case of a male patient who presented with specific symptoms of Graves' disease that concealed a papillary thyroid carcinoma, whose further development was good

under appropriate medical, surgical and radioiodine treatment.

(182) Endocrine hypertension secondary to pheochromocytoma

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Objective: Pheochromocytoma is a rare neuroendocrine tumor, clinical manifestation consisting of the triad palpitations with tachycardia, episodic headache and sweating. Most phaeochromocytomas are sporadic but in approximately 30 percent of patients the disease is a part of a genetic disorder.

Methods: We present the case of a young patient of 24 years old with no particular family and personal medical history, who presented at National Institute C.I.Parhon by transfer from Craiova County Hospital for endocrine evaluation of hypertensive crisis with maximum of 270 mmHg systolic in the presence of an adrenal tumor of 48/37 mm. On admission in Craiova County Hospital, the patient accused headache, dizziness and vomiting in the context of a hypertensive crisis suddenly installed. Also during hospitalization patient had ventricular and supraventricular extrasystoles, controlled under treatment with bisoprolol, doxazosin and indapamide. The patient was transferred to National Institute C.I.Parhon for further investigations.

Results: Hormonal evaluation revealed elevated plasmatic metanephrines (1000 pg/ml), plasmatic normetanephrines (1227 pg/ml) and serum serotonin (1190 ng/ml) with normal urinary metanephrines and normetanephrines. Furthermore, plasmatic chromogranin A and neuron-specific enolase were within normal limits. The assessment of pituitary, thyroid, parathyroid hormones, aldosterone-renin axis and ACTH-cortisol axis values were within normal limits. Abdominal computed tomography showed expansive left adrenal tumor of 48/37 mm with hypodense aspect with right adrenal gland without modification and without regional lymph nodes. The patient was transferred to the general surgery ward of the University Hospital Floreasca, where the surgeons practiced a laparoscopic left adrenalectomy. Histopathologic and immunohistochemical examination diagnose pheochromocytoma, without invasion of adjacent tissues. The patient evolution was favorable, with the remission of the symptoms and normalization of hormonal markers.

Conclusions: We present the case of a young patient who presented with specific symptoms of pheochromocytoma, whose further development was good under appropriate medical and surgical treatment.

(191) Chemotherapeutic and psycho-therapeutic interference in marginal psychiatry

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Objective: The current trend in psychiatric research to focus on neurosciences, psychobiology, and psychiatric pharmacology does not reduce the importance of psychotherapy that has already proven its efficiency

The integrative pharmacological and psychotherapeutic approach brings us closer than ever to the major objective of any research: improving therapeutic strategies, disease prevention or improvement of life quality.

Methods: Our study was extended over 12 months. The number of patients involved was of 178 out of the patients of the "Dr Constantin Gorgos -Titan Psychiatric Hospital".

The Patients were interviewed; they have been psychologically tested, especially on depression and anxiety.The sample group of 200 patients of "Dr Constantin Gorgos-Titan, Psychiatry Hospital" – Outpatient Departament

The Working Team:

Consisted in psychiatrist, psychotherapist, clinical psychologist, sociologist, art therapist and kinetic therapist.

Patients were selected to form of group psychotherapy psychiatry psihoeducational variety marginal group due to their size and psychiatric variety

Earlier sessions of the group patients were trained in short sequences of individual psychotherapy like: Baruch Araujo, Barahona Fernandes, Ybor Lopez. At the end of the group sessions each patient participated in another session of therapy with one of the team member's therapists. Phar-

macological therapy consisted in timostabilizers, anxiolytics, sedative abuse.

Conclusion: Marginal Psychiatry gives a phenomenological variety so complex that the combination of processes and psychotherapeutic techniques to pharmacological treatment can be required urgently.Effective to decrease depressive episodes, anxiety, depression, etc., and able to increase the efficiency of patient looming possibility of reintegration, improving self-esteem, integration into family responsibilities prior illness, increase the training of patients and information to people close on the human condition and mental health.

(192) Assessment of imaging procedure in diagnose and follow up of obstructive urolithiasis in infants

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Objectives: The purpose of this paper is to present the radiologic features of hydroureteronephrosis, to graduate imaging methods for an initial accurate diagnosis and an appropriate follow-up of the children with urolithiasis.

Methods: We review the imaging used in pediatric population with hydroureteronephrosis (HUN) hospitalized in the last 5 years in Fundeni Clinical Institute, taking into account that many causes are involved. Conventional technics - plain film, ultrasound, intravenous urography +/ voiding cystography or advanced - computer tomography +/- CT urography, magnetic resonance urography, voiding ultrasonography.

Results: Imaging has an important role in diagnosis, staging and follow up of the HN witch can vary from mild to severe, and may involve the kidneys' function. In our study one of most common cause of HUN was urolithiasis in addition/ without a urinary system malformation.We have analyzed advantages and disadvantages of each of the radiological modalities, in order to choose the most convening strategy - merging low radiation exposure with its essential diagnostic value.

Conclusions: The pediatric patient management (conservative or surgery) and follow up will be established depending on etiology, its grade, additional pathology and clinical features.

Imaging has an important role in initial evaluation and follow-up of urolithiasis in infants and knowing the diagnostic value of different imaging modalities and its limitation is mandatory in evaluation of pediatric patients.

(193) Therapeutic difficulties in lupus pericarditis – a case report

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Objective: Systemic lupus erythematosus (SLE), a connective tissue disease can affect all organs, including the heart. All parts of the heart can be involved, including the pericardium, the myocardium, the valves, the conduction system, the coronary arteries. The prevalence of cardiovascular involvement is about 50%, with 12-48% cases of pericarditis. The management of SLE pericarditis can be difficult in some cases.

Methods: We present the case of a 31 yo female, admitted in hospital for dyspnoea and chest pain, relieved by sitting up and leaning forward. She was diagnosticated with SLE, with severe neurologic, renal and skin manifestation, and with antiphospholipidic syndrome. The physical exam revealed: underweight, pallor, HR: 120/ min, BP: 115/70 mm Hg, left parasternal systolic murmur. The laboratory investigations (biological samples, ECG, Holter ECG, chest x-ray, echocardiography) led to the diagnosis of SLE pericarditis, with pericardial fluid in large amount, with collapse of right heart cavities.

Results: Due to the fact that the patient had collapsed right cavities, we took into account pericardial drainage with all its risks. Fluid replacement, diuretic therapy cessation and specific therapy of SLE have resulted in improved echocardiographic parameters and clinical status, pericardiocentesis no longer being necessary. Because the patient was diagnosed withantiphospholipidic syndrome and has indication for anticoagulant therapy, the benefits of this treatment in prevention of thromboembolic events was weighed against the risk of pericardial effusion transforming into haemorragic pericarditis. Ultimately, the patient receives anticoagulant therapy with good results.

Conclusions: Cardio-vascular impairment in SLE is complex, can cause diagnostic and treatment difficulties and requires specific management of the underlying disease, as well as specific cardio-vascular medication sometimes.

(196) Diagnostic issues in a case of STEMI and pancytopenia

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Objectives: Patients with STEMI are treated with primary PCI and emergency stent implantation followed by antiplatelet therapy. Complications of treatment may raise important differential diagnosis problems.

Methods: Patient, 60 years, former smoker (indicating year packages - 60), diagnosed with right small cell lung cancer (9 months ago), on chemotherapy - 9 cures monthly with Cisplatin + Etoposide. During the 9th cure the patient presents typical chest pain. Resting ECG shows wide anterior ST segment elevation AMI. Emergency coronary angiography reveals the origin stenosis subocclusion progeny anterior right coronary (90% stenosis of the proximal segment, 50% middle segment). The patient suffered PCI with prokinetic metal stent implantation on left anterior descending artery (at origin) with favorable final result, TIMI 3 antegrade flow.

10 days after admission, the patient developes pancytopenia (Hb: 8.68 g/dl → 7.19 g/dl, WBC: 5000 / → 1880 ml/ml; Platelets: 325 000/94 000 ml → / ml) raising problems about the etiologic diagnosis: thrombocytopenia after heparin therapy / post treatment with clopidogrel / post cure cytostatic cisplatin + etoposide.

Oncologic consult recommends continuing the antiplatelet therapy (Plavix 75 mg 1 cp/day, Aspirin Cardio 100 mg 1 cp/day) combined with full blood transfusion after which the patient has a favorable evolution.

Conclusions: An atypical case that raised questions about the risk of AMI in patients diagnosed with cancer and chemotherapy-related side effects of cytostatics and incidence of anticoagulant and antithrombotic therapy.

(197) The importance of psychotherapy in patients with oncological diseases

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As far back as the Book of Job it is mentioned the idea that body health cannot be separated from that of the mind.

Spinoza in his anthropological book believes that any disorder of the body has an equivalent in the mind. Leibnitz speaks of a predetermined harmony between spiritual and bodily states.

Nowadays there are well known the connections between mind and body and as soon as the knowledge in the field of psychotherapy evoluated it became a real scientific discipline..

Objectives: The evaluation of the psychotherapeutic effects as associated method of the basic therapy on a group of patients diagnosed with cancer who have since depression, anxiety, restlessness, panic diagnosis.Study duration was for 1 year (March 2015 to March 2016),and the patients are still under observation.

Patients included in the study were surveyed using Sifneos questionnaire selection. As working tools the following were used:

- The 17 Hamilton Depression Scale (HAMD 17)
- The Montgomery-Asberg Depression (MADRS)
- Defense Style Questionnaire (DSQ-40) - which revealed the defence mechanisms according to qualities or "styles".

Psychotherapy consisted of applying individual techniques followed by group sessions.

The effective efficiency of the psychotherapeutic interventions proved superior in the positive evolution of the group involved, witness being the favourable indicators as: increasing self-esteem, quality of life, improving of the biological labeling with 27%

Conclusion: The study has a history of one year. Partial results are encouraging: optimism, increasing life expectancy have resulted in objective improvement of 27% of the biological markers. Statistical techniques to analyze interpretation were used: Student's test and Xi^2 (since this is a small sample of patients).

(198) The aggressiveness in marketing communications and the impact of the advertising message

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Objective: Promotion, a variable of the mix in marketing, holds a special place in medical services. Advertising is a creative activity and is a bridge between manufacturer, distributor and consumer and seeks to influence and determine attitudes and behaviors.

Advertising uses the following media outlets: television, radio, magazines, newspapers, billboards, posters and prints placed outside such as catalogs, leaflets, brochures, and flyers.

Method: A retrospective study in which were included 52 people who responded to a questionnaire consisting of nine questions, distributed over a period of one month. The questionnaire has three demographic variables and six questions related to importance and impact of the advertising messages. Demographic variables are: age, education, and marital status.

Results: In the study 36 people were aged between 18-25 years, 28 had university study and 39 people are unmarried.

Most people participating in the survey (27) said that they received promotional messages two – five per month.

Only 32 of the 46 people mentioned that they sometimes read these materials.

23 people have stated that sometimes threw some bills along with promotional materials.

32 people consider this promotional method useless. 29 people take count rarely of these promotional materials in their purchasing decisions.

25 people mentioned that sometimes they are interested in the content of these materials.

Conclusions: Promotion in marketing is a set of tools that organizations can use to give customers a clear, consistent, compelling and honest message. This can be used to inform about their activities, products, education campaign and social and environmental awareness. This will give an advantage to the organization over their competitors, by designing in the customers mind an image of organization.

(199) Vasoreactivity testing in pulmonary hypertension in children

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Objectives: Vasoreactivity testing in pulmonary arterial hypertension (PAH) has clear indications concerning patients with idiopathic or hereditary form of PAH or PAH associated with the usage of anorexigen drugs in order to identify patients who can be treated with high doses of calcium channels blockers. Another recommendation for vasoreactivity testing is PAH associated with congenital heart disease in which the patients are in the "gray" stage. In this last situation the vasoreactivity must be tested to find a strategy: operability or Bosentan therapy for 6-12 months period followed by another vasoreactivity evaluation.

Method: Between 2015 (June) - 2016 (March) in the Angiography Laboratory of Emergency Children's Hospital Marie Curie there were performed 62 diagnostic/therapeutic interventional procedures.

Results: Of the 62 patients investigated, six had PAH (9.7%). Of these, 5/6 had PAH associated with congenital heart disease (2 patients with patent ductus arteriosus (PDA), a patient with ventricular septal defect (VSD), one with atrioventricular septal defect and another one had two defects: PDA and VSD). One patient (1/6) presented idiopathic PAH. The pulmonary vasoreactivity testing was carried out in 5/6 patients (83%) using nitric oxide, 24 ppm. We discovered the mean pulmonary arterial pressure (mPAP) 48-120 mmHg (media 80.8 mmHg). The basal total pulmonary vascular resistances (TPVR) were 0.71-35 WU/m^2 (media 14.3 WU/m^2) with 2/5 patients having normal pulmonary resistances. The vasoreactivity testing showed a decrease in pulmonary pressures and resistances in 4/5 patients; mPAP 41-100 mmHg (media 71.4 mmHg), and TPVR 0.12-24 WU/m^2 (media 8.9 WU/m^2). Therapeutic consequences of this assessment were: 4/5 patients had surgical/interventional consequences: 1 patient suffered/1 in program for heart surgery, 1 patient had interventional clo-

sure, 1 patient had step by step approach, with partial interventional closure of PDA, then continuing with sildenafil therapy to establish the appropriateness of cardiac surgery. In another patient the Sildenafil therapy was not tolerated, and the patient remained in natural history.

Conclusion: Diagnostic catheterization and vasoreactivity testing are extremely useful in patients with PAH comprehensive assessment and can help for the therapy management.

(209) Scleroderma pericardial disease presented with large pericardial effusion

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Objectives: Systemic sclerosis is a multiorganic disease of the connective tissue with unknown etiology, characterized by a high rate of mortality. The complex pathogenesis involves simultaneously vascular lesions, the activation of the immune system and generalized fibrosis. The cardiac damage in scleroderma can be detected clinically only in 15-25% of the pacients, but in anatomo-pathologic examination the percentage rises at 50%. The cardiac injury involves myocardial fibrosis, ischemic disorders, pericardial effusions (15-43%), rhythm disturbances and less often myocarditis. Although the pericardium is frequently affected by inflammation and fibrosis, cardiac tamponade is extremely rare, leading to important hemodynamic changes, emphasizing the diagnosis often at autopsy.

Methods: We report the case of a 48 years old female pacient with sequelae of polio, history of ductal breast carcinoma, operated, treated by chemo and radiotherapy in 2007, diagnosed with limited cutaneous systemic sclerosis form in October 2015(ANA+, sclerodactyly, Raynaud syndrome, digital ulcers, gastro esophageal reflux disease), admitted in January 2016 to „Sf. Maria" clinic, for dyspnea with orthopnea, nonproductive cough and Raynaud's phenomena, progressive symptoms exacerbated in the last 2 weeks. Clinical data, laboratory and imaging explorations have shown massive pericardial effusion with a tendency to cardiac tamponade, for which it has been performed a pericardiocentesis and pericardial biopsy in order to establish the etiology.The pulmonary radiography revealed left pleural fluid, drained through thoracocentesis

Conclusions: The occurrence of severe cardiac complications due to the rheumatological disease, determined the discussion of cardiac tamponade etiology. The differential diagnoses will include: paraneoplastic syndrome, specific infections (tuberculosis, Staphilococus aureus) and non specific infections (viral), and the pericardial changes within collagen disease. The anatomo-pathologic result of the biopsy rules out the etiology for tumor and infections, showing only inflammatoryprocess.

The variety of clinical manifestations and the different evolution in each patient, requires an individualized approach of the visceral damages.

(212) Endothelial dysfunction particularities in a lot of patients with active acromegaly

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Objectives: Active acromegaly is associated with increased cardiovascular morbidity and mortality, cardiovascular disease being the first cause of mortality in such patients. We aimed to assess some particularities regarding endothelial dysfunction in a lot of patients with active acromegaly.

Methods: Cross-sectional study including 56 patients with acromegaly (36 females, 53,4+/-11 years and 20 males, 44,9+/-15,5 years) referred to CI Parhon National Institute of Endocrinology. IGF1, nadir GH during 75 g glucose OGTT, major cardiovascular risk factors and endothelial dysfunction determined by ultrasound assessment of endothelial dependent flow mediated vasodilatation of brachial artery (FMD<10%) were evaluated in all our patients.

Results: The prevalence of endothelial dysfunction in the acromegalic patients was 60,7% (53% in women and 75% in men). We found a positive correlation regarding diastolic blood pressure, dyslipidemia, insulinemia and HOMA Index, but no correlation with diabetes mellitus, cholesterol fractions or triglyceride levels or hypertension. Increased GH/IGF1 levels induce the endothelium impair so this must be the reason for the indirect correlation we found between GH

level and endothelial dysfunction and also the positive correlation with the time of evolution of the disease.

Conclusions: Endothelial dysfunction is more frequent in patients with acromegaly as we found in literature and this test can be used as an additional risk factor for cardiovascular events and also can be used to evaluate the response to treatment. The correlation between GH level and endothelial dysfunction may lead to the conclusion that we can use the GH as a predictor for cardiovascular events.

(213) Late introduction of solid food in children increases the risk of atopic dermatitis

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Objectives: Atopic dermatitis (AD) is a chronic inflammatory skin disease that has an increasing prevalence. It is the first manifestation of the atopic march preceding respiratory allergy and it appears in genetically predisposed individuals. Environmental factors are also involved in the disease occurrence. The aim of the study was to investigate the moment of solid food introduction and AD.

Method: We performed an observational study on 190 subjects presented to the dermatologist's office. The parents filled a questionnaire divided in two parts. The first part contained the main three questions from International Study of Asthma and Allergies in Childhood survey for the AD diagnosis while the second part comprised questions regarding the factors that could be involved in disease occurrence. All the subjects were consulted by dermatologist and AD diagnosis was made according to "U.K. Working Party's Diagnostic Criteria".

All potential variables associated with AD were tested at first by binary logistic regression. All possible risk ($p \leq 0.05$) or confounding factors ($p \leq 0.10$) associated with AD in simple logistic regression were then introduced in a multiple logistic regression with stepwise selection of covariates. Variables retained in this model represented the adjustment model. Finally, the moment of solid food introduction was introduced in a logistic regression adjusted for the above described model in order to test its independent association with AD. MedCalc software, version 16.2.0, was used for analysis.

Results: The adjustment model comprised smoking (OR = 0.23 p = 0.02) and trimester of antibiotic administration during pregnancy (OR = 1.7 p = 0.01). In simple logistic regression solid food introduction over 6 months (OR6-months = 8.94, p = 0.0003) and at 4 to 6 month (OR4-6 months = 2.69, p = 0.02) was associated with AD. After adjustment for the above described model only diversification over 6 months was independently associated with AD (OR6-months = 12.4; p = 0.004 and OR4-6 months = 1.7; p = 0.34).

Conclusion: Delayed introduction of solids over 6 months of life was associated with an increased risk of AD.

(215) Genetics bridges specialities that medical students learn

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Objectives: Teaching genetics to medical students proves to be challenging in a time of great upheaval caused by discoveries made every day in this field. Besides, genetics usually entails important knowledge for medicine and this is spreading not only among scientists, but also through public media, raising people's awareness concerning inherited traits. Some of the challenges are represented by choosing the amount and type of information that students should receive during their one term training in medical genetics, this being the necessary basic knowledge they should gain to help them in their future studies and practice.

The objective of this study is to demonstrate the usefulness of the genetic knowledge acquired during the first year by medical students.

Method: Questionnaires were answered by second year students of the Medical and Pharmacy University Carol Davila after they learned about the genetic features of microbes. 377 students answered 3 questions concerning the usefulness of the information (overall, during the lectures and then during the workshops) learned in medical genetics for understanding the microbial genetics. A 4th question asked them to specify

how useful was the knowledge gained in genetics during high school.

Results: The data obtained show that lectures and workshops of medical genetics are further helping students in their training. Only 19.10% of students considered that what they learned in medical genetics during the practical workshops was not at all useful, as also considered 18.04% of them the knowledge gained in the lectures of the same specialty. In the paper we discuss the insights generated by the student's answers, and by their specific observations noted after completing the questionnaire, and we analyze the limitations and biases of the study.

Conclusion: The present curriculum in medical genetics helps students understand and learn the knowledge on the genetics of bacteria and other types of microbes. With both fields, medical genetics and microbiology, extending in the last years due to new discoveries, a better interdisciplinary alignment of the information taught would undoubtedly benefit students.

(223) Role of immunocytochemical markers in cervical precancer risk assessment

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Objective: Highlighting the effectiveness of p16/ Ki-67 dual-stained cytology that combines high sensitivity with high specificity, a solution that has been developed in recent years to increase cervical precancer detection. The test is a dual-stained cytology performed simultaneously in the same cell for p16 - transforming infection marker and Ki67 – proliferation marker, from cervical cytology samples.

Method: Assessment of a group of 551 patients aged 19-72 years, in terms of clinical usefulness of immunocytochemical markers.

Results: The exclusion criteria applied were high-grade lesions cytologies, absence of historical and clinical data, and absence of HPV analysis. Referrals for CINtec PLUS test were triggered by ASC-US and L-SIL cytology <30 years, negative cytology/ positive HPV test regardless of age. For 307 patients, included in the group, p16/ Ki-67 immunocytochemical testing was negative, and for the rest 244 patients tested the immunocytochemical staining turned out positive.

Conclusions: The use of p16 / Ki-67 immunocytochemical tests optimizes the medical approach in screening or surveillance of young patients with high-risk positive HPV LSIL or ASC-US cytologic results, enables avoiding unnecessary colposcopy (indications for colposcopy are restricted to positive CINtec PLUS cases), thereby limiting the invasive gestures on nulliparous. Negative CINtec PLUS results are subject to cytologic and viral surveillance at every 12 months.

(224) Herpes infections in HIV infected patients from Giurgiu county

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Objective: HIV infected patients have different opportunistic infections as they came across different patogens. Herpes viruses are widely spread in general population and put no risk on immunocompetent person. In HIV infected even a simple recurrence with HSV1 may cause dramatic simptomatology. The objective was to assess the prevalence of HSV infections in HIV infected from Giurgiu County and also the number of HSV recurrences over a period of one year.

Method: 213 HIV infected patients were monitored over a period of one year. They were clinical and paraclinical investigated. For HSV diagnosis direct and serological tests were performed. Direct detection and identification of HSV-1 and HSV-2 was performed directly on the specimens with HSV1/2 Typing DFA Kit. To ensure specificity culture isolation was performed by standard tube culture isolation procedure.

Results: The group of studied patients is long survivors born during 1987-1994. They were monitored over a period of one year. The average number of CD4 were 438.3 cells/ml and average HIV viral load was 144 912.3 copies RNA/ml. 110 patients presented Herpes zoster, out of them 12 had at least two recurrences. 46 presented atypical HSV infections and 5 of them had at least two recurrences. Only 31 out of 213 HIV infected were not HSV 1 infected. During one year, the HSV1 infected presented 459 recurrences; the maximum number of recurrences encountered in one person was 6. Three patients presented infections with HSV2 and had only one

recurrence over the year of monitorisation. 17 patients had chickenpox that year. All patients were treated with different forms of acyclovir.

Conclusion: Herpes infections are very common in HIV infected patients and all patients presented herpes infections. The most prevalent was HSV1, followed closely by VVZ. During the period of study despite the etiological treatment the recurrences were frequent. The frequency of recurrences was closely linked with the immune and viral status of HIV infection.

(225) A curious case of central serous chorioretinopathy

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Objective: We present a case of reccurent CSCR in a male patient, at the age of 35 years old. He presented himself to the outpatient department of a private medical facility, accusing decreased visual acuity (VOD) in the right eye with an onset of about 1-2 weeks, as well as metamorphosia. His medical fiels reveal that he has a history of central serous chorioretinitis (CSCR) in the left eye diagnosed in 2014.

Method: Following doctor's examination, the patient underwent a series of medical investigations, as it follows: measurement of the intraocular pressure, investigation of the optical axis, eye fundus examination and an optical coherence tompgraphy (OCT) for both eyes, as a method of assessing subretinal fluid and macular changes. There was requested an assesment of the visual acuity and a microbiolgical investigation to detect a possible infection with Helicobacter pylori, a bacteria which could be associated with the development of CSCR.

Results: Investigations have found that the patient has an IOP of 14 mmHg, and a normal optical axis. Right eye fundus examination shows a slightly nonhomogeneous macula, otherwise normal, whilst for the left eye it shows pigment epithelial detachments, RPE atrophy, subretinal fibrin, chronic CSCR and macular edema and neurosensory macular detachments.

For the right eye, the OCT shows neurosensory retinal detachment, subretinal fluid with foveal fotoreceptors layer preserved.

The results of the microbiological investigation are still awaited.

Conclusions: In spite of the positive development, photoreceptors layer loss is seen on OCT, which explains the fact that there is no improvement in the visual acuity of the patient.

It is very important to mention that the relapse of the CSCR on the right eye is a particularity of the case, because it is known that the patients in which the visual acuity does not show an improvement after the treatment are more likely to suffer from a relapse of the disease on the same eye, not on the congener one.

(226) Thrombophilia and pregnancy – screening of pregnant women admitted to Emergency University Hospital

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Objectives: Thrombophilia is a disorder characterized by blood hypercoagulability occurring as a result of hereditary or acquired predisposition substrate and depends on changes that occur regarding the balance of coagulation and hemostasis.

The aim of this study was diagnosis of pregnant women suspected of thrombophilia due to medical history and family history.

Methods: Between September 15th 2015 and December 31st 2015, the researchers enrolled 636 pregnant women with average age 29.5 years. The diagnostic methods included clinical exam, pregnancy test or abdominal transvaginal ultrasound at all patients included in the study. Laboratory samples included protein C, protein S, antithrombin III, homocysteine, lupus anticoagulant, LA ratio, PRCA. Genetic analysis collected during the study included mutations of factor V and gene MTHFR, mutation of factor XIII, polymorphism mutation of PAI and EPCR gene mutations.

Results: Of the 636 patients included in screening, a total of 412 patients (64.77%) had history of repeated miscarriages (more than two), 421 (66.19%) were smokers, 353 (55.5%) had used oral contraceptives more than 5 years, and 198(31.13%) had family history of thrombosis.

Conclusion: Most pregnant women included in the study had a history of recurrent miscarriages or thrombotic events, being known that these factors suggest an incresed risk of hypercoagulable state in pregnancy.

(230) Clinical and metabolic associations in multiple sclerosis

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Objectives: The numerous physical and psychological effects of multiple sclerosis are well documented. However little is known of the mechanisms by which this illness manifests or is aggravated. For this reason a great deal of interest has been given to vitamin D status of the body and insulin resistance, which are closely linked to MS.

Method: A cohort of 87 people suffering of multiple sclerosis, of which 56 females and 31 males, have been investigated for possible metabolic correlations with multiple sclerosis. The parameters of interest in this study are vitamin D serum levels and HOMA-IR, these being compared with the EDSS score and other neurological tests.

Results: The first observation has been the gender distribution of our cohort, favoring the female gender, which is characteristic of the disease. The mean age of the female portion is 38 years, and that of the male portion is 36 years. Although fewer in number, the male portion presented a higher percentage of individuals under the average age. The second observation was linked to vitamin D serum levels. With the results being between 8 and 50 ng/ml, and a mean concentration of 24,92 ng/ml, out of the 87 participants, 73% were deemed vitamin D deficient at the time of the investigation. To put that into perspective, we matched our patients vitamin D levels with their respective EDSS scores and found that the vast majority of individuals with high EDSS scores presented low levels of vitamin D. The last parameter utilized has HOMA-IR, used to determine insulin resistance. Using as a cut-off value HOMA-IR=2, or possible insulin resistance, we found that 40.23% of our patients exhibited such a characteristic, it being much more prevalent in the male portion. Of the individuals with higher HOMA-IR, an equal EDSS score distribution of 1.5-2,5 was observed in both genders.

Conclusions: From our partial results, we have been able to correlate the low vitamin D status and the severity of multiple sclerosis. Insulin resistance however does not have sufficient evidence to properly link it to multiple sclerosis.

(234) Bilateral occlusion of the inferior cerebral arteries in a patient who suffered a minor ischemic stroke – case presentation

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We present the case of a 59-year old patient, smoker and drinker, who is known with arterial hypertension, type 2 diabetes and glaucoma of the left eye. He presented to the emergency room for dysarthria and a confusional episode, which started the day before admission.

Clinical and neurological examination highlight: AT = 140/80 mmHg, VA = 70/min, rhythmic, no neck stiffness, lateral left homonymous hemianopia, left hemiparesis 4/5 MRC, globally diminished OTR, Babinski sign present on the left, left hemihypoesthesia, left hemicrania.

Laboratory tests were normal, except for a blood glucose of 185 mg/dl. EKG: sinus rhythm.

Cerebral CT exam diagnosed a recent ischemic stroke in the territory of the left MCA. The cervical and cerebral Doppler highlights severe bilateral carotid atheroma, with a bilateral occlusion of the ICA. TheAngio-CT scan confirmed bilateral occlusion of the ICA.

The diagnosis of acute ischemic stroke in the superficial territory of the left MCA with left hemiparesis, bilateral occlusion of the ICA, severe bilateral carotid atheroma was established. The treatment was performed through admission of drugs (platelet antiaggregant, anticoagulant, lipid-lowering-statin), the occlusion of the carotid having no indication of angioplasty. We also administered treatment for the chronic associated pathologies (oral antidiabetic, antihypertensive, gas-

troprotection) along with maintaining a normal blood pressure in order to allow a good brain vascularization. The evolution was favorable, with the improvement of the neurological deficits.

The particularity of the case:

1. Although the occlusion of the ICA was bilateral, the stroke was located in the superficial territory of the left MCA, not in the border territory as we would expect with the MCA-PCA being the area where strokes occur more frequently and more specifically in case of severe carotid atheroma.

2. Although it was a bilateral occlusion, the occlusion of the left ICA remained asymptomatic.

3. The neurological deficit was minor compared to the severity of the atheroma, suggesting proper functioning of the posterior vascular territory with an effective alternate circulation developed over time.

(236) Apnea hypopnea index and different cut-off values for defining Oxygen Desaturation Index and in patients with morbid obesity

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Background: Basal nocturnal oxyhaemoglobin level (SaO_2) in patients with morbid obesity is usually low due to alveolar hypoventilation. The Oxygen Desaturation Index (ODI) calculated with different cut-off values for the independent desaturation may differ from the Apnea Hypopnea Index (AHI, determined by cardio-respiratory polygraphy) in assessing Obstructive Sleep Apnea (OSA) severity.

Objective: To assess the correlation between ODI3%, ODI4% and AHI in patients with morbid obesity.

Methods: We prospectively evaluated morbidly obese (BMI >40 kg/m^2) patients with OSA (cardio-respiratory polygraphy, AHI >5/hour). ODI for the 3% and 4% cut-off values for the independent desaturation was calculated. The correlation between ODI3%, ODI4% and AHI was assessed.

Results: 97 patients (58 males) were enrolled in the study, with a mean age of 50.8±11.8 years, a median BMI of 43,2 kg/m^2 (40-67.5), a median AHI of 44/hour (8-131), a median ODI3% 45/hour (2-139), a median ODI4%: 33.5/hour (1.8-128), a median average SaO_2: 90% (49-96) and a median lowest SaO_2: 71% (39-91). A statistically significant positive correlation between ODI3% (r=0.85, p<0.001), ODI4% (r: 0.82, p<0,001) and AHI was found.

Conclusion: In morbidly obese patients with OSA, ODI calculated by both cut-off values for the independent desaturation, correlate with AHI determined by cardio-respiratory polygraphy.

(237) The Dash diet – need for databases of minerals and poliphenolic concentrations in foods – literature survey

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The DASH diet (Dietary Approaches to Stop Hypertension) was ranked as the "Best Overall Diet" by US News & World Reports in 2011, 2012, and 2013. Its potential to influence allergic immune reactions was not sufficiently tested. The DASH diet includes whole grain, fruits and vegerables for 1600- 3100 calorie diets. Whole grain cereals are good sources of phenolic compounds and amino phenolic compounds. The nutritional composition of whole and refined wheat flour differs markedly and studies indicate that through refining process, most of the bran and some of the germ are removed, resulting in loss of dietary fiber, vitamins, minerals, lignans, phytoestrogens, phenolic compounds, and phytic acid therefore all processing techniques will involve a change in all nutrients and bioactives availability as well as general nutritional quality changes. Self-reported survey data in the United States suggest that there

was an increase of 18% in food or digestive allergies from 1997 to 2007. The influence of poliphenolic content of foods may also influence allergic immune reactions. USDA published an updated database on bioactives in foods, such as the USDA Database for the Flavonoids Content of Selected Foods. These databases are helpful in calculating the daily poliphenolic intake of US population based on population diet patterns. However usual databases for foods composition do not highlight limiting factors for food consumption in the case of allergies. We believe that such data will be of great importance as many of the foods which are rich in polyphenols may contain also non-specific lipid transfer proteins (nsLTPs) which are known to be panallergens and believed to account for the majority of LTP allergy (pollen-food syndrome). Moreover the textural properties of processed and raw foods will influence minerals and bioactives availability. Our literature survey suggest the need of diet inquiry standardization and also need for including in food databases a larger selection of minerals and poliphenolic concentrations for processed and raw foods. Also we suggest that questions on textural properties of foods should be included in the diet inquiries in order to better understand nutrients and bioactives bioavailability as influenced by texture and consumers' preference.

(239) Impact of GJB2 mutations in children with non-syndromic hearing loss

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Background and aims: Non-syndromic hearing loss is the most common sensory deficit in humans, with profound medical, social, and cultural ramifications. For the children born with moderate to profound hearing impairment, particularly in families in which there is no previous history of deafness, the diagnosis has a major impact on that family.

Objectives: Testing for mutations in GJB2, the gene for connexin 26 (Cx26) that can account for up to 60% of prelingual nonsyndromic hearing impairment, is commercially available, and many more deafness-related genetic tests undoubtedly will follow in the near future.

Methods: In our study, we performed mutation screening for GJB2 in 42 non-syndromic hearing loss families, including those with cases of sporadic deafness. Peripheral blood lymphocyte DNA was used to amplify by polymerase chain reaction the Cx26 coding region, followed by 35delG mutation detection screening and complete sequencing. For DNA extraction we used QIAamp DNA Blood (QIAGEN), and PCR fragments were sequenced using the forward primer and the ABI BigDye Terminator v3.1 Cycle Sequencing Kit.

Results: The most frequent mutation was 35delG. The study of allele frequency 35delG showed a significant association between the presence of 35delG allele and extent of damage ($\chi^2 = 20.573$ / $p = 0.0001$ for profound hearing loss; $\chi^2 = 6.759$ / $p = 0.0093$ for severe hearing loss; $\chi^2 = 1.689$ / $p = 0.1937$ for moderate hearing loss to those with mild hearing loss).

Conclusions: The high prevalence of the 35delG mutation may justify its use in screening for severity of hearing impairment.

The mutational screening in this gene may be effective and beneficial for diagnosing hearing loss in population.

(240) New drug delivery model in ischemic pathology

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Objective: Tissue loss and organ dysfunction due to hypoxia is a major factor involved in ischemic pathology. Thus, for example improving the anti-hypoxia therapies of cardiomyocytes has been an important issue within the cardiovascular field. Microenviorment of hypoxic area modifies celluar metabolism including overexpresseon and upregulation of LDL-receptor (LDL-R) that enhances Low Density Lipoprotein (LDL) endocytotic rate. This model take advatage of naturaly occured LDL endocytotisis to introduce ApoB-100 functionalized liposomes (ApoB100-L) loaded with active biomolecules to block pathways involved in hipoxia related cell changes. This model was tested and validated using in-vitro studies on cultured cells that have overexpressed and increased LDL endocytotic rate.

Methods: Liposomes were prepared usind rotary-evaporator method, from a lipid stock solution containing: phospholipids, cholesterol and fluorescent dye. For ApoB100 containing sample, the protein was dissolved in methanol and then

mixed with lipid solution. Two samples were made one containing simple liposomes and other containing ApoB-100 functionalized liposomes. Circular dichroism (CD) analysis of ApoB100 sample was used to estimate protein secondary structure. The samples were incubated with A375 humman cells for 2 and 4 hours. After this period the medium was removed and cells were washed with PBS. Transmission and fruorescence microscopy were used to examine liposomes endocytosis and intracellular distribution.

Results: The state of ApoB100 protein was analysed, CD data shows the presence of a minimum at 220-230 nm. This confirms that the preparation protocol leaves the protein biding active site unperturbed with α-helical secondary structure conformation conserved. So these liposomes are capable for docking, binding to the LDL-R and direct receptor activation of cellular endocytosis. Fluoresence microscopy images demonstate that ApoB100-L were distributed in the cell with the same pattern as a positive control using labeled humman LDL.

Conclusion: Specific interactions between ApoB-100 functionalized liposomes and overexpressed LDL-R can be used to target hipoxic areas without causing harm to normal tissues. Feature of molecular therapies must be investigated, in situations where there are no options, or when these conventional methods have limitations. This work opens up new avenues for developing targeted drug delivery treatment for benefits in ischemic heart disease.

(245) Infective endocarditis, isolated germs and their susceptibility to antibiotics

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Objective: An important aspect in the treatment of infective endocarditis is to choose the right antibiotic to which the isolated germ is susceptible. We conducted this study in order to determine the most frequent germs involved in the etiology of infective endocarditis and their susceptibility to antibiotics.

Methods: We retrospectively studied 103 patients admitted in the Infectious and Tropical Disease Hospital "Dr. Victor Babes" with the diagnosis of infective endocarditis between October 2014 and September 2015. We excluded from the study 18 patients with incomplete data and their further readmissions in this period. The patients' age ranged between 31 and 89 years old. For the remaining 85 patients we analyzed the etiology of the infective endocarditis and the antibiotic susceptibility of the identified germs. We used Epi Info 7.1.5.2.

Results: Of the 85 blood cultures, 36 were negative. The most frequent etiology was represented by Staphylococcus spp., 22 isolates in 21 patients; this germ was also involved in polimicrobial etiology. The species of this genus identified in this study were Staphylococcus aureus (in 10 blood cultures, of which 6 were methicillin-resistant), Staphylococcus epidermidis (3 cases, 95%CI: 0.73%-9.97%), and other species of coagulase-negative Staphylococcus (9 cases). The next genus in order of the frequency was Streptococcus spp., isolated in 16 cases, mainly represented by Streptococcus gallolyticus (7 cases, 95%CI: 3.38%-16.23%). Other identified germs were Enterococcus spp., Candida spp., Corynebacterium spp., Serratia spp., Klebsiella spp. and others. Of the isolated species, 16 were resistant to erythromycin (95%CI: 11.16%-28.76%), 16 to tetracycline (95%CI: 11.16%-28.76%), 11 to methicillin, 11 to penicillin, 11 to oxacillin (95%CI: 6.64%-21.98%), 10 to ciprofloxacin (95%CI: 5.79%-20.57%), 9 to ampicillin (95%CI: 4.96%-19.15%), 8 to rifampicin (95%CI: 4.15%-17.71%), 7 to clindamycin and 7 to gentamycin (95%CI: 3.38%-16.23%).

Conclusions: A few decades ago the most frequent identified germ in infective endocarditis was Streptococcus spp. In this study the etiology involved Staphylococcus spp., followed by Streptococcus spp., Enterococcus spp. and other organisms. Most often, the isolated germs were resistant to erythromycin, tetracycline, methicillin, penicillin and oxacillin.

(247) Digital acute ischemia on a young patient with systemic lupus erythematosus

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Objectives: We present the case of a 34-year-old patient, diagnosed in 2004 with SLE (systemic lupus erythematosus) with multiple organ involvement (skin, joints, kidneys, serous and haematological) and secondary antiphospholipid syndrome, followed in the Internal Medicine and Rheumatology Clinic of St. Mary Clinical Hospital Bucharest. The patient presents in February 2016 for acute pain and cyanosis of the second and third finger of the right hand witch appeared three days ago.

Methods: The onset of the disease was after a miscarriage (2002) when antiphospholipid syndrome was diagnosed; in time developping renal (membranous GN and proteinuria+++) and haematological involvement (leukopenia). Immunosuppressive therapy with Cyclophosphamide (6 cycles), then Hidroxicloroquin and high doses of corticosteroids was initiated and the patient enters remission until 2015. In April 2015 the desease flares after a cutaneous infection (retinal vasculitis, intensifying Raynaud's phenomenon, hipocomplementemia, increased titers of Ac-antiADNdc). Immunosuppression is postponed (patient's will), and despite the calcium blockers and antiplatelet therapy, acute ischemia of the second and third finger of the right hand occurs.

Results: Prompt immunosuppression with Cyclophosphamide i.v. is initiated and corticotherapy increased, along with i.v. vasodilatators (PG1-alrostadil), and calcium blockers, antiagregant and oral anticoagulant are continued, and after 30 days of treatment, the accute ischemia results into distal phalang necrosis of the second finger, and complete resolution of the ischemia in the third finger.

Conclusions: Patients with SLE have to be closely monitored. To date, the exact etiology of SLE digital gangrene remains unclear and complex with the presence of APS, overlap syndrome, atherosclerosis, or vasculitis appearing as potential causes. The patient presented combines all these risk factors.

(248) Complications of surgical approach and cure rate in patients with craniopharyngioma

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Objective: We analyzed the surgical result and complications after surgery in patients with craniopharyngioma followed-up in the pituitary and neuroendocrine diseases department and pediatric endocrinology department at the National Institute of Endocrinology C.I. Parhon Bucharest.

Method: This is a retrospective study of surgically treated craniopharyngioma patients, followed-up in a tertiary center of endocrinology. The study group consisted of 82 patients, 21 under 18 years of age (25.61%) and 61 between 18-72 years (74.39%).

Results. The most commonly used surgical approach in adults was the transfrontal one, used in 38(62.29%) patients. Excision was complete for 20(32.78%) and incomplete for the remaining 41(67.21%) patients. Pituitary function was normal in 24 adult patients (39.34%) and 4 children (19.04%) but 37 adults (60.65%) and 17 children (80.95%) had pituitary deficiency in varying degrees, most frequently monotropic deficiency. At diagnostic 5 adults (8.19%) and 7 children (33.33%) had central diabetes insipidus and impaired visual acuity was found in 68.85% of adults (42 cases) and 38.09% of children (8 cases). Postoperative complications in adults were represented by: diabetes insipidus in 39 cases (63.93%) of which 20 (51.28%) permanent and 19(48.71%) transient diabetes insipidus and global pituitary insufficiency in 41 patients (67.21%). Postoperative hormonal deficiency was worsened in 48 patients (78.68%), stationary in 11(18.03%) and improved in only 2 (3.27) cases. The postoperative visual acuity was stable for 45.90 (28), worsened for 31.14% (19) and improved for 22.95% (14) cases. Postoperative, in the under 18 years group, 17 cases (80.95%) had diabetus insipidus, permanent in 13 (76.47%) with global pituitary insuffi-

ciency in 16 cases (80%) and impaired vizual acuicy was stable for 12(63.15%) and worsened for 6 (31.57%).

Conclusions: Surgery is the treatment of choice of craniopharyngiomas. However, in both children and adults, the cure rate is suboptimal and neurosurgical postoperative complications are frequent, especially endocrine (pituitary failure, central diabetes insipidus).

(249) Pruritic urticarial papules and plaques of pregnancy vs fraxiparine allergy

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Pruritic urticarial papules and plaques of pregnancy (PUPP) is a benign skin condition that occurs during pregnancy. Lesions usually occur in primigravidas at any time from the first trimester through the postpartum period.

Objective: Management of a woman case with hives. A 43 years woman with 16 weeks of pregnancy came to alergology for the suspicion of allergy to fraxiparine. She was diagnosed with thrombophilia and started the therapy with Fraxiparine. After two weeks of therapy, she developed abdominal hives, some with tendency to forming plaques. Four years ago the patient received treatment with interferon for chronic hepatitis with VHC.

Methods: After the first evaluation of the patient, we stopped administration of Fraxiparine and initiated the treatment with aspirin at 75 mg daily. Also, the patient was reevaluated in the infectious diseases department that denied viral replication.

Results: In vivo tests are contraindicated in pregnant women. Therefore we conducted initial in vitro tests. Basophil degranulation test (BDT) and lymphoblastic transformation test (LTT) for fraxiparine was negative. After these results, we performed the administration of fraxiparine. It was well tolerated in terms of hypersensitivity reactions. Now, after we excluded an allergic reaction to fraxiparine, she is in the 27th week of pregnancy and takes this medication daily without worsening the urticarial eruptions. Rarely, she continues to describe some heaves and we ameliorate urticaria with intermittently administration of topical cutaneous corticosteroids.

Conclusion: Although PUPP is a benign disease, in some cases the differential diagnosis is difficult and requires good cooperation between the obstetrician and allergologist.

(250) Thyroid and metabolic status in menopausal women to whom surgery for primary hyperparathyroidism was performed

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Objective: We analyze thyroid profile, cardio-metabolic components in subjects with isolated PHPT.

Methods: This is a non-selective case series analyses. Their latest evaluation was performed between July 2015 and March 2016.

Results: 3 females were followed before and after parathyroid (PT) surgery: the age at disease confirmation was of 60 yrs (case 1), 63 yrs (case 2), 58 yrs (case 3). The peak total calcium levels at onset were: 10.57 ng/mL, 10.5 ng/mL (normal <10.2 mg/dL), respective (rs.) 11.7 ng/mL; parathormone of 193 pg/ml, 104 pg/mL, rs. 284 pg/mL (N <66 pg/mL); 25-hydroxyvitamin D of 9, 20, rs. 4 ng/mL. All patients had mild obesity, 2 females had high blood pressure, and first subject associated hyperlipemia and uric diathesis. No glucose metabolism anomaly was identified. Kidney stones were 100% presented while case 1 and 3 had osteoporosis (L2 vertebral fracture, rs. 5 fractures at upper and lower limb). PT-ectomy was performed at 12, 14, rs. 13 months since diagnosis (an inferior left adenoma was identified in case 1 and 2 and left superior in case 3). Case 1 had autoimmune hypothyroidism yet with a macronodular ultrasound pattern (as case 3); both case 2 and 3 had normal thyroid function. During PT-ectomy, in case 1 and 3 the partial resection of thyroid associated L-thyroxine substitution further necessary. Case 2 had thyroid nodules of maximum 1 cm and during PT surgery the decision of remove/biopsy was not done.

Conclusion: In studied patients with PHPT, at least one metabolic risk factor was positive; thyroid checks-up before and during PT surgery made necessary a partial resection in some cases; hypovitaminosis D was confirmed in all cases.

(254) *In vivo* micromorphological evaluation of cutaneous neurovascular reactivity in type 1 diabetes

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Background: Peripheral neuropathy is a common complication in diabetes that plays an important role in the development of foot ulcerations and amputations. Altered cutaneous microvascular response to various stimuli reflects the dysfunction of small peripheral nerve fibers, considered to be initially damaged in diabetic neuropathy.

Objectives: The aim of our preliminary study was to assess the reactivity of skin dermal microvascularization to topical capsaicin in type 1 diabetic patients through means of in vivo reflectance confocal microscopy.

Method: The study was aproved and fullfills the requirements imposed by the local ethics committee. In vivo reflectance confocal microscopy using a wavelenghth of 785 nm was used to evaluate the papillary capillary vessels located at the dermo-epidermal junction from the skin of 8 type 1 diabetic subjects and 8 healthy volunteers, before and after 30 minutes of topical capsaicin 0.1%.

Results: *In vivo* reflectance confocal microscopy allowed the noninvasive morphological and dynamic evaluation of cutaneous microvasculature and showed a significatly reduced vasodilatatory response of the papillary capillary vessels after 30 minutes of topical capsaicin in type 1 diabetic compared to healthy subjects.

Conclusions: *In vivo* reflectance confocal microscopy is a reproducible tool for the nonivasive assessment of the cutaneous neurovascular reactivity that could be used for early detection of small peripheral nerves damage in type 1 diabetes.

(255) Adrenal tumors in patients with kidney removal surgery due to unilateral renal cancer

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Surgery for renal cancer (RC) do not necessarily involves adrenals remove so an endocrine tumor at this level needs to be differentiated from metastases.

Objective: To highlight the importance of endocrine panel in patients with a prior RC and adrenal tumor (AT)

Method: This is a case series report.

Results: A 61-year female patient was admitted for evaluation of a double incidentaloma: a thyroid nodule and a right AT. She had only one kidney after surgery for a left RC, diagnosed 1 year ago. No chemotherapy was added but serial computed tomography scans were performed. She associated type 2 diabetes mellitus, high blood pressure under oral medication. Thyroid function was normal and fine needle aspiration excluded showed well differentiated follicular pattern. Adrenal profile showed chromogranin A of 84 ng/mL (Normal between 20 and 125 ng/mL), neuron specific enolase (NSE) of 5.25 ng/mL (Normal between 0 and 12 ng/mL), normal 24-urinary metanephrines and normetanephrines and normal 1 mg dexametasone (DXM) overnight test. She also had hypovitaminosis D (25-hydroxyvitamin D of 24.9 ng/mL; Normal between 30 and 100 ng/mL), normal central Dual-Energy X-Ray Absorptiometry, and negative for metastases whole body bone scintigram. Further imagery and endocrine follow-up was recommended.

A 52-year female had the left kidney remove a decade ago for RC. 1 year after surgery a right AT of 1.2 cm maximum diameter was discovered. Yearly imagery scans (either computed tomography or ultrasound) were done without any changes. She became hypertensive so an endocrine check up was recommended. Plasma cortisol after low DXM dose was 0.88 μg/dL with a NSE of 13 ng/mL (and normal chromogranin A of 72 ng/

mL). Adrenal surgery was recommended because of high NSE but the patient refused it. Nevertheless the CT scan 1 year later was status quo.

Conclusion: In the absence of surgery and associated pathological report, close follow-up is necessary regarding adrenal incidentalomas in patients with a prior surgery for renal cancer. The secretor profile excludes a secondary lesion but adrenalectomy is required.

(256) Interdisciplinary intervention to prevent severe disability in children

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Phenylketonuria (PKU) is a rare inherited disorder that increases the blood level of an essential aminoacid called phenylalanine. PKU is caused by a defect in the gene that helps create the enzyme phenylalanine hydroxylase (PAH) needed to convert phenylalanine into tyrosine. Consequently, phenylalanine can reach harmful levels in the body, causing intellectual disability and other serious health problems. Neonatal screening for PKU in Romania is currently conducted through the National Health Program.

Objective: Early diagnosis and treatment of PKU in order to prevent neurological damage at children positive tested for this disorder.

Methods: We analyzed data from the 5 regional centers of PKU diagnosis (Bucharest, Cluj, Iasi, Targu Mures and Timisoara). This data was reported to the Implementation Unit of Health Programs since January to December 2014. Confirmed cases were treated and monitored by a multidisciplinary medical team from these centers.

All the newborns were tested using "dry blood spot" (DBS) method. The test is usually done before a newborn leaves the hospital, in the first 48-72 hours of life.

Phenylalanine levels were assessed by immunofluorimetric method.

Phenylalanine and tyrosine blood levels were measured to confirm the diagnosis of PKU at children with positive screening tests.

Results: In 2014, 94.78% of newborns were nationwide screened for PKU. We identified 21 positive patients. Further tests confirmed phenylketonuria in 17 newborns.

Children with PKU disease were early treated and monitored by a multidisciplinary medical team. Furthermore, patients that were diagnosed and correctly treated had a normal neurocognitive development.

The PKU incidence in this study is 1/10 000 infants.

Conclusion: National neonatal screening program for PKU provides social and economical benefits for our community, due to the fact that newborns can be diagnosed early on. Early diagnosis and treatment ensures a proper neurodevelopment of these patients and prevents morbidity.

(257) Acute adrenal insufficiency after insulin tolerance test on a patient with paraparesis and polydipsia

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Insulin tolerance test (ITT) is a useful tool for the confirmation of central adrenal insufficiency. The insulin dose is precisely calculated based on patient weight; yet sometimes severe reactions are registered in adults.

Objective: We aim to describe an unusual severe reaction after ITT.

Methods: This is a case report. Endocrine panel and medical history is exposed.

Results: A 33-year female patient was admitted for an endocrine assessment because of a few recent lipothymia episodes in association with an increased liquid intake up to 10 liters per day. She was known with paraparesis after a neurosurgical procedure for lumbar disc herniation; hemorrhagic gastritis; chronic hepatitis B, and untreated depression.

The biochemistry parameters were within normal limits, including ionogram. The systolic blood pressure was between 90-100 mmHg while she continued to have normal menses. The

endocrine profile confirmed a normal thyroid and gonad axes with normal increase of plasma cortisol after Synacthen stimulation test ruling out Addison's disease.

A secondary adrenal insufficiency was suspected thus ITT was started with IV (intravenous) 0.1 U insulin/kg. Fasting plasma glucose of 77 mg/dL decreased to 21 mg/dL within 19 minutes with a rapid correction after 2 vials of glucose 33% and continuous perfusion with glucose 5%. Less than 10 minutes after, the consciousness progressively deteriorated in association with low glycemia (between 20 and 40 mg/dl) and rapid IV glucose did not immediately correct it. For the next 10 hours 7 vials of glucose 33%, 1500 ml of glucose 5%, and 400 mg IV of hydrocortisone hemisuccinate were administrated to obtain a stable estate. The levels of plasma cortisol at baseline were low (of 7.66 μg/dl, normal between 7.36 and 22.6 μg/dL) and did not increase at hypoglycemia (a peak of 6.4 μg/dl) in association with a peak of growth hormone (GH) of 0.63 ng/mL (expected normal levels >10 ng//mL), confirming central adrenal insufficiency and adult GH severe deficiency. Magnetic resonance imagery did not point out any anomaly, polydipsia was diagnosed as psychogenic and glucocorticoid substitution was recommended.

Conclusion: Dramatic reaction at hypoglycemia was correlated with hypopituitarism; the cause is probably autoimmune despite the lack of specific evidence.

(259) Endocrine manifestation of ANCA-associated vasculitis

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Objective: Cases of pituitary involvement in granulomatosys with poliangiitis are rarely found in the medical literature. We report the case of a patient with atypical debut presentation- polydipsia- of a rare sistemic disease-granulomatosis with poliangiitis.

Methods: We present the case of a 50-year-old female patient, admitted to one tertiary Rheumatology Centre, for tiredness and fatigue, conjunctivitis of the right eye and arthralgia. The patient also complains of progressive high water intake (15 liters per day), for the last year.

A careful patient history showed the presence of recurrent hiposmia and epistaxis he patient being repeatedly evaluated in an Oto-Rhino-Laringology Department for maxillary and ethmoidal-sinusitis and multiple surgeries were performed. The patient also associated migratory arthralgia, erythema and edema of the right eye. Polydipsia was also present, approximately15 litters/ day. The lab results showed inflammation, thrombocytosis. Immunology showed positive ds DNA antibodies and c-ANCA antibodies. Other investigations revealed the presence of keratoconjunctivitis, with an intense positive Schirmer test. The thoracic CT exposed the presence of pseudocavitary nodular lesions in both lungs. The cerebral MRI showed the presence of a nodular mass of the pituitary gland.

Results: Taking into account the clinical, paraclinical and immunological findings the diagnosis was Granulomatosis with polyangitis with upper- and lower respiratory tract, musculoskeletal and ophtalmological involvement. At the onset there was no renal involvement. The presence of the polydipsia and the mass found in the MRI, arouse the suspicion of a pituitary granuloma, a rare manifestation in this type of vasculitis.

Immunosuppressive treatment was quickly initiated with corticosteroids and Cyclophosphamide pulse- therapy, and then continued with oral cyclophosphamide. The evolution under treatment was favorable with normalized lab results and abrupt decrease of the water intake (3liters/day).

Conclusions: Sometimes the organ limited manifestations of a systemic disease can postpone or reveal the correct diagnosis. In the presented case the evolution was favorable under treatment, with remission of polydipsia, but the diagnosis and treatment have to be quick in order to prevent irreversible changes like pituitary necrosis.

(260) The link between psychological disorders and thyroid antibodies

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Objective: autoimmune thyroiditis, also known as Hasimoto's thyroiditis (HT), is the most common autoimmune thyroid disease, with a

higher prevalence in women. Also, it is the most frequently cause of adult hypothyroidism in the world and is diagnosed with high titers of antithyroid peroxidase (ATPO) and antithyreoglobulin (anti-Tg). Recent studies have shown a connection between HT and psychological disorders (obsessive-compulsive syndrome, anxiety, depression, etc.). Our review includes a number of studies, with the primary purpose being to find a link between high levels of ATPO and anti-Tg, and psychological disorders.

Method: the study is a review of 3 different clinical studies on patients in which analyses are performed on thyroid function, while levels of Free Triiodothyronine, Free Thyroxine and Thyroid-stimulating hormone indicate a normal function of the thyroid. In the group study, ATPO levels are elevated, indicating an euthyroid autoimmune thyroiditis. In control groups, levels of autoantibodies are below limits. Psychological testing followed, through questionnaires that evaluated the severity of different morbidities.

Results: in each study, a strong correlation can be noticed between elevated levels of ATPO and the onset of psychological symptoms, such as depression, obsessive-compulsive disorder and anxiety. With serum levels of markers for thyroid function within normal limits, possible symptoms created by a hypo- or hyperthyroidism are excluded.

Conclusions: there is a strong connection between the elevated levels of ATPO and the onset of psychological manifestations. Until now, no correlation between these manifestations and high levels of Anti-Tg has been proven. Knowing that an increasing number of auto-immune thyroiditis cases with high Anti-Tg are being recorded, new grounds for research can be established. The etiology is not yet clear, but a number of hypotheses are proposed in order to truly understand the connection.

(261) Delayed onset of acromegaly in a patient with an incidentally discovered pituitary mass, associated with primary adrenocortical insufficiency

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Objective: Pituitary "incidentalomas" are unsuspected masses discovered on imaging studies, which are rarely clinically significant at initial presentation, and periodic follow-up is recommended, according to current guidelines. We present a rare case of delayed onset of acromegaly in a patient with a pituitary incidentaloma, raising the question of optimal follow-up schedules.

Methods: Clinical examination, biochemical and imaging studies.

Results: A 53 years old female presented with a 11x5 mm pituitary mass discovered on a head CT scan for headache. There were no clinical signs of pituitary hypersecretion and serum prolactin and IGF-I levels were normal. On two yearly follow-up visits CT scans showed non-progression of mass size and normal prolactin and IGF-I levels. MRI follow-up scans after 10 and 13 years showed a stationary mass with cystic changes. Recent onset of unexplained persistent hyperkalemia prompted endocrine re-evaluation, 13 years after the initial diagnosis.

Clinical examination revealed mild skin hyperpigmentation and a small increase in shoe size. IGF-I levels were repeatedly abnormal (2.2-2.9 x ULN) and unsupressible growth hormone levels during OGTT, diagnostic for acromegaly. We discussed treatment options and the patient has been started on a trial of dopamine agonist, with a view of pituitary surgery in case of lack of response.

ACTH levels were high and increased progressively while baseline serum cortisol levels were normal, with subnormal response to synthetic ACTH, suggesting subclinical primary adrenocortical failure (Addison's disease). Adrenal CT imaging excluded adrenal masses as a possible cause of Addison's and revealed an unexpected left adrenal hyperplasia. 17 HO-progesterone levels were elevated, suggesting concomitant congenital adrenal hyperplasia, which would require genetic testing of CYP21A mutations for confirmation. The patient was commenced on glucocorticoid and mineralocorticoid replacement.

Conclusions: Current guideline recommendations (Endocrine Society 2011) for pituitary incidentaloma do not provide clear-cut follow-up schedules; prolonged clinical and hormonal follow-up may sometimes uncover delayed onset of endocrine disease. In our case, incidental hyperkalemia prompted endocrine re-evaluation revealing multiple endocrine abnormalities.

(270) Clinical features and response to treatment in a group of patients with ANCA-associated vasculitis

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Objective: The aim of the study is to raise awareness in a rare group of diseases, ANCA-associated vasculitis, in which there still isn't a gold standard of care. In the early phases of the disease, the symptoms are non-specific, the diagnosis is delayed and the mortality is high.

Methods: We performed a study on a cohort of patients diagnosed with ANCA-associated vasculitis followed in one tertiary Rheumatology Centre. We evaluated the clinical and immunological features, choices of treatment and response to therapy. We used Windows Excel/ SPSS20.0

Results: The study group included a total of 18 patients (13 patients diagnosed with granulomatosis with polyangiitis, 3 patients with eosinophilic granulomatosis with polyangiitis and 2 patients with microscopic polyangiitis), 10female and 8male patients with a mean age of 49,8at the time of the diagnosis. The female patients were between 37 and 75 years of age with a mean age of 54.7 years. The male patients were between 21and 61years of age, with a mean age of 42.75.

The first organ involvement present at the onset of the disease was as it follows: upper respiratory tract in 11 patients (sinusitis, otitis, dysphonia), lower respiratory tract in 7patients (unilateral nodular lesions, cavernous nodular lesions in both lungs) and musculoskeletal involvement in 6 patients. There were also 3 cases of Ophthalmological, cutaneous and renal involvement. Renal involvement (hematuria, proteinuria) developed in 11patients.

As for the treatment, the induction of remission was initiated with high doses of cortisone in 4 patients, Azathioprine and corticosteroids in 1 case and combined pulse therapy with Cyclophosphamide and cortisone in 13 cases (for renal and lower respiratory tract involvement). Cyclophosphamide induction dosage was between 800 and 4000 mg with a mean dose of 1780 mg. Remission under treatment was successful in 12 cases. Adverse reactions were present in 5patients (pulmonary infections)

Conclusions: Clinical manifestations of ANCA-associated vasculitis are polymorphic and they usually involve the upper and lower respiratory tract. Renal involvement may appear later in the disease evolution. Immunosuppression with Cyclophosphamide is still the most used therapy for inducing disease remission.A prompt diagnosis is necessary because the choices and duration of treatment are dictated by the type of involvement, the severity of the disease and patients age.

(272) Osteoporotic fractures: the risk of falling represents an unexpected package beyond Trabecular Bone Score and Bone Mineral Density

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Objective: The fragility (osteoporotic) fractures are caused by three distinctive parameters: quantitative skeletal features as pointed by Bone Mineral Density (BMD) at Dual-Energy X-Ray Absorptiometry (DXA) scans; micro-architecture -related qualitative points as expressed by Trabecular Bone Score (TBS) and the risk of falling related to hypotension, hypoglycemia, muscle force as reflected by vitamin D (VD) status, etc. We aim to analyze a female case who had a fragility fracture registered despite good results of TBS and BMD dynamics based on anti-osteoporotic therapy but un-controlled risk of falling on a VD independent way.

Method: The data of bone metabolism are provided: BMD (GE Lunar Prodigy machine), TBS (iNsight software); VD is assessed by 25-hydroxyvitamin D (25-OHD; ELISA kit; normal levels >30 ng/mL). Informed consent of the patient was signed in April 2016.

Results: A 61-year old non-smoker female with irrelevant personal and family history had menopause at age of 48 years (without replacement therapy). 2 years later she suffered a fragility fracture at right external malleolus, and central

DXA confirmed menopausal osteoporosis. She was offered strontium ranelate for 2 years when she suffered a second fracture at left external malleolus and treatment was switched to risendronate weekly for 4 years and another year of intravenous Ibandronate every 3 months. At this point DXA showed L1-4 lumbar BMD of 0.841g/sqcm, T-score of -2.8SD, Z-score of -1.9SD; L1-4 TBS was of 1.093, and 25OHD was 40 ng/mL. Therapy was continued the same but 6 months later she suffered a new fracture at right arm after falling on ice (surgery was necessary) despite BMD and TBS improved: L1-4 BMD of 0.904 g/sqcm, T-score of -2.3SD, Z-score of -1.5SD, and TBS of 1.172. Further bone forming teriparatide therapy was introduced.

Conclusion: This case highlights a few aspects on skeletal field: regardless the anti-osteoporotic drugs the risk of fracture is reduced, not canceled; an osteoporotic fracture registered early after menopause indicates a fast bone looser phenotype with augmented risk for cascade fractures; risk of falling is not corrected despite therapy and improvement of BMD, and adequate 25OHD; TBS assays are among the first tested in Romania because of novelty method.

(275) Active cancer surveilance in polymialgia rheumatica

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Objective: To raise awareness of the importance of active cancer screening in patients with a rheumatic disease as sometimes the rheumatic features may reveal or postpone the diagnosis of a neoplastic disease.

Methods: We present the case of a 74-year-old patient who presented in a tertiary Rheumatology Centre complaining of intense muscle pain and stiffness in the upper and lower limbs, with the impossibility to rise or climb the stairs, in the last month. He associated mild dysphagia and weight loss (5hg/ 1year) but the upper gastrointestinal (UGI) endoscopy and biopsy were negative for neoplasia and evolution was stable under treatment.

Following the last three months, the patient had easy dysphagia for solids and UGIE detected a protrusional lesion negative for neoplasia. Subsequently, the patient developed pain and functional impotence on the upper and then in the lower limbs. Clinical examination revealed marked functional impairment of the limbs and the lab results showed high inflammation (ESR=120 mm/h, CRP=118.86 mg/l,), chronic normochromic normocytic anemia (Hb=10.1 g/dl), and normal muscle enzymes, rheumatic factor negative, ACPA negative. An imagistic and blood marker screening for cancer was performed and resulted negative. Musculoskeletal ultrasound of the shoulder show left bicipital tenosynovitis, bursitis and long head biceps tenosynovitis. Thus, the diagnosis of Polymyalgia rheumatica (PMR) was made and low-dose corticosteroids were initiated.

Results: The response to low-dose corticosteroids was favorable, with rapid clinical and biological improvement, with a CRP value, lowering to half in 48 hours, which is one strong argument in favor of a rheumatic disease per se. In spite of the good evolution the neoplastic screening was continued and a second UGI endoscopy was performed showing at this time a lesion positive for squamous cell carcinoma of the middle part of the esophagus and the patient was referred to a gastroenterology clinic for further investigations.

Conclusions: Although the cancer incidence among PMR patients is not very high, clinicians should always closely and prompt screen for an accompanying cancer during the first months after a PMR diagnosis is made.

(278) Complications of glucocorticoid treatment of a non-compliant patient with systemic lupus erythematosus – case report

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OBJECTIVES: Systemic lupus erythematosus (SLE) is a chronic inflammatory disease that can have multiple systemic effects in the human body. More than 90% of cases of SLE occur in women, frequently starting at childbearing age and follows a relapsing and remitting course. The purpose of our case report is to present the evolution and complications that occur when a patient with SLE is non-compliant.

Methods: We report the case of a 58-year-old woman presenting middle back pain who recently developed thoracic kyphosis.The pacient was diagnosed with SLE at the age 56 when she satisfied the requirements of Systemic Lupus International Collaborating Clinics (SLICC) with 4 criteria including acute cutaneous lupus, arthritis, positive antinuclear antibodies (ANA) and positive anti-dsDNA antibodies. Medications used to treat SLE manifestations of the pacient included Methylprednisolone (MPD), Hydroxychloroquine and Aceclofenac. Despite the doctor's instructions to take 4 mg /day MPD for 3 months and then come for a reevaluation, the patient took 16 mg/day MPD for 2 years. Clinical examination revealed Cushingoid facies, malar rash, macular rash in the anterior cervical and thoracic region, truncal obesity and thoracic kyphosis. Osteodensitometry revealed severe osteoporosis and the chest radiography showed T11-T12 vertebral compression fractures.

Results: The final diagnosis was Iatrogenic Cushing Syndrome due to an administration of excessive amounts of glucocorticoid. The main characteristic of our case report consists in the patient's lack of treatment adherence which led to an unfavorable evolution from a barely sympthomatic SLE, diagnosed at an uncommon age, into an Iatrogenic Cushing Syndrome with severe complications.

Conclusion: Among the multiple SLE complications, there are also glucocorticoid treatment related complications which rely on the patient's adherence to the treatment. Without cardiac, renal or neurologic complications and with a proper treatment, SLE has a good prognosis showing increased bone density and a decrease in possible bone fractures. Instructing the patients with SLE to adhere to treatment, seek medical care for evaluation of new symptoms (including fever) and advising them regarding their hightened risks for infection and cardiovascular disease is very important for managing the disease.

(281) High-risk HPV genital infection in women and anal dysplasia

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Objectives: The majority of sexually active women will acquire anogenital HPV at some point in their lives. The presence of cervical HPV is a major risk factor for anal HPV. The aim of our study is to verify the coexistence of anal warts or anal dysplasia in HR HPV patients.

Method: We examined 20 women with visible perianal warts and 30 women known with cervical intraepithelial disease, all of them with positive cervical HR HPV (16, 18, 31). We performed visual inspection, anal cytological smears and anuscopy.

Results: Clinically, HPV infection of the anal area can present as benign warts (condyloma acuminata), dysplastic lesions (anal intraepithelial neoplasia), or a combination of both.

We observed pedunculated warts (14 cases) and warts which grow in radial rows around the anus (6 cases). Some of them extended into the anal canal as far as 2 cm above the dentate line (seen during anuscopy). Symptoms associated with anal warts included the presence of a raised lesion, pruritus, bleeding, discharge and pain. Anal intraepithelial neoplasia (AIN) was diagnosed after acetic acid 5% application to the perianal area. The most frequent appearance was as flat, dysplastic (16 cases) and neoplastic lesions (5 cases). We performed high resolution anuscopy to explore intra-anal disease, which was confirmed in two patients. The therapeutical approach was application of topical agents (podophyllotoxin, imiquimod, and trichloroacetic acid). Timely diagnosis and treatment of AIN is important to prevent progression into invasive anal SCC. Topical imiquimod 5 percent is an effective treatment of AIN.Surgical therapy included wide local excision and targeted destruction.

Conclusion: The coexistence of HR HPV in cervical and anal dysplasia is of real concern for both women and practitioner. Following treat-

ment, long-term surveillance is essential to treat recurrence and prevent progression for both cervical and anal cancer in HR HPV women. Although routine screening remains controversial, screening with anal cytology is suggested.

(282) Thrombophilia screening and hormonal contraception

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Objectives: Epidemiologic studies suggest that oral estroprogestatives increase the risk of thrombosis, due to estrogens and their dosage. The effect is related to the increased synthesis of pro-coagulant factors. The effect on anticoagulant parameters (protein S, C and antithrombin III) is less known.

Method: Due to possible serious complications during pregnancy, we observe that a lot of our patients perform screening tests for thrombophilia. Associated with familial or personal history, we manage to diagnose far more patients with several mutations with thrombotic risk (mutations of MTHFR and PAI genes, mutations of factor XIII). This patients will need also further contraception. Actual recommendations are a nonestrogenic pills. We studied 65 women, which due to family or personal history are considered with high risk for thrombotic events.

Results: For patients who desire oral hormonal contraception, with personal risk factors (obesity, smoking etc) a thorough familial thrombotic history should be taken. The history investigates acute thrombotic events and possibly thrombosis-related events in young relatives (under 50 years) or pregnant relatives. If this history is positive, screening tests for thrombophilia are mandatory. From our 65 patients series, 49 tested positive for the abovementioned mutations. After counseling, 41 choose a nonhormonal birth control method, for the eight left, low-dose estrogen containing pills or progestative-only pills were recommended.

Conclusions: Positive familial history for thrombophilia should be a strong motivation for screening patients who desire oral contraception.

(284) Single centre experience with collagen IV-related nephropathies

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Collagen IV-related nephropathies family comprises a spectrum of phenotypes from Alport syndrome (AS) to thin basement membrane nephropathy (TBMN).

We present the evolution of 6 patients (pts) with AS and 8 cases with TBMN diagnosed in our centre by renal biopsy.

The 6 cases with AS were males, and average age at onset was 28.2 +/- 16.7 years (yrs). All AS pts presented with microscopic hematuria and proteinuria (mean value 5.2 +/- 4 g/day). Renal function was affected at onset in 4/6 pts, with mean serum creatinine 1.47 +/- 1.14 mg/dl; two pts developed progressive renal failure and reached ESRD at 22 yrs, and 25 yrs respectively. Hypertension was diagnosed in 3/6 AS pts. 4/6 of AS patients were diagnosed with bilateral sensorineural hearing abnormalities. Every AS pt received antiproteinuric treatment, either was hypertensive or not: with ACEI in 4 pts, sartans in 1 pt, and both in 1 pt.

In 8 pts with TBMN, males/females = 1, average age at onset was 24.1 +/- 13 yrs. Most common findings were hematuria in 7/8 cases (macroscopic in 3/8 pts) and proteinuria in 4/8 cases (mean value 1.3 +/- 3.1 g/day), with only 1 pt with NS. 4/8 cases developed renal failure from the beginning, mean serum creatinine 1.56 +/- 1,37 mg/dl. One pt had mild elevation of blood pressure; 2 pts received ACEI treatment. None of TBMN pt had hearing problems during follow up. Two TBMN patients presented associated lesions at renal biopsy: IgA nephropathy in a 48 years age male patient with HBV infection, and FSGS in a 21 years age female patient; both of them developed renal failure and were treated by immunosuppressive therapy with a favourable evolution.

In conclusion, renal involvement is significant not only in AS, but also in TBMN. In AS, patients can reach ESRD in early adulthood; also in TBMN some cases develop renal failure from the beginning, which worsen the middle and long-term

prognosis.Considering there are genetic disorders, testing of relatives at risk by urinalysis is advisable, in order to detect and diagnose the asymptomatic affected individuals.

(285) Aseptic osteonecrosis-adverse effect of TNF-α inhibitors?

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Objective: Tumor necrosis factor-alpha (TNF-α) is a key regulator in inflammation. New studies proved the pathogenic role of TNF-α in aseptic osteonecrosis by promoting osteoclastogenesis and endothelial dysfunctions. Anti-TNF-α therapy seems promising in osteonecrosis, but there is still little evidence. Recently, osteonecrosis has been noted as possible adverse effect of anti-TNF-α therapy. The aim of our presentation is to describe and analyze four cases of patients with rheumatic diseases, treated with TNF-α inhibitors, that developed aseptic osteonecrosis during the treatment.

Method: We observed two patients with rheumatoid arthritis (RA) and two with ankylosing spondylitis (AS). The patients having RA were a 30-year-old woman and a 47-year-old man. After an unsuccessful combination of disease-modifying antirheumatic drugs (DMARDs) (methotrexate, leflunomide, sulfasalazine) and small doses of corticosteroids, both subjects received an association of DMARDs and TNF-α inhibitors (etanercept, adalimumab, respectively). After four years of biological treatment and three and a half years, respectively, the patients developed aseptic osteonecrosis.

The patients having stage 3 AS: a 40-year-old woman and a 40-year-old man, received similar therapies: NSAIDs and etanercept (the man received extra sulfasalazine therapy for non-axial involvement). Both developed osteonecrosis after six months of biological therapy and after 1 year and a half, respectively.

The diagnosis of osteonecrosis was based on symptoms, aspect on magnetic resonance imaging and/or plain radiology (affected bones: talus, navicular bone and femoral head).

Other causes of osteonecrosis were excluded.

Results: All the patients have rheumatic diseases, were treated with different TNF-α inhibitors and developed osteonecrosis. While for the RA patients, the corticosteroid therapy can be a cause of osteonecrosis, for the AS patients the main factor seems to be the use of TNF-α inhibitors. The development of osteonecrosis during the biological treatment and the later occurrence in the patients with higher risk factors sustain the pathogenic role of TNF-α inhibitors in osteonecrosis.

Conclusions: Although more demonstrations are needed, our case series could represent a beginning for further clinical studies. Avascular osteonecrosis is a severe and debilitating condition which should be investigated as possible adverse reaction of TNF-α inhibitors, considering the widespread use of this therapy.

(287) Secondary hypertension due to primary aldosteronism – an audit of diagnosis, treatment and follow-up in a tertiary endocrine center

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Objectives: To analyze clinical and biochemical characteristics in a group of patients with primary aldosteronism (PA) as compared with patients with essential hypertension.

Methods: Medical records of 30 patients with primary aldosteronism (19F/11M, aged 35.5 ± 10.9 years at hypertension onset) and 41 control hypertensive patients matched for age and body mass index (16M/25F, aged 35.6 ± 14.7 years) without mineralocorticoid excess, were retrospectively reviewed. Plasma aldosterone and plasma direct renin were measured by chemiluminiscence (CLIA - method's sensitivity 2.2 ng/dl for aldosterone and, respectively, 0.27 ng/dl for renin). Blood collection and diagnosis of PA were performed according to guidelines, using screening and confirmatory tests (Captopril challenge or saline infusion tests). Whenever possible, drugs interfering with renin-aldosterone axis were withdrawn.

Results: Maximum systolic blood pressure in patients with PA (214 ± 28 mmHg) was signifi-

cantly higher than in control patients (195 ± 25 mm Hg, p=0.009). Median time from hypertension onset to diagnosis of PA was 5 years, ranging between

0.5-25 years. Median number of antihypertensive drugs used for blood pressure control in PA patients was 3. Serum kalemia in patients with PA was significantly lower (3.06 ± 0.9 mmol/l) than in control patients (4.3 ± 0.3mmol/l, p<0.0001).

20 out of 30 patients diagnosed with PA (66.67%) presented hypokalemia at diagnosis. Maximum diastolic blood pressure, fasting glycaemia, total cholesterol were similar between the two groups. Computed tomography imaging revealed unilateral adrenal tumor in 15 cases, while adrenal hyperplasia and/or bilateral adrenal tumors in 15 cases. Adrenal vein sampling was not available, so surgery was performed in only 10 patients, with normalization of kalemia and control of hypertension in 8 patients (80%). Mineralocorticoid antagonists were used in the other 22 patients.

Conclusion: primary aldosteronism was diagnosed after long term evolution of hypertension, even in young patients; precocious referral for endocrine work-up and adrenal vein sampling were expected to improve outcome of surgical treatment.

(288) The incidence and importance of comorbidities in female patients diagnosed with breast cancer

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Background: Identifying comorbidities in patients with breast cancer is very important. Comorbidities affect both the total mortality rate and breast cancer specific mortality, thus the management of these patients is different, with a greater focus on treatment.

Methods: The research was conducted between 2010-2014 as a retrospective, descriptive and observational study conducted on a sample of 102 female patients diagnosed with breast cancer and registered in the Dpartment of Oncology of Hospital "Dr. Constantin Gorgos" in Bucharest. Data were analyzed using IBM SPSS Ver. 22 software.

Results: The mean age of the patients was 58 years (95% CI 55.35 to 60.67). 43% of patients had stage II cancer and 39% expressed inflammatory syndrome. Associated comorbidities were identified in 75% of patients. Among cardiovascular pathology, we identified primary hypertension in 36 patients (35.29%), ischemic heart disease in 20 patients (19.6%), heart failure in 12 patients (11.76%) and cardiac arrhythmias in 6 patients (5.88%) Other comorbidities were: dyslipidemia (16 patients, 15.68%), pneumopathy (15 patients, 14.70%), diabetes (22 patients, 21.56%) and chronic viral hepatitis (4 cases, 3.92%). For 47% of patients comorbidities were discovered at the time the diagnosis of breast cancer was made. Of these, 39% (n = 19) were non-adherent to the associated treatment and had a worse prognosis compared to patients who accepted therapy of comorbidities.

Conclusions: Breast cancer associated comorbidities should be identified as early as possible. A different management strategy of these patients should be adopted (specific treatment and follow up) in order to reduce mortality.

(290) Patterns of nephrology referral and dialysis initiation in chronic kidney disease patients

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Late referral to nephrologist (less than six months before dialysis initiation) of chronic renal failure patients (pts) can lead to urgent unprepared dialysis start, with increased morbidity and mortality.

We retrospectively assessed 340 pts (males = 178, mean age = 54.56 +/- 15.57 years admitted for dialysis initiation. 177 (52.1%) pts were late referred (LR), while in 163 cases (47.9%)

were early referred (ER). Hemodialysis was the preferred method either in the LR group (74%), or in the ER group (52.8%). Central venous catheter (CVC) was used in 121 pts (68.4%) from LR group, and in 71 pts (43.6%) from ER group; arteriovenous fistula (AVF) was used in in 18 pts (10.2%) from LR group, and in 25 pts (15.3%) from ER group; peritoneal dialysis (PD) was used in in 38 pts (21.5%) from LR group, and in 67 pts (41.1%) from ER group.

Three months survival after dialysis initiation was lower in LR group (84.6%) compared to ER group (89.4%), but without statistical significance ($p=0.18$); the difference was significant when analysed 12 months survival: 77.6% in ER group versus 69.9% in LR group ($p=0.02$). We found highest mortality in pts emergently included in hemodialysis via CVC (37.7%) when compared to pts initiated using AVF (12.1%) or with pts included in PD (13.6%).

Complications were significantly more frequent in pts dialysed using CVC compared to pts dialysed by AVF or PD: fluid overload in 36% vs 13% pts ($p<0.0001$), pericarditis in 27% vs 14% pts ($p=0.008$), cardiac failure in 54% vs 28% pts ($p = 0.0001$), arrhythmia in 33% vs 15% pts ($p<0.0001$), pleural effusion in 35% vs 13% pts ($p<0.0001$), neurological disorders in 3% vs 8% pts ($p<0.0001$), hemorrhagic syndrome in 26% vs 7% pts ($p<0.0001$).

Clinical outcome and survival is better in CKD patients early referred to nephrologist. In clinical practice, dialysis is often delayed, and is initiated using CVC, even in timely referred patients. This delay can abolish the potential benefits of timely referral.

(293) Serum osteoprotegerin is associated with symptomatic heart failure with normal left ventricular ejection fraction in CKD patients

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Objectives: Heart failure (HF) is common and appears early in the evolution of chronic kidney disease (CKD). The aim of our study is to identify markers associated with symptomatic HF in CKD patients with normal left ventricular ejection fraction.

Methods: We prospectively enrolled 90 CKD patients (pts) in pre-dialysis. Heart functional status was defined according to the NYHA classification. Were evaluated echocardiographic parameters of cardiac structure and function. xMAP technology was used to evaluate inflammatory and mineral metabolism markers: FGF-23, osteopontin, osteoprotegerin, osteocalcin, iPTH, IL-6, TNFalpha. All patients underwent 24 hour ambulatory blood pressure monitoring and peripheral pulse wave analysis.

Results: We enrolled 90 CKD patients (10 patients CKD stage 2, 58 patients CKD stage 3, 22 patients CKD stage 4), men = 64, age=64.8 ± 11.4 years (yrs). All study patients had EF ≥50%. 22 patients were in NYHA class 1, 49 patients were in NYHA 2 and 19 patients were in NYHA class 3. Pts with symptomatic HF (NYHA class ≥2) were older (68 ± 10 yrs vs 56±11 yrs, $p<0.05$), had lower eGFR (37.2±12.9 vs 55±23 ml/min/1.73 m^2, $p<0.05$), higher LAVI (42.5 ±17.5 m;/m^2, $p<0.05$), higher LVMI (120.7±29.9 vs 105.5±20.6 g/m^2, $p<0.05$), lower E/A (0.84±0.25 vs 1.04±0.37, $p<0.05$) and higher E/E` (12.6±3.5 vs 9.8±2.8, $p<0.05$). Also, we found significantly higher levels of IL-6 and OPG in NYHA 2-3 patients ($p<0.05$). In univariate analysis, symptomatic HF was correlated with LAVI ($p=0.02$), LVMI ($p=0.043$), E/A ($p=0.024$), E/E` ($p=0.001$), IL-6 ($p=0.015$), fibrinogen

(p=0.041), eGFR (p<0.0001), uric acid (p=0.003), OPG (p=0.003), OPN (p=0.02) and average systolic blood pressure (p=0.009). No correlations with pulse wave velocity parameters were identified. Binary logistic regression analysis identified eGFR (p=0.029), OPG (p=0.003) and E/E` (p=0.035), as markers of symptomatic HF.

Conclusions: In our study, 65.6% patients with normal LV ejection fraction had symptomatic HF, evaluated as NYHA ≥2. Symptomatic heart failure was associated with more advanced CKD. Our results suggest that OPG is a marker of symptomatic HF in CKD.

Acknowledgement: This work was partially supported by a grant of the Romanian National Authority for Scientific Research, CNDI- UEFISCDI, project number PN-II-PT-PCCA-2011-3.2-079.

(296) Serum Fetuin-A with left atrial size and function in patients with chronic kidney disease

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The aim of this study was to evaluate associations between serum fetuin-A and echocardiografic parameters of left atrial (LA) volume and function in patients with chronic kidney disease (CKD).

We enrolled 95 CKD patients (65.1±11.2 years, 67 men) in pre-dialysis (10 patients with CKD stage 2, 62 patients stage 3, 23 patients stage 4). Fetuin-A was measured using xMAP technology. Echocardiographic evaluation included: indexed left atrial volume (LAVI), left ventricular mass index (LVMI), LV dyastolic and sistolic function, and two-dimensional speckle-tracking echocardiography. We obtain LA reservoir, conduit and contractile (atrial function strain rate – ASr) functions. We evaluated intima-media thickness (IMT) by ultrasonographic study of the common carotid arteries.

Higher fetuin-A level was significantly associated with increased eGFR (p=0.006) and hemoglobin (p=0.029), and negatively associated with LAVI (p=0.025), ASr (p=0.029), LVMI (p=0.014), IMT (p=0.01), arterial pressure (p=0.046).

A stepwise multiple regression analisys revealed that left atrial contractile function parameter (ASr) was independentely correlated with fetuin-A level (β= -0.381, p=0.018) and age (β=0.559, p=0.001). Also, on stepwise multiple regression, only ASr was independenly associated with the presence of cardiac failure symptoms. LAVI and was significanly increased in patients with heart failuresymptoms.

Our study shows that fetuin-A correlated with LA function and LAVI. LA contractile dysfunction was the main factor associated with the presence of symptoms, suggesting that it could better reflect cardiac involvement with clinical consequences in CKD patients.

Acknowledgement: This work was partially supported by a grant of the Romanian National Authority for Scientific Research, CNDI– UEFISCDI, project number PN-II-PT-PCCA-2011-3.2-0794.

(298) Data regarding epidemiology and clinical aspects of hydatidosis in children

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Objective: Hydatid disease (Cystic echinococcosis, CE) still represents an important public health issue. Socio-economic risk and cultural factors, uncontrolled slaughter of livestock, and unsanitary living conditions are some of the main factors for human CE. Our objective was to analyze and describe the data related to epidemiology and clinical aspects of CE in children.

Methods: Out of more than 2,500 patients registered in our database (2000-2015) with CE, we selected for this study 186 children. We did a retrospective study, analyzing diagnostic and therapeutical aspects.

Results: Most of the children came from rural areas. 87 cases had a primary localization and in 99 cases relapses were identified. Regarding the first organ infected, the lungs were the case for 34.4% of our patients, followed by the liver (31.18%), lungs and liver (19.9%), and other localization (14.52%). The hydatic cyst was unique in 41.9% of our cases. More cysts were diagnosed in the other patients. Most of the detected cysts had a scale between 3 and 6 cm. Two suggestive cases will be presented.

Conclusions: Hydatidosis represents a public health problem in Romania, affecting children and adults. It could be related with invalidating evolution, tendency to relapses and a quite important mortality rate. Hydatidosis treatment is individualized, medical, surgical and mixed, depending on each case. The diagnosis is based on imaging, serological and clinical data.

(299) Chronic kidney disease is significantly associated with insulin resistance and hypertension in patients with nonalcoholic fatty liver disease

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Non-alcoholic fatty liver disease (NAFLD) and chronic kidney disease (CKD) shared common features, such as type 2 diabetes mellitus, metabolic syndrome, obesity and insulin resistance.

The aim of the study was to assess the risk factors for CKD in patients with NAFLD.

We enrolled consecutive patients with histological proven NAFLD. Clinical and biological data were recorded at the time of liver biopsy. CKD was defined as eGFR 2.7. IBM SPSS Statistics 21 programme was used to analyze data.

75 patients with liver biopsy proven NAFLD were included: mean age 54.3 ± 9.9 years, 57.3% men. CKD was present in 15 (20%) of 75 NAFLD patients. 74.7% of patients presented metabolic syndrome, 57.3% type 2 diabetes mellitus, 65.3% arterial hypertension, 58.4% obesity and 70.7% presented insulin resistance. The presence of CKD was significantly associated with insulin resistance and hypertension ($p<0.05$). A stepwise multiple regression analysis showed that age ($p=0.002$), arterial hypertension ($p=0.01$) and serum trombocytes ($p=0.04$) positively associated with eGFR ($p<0.0001$). Hepatic steatosis grade positively correlated with eGFR and inflammation on liver biopsy. We didn't find correlation between liver fibrosis and eGFR.

Our results indicate a significant association between insulin resistance, arterial hypertension and CKD in patients with NAFLD. This study show that is important to evaluate the risk factors for CKD in NAFLD patients, in order to treat them and to prevent CKD developing in NAFLD patients. Specialists and practicing clinicians should be aware of the association between NAFLD and CKD, especially because of the high and growing prevalence of CKD and NAFLD.

The study was partially supported by grant PN-II-ID -PCE-2011-3-0917, no. 297/2011 of the Romanian Ministry of Education represented by UEFISCDI.

(303) Radiological interstitial syndrome and mediastinal adenopathy at a patient under treatment with Interferon y for Hepatitis C

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Objectives: IFNy is a soluble cytokine from the II class of interferons. It is critical for the native immunity and adaptation against viral and bacterial agents, by inhibiting the viral replication and stimulating the macrophages inducing the MHCII. The Il1, Il12 macrophages surround the Th cells and become Fibroblasts-like resulting into the appearance of granuloma.

Methods: The patient, 58 years old, female, non-smoker, with professional exposure (carpet factory)-10 years, diabetic was treated for Hepatitis C with IFNy (2007-2008) and restarted in 2015 presents with progressive dry cough for over a year. The clinical Examination depicts normal breath sounds and saturation of oxygen, with no peripheral adenopathies or hepatosplenomegaly.

The complete blood count discovered a minor leucopenia and inflammatory syndrome. X-ray shows enlarged pulmonary hila and superior mediastinum, CT reveals mediastinal adenopathies and nodules (0.9-1.5cm).

Diferential diagnostic is made between: HVC associated vasculites, sarcoidosis, lymphoma and adverse reaction from the IFNy treatment.

Further investigations: ACS-normal, HIV- normal endobronchial aspect, bronchoalveolar lavage with no tumoral cells, no bacteria, and discrete lymfocytosis, functional pulmonary explorations are also normal.

The ganglia biopsy describes: granulomatous nodules without caseous necrosis.

Results: The entire Clinical-Paraclinical context indicates a case of secondary sarcoid-like reaction after the IFNy treatment.

The Patient continued the treatment due to the importance of reaching an undetectable viremia and the fact that the respiratory function was intact.

The reevaluation after finishing successfully the IFNy treatment, the CT shows a normal aspect, with the retraction of the previous nodules. Therefore the diagnosis of Sarcoid-like reaction from the IFN treatment is confirmed.

Conclusions: In choosing the right approach of a patient with such unspecific clinical and radiological manifestation, the physician should also take into consideration this possible side-effect of the IFNy treatment and decide the balance of continuing or stopping it.

(304) Multiple myeloma: a possible hidden cause of chronic kidney disease

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Objectives: Multiple myeloma represents the malignant proliferation of plasma cells in bone marrow with the production of monoclonal paraproteins. These plasmocytes release substances that produce bone lysis with consequent bone pain. Paraproteins are light chains of immunoglobulins which precipitate and produce the alteration in physiologic renal function. The aim of this study is to aid in the early diagnosis of multiple myeloma and to demonstrate the fact that multiple myeloma could be the hidden cause in a patient with chronic kidney disease.

Methods: A 71-year-old female, known with essential hypertension (stage II), chronic kidney disease, coronary heart disease,and chronic heart failure. She presents to the emergency department with: nausea, rib cage and lower back pain, with radiation to the hip joint. Clinical examination revealed: hypertension (160/80mmhg), ventricular rate (88 bpm), basal spontaneous pain on palpation of the left hemithorax. Laboratory investigations revealed: hypercalcemia (13.21 mg/dl), elevated total protein (14.16 mg/dl), elevated Blood Urea Nitrogen (75 mg/dl), elevated creatinine (4.27 mg/dl), elevated amylase (150 u/l), hyponatremia (133 mmol/L), hypokalemia (2 mmol/L), hypoalbuminemia (2.5 g/dl), mild normocytic normochromic anemia with hemoglobin (9.1). Before making the diagnosis, the patient was hydrated and perfused in order to normalize both values of hypokalemia and hyponatremia. Also, the patient was treated for hypercalcemia. Blood pressure and ventricular rate were also maintained at normal level. The pain was ameliorated with analgesics.

Results: Suspected multiple myeloma was supported by laboratory investigation showing: hypercalcemia and hyperproteinemia,seric protein electrophoresis, cranial X-ray revealing multiple zones of osteolysis in the frontal, occipital and temporal bones, expression of Bence Jones Proteins in the urine strengtened by positive medullary puncture.

Conclusion: Patient known with chronic kidney disease, aggravated by a chronic intake of NSAIDs due to bone pain. Investigations revealed hyperproteinemia and hypercalcemia. The final diagnosis was made on the bases of the cranial radiology, presence of Bence jones proteins in urine and bone marrow puncture.

(305) Arrhythmogenic risk and severity of coronary arteries injuries

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Objectives: This paper aims to describe the spontaneous cardiac arrhythmias encountered in patients with coronary artery disease (CAD) with significant injuries, proven by angiography and to compare these arrhythmias with those found in a group of patients without significant CAD.

Method: This study is a retrospective study which included 80 patients with stable CAD, coronary anatomy assessed by coronary angiography or MSCT, and the presence of cardiac arrhythmias by ECG Holter.

Results: In this study we included 80 patients, 60 men and 20 women, compared 3/1. Observe the predominance of men in the study group and also of the age group 60-69 years.

The biochemical and metabolic alterations caused by I/R phenomena are responsible for electrofiziological inhomogeneity favoring arthmogenesis conditions. These complex changes represent an arrhythmogenic substrate in different cardiac structures.

Analyzing the results is observed complex ventricular arrhythmias in patients with significant injuries: presence of ventricular doublets ($p = 0.00003$) and non-sustained ventricular tachycardia (NSVT) ($p = 0.00002$) in these patients.

It can be noted also that patients with three-vessel injuries show an increased incidence of non-sustained injuries to those two-vessel injuries, from 2% to 18%.

Conclusions: The study highlights the association noninvasive Holter ECG with invasive angiographic to emphasize the link between the severity of coronary injuries and the severity of cardiac arrhythmias, enabling the assessment of patients with arrhythmias. The incidence and severity of cardiac arrhythmias is greater as coronary injurys are more severe and include several major coronary arteries.

The study allowed the delimitation of the CAD arrhythmogenic profile, characterized by complex cardiac arrhythmias with hemodynamic impact and associate this profile with severity of coronary injuries (degree of stenosis).

(306) High red blood cell distribution width could be a marker of cancer in patients with unprovoked VTE

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Objectives: An occult cancer is diagnosed in 10% of patients with an unprovoked venous thromboembolism (VTE). Extensive screening of cancer in patients with unprovoked VTE is not widely recommended. The main purpose of our study was to determine weather the high RDW level could be a new bio-marker of the presence of cancer in patients with VTE.

Methods: we prospectively evaluated 100 patients admitted consecutively in our clinic with the diagnosis of deep vein thrombosis (DVT) and / or pulmonary embolism (PE). Patients were divided in the two study groups: group A- 60 patients without cancer (excluded by extensive screening methods including mammography and abdomino-pelvin CT scan) and group B- 40 patients with cancer (70% with known malignancies, 30% having VTE as the first sign of malignancy).

Results: There were no significant differences regarding sex distribution between the two groups (60% in both groups). PE was present in 15% of patients in group A and 25% of those in group B. There were statistically significant differences between the two groups (group A vs. group B) in terms of age (59.56 ± 16.46 vs. 66.16 ± 10.24 years, $p = 0.011$), hemoglobin level (13.05 ± 2.44 mg/dl vs. 10.59 ± 2 mg/dl, $p = 0.005$) and ESR (18.53 ± 8 mm / 1h vs. 42.13 ± 17.2, $p = 0.002$). RDW was significantly higher in patients with malignancies compared with those who had no diagnosis of cancer (14.49 ± 2.61 vs. $12.38 \pm 1.98\%$%, $p = 0.0006$).

Conclusion: The presence of elevated levels of RDW, along with other clinical and hematological markers already validated, as older age, anemia and inflammation requires a thorough screening to rule out a malignancy in patients with unprovoked VTE.

(308) Bone assessment improvement on primary hyperparathyroidism: focus on Trabecular Bone Score

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Objective: Trabecular Bone Score (TBS) represents the latest tool to assess the skeletal archi-

tecture based on prior lumbar DXA (Dual-Energy X-Ray Absorptiometry) capture. TBS iNsight software is attached to central DXA machine and provides the indices. A new bone perspective is offered which is the first available for current practitioners knowing that prior similar studies using quantitative computed tomography or bone morphometry are recommended only for clinical trials. We aim to focus on TBS changes as well as classical bone features on a subject treated for primary hyperparathyroidism (PHPT).

Method: Bone Mineral Density (BMD) is based on GE Prodigy DXA device, providing Z-score according to WHO criteria. Phosphor-calcium metabolism is tested using parathormone (PTH), 25-hydroxyvitamin D (25-OHD). The patient signed the consent to use her medical records on March2016

Results: A 43-year old menstruating female was diagnosed 8 years with PHPT starting from multiple fragility fractures as vertebral, rib, and clavicle. She came for an endocrine check-up since she associated persistent high levels of calcium. On admission, a high PTH values (more than 10 times above the upper normal limit), high bone remodeling markers and a 25OHD of 4 ng/mL (normal >30 ng/mL) indicated a secondary and a primary activation of parathyroid glands. Sustained vitamin D supplements were offered to the patient for a few months and then left superior parathyroidectomy was performed. Treatment with alendronate weekly was added for 5 years. After surgery, no hypoparathyroidism was registered; she never experienced any new fracture while PTH and 25OHD remained normal. L1-4 lumbar BMD of 0.484 g/sqcm, Z-score of -5.7SD increased after 5 years to L1-4 BMD of 1.047 g/sqcm, Z-score of -0.4SD, L1-4 TBS of 1.41 and 3 years later of holiday drug DXA showed similar results while TBS pointed a continuous augmentation to L1-4 TBS of 1.555.

Conclusion: TBS analyze data are limited for the calculation obtained on Romanian medical centers since the method is new. After the correction of PTH and anti-osteoporotic therapy, TBS might become a more useful tool to reflect the bone recovery than BMD-DXA especially in non-menopausal women.

(311) The impact of the treatment in acute pericarditis

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We present the case of a 64 years old pacient with medical history of gastric ulcer, esofagitis, hipertension and pericardial effusion (05.2015) who was admitted to the hospital with fatigability and one episode of loss of consciousness. He also presented cough and fever by a week. On admission he has no signs of ventricular failure or haemodinamic disorder. The clinical examination was aparrently normal, without any murmurs or pericardial friction rub. (TA=128/80 mmHg; AV=90 bpm, without oedema). Biologically he had leucocitosis with limfocitosis and increase in the inflamatory markers; no increase of cardiac necrosis markers. Electrocardiography showed a negative T-wave in DIII, aVF, V1-V6. Computer tomography of the chest demonstrated pericardial effusion. Ecocardiographic examination established the diagnosis and reveals a moderate diastolic disfunction in progression.

The most patients with small and medium pericarditis can be managed effectively with medical therapy. Non steroidal antiinflamatory drugs are the mainstay level of evidence B, class I. Colchicine added to the NSAID or as monoterapy also appears to be effective for the attack and the prevention of a recurrence (level of evidence B, class IIa indication).

In this case, the treatment with NAINS was initiated (3g Ibuprofen per day) and the patient has developed upper gastrointestinal bleeding; the upper endoscopy reveald active gastric ulcer so the Ibuprofen was stoped; that is the reason why he will receive only 1mg colchicine per day.

The clinical evolution, was improuved, the fever, cough and fatigability were submitted.The patient was discharged receving 1g of Colchicine par day, Esomeprazole for the gastric ulcer and the hypertension treatment.

After one month echocardiography shows pericardial deposits of fibrine that reveals a possible evolution to a constrictive pericarditis. In this case the medical treatment, impose by the other pathologys, is apparently innefective as the evolution of the disease may be cronic.

The particularity of this case is that it refers to one patient with pericadial effusion, who can't receive the standard treatment with NAIND and is treated only with colchicine. Colchicine can't replace the benefic effects on the acute inflamation of the NAIND. That was demostrated by the evolution of the desese.

(314) The importance of breast cancer risk factors in prevention and early diagnostic

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Background: Breast cancer is the most common malignancy in women of our country. There are several risk factors presumed to be related with breast cancer and his incidence in young patients, based on data from many studies. The aim of this study was to evaluate breast cancer staging and to find out which of those presumed risk factors are relevant for our breast cancer patients.

Methods: we have performed a retrospective, descriptive and observational study, on a lot made up to 102 patients with breast cancer, evaluated and treated in the Oncology ward of the hospital Titan "Dr. Constantin Gorgos", Bucharest.

Results: For statistic analysis we used the following software: Excel and SPSS and we aplied especially nonparametrical tests and multiple comparison tests. 92 patients (90%) were from urban areas, 52 patiens have not breastfed (51%) and 38 patiens were nulliparous (37%). Benign mamar disease was present in the medical history of 22 patients (22%) and benign genital disease in other 22 patients (22%). Statistic analysis showed a significant relation between incidence of breast cancer and a number of risk factors as: urban areas, benign breast disease, benign genital disease, the absence of breast feeding, nulliparous status or age after 30 years for the first birth ($p<0,001$). Only 2% of the patients were diagnosed in stage 0, while the majority of patients were diagnosed in stage II 44 patients (43%) and in stage III 28 patients (27%). The lack of prevention, early detection and follow-up are responsible for the high incidence of locally advanced breast cancer.

Conclusions: We consider that a nearly follow-up of women with breast cancer risk factors, can lead to an earlier correct diagnostic and treatment of those patients, and it could reduce mortality in young breast cancer patients.

(315) Influenza and seasonal influenza caccine – where do we stand?

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Since 1960s Influenza Vaccine is available for use in Europe, making the influenza a vaccine preventable disease.

Objectives: To evaluate the knowledge and attitude regarding influenza viruses and seasonal influenza vaccines in general population.

Methods: We designed a questionnaire with several sections: personal information and influenza notions - with 13 multiple choice questions. Between 5th of April 2015 and 10th of April we posted the online version of the questionnaire on several public websites and asked the visitors to answer the questions. There were 169 participants to the study, out of which we excluded 67 of persons as they were part of medical personnel. Data collected has been processed using Epi Info 7.

Results: Almost 80% of participants were females, 90% coming from urban area. More than 90% of the participants knew about the existence of influenza vaccine, 83.6% think that the flu can be prevented, and 77.2% believe that vaccination can prevent it. More than 25% of participants consider that the influenza cannot be fatal, while half of the participants are afraid of getting the flu.

Only 5 persons got vaccinated this season, 52% consider it healthier to get immunity by passing through disease while 30% declared as anti-vaxxers. There were 6 participants who wanted to get vaccinated, out of which in 4 cases the general practitioner was out of vaccines, and 2 participants could not find the vaccine in pharmacies.

Almost 78% of participants have never got vaccinated against influenza and only a quarter of respondents consider that at the time of the study there was influenza epidemic in Romania.

Internet seems to be the most frequent source of information used, as 88.5% get informed about influenza from internet, compared to friends -55.7% and TV – 37.5%.

Conclusions: In the time of influenza epidemic in Romania, only 5 persons got vaccinated, this fact being due not to a lack of vaccine availability, but to a lack of knowledge – most of the participants did not even try to get vaccinated, as they consider that immunity is better acquired through getting ill.

(327) Superficial basal cell carcinoma of the trunk

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Objective: Basal cell carcinoma (BCC) is the most common skin malignancy. Its incidence has increased in the past 20 years, representing 30% of the total cutaneous malignant tumors and 68-80% of cutaneous epithelioma.

Method: We present the case of COA, 52 years old, with no significant pathologic antecedents, type IV Fitzpatrick, with constant 2 week/year sun exposure with photo-protection creams. About 3 years ago she observed a pigmentary maculae on the lower back trunk, which remained unchanged until last month, when the patient observed accidentally a fine pigmentary asymmetrical extension with an almost imperceptible discoloration of the center of the lesion. Clinical and dermatoscopic examination suggested the diagnosis of BCC, so surgical excision followed by histopathology examination were performed.

Results: Histopathology examination confirmed the clinical diagnosis of superficial BCC (normal orthokeratotic epidermis, tumor masses of basal type cells, lymphocyte infiltrate and melanic pigment at the dermo-epidermic junction).

Conclusion: Relative low age of onset, rare localization on the lower back, which is less sun-exposed, slow evolution without ulceration, but with asymmetrical pigmentation. Repeated sun exposures, even sun burns in childhood and teenage, might be incriminated in the pathogenesis of this BCC.

(335) Extremes in hyperparathyroidism: management of parathyroid carcinoma

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Background: Parathyroid carcinoma (PC) is a rare cause of primary hyperparathyroidism (PHPT), accounting for less than 1%, with an equal gender distribution and an average age of diagnosis in the fifth decade of life. The diagnosis of PHPT is based on the laboratory finding of high levels of immunoreactive PTH in the presence of severe hypercalcemia. The only potentially curative treatment for PC is surgery. Early surgery is the most important factor for optimal outcome.

Methods: This case series is based on a multidisciplinary review of four patients with parathyroid cancer, describing their therapeutic management and follow-up. Imagistic evaluation was performed by ultrasound (US), computed tomography scan (CT), magnetic resonance imaging (MRI), positron emission tomography (PET) and Technetium-99m sestamibi scintigraphy, for detecting the primary tumour, its local extent and remote metastases.

Results: Between 2008 and 2014 four patients were diagnosed with PC in our clinical department, three men and a woman, with a mean age of 50 years ± SD 13.22 (range 38-68). None had family history of hyperparathyroidism or hormonal disorders suggesting multiple endocrine neoplasia. All had severe hypercalcemia (15.3-19.4 mg/dl) and elevated PTH levels ranging from 15 to 45 times above normal value. Tumour size ranged from 3.2 to 7 cm; two of them had thyroid gland invasion and one thymic invasion. Three patients underwent parathyroidectomy with hemithyroidectomy and one underwent parathyroidectomy with thymectomy and cervical dissection. Schulte stage at diagnosis was between II and IV, while all were classified as high risk. Conformational radiotherapy of the tumour bed was used in 2 cases. Cinacalcet treatment was tried in one case and chemotherapy regimen in another, without significant improvement. Three patients had local recurrence and the time from the initial surgery to recurrence ranged from 1 month to 1 year.

Conclusion: Parathyroid carcinomas are rare endocrine cancers, with high relapse rate and poor prognosis. Multidisciplinary approach requires detailed imaging, skilled surgeons, endocrinologist and oncologist.

(340) The impact of cytogenetic and molecular analysis on survival in patients with acute myeloid leukemia

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Objectives: Acute myeloid leukemia (AML) is the most common acute leukemia in adults. It is widely accepted that the use of cytogenetic and molecular tests help classify these patients into risk groups. This allows a risk adapted therapy. In this study we aimed to analyse the impact of cytogenetic and molecular abnormalities on survival from 30 newly diagnosed patients with AML.

Materials: A study of 30 patients diagnosed with AML in the period January-July 2015 in the Center of Hematology and Bone Marrow Transplantation Fundeni Clinical Institute.

Methods: Cytomorphology/ cytochemistry / bone marrow biopsy/Immunophenotyping/ Cytogenetic exam / FISH and and molecular biology by Multiplex PCR identification (AML1-ETO; FLT3-ITD; MLL-AF9; PML-RARa; CBFb-MYH 11) / Real - Time PCR (AML1-ETO; PML-RARa; CBFb-MYH 11).

Results: 30 cases of AML: 46.66% men, 53.33% are women. The median age is 50.66 years. According to FAB classification: 13.33% patients AML0; 16.66% AML1; 3.33% AML2; 6.66% AML3; 26.66% AML4; 20% AML5. Eight patients presented normal karyotype; 2 patients trisomy 9; 2 patients t (15; 17); 2 patients *t* (8; 21); 1 patient inv 9; 5 patients unconclusive cytogenetic; for 9 patients has not been evaluated. Two patients present PML / RARα; 1 patient with S isoform (bcr-3) associated FLT3-ITD mutation; 2 patients AML-ETO; 2 patients FLT3-ITD; 1 patient CBFb-MYH11, 18 patients without molecular abnormalities. According to NCCN guidelines: 13.33% patients favorable risk; 26.66 % patients high risk; 60% intermediate risk. Fifty percent patients achieved complete remission; 16.66% patients partial remission; 3.33% patients had refractory disease. Regarding consolidation therapy: 20% patients received HIDAC regimen; 13.33% patients IDAC; the remaining patients are still undergoing chemotherapy protocol. Twenty percent are proposed for allotransplantation of hematopoietic stem cells.

Conclusions: These results underline the importance of cytogenetic and molecular tests in the risk classification and therapeutic decisions in AML patients. These tests must be part of investigations mandatory for all patients with acute leukemia.

(348) Clivus chordoma – a rare sellar mass mimicking pituitary adenoma. Long-term follow-up

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Objectives: Chordomas are rare, slow-growing malignant bone tumors arising from notochord remnants. Skull base chordomas may cause severe cranial nerve palsies and are life threating due to brainstem proximity. Perisellar chordoma can rarely present as a sellar mass, as illustrated by our patient.

Methods: A 47 years old female patient presenting with left VIth cranial nerve paralysis was evaluated clinically, with repeated imaging and underwent several surgeries and proton beam irradiation. Surgical specimens were evaluated histologically and by immunohistochemistry.

Results: Initial assessment revealed early menopause (45 years), appropriately high serum gonadotropins and increased prolactin levels (50 ng/mL), inconsistent with prolactinoma. Insulin tolerance testing revealed normal corticotroph and somatotroph function and cerebral IRM revealed a sellar and suprasellar mass, which was removed transsphenoidally. Histological examination revealed a sellar chordoma with positive immunohistochemistry for cytokeratin PAN (KL 1), Ki-67 index 3-4%, high co-expression of vimentin/ S100 protein. After a first tumor relapse, treated by transsphenoidal surgery, proton beam therapy (74 Gy) was administered to the sella and clivus. Repeated tumor recurrences led to six sur-

gical procedures (transsphenoidal/ transtemporal) over eight years. Throughout follow-up, pituitary function was preserved, with only mild gonadotropin insufficiency. Low IGF-I levels, noted recently, may indicate somatotroph insufficiency or GH resistance due to malnutrition (diagnostic ITT was deemed too invasive). Multiple cranial nerve palsies developed: IX and X (dysphagia, leading to feeding impairment and right vocal cord), III-partial and VI (bilateral ocular paralysis), V and VII (right facial paralysis and hypoesthesia). Tumour resection to decompress cranial nerves was performed after initial treatment of atlanto-occipital instability by fixation with titanium rods. Swallowing and phonation were significantly improved, and immediate postoperative control CT showed approximately 80% reduction of tumor volume. After postoperative recovery, radiotherapy is planned, to stabilise disease progression. Molecular tumor profiling revealed negative c-kit (CD117) staining and presence of p.G719S EGFR mutation. Tyrosine kinase inhibitors (e.g. Imatinib) may also slow progression.

Conclusions: Treatment of chordoma patients is difficult and requires multidisciplinary care, with an overall poor prognosis. The main focus of therapeutic endeavors is to improve quality of life and prolong survival.

(349) Prevalence of the mutation of BRAF V600E gene in differentiated thyroid cancer: anatomo-clinical correlations

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Objective: Thyroid cancer is the most common endocrine cancer and represents about 1% of all cancers. In addition, its incidence is on the rise, with the fastest growing cancer incidence among women and No. 2 among men.

In this study included 56 patients operated on for differentiated thyroid cancer, undergoing radiuoterapiei with iodine-131 and receiving BRAF V600E mutation resulted presence in the Laboratory of Molecular Biology of the National Institute of Endocrinology "C.I. Parhon "Bucharest.

The evaluation took into account the characteristics of type age (under or over 45 years), tumor stage (pTNM), histological subtype, vascular invasion, lymphatic and regional and extra thyroidal extension of the primary tumor.

This study found a correlation between higher prevalence of BRAF V600E gene mutation and unfavorable prognostic factors: the absence of tumor capsule, pT3 / pT4, advanced stages (III and IV), invasion of lymphatic vessels, extra thyroidal invasion. Also, although without reaching statistical significance, the study found the association of a higher prevalence of BRAF V600E mutation with vascular invasion, with feminine and with a ≥45 years of age.

Conclusion: BRAF V600E mutation represents a factor of alert for a closer look and follow a more aggressive antitumor therapy.

(350) Age estimation in subadults based on the parameters of anthropological analysis of the thigh length

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Objective: In Romania, the age estimation for a living person is performed on a working protocol derived from the rules developed by the Study Group for Forensic Age Diagnostics. According to this, the investigation methods to be used are:

- physical examination to determine some anthropometric measures (weight, height, constitutional type, sexual maturation, identification of diseases that would cause the abnormal development of the body).

Methods: The study was conducted on 181 forensic cases which required an anthropological forensic exam so as to estimate the age in subadult individuals (under 13 years old). The study included 93 females and 88 males. For each parameter, a linear regression equation for males and respectively females was created. The adjusted R2 values for the equations created based on the above parameters were in all cases over 0.5;

the highest values were obtained, in the case of both sexes, for the thigh length.

Results: Based on the regression equations obtained for age estimation from general anthropometric parameters we can create algorithms either in Excel or programming languages which may allow, in many cases, to identify the age with a margin of error of a few weeks.

Conclusions: By introducing all of the variables analysed above in a regressive matrix and using the stepwise method to eliminate variables, the following polynomial regression equations were obtained:

- For females: Age = 0.413*Length (cm)+ 0.432*Thigh length (cm) - 5,866 which has an adjusted R2 of 0.817
- For males: Age = 0.450*Length (cm)+ 0.101* Thigh length (cm) -7,019, which has an adjusted R2 of 0.744.

(351) Allopurinol effect on platelet aggregation in patients with essential hypertension

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Background: The increased level of serum uric acid (SUA) could affect platelet function, an important mechanism in the progression of cardiovascular disease (CVD). Allopurinol (ALLO) has beneficial effects in patients (pts) with CVD, but its mechanisms of action have not been fully elucidated yet and its effect on platelet function has not been studied until now.

The purpose of the study was to evaluate the effects of ALLO on platelet aggregation in pts with essential arterial hypertension (AH) in relation with its SUA lowering effect.

Methods: 70 pts with AH were included, mean age 62±12y ears, 54% women, mean blood pressure/24 hours on ambulatory monitoring 133±12/80±8 mmHg with antihypertensive treatment. 31pts were treated with acetylsalicylic acid (ASA). In 37 pts ALLO 300 mg/day was added to the therapeutic regimen, regardless of the SUA level (ALLO+group). In all pts SUA level, platelet count and platelet aggregation to adenosine diphosphate (ADP) and collagen by the light transmission aggregometry were evaluated at baseline and after one month.

Results: At baseline SUA level (p=.22), platelet count (p=.10) and platelet aggregation to ADP (p=.19) and collagen (p=.23) were similar in the two groups. After one month of treatment, in ALLO+ group there was a significant decrease in SUA level, from 5.6±1.9mg/dl to 3.3±1.5 mg/dl (p=.0003) and in platelet aggregation to ADP, from 77±16% to 38±24% (p=.0009) and to collagen from 87±14% to 71±21% (p=.0002). Platelet count remained constant (p=.48). At baseline pts with ASA had a lower level of aggregation to collagen. After a month, in ALLO+ group the decrease in collagen aggregation was more important in pts without ASA (p=.0004) compared to pts with ASA (p=.003). The decrease in platelet aggregation, both to ADP (r=-0.25, p=.35) and collagen (r=-0.15, p=.59) did not correlate with SUA decrease. In ALLO- group there were no significant variations of aggregation to ADP (p=.06) and collagen (p=.34), of SUA (p=.49) or platelet count (p=.34).

Conclusion: ALLO has an antiplatelet effect by inhibiting platelet aggregation to ADP and collagen, independent of its effect of lowering SUA and does not affect platelet count.

(353) Simple, usual parameters, as alarm signals in childhood obesity

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Childhood obesity is asociated with insulin resistance, oxidative stress and with dyslipidemia.

The aim of this study is to underline that strong correlations between cheap and usual parameters with those important markers known to be modified in obesity, but the measurement of these markers is expensive.

The study was done on 110 overweight and obese children, aged 10-18 years, at whom usual clinical parameters were measured and also some important, but less common variables like: C peptide, HOMA-IR, total antioxidant capacity (TEAC), malonyldialdehide (MDA), glutatione (GSH), carotid intima media thickness (CIMT), superoxid dismutase (SOD) and serum cortisol. There were chosen significant and strong correla-

tions for the folowing parameters: waist circumference, uric acid, total bilirubin, ALT activity and cholesterolemia.

The waist circumference was correlated with surrogat markers of insulin resistance, HOMA-IR (r= 0,40), with C peptide (r= 0,45) and also with CIMT (r= 0,59) and with cortisol (r= 0,43). Total bilirubin was correlated with TEAC (r=0,55), uric acid with C peptide (r=0.60) and with TEAC (r=0,65), cholesterolemia with MDA (r= 0.30), and ALT with GSH (r= -0.34) and SOD was negatively correlated with glycaemia (r= -0.30) and positively correlated the albumin/globulin ratio (r= 0,39).

In conclusion, in obese children, the increased uric acid and waist circumference values were correlated with insulin resistance. Uric acid and total bilirulin levels were associated with total antioxidant capacity and the high level of ALT and of cholesterol with an increased oxidative stress.

Simple, usual parameters at the edge of the normal range can underline the presence of an antioxidant-oxidant imbalance.

(354) Risk factors for respiratory tract infections in infants

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Objective: The purpose of our work was to observe the correlations between the infectious respiratory pathology in infants and various factors related to the mother or the infant's medical history.

Methods: We retrospectively studied a number of 278 infants, aged between 2 days and 1 year, admitted between August 1st and October 31st 2015 to the „Dr. Victor Gomoiu" Clinical Hospital. Using Epi Info 7.1.5.2 we determined frequencies of various characteristics and through applying logistic regression we analyzed correlations between respiratory infections on one hand and the child's birth weight, preterm birth, incomplete immunization, cigarette smoke exposure, maternal educational level and age on the other.

Results: Of the 278 infants, 11.72% (95%CI: 8.16%-16.4%) were prematurely born, 73.76% (95%CI: 68.01%-78.98%) were incompletely immunized, 58.27% (95%CI: 52.23%-64.13%) had at least one respiratory infection during their lifetime, and 37.41% (95%CI: 31.70%-43.39%) were diagnosed at the time of admission with respiratory infection. The correlation coefficient between respiratory infections and the following characteristics was of -0.0002 (p=0.6531), with an odds ratio of 0.9998 (95%CI: 0.9989-1.0007) for the child's weight at birth; of -0.3319 (p=0.5901) with an odds ratio of 0.7176 (95%CI: 0.2145-2.4002) for premature birth; of -0.6910 (p=0.1800), with an odds ratio of 0.5011 (95%CI: 0.1825-1.3760) for complete immunization; of 0.7874 (p=0.0654), with an odds ratio of 2.1977 (95%CI: 0.9512-5.0780) for smoke exposure; of -0.0495 (p=0.3114), with an odds ratio of 0.9517 (95%CI: 0.8646-1.0475) for the mothers studies; of -0.0459 (p=0.2009), with an odds ratio of 0.9552 (95%CI: 0.8904-1.0247) for the mother's age.

Conclusions: The results of this study suggest that complete immunization, higher maternal educational level and greater age were associated with a reduced risk of the infant developing respiratory infections. Conversely, small birth weight and cigarette smoke exposure of the infant increased the risk of respiratory infection.

(357) The difference between the severity scores and biological markers of infection in sepsis with Enterobacteriaceae and other Gram-positive cocci

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Objectives: The primary objective of this study was to describe whether the severity scores and the biological markers of infection and inflammation are more altered in Enterobacteriaceae infections compared to infections with other families of bacteria (especially Gram-positive cocci).

Methods: Student T and Chi square tests were used to analyze data from 77 patients with sepsis who were admitted to Prof.Dr. Matei Bals National Institute for Infectious Disease during 2015-2016.

Results: Both APACHE and APS scores seem to be significantly higher in patients with Klebsiella infections, but there were few cases to draw conclusions. Putting together all the patients with Enterobacteriaceae infections (77 patients) revealed significantly higher APACHE (the highest values being 2.94,2.84.3.07)and APS scores in this category. There was also a significantly higher MPV in Escherichia coli patients as well as in the Enterobacteriaceae patients. The PCT was significantly higher (highest-1.65) in Klebsiella patients, which also stands true for the whole Enterobacteriaceae group, but without reaching statistical significance. Significantly PCR levels are associated with digestive, respiratory and skin infections, but not with Enterobacteriaceae infections. We have also analyzed the probability of developing septic metastates and

Conclusions: The severity scores and the biological markers of infection are more altered in Enterobacteriaceae infections except the inflammation ones. Larger studies are needed in order to substantiate these preliminary results and to determine whether this is also true for the various genera of Enterobacteriaceae. When confronted with a severe sepsis, the physician should consider a Gram-negative bacteria as more likely and chose the antibiotics accordingly, pending the results from the bacteriological studies.

(359) Congenital anomalies of the male genitourinary system

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Objetives: Congenital anomalies of the genitourinary system represented a border between pediatric surgery and urology. In the past, newborns with various ailments were identified and diagnosed by pediatricians after that they asked the pediatric surgeon to perform the interventional gesture. If the anomalies have not been so serious, the patients would have been diagnosed during adult life (e.g. cryptorchidism can be identified during enrollment for military service or hydronephrosis can be diagnosed during the assessment of hypertension).

In the last 30-40 years the situation has changed substantially worldwide. The correlation between the diagnostic and the therapeutic act, the advanced knowledge of anatomy, embryology and physiology of the male genital system have allowed pediatric surgeon or urologist to make a rapid diagnosis, early and accurately and determine the best therapeutic approach, knowing that any abnormality should be treated as early as possible because the sequelae will not be so serious

Method: In this study were included patients diagnosed with anomalies of the male genital apparatus and admitted to hospital M.S.Curie in 2012-2014.

Results: Most patients were diagnosed with abnormalities of the testicle, and of these the most frequent was the undescended testicle unilaterally. Second place after testicular malformation is hypospadias, while pseudohermaphroditism and indeterminate sex are on the last places.

Most patients come, as expected, from urban areas, and their age is between 5 to 14.In recent years we observed the age of diagnosis has decreased and that can be a very encouraging result.

Conclusion: The abnormalities of the male reproductive system represent, according to EU statistics, 12% of all congenital malformations. Most of them, along with functional deficit, are accompanied by psychological problems sometimes major, which once again underline the importance of recognizing the type of abnormality and treat as early as possible.

(361) Agranulocytosis after ten years of thiamazole treatment for Graves' disease

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Background: Haematological disorders such as agranulocytosis and granulocytopenia are the possible side effects that may occur during treatment with antithyroid drugs for Graves-Basedow disease.

Objective: We report a case of subclinical agranulocytosis after 10 years of thiamazole treatment for Graves's disease.

Method: The patient, a 55-years-old woman, was diagnosed with Graves's disease in 2006 and was treated continuously with thiamazole for almost ten years.

Results: In july 2014 the laboratory tests showed leukopenia (2570/μl) with neutropenia (1120/mm ^ 3,43.5%). In february 2015 the leukopenia (2900/μl) with neutropenia (990/

mm^3,34.8%) was confirmed but the thiamazole treatment was continued. In January 2016 the blood count showed 1210 leukocites/μl with 80 neutrophils/mm^3 (6.6%) and thiamazole was stopped. The thyroid function test showed free T4 =77.36 pmol/l and TSH <0.005 mIU/l. The patient was admitted to our Department of Endocrinology in february 2016, 2 weeks after the withdrawal of thiamazole without any signs of infection. She was under treatment with lithium carbonate 500 mg per day and methylprednisolone 16 mg per day. The blood tests indicated a slight improvement in the cell count: 3133 leukocites/μl with 150 neutrophils/mm^3 (4.8%), while the thyroid tests were improved significantly: free T4 =31.07 pmol/l (9-19) and TSH <0.03 μIU/ml (0.5-4.5). During hospitalisation the patient received a higher dose of lithium carbonate (750 mg per day). After 3 days the leukocite count was normal (4600/μl) while the neutropenia persisted (400/mm^3,9.7%). An osteomedular biopsy ruled out haematological maligancies. 5 weeks later the patient was admitted again. She under treatment with lithium carbonate 500 mg per day and methylprednisolone 4 mg per day. The leukocite count was normal (9240/μl) with 6310 neutrophils/mm^3 (68.3%). The thyroid function test showed free T4 =33.7 pmol/l (10.3-24.4) and TSH =0.018 μIU/ml (0.5-4.5). Radioiodine therapy was recommanded and the patient received 5 mCi I-131.

Conclusion: Agranulocytosis during antithyroid drugs is a rare and usually severe side effect that requires drug cessation. Most cases occur in the first months of treatment but agranulocytosis may also occur after prolonged and well-tolerated therapy.

(363) The influence of maternal risk factors on pregnancy evolution

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Objective: This study was aimed to investigate a link between the pregnancy evolution and various maternal risk factors, such as age and personal pathological history.

Method: We have performed a retrospective study including 278 infants, aged between 2 days and 1 year, along with their mothers, aged 15 to 41 years old. The infants were admitted between August 1st to October 31st, 2015 in the ber 31st, 2015 dy including 278 infal. Various parental factors such as age, medical history, smoking habits, pregnancy evolution, as well as term/preterm delivery were evaluated. Using Epi Info 7.1.5.2 we determined frequencies and through applying logistic regression we calculated the correlation coefficient between the evolution of the pregnancy and the various parental factors mentioned above.

Results: Of the 278 mothers, 6.12% (95%CI: 3.60%-9.61%) had a rich pathological history, including diseases such as viral hepatitis or tuberculosis and 74.82% (95%CI: 69.29%-79.81%) of them had a physiologically developed pregnancy. The correlation between the mothered. Using Epi Info 7.1.5.2t 1st cxies related to the pregnancy had a coefficient of -0.0093 (p=0.7498), and an odds ratio of 0.9907 (%95CI: 0.9356-1.0491). The correlation coefficient between the presence of significant pathologies in the mother the mothered. Using Epi Info 7.1.5.2t 1st cxnancy was of -0.4125 (p=0.5254) with an odds ratio of 0.6620 (95%CI: 0.1854-2.3642).

Conclusion: According to the results of our study, we have concluded that both advanced maternal age and a significant medical pathological background of the mother augment the risk of a non-physiological pregnancy evolution.

(364) The incidence of community-acquired pneumonia during summer

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Objectives: Community-acquired pneumonia (CAP) is an infectious lung disease characteristic for the cold season, while the cases during the summer are less frequent. There is a big diversity of infectious agents involved in the etiopathogenesis of the disease, Streptoccocus pneumonie and Klebsiella pneumoniae remaining the most important representatives. The purpose of the study is to quantify the incidence of CAP in the summer, highlighting a predominant etiologic agent for this period, the treatment that it responds to

favorably and the most effective prophylactic measures.

Methods: This observational, quantitative study was conducted retrospectively by analyzing the observation charts of 39 hospitalized patients at the Institute for Lung Diseases "Marius Nasta" in the period June-August 2015. During hospitalization were performed blood tests, chest X-rays and pulmonary function tests. In the cases where there were isolated microbial agents from sputum or bronchial aspirate, drug susceptibility test (DST) was performed.

Results: The most frequent symptoms on admission were dyspnea (66.6%) and cough (64.1%). Almost half (46.15%) of the patients experienced ventilatory dysfunction, the most common being mixed ventilatory dysfunction (30.7%). In 23% of cases the causal organism was isolated and detected, Streptococcus pneumoniae and Klebsiella pneumoniae being the most frequent, each in 8% of cases. All patients received empirical treatment, 44% of them following treatment with Cefoperazone in combination with Sulbactam. The DST showed particular susceptibility of Streptococcus pneumoniae to the antibiotics from the classes of glycopeptides (Vancomycin) and lincosamides (Clindamycin), the results being compared with literature data.

Conclusion: The findings are inexorably linked to the problem of irrational use of antibiotics that has resulted in time in the emergence of resistant strains for the classical therapy. The annual seasonal vaccine prophylaxis and avoiding exposure to ventilation systems used more often in the summer have a special importance in fighting the infectious recurrence.

(368) Impact of chronic stress on the pathogenesis of cardiovascular reactivity in healthy adults

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Objective: Chronic stress is a fact of modern life. When stress levels surpass mental, emotional, and physiological limits, stress becomes distress and can play a direct role in organic cardiovascular pathology. Unfortunately healthy adults often deny and hide well their distress symptoms, going from one stressful situation to the next without taking time to relax.

Early assesement of hidden cardiovascular reactivity must be taking in discution when aparantly healthy clinical and laboratory data indicate no health problem; although patients still report subjective simptoms occurring during working hours.

Methods: The target group (78) consisted of employees with executive functions and high level of distress. Clinical data was recorded and cardiovascular parameters were considered such as: blood pressure measurements, ecg recorders, echocardiography assessment. As well as a 24-hour Holter-ECG was performed during patients working hours.

Results: Patient history and findings show clinically and biologically healthy patients without ECG changes and normal echocardiography; notwithstanding patients often accuse subjective symptoms that may indicate distress asociated illness. Thus, performing a 24-hour Holter-ECG monitoring during working days, detected changes such as: tachycardic heart rhythm atrial and ventricular isolated extrasistoles, with increasing frequency during midday working hours.

Conclusion: New type of work-related hidden distress occurs in people with high level of education. It acts probably via a mechanism involving excessive sympathetic nervous system activation. Better control and early detection of this distress is effective way to prevent incidence of cardiovascular reactivity that further induces organic illness. 24-hour Holter-ECG monitoring is an effective and accessible for every practitioner to detect early heart rhythm modification due to chronic life stress. Psychotherapy, light psychotropic medications as well as mineral supplements may be indicated in this stage as wise therapy.

(376) Poikiloderma of civatte – case report

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Objective: Poikiloderma of Civatte is a cutaneous entity caused by prolonged sun exposure which involves upper chest, neck and cheeks, but spares the submental area. It is a common condition with a slowly progressive and irreversible course of action. Other factors associated with this condition, such as genetics, low estrogen, phototoxic or photoallergic reactions to cosmetics chemicals have been proposed. Chronic sun exposure may be associated with the appearance

of Favre-Racouchot syndrome, actinic keratoses, basal cell carcinoma and squamous cell carcinoma. IPL (Intense Pulsed Light), PDL (pulsed dye laser) or KTP laser have proven their efficacy in treating poikiloderma of Civatte.

Methods: We report the case of a 56-year-old woman who presented with an erythematous eruption which appeared a few years before. Clinical examination revealed pigmentation, telangiectasia and epidermal atrophy on the lateral side of the neck and upper chest without involving the submental area. The patient states working in a sun exposed environment for more than 25 years and she did not follow any photo protection rules.

Results: The morphology and topography of the lesions were suggestive for poikiloderma of Civatte. Since the eruption was typical no biopsy was performed. The patient was assured by the benign character of the lesions and she refused the proposed treatment using laser. She was prescribed a sunscreen cream and limitation of sun exposure.

Conclusions: We report a typical case of poikiloderma of Civatte in a 56-year-old Caucasian woman, with a history of prolonged sun exposure. It is important to recognize poikiloderma of Civatte because of its benignity and to avoid unnecessary biopsies and invasive treatments.

(377) Heart failure comorbidities and prognosis

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Objective: Heart failure (HF) affects nearly 2% of the adult population and is one of the leading cause of hospitalization in elderly population.

Management of HF many comorbidities is extremely important for improving the prognosis of acute heart failure.

The objective of this study is to assess the impact of common comorbidities in acute heart failure prognosis.

Methods and **Results:**

Our lot included 96 hospitalized patients with acute heart failure diagnosis. There was an equal number of women and men with an average age of 72 years.

A large number of noncardiac comorbidities were evaluated.

The most important comorbidities in heart failure patients was anemia, diabetes mellitus, chronic obstructive pulmonary and renal insufficiency.

There were 35 patients with diabetes in the study group. The risk intensity increase by 85% in patients with heart failure and diabetes (p 0.025).

The risk intensity increase by 20% in patients with heart failure and stroke history (13 men and 9 women).

There were 8 patients in the study group (4 men and 4 women) that was associated to chronic obstructive pulmonary cardiac pathology. Patients with heart failure and COPD have a reduced survival, no patients survived more than 36 months.

There was a direct proportionality between anemia severity and mortality, an increase in hemoglobin is associated with an improvement in the survival.

Conclusion: Comorbidities are frequent and have a great impact on HF prognosis. Heart failure comorbidities management is of special interest and often challenging.

(378) Tinea incognito

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Objective: Tinea incognito is a dermatophytic infection which is clinically modified by self-medication and application of topical or systemic immunosuppressants. The most common types of treatment that induce this entity are corticosteroids and immunomodulators such as pimecrolimus and tacrolimus. These drugs' action is to suppress the normal cutaneous immune response to dermatophytes and therefore increasing the development of fungal superficial infections. This type of lesion can be misdiagnosed and thus the treatment delayed because it resembles atopic dermatitis, rosacea, neurodermatitis, seborrheic dermatitis or contact dermatitis.

Methods: We report two cases of tinea incognito who referred to our clinic. The first case is a 52-year-old male patient who presented an erythematous eruption on the right thigh, knee and upper calf. Clinically the plaque was diffuse and had white scales on the surface, telangectasias,

papules, pustules and some crusts. The second case is a 5-year-old male child who presented an erythematous plaque on the left cheek and chin. The clinical examination revealed an imprecisely defined lesion with papules, telangiectasias and fine scales on the surface.

Results: The first patient stated having applied topical steroids for two weeks and at the end of the treatment the worsening of the previous lesion. The second patient's mother admitted self-medicating the child with topical corticosteroid for one week after which the lesion exacerbated. The clinical history and the mycological exam revealed tinea incognito in both cases. Both patients were told to stop the corticosteroid therapy and were prescribed oral antifungals (fluconazole) and topical miconazole for 4 weeks and were told to continue for another 2 weeks after the disappearance of the symptoms. At the end of the treatment the patients came to a follow-up consult where complete resolution was observed.

Conclusions: Tinea incognito must be thought of when we face an unrecognizable or altered skin condition on which it was previously applied a topical steroid or immunomodulatory such as tacrolimus or pimecrolimus. It is of utmost importance to recognize this entity and act accordingly since it can be easily misdiagnosed and further inappropriately treated.

(380) Favre-Racouchot syndrome: case report

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Objectives: Favre-Racouchot syndrome, also known as nodular cutaneous elastosis with cysts and comedones, refers to skin changes mostly affecting the periorbital area, due to chronic exposure to ultraviolet light and smoking. Ultraviolet radiation determines elastic fibers degeneration and hyperplasia of the sebaceous glands, dilation of the pilosebaceous openings, which fill with sebum and horny material, clinically noted as comedones, cysts and nodules. Long-term exposure to sun light may also determine the appearance of solar lentigines, poikiloderma of Civatte, millium cysts, solar purpura, actinic keratoses, basal cell carcinoma and squamous cell carcinoma. As therapy options, topic retinoic acid, cryotherapy and surgical techniques had been proposed.

Methods: We report the case of a 62-year-old man, Fitzpatrick skin type II, who presented for a painful nodule over the right cheek, evolving for 2 years, with inflammation for 2 weeks before the presentation. Clinical examination revealed a round-shaped, 4 cm in diameter, erythematous and yellowish, painful cyst located in the right malar area. Moreover, signs of solar elastosis were observed on the entire face, characterized by yellow plaques, deep wrinkles and furrows, on a background of yellow, atrophic skin, with open and closed comedones. He admitted having an outdoor occupation and a history of chronic sun exposure in the last 40 years and he had never used sunscreen cream.

Results: The facial eruption was suggestive of Favre-Racouchot syndrome. The patient was prescribed antibiotic treatment for 7 days, with the decrease in size and inflammation of the cyst. Consequently, under local anesthesia with lidocaine 1%, incision and drainage of the malar cyst were performed, followed by evacuation of sebum and horny material and dressings. The evolution was favorable, with gradual healing in the next 6 days. The patient refused treatment for Favre-Racouchot syndrome.

Conclusions: Favre-Racouchot syndrome represents a cutaneous disorder secondary to chronic sun exposure. Patients should be advised to limit sun exposure and to follow sun-protection measures, including sunscreen creams, in order to avoid photoaging.

(381) Dermatitis artefacta: a case report

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Objectives: Dermatitis artefacta, a psychocutaneous disorder affecting mostly women, is characterized by self-induced lesions in accessible regions of the body, created by the patient in order to satisfy a psychological need. An onset during adolescence or in early adulthood had been observed. Usually, the patients deny having any role in the appearance of the injuries. Clinically, dermatitis artefacta can resemble other dermatoses, leading to misdiagnosis or on the contrary, the aspect may not correspond to any dermatologic condition. The lesions may be in various stages of healing, single or multiple and their aspect may

range from vesicles to erosions, ulcerations and scarring, mostly with angulated borders, with bizarre, geometric shape. Usually, the patient has an underlying psychiatric disorder. Blood tests and histopathologic examination are non-specific. A topical treatment and psychiatric referral is the appropriate management for this disorder.

Methods: We present the case of 42-year-old woman, who presented for painful erosions on the neck, which appeared 1 year before. Clinical examination revealed 2 round-shaped, well demarcated erosions over the lateral aspect of the left cervical area, 2 cm in diameter, with a whitish scale at the periphery, associated with hyperpigmentation and multiple white, round and linear scars, arranged in a parallel pattern on the left part of the neck, extending into the left cheek. The patient was not able to explain the evolution of the lesions and she denied self-harm.

Results: Based on the clinical aspect of the lesions, a clinical diagnosis of dermatitis artefacta was made. We decided to perform a biopsy from the erosion, but the patient disagreed with the idea. She was prescribed topical antibiotic and occlusive dressings, in order to limit self-injury and she was referred to the psychiatric department. She did not return for further follow-up.

Conclusions: Dermatitis artefacta is a challenge diagnosis, with a poor prognosis for cure, which requires multidisciplinary evaluation and dermatologists should consider an empathetic and nonjudgmental aproach, for better results.

(382) A case of a fixed-drug eruption presumably due to erythromycin

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Objectives: Fixed drug eruption (FDE) is a distinctive type of cutaneous drug reaction that typically recurs in the same locations upon reexposure to the offending drug. Acute FDE usually presents with a single or a small number of dusky red or violaceous plaques that resolve leaving postinflammatory hyperpigmentation. The diagnostic hallmark is its recurrence at previously affected sites. Rare severe atypical variants of FDE, including multiple, nonpigmenting, and generalized bullous variants, share clinical features with Stevens-Johnson syndrome/toxic epidermal necrolysis. Antibacterial sulfonamides, antibiotics, nonsteroidal antiinflammatory drugs, analgesics, and hypnotics are the most frequent causes of FDE.

Methods: We report the case of a 54-year-old woman who presented for two oval, erythematoviolaceous plaques located on the breasts, sharply demarcated, with 3/2 cm and 8/6 cm in diameter. The lesions appeared 5 days after she took erythromycin for an infection of the upper respiratory tract. They were accompanied by burning sensation and mild pruritus, without general symptoms.

Results: The history and the clinical findings of the patient were suggestive for a fixed drug eruption presumably induced by erythromycin. We recommended to avoid this drug and the chemically related drugs.The treatment was only symptomatic, focused on the relief of the pruritus.

Conclusion: The diagnosis of fixed drug eruption (FDE) in its typical presentation is usually straightforward, based upon lesion morphology and history. A careful medication history is required to elicit the fact that a drug has been taken and is temporally related to the onset of the eruption. Systemic or topical provocation tests may be useful in identifying the culprit drug when history is unclear or multiple medications are suspected.

(389) Detecting Etanercept serum level and immunogenic profile – useful tool in monitoring spondyloarthritis patients?

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Background: Anti-TNF (tumor necrosis factor) agents have highly proved their efficacy in spondyloarthritis (SpA) patients, having a good rate of response of approximately 70%. However, patients who initially benefited from therapy with a TNF inhibitor lose response. This might be due to

undetectable drug level resulting from anti-drug antibody production.

Objectives: The aim of this study was to evaluate the drug level and immunogenic profile of patients with SpA on etanercept and its relation to disease activity as well as the frequency of NSAID consumption.

Methods: This study was prospective, observational and cross-sectional. Over a period of eleven months, 46 patients with established SpA, both axial and peripheral forms, were enrolled. No patient had synthetic DMARD and NSAID self-administration was "on demand". The exclusion criteria consisted of discontinuation or delay in treatment administration in the last three months or concomitant infection. Demographic, clinical and laboratory parameters were collected. Serum drug levels and anti-drug antibodies were measured using the ELISA method. The statistical analysis used SPSS 20.0.

Results: Thirty-two patients were eligible, 69% were males and 87% presented HLA B27 antigen positivity. The mean age was 44.3 y.o ±11, with mean disease duration of 101 months. 40% of patients needed tuberculosis prophylaxis, due to positive Quantiferon test. Mean treatment persistence was 51 months ±23.3. Out of the 32 patients, two had undetectable drug serum level. Without reaching statistical significance, mean values of disease scores and inflammatory markers were higher in the ETA-negative group (BASDAI 1.85, ASDAS-CRP 2.42, CRP 24.7 mg/l, ESR 37 mm/h). Interestingly, drug serum level correlated to ASDAS-CRP ($r= -0.432$, $P=0.01$) but not to ASDAS-ESR or BASDAI. In our study group, drug serum level did not correlate to NSAID ingestion among patients. No anti-ETA antibodies were found. 19% of patients on ETA had had another anti-TNF agent, namely 66% were previously on adalimumab and 34% on infliximab, switching after a mean period of 4 years.

Conclusions: Etanercept proves to have a low immunogenicity among other common anti-TNFs. This can help when switching a patient who has priorly developed anti-drug antibodies. Correlating drug serum level to disease activity scores might help us find a personalized adjusted therapeutic scheme.

(8) Quality of life assessment after longitudinal gastrectomy for obesity – the experience of a single team

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Objectives: Obesity is an extremely current pathology with many clinical, molecular and psychological implications. In the past 10 years the number of obese people has doubled and the age at which they occurring is becoming smaller.

Method: We conducted a qualitative quantitative and exploratory study on 34 obese patients, from the Emergency Hospital Sf. Ioan, Bucharest, that undergone surgery for obesity. Inclusion criteria were the embodiment of surgery for obesity: BMI; 40 kg/m^2 or BMI; 35 kg/m^2 and associated comorbidities. We used a modified BAROS and SF¬36TM questionnaire.

Results: The mean postoperated BMI was 25.7670 ± 3.74759 (StDev). The average number of lost kilos was: 38.74 ± 12.526 (StDev), and the average %EBWL 85.9952 ± 22.69028 (StDev). Since 6-12 months after surgery patients lost an average of 36.88- 38.56 kilograms and after 18 months postoperatively they reach a EBWL of 92.39% - 96.99% and a normal weight BMI of 23.96 kg/m^2. All patients after surgery significantly reduced the amount of food eaten. More than 2 years after the surgery patients increase their food intake by about 30%, but maintain their weight loss and a normal weight BMI

Conclusions: Quality of life overall, 77.78% declared a vastly improvement, 11% a good quality of life and only 3.7% said quality of life is worse than before the surgery. Improving quality of life directly correlates with the number of lost kilograms and %EBWL and so with the postoperative BMI. Also there is a direct relationship between QoL and improved sexual life and increasing the frequency of making sport.

(14) The impact of narrow band imaging cystoscopy in non-muscle invasive bladder tumors – diagnostic accuracy

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Objectives: A retrospective clinical analysis was performed while aiming to establish the impact of narrow band imaging (NBI) cystoscopy in cases of non-muscle invasive bladder cancer (NMIBC) within a comparison to the standard white light cystoscopy (WLC).

Method: 139 patients were consecutively diagnosed with NMIBC based on conventional WLC followed by NBI cystoscopy as complementary investigation. The bladder cancer suspicion was established based on the presence of hematuria, positive urinary cytology and/or ultrasound aspect suggestive for bladder tumors. The classical transurethral resection of bladder tumors (TURBT) was performed for all white light visible lesions while NBI-guided TURBT was applied exclusively for tumors solely discovered in this vision mode.

Results: Among the carcinoma in situ (CIS) patients, NBI cystoscopy emphasized a superior diagnostic accuracy concerning the cases' (92.3% versus 69.2%) as well as lesions' (93.75% versus 71.9%) detection rates. NBI-TURBT provided a higher proportion of additional tumors' cases (53.8% versus 15.4%) when compared to classical resection but was marked by an increased fre-

quency of false-positive results (18.9% versus 11.5%). Moreover, a significantly higher patients' related detection rate was underlined for the NBI vision mode with regard to both pTa (95.3% versus 87.1%) and pT1 (97.6% versus 92.7%) stages. Concerning the number of tumors, the respective proportions remained substantially increased subsequent to the use of narrow band imaging (96.9% versus 90.8% detection rate for pTa and 97.4% versus 94.9% for pT1 stage lesions). Consequently, a distinctively larger category of cases were identified as presenting supplementary lesions during the NBI examination (17.6% versus 5.9% in the pTa group and 9.7% versus 4.8% among pT1 patients). The frequency of negative biopsies remained elevated for the NBI-guided TURBT by comparison to the classical resection (14.3% versus 9.6% rate of false positive results for the pTa series and 8.4% versus 5.1% for pT1 cases).

Conclusions: NBI cystoscopy and resection substantially ameliorated the NMIBC-related diagnostic accuracy within a parallel to the standard approach at the cost of a relatively reduced specificity, regardless of tumor stage. Subsequently, NBI-TURBT was able to find more bladder cancer patients as well as lesions, thus improving the precision of the endoscopic treatment.

(15) Therapeutical value of biochemical correlations in polytrauma patients with pelvic fractures

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Objectives: The purpose is to evaluate the potential clinical correlations between inflammatory markers and the steps of managing polytrauma patients. This idea is valuable because it forms the basis of the concept of "damage control surgery" (DCS), which the Anaesthesia and Intensive Care doctor helps implement.

Method: The authors retrospectively evaluate 24 patients admitted to the Clinical Emergency Hospital of Bucharest during 01.01.2013-01.06.2015 with multiple trauma and pelvic fractures. The following acute inflammation tests were monitored: white blood cell count, ESR, fibrinogen, C reactive protein, interleukin 1 and interleukin 6. In haemodynamically stable patients (8 cases) "early total care" (ETC) was performed and in the other 16 borderline and stable patients external fixation (DCS) was chosen, followed by internal fixation only after the systemic inflammatory response subsided. General complications (mortality, incidence of ARDS and MSOF) and length of stay were evaluated.

Results: The analysis of the data revealed that multidisciplinary team application of DCS lead to a lower incidence of complications (although without statistical significance) Acute inflammation tests were correlated with mortality and complication rates. Of these tests, IL 1 and IL 6 had the best capacity to predict complications. In patients where definitive stabilization was performed only after the remission of the inflammatory syndrome, the rate of complications was much lower.

Conclusions: For the multidisciplinary specialty team, the inflammatory tests and especially IL 1 and IL6 represent useful tools for more efficiently managing polytrauma patients.

(16) Modern interactive approach in training orthopedics using e-learning

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Objectives: Modern medicine requires complex training of the physicians, in order to face the rapid changes of pathology and therapeutic means. The objective of this paper is to present a multidisciplinary approach in training orthopedic surgeons, using e-learning as an educational tool.

Method: This paper presents the experience expanding the results of the Leonardo da Vinci project (transfer of innovation), named "A Web-based E-Training Platform for Extended Human Motion Investigation in Orthopedics", addressed to orthopedic trainees, with interdisciplinary approaches. The main result of the project is a Virtual Training & Communication Center ORTHO-eMAN for innovative education - on-line education and training material accessed using a

standard web browser, which provides an integrated on-line learning environment.

Results: The teaching materials were created by a multi-disciplinary team, and the unique feature of this e-learning platform is that it contains not only courses, but also interactive training material with real clinical case studies. The trainees analyze the given clinical or imagistic information, regarding the patient, and establish, within an interactive process, the diagnosis and treatment. As in real situations, each step of the algorithm must be followed, otherwise the outcome of the patient is negative.

Conclusion: Complex changes in medicine concerning diagnosis and treatment generated major educational challenges, since medical training has to reflect the multi-disciplinary approach of modern medicine The project presented in this paper uses a pluridisciplinary approach and significantly improves the image-based diagnostic and therapeutical skills of the orthopedic trainees, which were not at all targeted by the classical "courses and dissections".

(17) The significance of inflammatory markers for the outcome of the patients with mangled extremities

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Objectives: Mangled extremities are severe injuries threatening not only the damaged extremity, but also the patient's life, so their treatment must be carefully monitored as to assure maximum of efficacy.

Methods: The authors retrospectively evaluate 21 patients with mangled extremity operated between 01.01.2013-01.01. 2015 from the point of view of demography, traumatic mechanism and injury severity. Local scoring systems were used to describe the anatomy of the injured zone, while general parameters (especially the inflammatory ones) are evaluated as potential biochemical markers.

Results: From the tests, hemoglobine level, CRP, ESR, fibrinogen, as well as IL (1 or/an 6) are to be thoroughly evaluated in polytrauma patients. This study, although limited, demonstrate that all these factors are influence by the pathology of polytrauma, There is a direct correlation between ECR and hemoglobin level and the incidence of septic complications, as well as between CK and the outcome of the patients. Renal function was also influenced by the CK and ECR levels.

Conclusion: When crushing is responsible for the trauma, due to the systemic effects of rhabdomyolysis, several biochemical markers can be used as predictive elements for the outcome of the patients. Whether they can be used in guiding the treatment or not, itg is still necessary to be studied.

(18) Multidisciplinary approach in complex injuries of the limbs

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Objectives: Complex trauma of the limbs are produced by high energy, thus being characterized by limb- and life-threatening injuries, with considerable risk for complications, both systemic (such as Acute Renal Failure, MSOF, or even death) and local (infection, or even amputation). The objective of this study is to demonstrate the efficacy of an interdisciplinary approach, using severity scores (such as MESS) to evaluate the injuries.

Method: Authors retrospectively analyze 36 complex crushing injuries operated in a complex team orthopedist-plastic surgeon- anesthetist-vascular surgeon between 01.01.2010-01.01. 2015 with MESS values 4-6, using the following criteria: age, the injured tissues, the mean time from trauma to surgical treatment, systemic response to aggression, contamination at admission (diagnosed using cultures before lavage), mean time of hospitalization, local and systemic complications, outcome at 12 months. The protocol was the same for all the patients- immediately after admission the patients were operated- debridement, lavage, stabilization of the fractures using external fixators. Internal fixation was secondarily performed after soft tissue healing (mean time 4 months after trauma)

Results: Mean age was 36 yrs. (14-48 yrs.); the injuries were crushing open fractures (4 cases III A, 16 cases III B, 6 cases IIIC), complicated with: compartment syndrome (16 cases), Acute peripheral Ischemia (6 cases) and polytrauma (18 cases). Mean time from trauma to surgical treatment was 4 hrs (2-48 hrs.); mean hospitalization was 48 days; complications were: sepsis (10 cases), DVT (4 cases), Pulmonary Embolism (4 cases), Acute Renal Failure (ARF) (3 cases), pseudarthrosis (8 cases). The complications were associated to increased MESS, prolonged time from trauma to treatment and haemodinamical instability and anemia at admission. Amputation was performed in a patient who arrived at the hospital 4 days after trauma, with ARF, the patient recovered.

Conclusions: Complex traumas of the limbs are increasingly frequent injuries affecting young people, threatening not only the vitality of the affected limb, but also that of the patient, due to their considerable systemic impact. Urgent complete treatment in a pluridisciplinary team followed by sustained multidisciplinary monitoring represent the key of success in these cases.

(19) Infected closed femoral fracture after high energy trauma – case presentation

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Crushing trauma of the extremities, involving both bones and soft tissues, are frequently complicated with infection, which threatens not only the functional outcome, but also the vitality of the injured limb, and of the patient. We present a clinical case reflecting the difficulties in treating infected fractures in mangled extremity. The patient, patient, male, 45 years old, was admitted in the Orthopedics and Trauma Clinic of Clinical Emergency Hospital Bucharest 4 days after a traffic accident, with a femoral fracture after a crushing injury, with a tensioned suture on the thigh, blisters and a partially stable external fixator. Initial thorough debridement was performed, lavage and opening the tensioned suture, with a considerable residual skin defect; muscular debris, oedema of the soft tissue and modified aspect of the haematoma raised the suspicion of infection, later confirmed by cultures (St. aureus). The external fixator was repositioned, then repeated debridements were necessary in order to assure the vitality of the fracture site. General antibiotic treatment was started with broad spectrum antibiotics and then performed according to the results from the culture. After sustained local and general treatment, the outcome was positive, secretion diminished and then disappeared skin graft was used in order to cover the defect. Sequential method was considered to be suitable for the patient, external fixation being followed by intramedullary nail after all the signs of inflammation disappeared.

Infected fractures are frequent after complex high energy trauma; they require a prolonged and complex treatment, both local (optimal stabilization of the fracture and repeated and thorough debridemenents in the operating theatre) and general (antibiotics and supportive treatment) and a well-trained interdisciplinary team

(20) Infections after open fractures – time from trauma to surgical debridement is the key factor

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Objective: Septic risk after Open Fractures (OF) is unanimously recognised but the factors influencing its onset have not been yet clearly quantified. The authors intend to check in this paper the hypothesis that time form trauma to initial complete surgical debridement influences the onset of infection after OF.

Method: A retrospective study was performed in a Level 1 Trauma Center regarding OF operated between 01.06.2008-01.06.2013, with a minimum of 18 months follow-up after trauma. From 588 patients with open injuries, only 362 completed the follow-up, thus being included in this study. Demographic and pathogenic criteria (Gustillo classification) were used, together with treatment assessment by: type of bone stabilization, time from trauma to the first antibiotic dose, time from trauma to surgical complete debride-

ment. The outcome was described by the incidence of superficial and deep infections within the first 18 months after trauma.

Results: Following Gustillo Classification, there were 172 type I, 101 type II and 90 type III open fractures. The mean time from trauma to first antibiotic dose was 2.8 hrs (30 min-6 hours). The type of bone stabilization was external (58%), initial contamination was present in 60 % of the fractures. Mean time from trauma to initial debridement was 3 hrs (42 min-48 hrs). The incidence of infection was 6.9 %, significantly higher ($p<0.05$) for type III OF, but, regardless of the type of the fracture, stabilization type did not significantly influence the incidence of infections. On the contrary, time between trauma and antibiotic treatment significantly increased the incidence of sepsis from 4.8% (antibiotics before 3 hrs) to 7.8 % (antibiotics after 3 hrs), while time from trauma to debridement increased the risk from 3.8% (debridement before 6 hrs) to 7.6% for debridement after 6 hrs.

Conclusions: The current study suggests that, more than the time from trauma to antibiotics, time from trauma to proper surgical debridement is essential for the incidence of infection. Despite its limitations, this study suggests that surgical treatment is unfairly underestimated, being at least as important as the antibiotics, due to the characteristics of open fractures.

(37) Is there any role for surgery in advanced stage cervical carcinoma?

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Background: Cervical cancer incidence and mortality rates in Romania are the highest in Europe. Increased mortality rate is partly explained by diagnosis of cancer in advanced stages due to lack of a nationwide screening program. The growing number of patients requiring radiotherapy and the low capacity of irradiations centers in our country influence the choosing of treatment plan. Thus in Romania the protocol applied in advanced stages of cervical cancer differs to some extent from that recommended in international guidelines

Objective: This retrospective study aims to analyze the reasons underlying the association of surgery to radiotherapy in treating patients with advanced cervical cancer in Romania.

Methods: Between 2010-2015, in the Department of Surgical Oncology from Oncologic Institute in Bucharest, 150 women diagnosed with stage IB2-IVA cervical carcinoma were treated by the same multidisciplinary team, according to the same protocol. Patients were staged as follows: IB2-17, IIA2-4, IIB-111, IIIB-15, IVA-3.

Treatment consisted of external beam radiation therapy (EBRT) to a dose of 50.4Gy given in 5 weeks, with concurrent weekly cisplatin at 40mg/m^2. EBRT was supplemented with 2 endocavitary applications each delivering 7.5Gy at point A, followed after 6-8 weeks by type II radical hysterectomy for patients reconverted to operability.

Results: All patients were reassessed after a point A total radiation dose of 65Gy and were considered operable. Pathological analysis of radical hysterectomy specimens showed that 68 patients (45.3%) had residual tumor in the cervix, and 5 of them in iliac lymph nodes too. The percentage of non-sterile pieces increased parallel with tumor clinical stage: 23.5% in stage IB2, 45.9% in IIB and 73.3% in IIIB. In our study group, administration of 65Gy in point A, a dose close to that considered therapeutic by most guidelines, failed to sterilize primary tumor in nearly half cases.

Conclusion: Given the high percentage of cases with persistent neoplastic cells in irradiated tissues and the undersized radiation network in our country, we believe that association of surgery to radiation therapy according to the protocol described above is warranted in advanced cervical cancer.

(49) Wire-guided surgical resection of lobular carcinoma in situ of the breast: case report

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Background: In situ lobular carcinoma and intraductal epithelial atypical hyperplasia are breast lesions with an increased risk of breast cancer. These types of lesions are easily identified during screening paraclinical examinations like ultrasound, mammography and magnetic resonance imaging.

Objective: To illustrate a case of early nonpalpable breast cancer detected on screening mam-

mography and managed by guide-wire conservative surgical resection.

Methods: Case report and review of the English language literature.

Results: A 46 year-old female patient with familial history of breast cancer, was referred for surgical resection of a nonpalpable left breast lesion, detected on screening mammography. The clinical exam of the breasts and axilary regions was normal. After mammography wire-guided localization of the microcalcifications the surgical resection of the involved area was performed, using a periareolar incision. The pathology report of the four/four cm tissue fragment revealed a lobular carcinoma in situ and intraductal epithelial atypical hyperplasia, completely resected, without involvement of the transected margins of the specimen.

Conclusions: Wire-guided surgical resection of an adequate tissue volume to allow negative margins, while maintaining the local cosmesis should be the aim of surgical resection. An experienced pathologist is needed to assess the early breast lesions and their complete resection.

Key words: surgery, wire-guided, lobular carcinoma in situ, intraductal epithelial atypical hyperplasia.

(61) Is elastography the new safety belt in salivary glands surgery?

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Objectives: Even before standardization sonoelastography recorded an upgrade in techniques from shear wave elastography to strain ratio elastography. Based on our systematic review concerning its use we introduced elastography in our routine daily practice in the diagnosis and management of salivary glands pathology. Furthermore the cases were analyzed by the ENT specialist using a portable ultrasound device.

Method: We present a seven step protocol of examining the patient with salivary glands pathology not only focusing on the salivary region but recording data both in standard ultrasound and elastography at head and neck level. Afterwards the ENT specialist compares elastography parameters not only concerning the salivary pathology but also from the rest of the head and neck region in order to establish a general ratio of stiffness for the case analyzed. Moreover the initial diagnosis of benign/malignant is compared with final surgical pathology results.

Results: We applied our sonoelastography protocol to 28 consecutive cases with salivary glands pathology. Our case series contained: 4 Warthin tumors, 6 pleomorphic adenomas, 2 lipoma, 2 lymphadenopathies, 4 cases with sialolithiasis, 6 adenocarcinomas, 2 malignant lymphomas. In 6 cases sonoelastography changed significantly the diagnosis and we discus if it subsequently changed the surgical management and prevented possible malpractice. Clearly it enabled watchful waiting with serial dynamic imaging of the chronic benign salivary glands pathology and a patient informed decision for further surgery.

Conclusions: There is still a need of further data for an evidence- based decision and even cheaper equipment in order to introduce elastography as a standard in daily practice for the cost efficient management of salivary glands pathology. This work was supported by UMF Carol Davila a project number 33895/11.11.2014.

(63) Nosocomial infections in obstetrics – a permanent challenge

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Objective: Nosocomial infections (NI) are a challenge for modern medicine: they are a major cause of morbidity and mortality in hospitals and are associated with high costs. It is only recently that they have been correctly defined and reported and their true prevalence in our hospitals is not known. The aim of our study is to observe the magnitude and characteristics of NI in a department of obstetrics.

Methods: It is a retrospective observational study evaluating the NI diagnosed in the Clinic Department of Obstetrics of S.U.U.B between 01.07.2014 – 01.07.2015.

Results: In the above interval 3524 deliveries were registered and 74 nosocomial infections were identified. 12 of these occurred after vaginal births, 42 after caesarean section and 20 during pregnancy. Age of patients ranged from 20 to 40 years. Localisation of infection was: chorioamniotitis (28 cases), urinary tract infection (22 cases), postpartum endometritis (12 cases: 10 after cesarean section, 2 after spontaneous birth), infection at the wound site (8 cases), infection with Clostridium difficile (4 cases), catheter infection (2 cases).

Germs involved were: E coli 28 cases, Klebsiella 22 cases, MRSA 8 cases, Streptococcus 12 cases, 2 cases of Serratia, Clostridium difficile 4 cases, Proteus miranbilis 6 cases, 2 cases Acinetobacter.

Associated pathology was present in 22 cases and was represented by: incompetent cervix (8 cases: 4 with cerclage and 4 with vaginal pessary) uterine malformations (4 cases), hypertension (2 cases), DPPNI (2 cases), systemic lupus erietematos (2 cases), type 2 diabetes (4 cases).

All patients were treated with antibiotics according to the sensitivity of the pathogen that has been identified when and with broad-spectrum antibiotics when incriminated germs were not identified.

Conclusions: The incidence of NI in our study was 2% (in various European countries the rates vary between 3,5% and 11,6%), witch means that this entity is still under-diagnosed and under-reported. The study identified some risk factors and the most common pathogens, providing necessary data for an effective infection control program.

(64) Primary serous carcinoma of the peritoneum – an uncommon malignancy

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Objective: Carcinoma of the peritoneum is a rare condition with a poor survival rate, even after treatment with debulking surgery followed by systemic chemotherapy. It is a disease of older women, with few cases diagnosed before the age of 40 years, diagnosed at a distant stage, underscoring the difficulty of diagnosing this malignancy. It has been recognized for almost 5 decades with an increased incidence during the past decade. Little is known about the etiology or pathogenesis of this uncommon malignancy. The objective of this paper is to present a case of primary serous peritoneal carcinoma diagnosed histopathologically.

Methods and results: The patient is a 59 old woman with hepatitis C and cirrhosis, anemic, cachectic, subicteric and plurialergic.

The clinical exam and the CT revealed important ascites and multiple intraperitoneal tumoral mases. A total extrafascial hysterectomy and bilateral salpingo-oophorectomy with pelvic and paraaortic lymph node dissection and omentectomy was performed. The cytoreduction was limited by the biologic condition of the patient.

The surgical staging was stage IIIB. The histopathologic diagnosis was: primary serous peritoneal carcinoma with high-grade of malignity (G3) and invasion of the uterine, tubal and cervical serosa and both ovaries. The immediate postoperative evolution was favorable, but due to the advanced stage, high-grade malignity and associated pathology of the patient the prognosis is poor.

Conclusion: In conclusion we presented a rare case of primary serous peritoneal carcinoma diagnosed histopathologically at woman with hepatitis C and cirosis.

(67) Preexistent components of metabolic syndrome and high risk pregnancy

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Background: Physiologically, pregnancy induces metabolic changes similar to those occurring in metabolic syndrome (MS). Preexistent components of MS cause major complications such as gestational diabetes (GD) or preeclampsia (PE). Preventing such complications is a subject of intense research, and easy to apply screening methods are needed in order to identifying pa-

tients at risk. Insulin resistance, abnormal lipid levels, obesity and hypertension are part of the MS. This study hypothesizes that the presence of components of the MS prior to conception increase the risk of maternofetal complications.

Method: We have retrospectively analyzed 169 pregnant patients with no history of cardiovascular disease, GD or PE who delivered in our hospital in 2015 and have been diagnosed with obesity (n=66), GD (n=39) and PE (n=64) during the current gestation. Pre-gestational blood pressure, glycemic and lipid values were correlated to those of control patients.

Results: Patients who had PE/GD had an increased weight and had higher triglycerides (>/=150mg /dl, n=103) and lower HDL cholesterol (<50mg/dl) one year prior to pregnancy compared to controls.

Moreover, obesity, PE and a large fetus meant an increased risk for cesarean section compared to healthier slimmer controls (total cesarean birth rate=70%).

Conclusion: Creating a metabolic profile prior to pregnancy or in early gestation is useful for identifying and proper managing pregnancies of increased risk.

(83) Postpartum aortic bifurcation thrombosis on the background of thrombophilic disorders

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Two main causes of arterial thrombosis are known: first-atherosclerosis, extensively studied, and the second-atrial fibrillation. The absence of any risk factors and the occurrence at young age of a thrombotic event requires us to investigate possible other conditions, including inherited thrombophilia which is characterized by a number of genetic disorders that increase the risk of thromboembolic disease. The role of thrombophilia in the occurrence of arterial thrombosis is inconsequential; this disorders being characterized by the tendency of developing venous thrombosis. We present a case of a 29 years pregnant woman who presents an arterial thrombotic event subsequent the caesarean section. The patient had a positive familial history for thrombotic events and a cavernous sinus thrombosis in personal history. Prophylactic treatment with low molecular mass heparins throughout pregnancy was applied. At 31 weeks gestation, iatrogenic premature termination of pregnancy by cesarean for intrauterine growth restriction 3 weeks, decompensated chronicle fetal distress, low objective biophysical fetal score and absent diastolic flow in the umbilical artery on ultrasound exam, was decided. Three days postoperative in the context of paresthesias, color and temperature modification of the right leg and abolished popliteal pulse, arterial thrombosis is suspected, being confirmed by angiographic-CT. Cardiovascular conservative treatment was successful. By considering the particularities of the presented case we discuss the occurrence of arterial thrombosis postpartum in the context of confirmed thrombophilia by reviewing the specialized literature.

(91) Retrospective study regarding management of vulvar cancer in the Department of Obstetrics and Gynecology of Emergency University Hospital Bucharest

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Objective: This study was undertaken in order to assess the rarity of vulvar cancer and point out the importance of interdisciplinary management of patients diagnosed with this type of neoplasia in order to improve its prognostic.

Methods: Medical records of all patients, diagnosed with vulvar cancer in the Department of Obstetrics and Gynecology of University Emergency Hospital of Bucharest between 1.01.2010 and 08.03.2016 were retrospectively reviewed. We analyzed the incidence and methods used in establishing the diagnostic, the histopathological subtypes of cancer, stage and the management used in all patients in order to determine the es-

sential factors of prognostic. 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 1.01.2010 and 08.03.2016 17 patients were diagnosed and underwent a surgical procedure in the Department of Obstetrics and Gynecology of University Emergency Hospital of Bucharest. 70.58% (n=12) of these patients were diagnosed with squamous carcinoma, and the others with adenocarcinoma (n=5). Clinical examination and vulvar biopsy following vulvoscopy were performed in all cases. Most patients had advanced stage vulvar cancer (according to FIGO – International Federation of Gynecology and Obstetrics staging for carcinoma of the vulva): stage III (n=7, 58,33%), stage II (n=4, 33, 33%), stage I (n=1, 8,33%). 9 patients underwent neoadjuvant radiotherapy and total vulvectomy with radical inguinal lymphadenectomy. We also observed that 16 patients had multiple comorbidities: diabetes mellitus (n=7), arterial hypertension (n=9) and obesity (n=4) and required interdisciplinary management prior and after surgery.

Conclusion: Vulvar cancer represents a challenge for specialists in gynecology and general surgery because it reveals major prognostic implications. Notwithstanding, according to this study, it is a rare condition with favorable prognostic if the diagnosis and radical treatment are performed in early stages.

(92) The abandonment in utero of the placenta in prolonged twin pregnancy complicated by premature rupture of membranes

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Premature rupture of fetal membranes is associated with a substantial fetal morbidity and mortality. The pathogenesis of spontaneous membrane rupture is not completely understood, but is considered to by multifactorial. The management of pregnancies complicated by premature rupture of the fetal membranes is influenced by the gestational age, the availability of neonatal intensive care, the presence or absence of maternal/fetal infection, the presence or absence of labor, the stability of the fetal presentation and fetal heart rate tracing pattern, the probability of fetal lung maturity, and cervical status. We present the case of a patient aged 45 years with primary infertility who presents rupture of the fetal membranes in the context of a dichorionic, diamniotic twin pregnancy, 20 weeks of gestation, obtained by in vitro fertilization. Ultrasound exam revealed first fetus with oligohydramnios in cranial presentation; the second fetus with normal development. It is decided an expectant management and an acute alternative tocolytic therapy with β-mimetics and a short course of 48 hours of atosiban was associated with calcium-channel blockers, progesterone and corticosteroids. Under specified treatment an extension with 7 weeks is obtained. During this period first fetus develops due to oligohydramnios successive ventriculomegaly and hydrocephaly. At 27 gestational weeks first fetus is delivered naturally and taken over by the neonatal intensive care service. The sectioning of the umbilical cord at his uterine emergence is practiced and the undelivered the placenta is abandoned in utero. At 28 weeks of gestation is delivered naturally in cranial presentation the second fetus. Unlike the first newborn whose perinatal development has been influenced by the consequences of premature ruptures of the membranes culminated with fetal death, the second fetus with intact membranes and intrauterine development prolonged with eight weeks presented a normal neuro-psychiatric development during the first 5 years of follow up. The expectant management of the cases with premature rupture of membranes is recommended in the absence of complications. The abandonment of the placenta is exceptional after the delivery of the first fetus of a twin pregnancy, only few similar cases being reported in the literature of this domain.

(95) Genodermatoses and the genetic predisposition for neoplasia

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Objective: Malignant tumors are associated with several inherited dermatological diseases called genodermatoses-skin diseases. The diagnosis of skin features associated can facilitate the diagnosis of genodermatoses with malignant potential and initiate the screening for tumors.

One of these genodermatosis is neurofibromatosis with two forms: type 1(peripheral), or type 2(central). NF1 is an autosomal dominant disease (17q11.2), characterized by multiples neurofibromas spread along the nerves, café-au-lait spots, Lisch nodules on iris and malignant tumors.

Method: We selected 20 patients with NF1 according to NIH criteria and with neurogene benign intratoracic tumors.

At 15% of patients with NF1 (3 from 20) appears malignant peripheral nerve sheath tumors (MPNSTs) from benigne neurofibromas which increase mortality. These malignancy is produced by biallelic loss of NF1 gene function, which acts like a tumoral suppression gene. NF1 gene produced a neurofibromin, an ATP-ase with a key role in cellular proliferation. The MPNSTs tumors have a complex histopathological features.

Results and conclusions: The management of neurofibromatosis is complex and implies a multidisciplinary approach: surgical, chemiotherapy and radiotherapy. The family history and the genetic counseling for genodermatosis must be important steps for malignant tumor surveillance.

(99) Interdisciplinary management of a patient with a rare mammary tumor

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Objective: We report the case of patient who was admitted in the Department of Obstetrics and Gynecology of University Emergency Hospital for a mammary tumor with benign clinical, ultrasound and mammographic characteristics diagnosed with breast cancer after an extensive histopathological examination with immunohistochemistry analysis. The aim is to highlight the importance of interdisciplinary management of patients with mammary tumors.

Method: We report the case of a 42 years old woman who was admitted in the Department of Obstetrics and Gynecology of University Emergency Hospital Bucharest for a palpable right breast tumor. She denied any significant family or personal medical history. The tumoral mass, located in the upper-outer right quadrant of the right breast, measured approximately 5/4/4 cm and was well circumscribed, non-adherent, with mobility on superficial plans. The mammography showed a well circumscribed mass, with hyperechoic homogenous tissue and no spiculation. During ultrasound examination the tumor appeared anechoic with interior vegetative tissue. Intraoperative we extirpated the tumoral mass which was very adherent to the great pectoral fascia. Also, specimens for biopsy were obtained during surgery and the extemporaneous examination showed a malignant papilloma. However, after an extensive histopathological examination with immunohistochemistry analysis she was diagnosed with intraductal papilloma with areas of atypical hyperplasia and ductal carcinoma in situ. She received adjuvant radiotherapy and anti-estrogen therapy.

Conclusion: The diagnosis of breast cancer was established rapidly in an early stage due to efficient collaboration between specialists in: Ob-

stetrics-Gynecology, General Surgery, Histopathology, Oncology and Radiotherapy. In order to improve prognostic interdisciplinary management is essential in patients with breast tumors.

(104) Diaphragmatic relaxation in adult patients – case report

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Relaxation, eventration or diaphragmatic paralysis represents the elevation of one leaf of an intact diaphragm. This condition is rare and oligosymptomatic (digestive, respiratory and cardiac), and it is the result of aplasia, atrophy or muscular paralysis. The differential diagnosis should be kept in mind. The surgical approach of this condition is recommended when alterations in respiratory function are found.

Objectives: A 53 years old man was presented with digestive, cardiac and pulmonary symptomatology, with no history of medical importance. The CT scans showed an elevated left hemidiaphragm, with the paramediastinal secondary ascension of the stomach, spleen and left colon, without any other suspect lesions. The ventilatory tests showed a moderate mixt disfunction with decreasing VEMS to 43.1% and VC to 36.7%.

Methods: We decided a classical approach by left thoracotomy with the plication of the diaphragm. Because there is a tendency to relapse, a polypropylene net was used to strengthen the area.

Results and Conclusions: The patient's postoperative ventilatory function was improved, the diaphragm lowered to the anatomic position and the symptomatology ceased. He left the hospital 5 days after surgery under analgesic treatment and having a favorable evolution.

It is important to recognise this condition because of its oligosymptomatology and the repercussions it might have left untreated or incorrectly diagnosed. In this case, we believe that the surgical approach has greatly improved the patient's quality of life.

(105) The use of ultrasound and Doppler examination in diagnosis, treatment and follow-up of gestational trophoblastic disease

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The gold standard for evaluation of first trimester pregnancy is considered to be ultrasound imaging, which can give a specific diagnosis in case of abnormal early pregnancy bleeding. Complete or partial hydatidiform can be often diagnosed using ultrasound examination, especially when correlated to clinical symptomatology.

Objective: To evaluate the clinical utility of sonography with uterine arteries Doppler examination in the diagnosis treatment and follow-up of gestational trophoblastic disease (GTD).

Methods: We performed a national, multicenter, retrospective trial between January 2015 and December 2015. We assessed 19 cases of GTD and the analysis included clinical and ultrasound findings, uterine arteries Doppler examination and ß HCG follow up. Ultrasound and Doppler examinations were performed in order to diagnose the presence of molar tissue, detect invasive disease, assess disease recurrence, and monitor the efficacy of chemotherapy. For the Doppler examination we compared to a control group of normal early pregnancies.

Results: Of the 19 patients with GTD, 11 had a classic hydatidiform mole (CHM), 5 a partial hydatidiform mole (PHM), 2 an invasive hydatidiform mole (IHM) and 1 had choriocarcinoma. Ultrasound showed abnormal molar tissue inside the endometrial cavity in all cases of CHM, while in cases of IHM and choriocarcinoma it revealed soft tissue invasion and cystic vascular spaces within the myometrium. The cases of PHM had a hydropic placenta with a concomitent fetus. Doppler waveforms showed low resistive indices of 0.54 for CHM, 0.55 for PHM, 0.25 for HIM, 0.23 for choriocarcinoma, and 0.65 for normal pregnancies. The abnormal sonographic and Doppler findings in invasive disease were successfully resolved with chemotherapy.

Conclusions: Ultrasound and Doppler imaging is especially useful in determining the invasion character and recurrence of gestational tropho-

blastic disease, as well as its chemotherapeutic treatment follow up.

(111) Management of borderline tumors of the ovary. Case report. Filantropia experience

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Borderline ovarian tumors (BOT) represent a group of low malignant potential tumors, approximatively 8-10% of all ovarian tumors. The incidence of these tumors is situated between 1,8-4,8/100.000 women/annually. The median age of the diagnosis of these tumors is usually 10 years earlier than the ovarian cancer. Surgical treatment for these patients includes conservative management considering the fact that most of these women are diagnosed at a fertile age. Also the fertility sparing treatment is associated with close follow up, without chemotherapy or radiotherapy.

Pseudomyxoma peritonei it is a rare condition, characterized by collection of gelatinous material in pelvis and abdomen with mucinous implant on the peritoneal surfaces. Firstly this condition was applied in cases of mucinous tumors of the appendix that spread into the peritoneum and also in ovaries. Standard treatment for PMP is repeated surgical debulking for symptomatic disease. Although randomized trials have not been conducted, five-year survival rates of 70 to 86 percent have been reported for highly selected patients.

Objective an Methods: We report a case of voluminous bilateral borderline ovarian tumors treated in our hospital. A 41 years old woman, presents with voluminous pelvi-abdominal mass and is suspected with ovarian tumor and ascites. The particularity of this case is that the macroscopic aspect and the grade of invasion of the tumor is similar to a case of pseudomyxoma peritonei. The patient is treated surgical in our hospital with total hysterectomy, bilateral anexectomy, appendectomy and evacuation of the mucinous fluid in the peritoneum. The histopathological result show two voluminous ovarian tumors with mucinous content, invading the uterus, the appendix and the peritoneum cavity. No chemotherapy or radiotherapy was added to her treatment. The postoperative evolution was simple. The follow up of this case is done from 3 to 6 months in the first 2-3 years and then annually up to 10 years.

(112) Medial vs. lateral parapatellar approach in total knee arthroplasty for severe valgus knees: case report and literature review

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Objective: An ideal approach for valgus knees should provide adequate exposure with minimal complications. Medial parapatellar approach is the most common approach in total knee arthroplasty (TKA) including valgus knee cases but some surgeons consider the lateral approach to be a better option. The objective of this study is to compare the medial vs. lateral approach for total knee replacement in severe valgus knees.

Methods: We performed a literature review (PubMed, ScienceDirect) searching for TKA for severely deformed valgus knee using a medial approach and also comparisons with the lateral approach.

We present a difficult case with severe post-traumatic valgus knee osteoarthritis operated using a medial approach and a pie crusting release of the lateral structures with a varus-valgus constrained prosthesis.

Results: In most studies the use for TKA in valgus knees with a standard medial approach in contrast to lateral approach with anterior tibial tuberosity osteotomy (TTO) showed no statistically significant differences in terms of clinical results.

The lateral approach allows for a good lateral release, but the main disadvantage is the occasional need for TTO and also the more frequently encountered skin healing issues compared with the medial approach.

The medial approach is more familiar for most surgeons and can be used successfully to perform the necessary releases. Using a medial approach for severe valgus cases usually involves extensive soft tissue dissection and may devitalize the patella.

Preoperatively our patient had a HKA (Hip Knee Ankle) of 146.4° (33.6 degrees of valgus) and a ROM of 90-10-0. Postoperatively the HKA was 177° (3° of valgus) with a ROM of 100-0. The mean modified Knee Society clinical score improved from 34 preoperatively to 90 points postoperatively, and the mean functional score improved from 32 to 80 points.

Conclusion: The medial approach is a useful approach for TKA even in severe valgus knee deformity offering good results and avoiding some of the disadvantages of the lateral approach.

(118) Management of pregnancy in Crohn disease

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Background: Crohn's disease (CD) is a chronic inflammatory bowel disease with onset during reproductive age. Current therapeutic strategies achieve good control over the CD activity and might permit fertility and a normal course of pregnancy.

Objective: To review the published data on pregnancy outcome in women affected by Crohn's disease.

Methods: We conducted a PubMed search for reviews and meta-analyses published between 2000 and 2016 with the following terms, "Inflammatory bowel disease" "Crohn's disease" in combination with keywords "fertility", "pregnancy", "congenital abnormalities" and "anti-TNF" therapy.

Results: We found 58 relevant studies. With inactive disease at conception, the risk of flare is similar to that in non-pregnant patients and rates of miscarriage, stillbirth, fetal abnormalities are equal to those in general population. The majority of women have full term normal pregnancies.

With active disease, one-third of patients present a relapse during pregnancy or postpartum. In this patients the risk of miscarriage, stillbirth, growth restriction and preterm birth are higher. These patients should be monitored as high-risk pregnancies.

Most drugs used in the treatment of CD disease are safe during pregnancy with no reported adverse outcomes. Folate supplementation is highly recommended. Anti-TNF drugs can be continued at least until late second trimester and infant vaccination should be postponed 3 to 6 months.

Vaginal delivery is safe for most patients. Caesarean section is only required for obstetrical indications.

Risk of relapse in all CD patients is higher postpartum and a medical exam is best scheduled at 4 to 6 weeks after delivery.

Conclusions: Disease control prior to conception dictates the pregnancy outcome. Early evaluation by gastroenterologist, maternal-fetal medicine specialist and obstetrician is recommended to plan appropriate pregnancy management, follow-up and mode of delivery.

(126) Surprising finding during hernia repair – a case report

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Objective: to report the case of a 65 year old patient submitted to surgery for inguinal hernia repair in whom a tumoral Meckel diverticulum was found.

Methods: the patient with no significant medical history presented for inguinal pain and was diagnosed with a right inguinal hernia with signs of incarceration so he was submitted to surgery. **Results:** intraoperatively in the hernia sac an ileal loop with Meckel diverticulum was found. The involved segment of the ileal loop was resected and sent to histopathological studies while the continuity was re-established by an end to end anastomosis. The histopathological examination revealed the presence of a well differentiated neuroendocrine tumor with low mitotic index.

Conclusions: although a standard therapeutic approach is not well established in patients diagnosed with asymptomatic Meckel diverticulum, the surgeon should always be aware of the possibility of malignant transformation especially in elderly patients.

(127) Incidental finding of serous ovarian carcinoma and endosalpingiosis – a case report

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Objective: to report the case of lymph node involvement in endosalpingiosis. Endosalpingiosis is a rare gynecologic condition which is characterized by the presence of epithelial inclusions outside the fallopian tubes, usually diagnosed in postmenopausal women.

Methods: we present the case of a 48 year old patient submitted to surgery for bilateral ovarian tumors with preoperative suspicion of malignant transformation.

Results: a total hysterectomy with bilateral adnexectomy, pelvic and para-aortic lymph node dissection was performed. The histopathological studies revealed the presence of a well differentiated serous ovarian carcinoma associated with bilateral endosalpingiosis associated with lymph node involvement.

Conclusions: although endosalpingiosis is a rare condition, the recognition of this pathology is especially important due to the possibility of association of malignant pathologies such as serous ovarian carcinomas.

(128) Aggressive surgical approach for ruptured uterine adenocarcinoma with secondary hemoperitoneum

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Objective: to demonstrate the efficacy of debulking surgery for rupturedeuterine tumors with peritoneal disseminations.

Methods: a 67 year old patient presented for diffuse abdominal pain associated with hypotension and tachycardia. The abdominal ultrasound revealed the presence of a large amount of free peritoneal fluid so she was submitted to emergency surgery.

Results: intraoperatively a large ruptured uterine tumor with peritoneal involvement and secondary hemoperitoneum was found. The patient was submitted to total hysterectomy with bilateral adnexectomy, pelvic, para-aortic lymph node dissection, parietal and pelvic peritonectomy and segmental enterectomy. The histopathological studies revealed a moderately differentiated endometrial adenocarcinoma. At two year follow up the patient is free of recurrent disease.

Conclusions: debulking surgery can be safely applied for uterine adenocarcinomas with peritoneal involvement and may bring survival benefit.

(129) Left upper abdominal quadrant resection as part of tertiary cytoreduction for relapsed ovarian cancer

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Objective: to demonstrate the benefits of en bloc resections in the left upper abdominal quadrant at the moment of tertiary cytoreduction for relapsed ovarian cancer.

Methods: a 44 year old patient had been previously diagnosed with a stage IIIC poorly differentiated serous ovarian adenocarcinoma; at the moment of initial diagnosis the patient was submitted to total hysterectomy, bilateral adnexectomy, pelvic, para-aortic lymph node dissection and omentectomy.

Results: At one year follow up the patient was diagnosed with peritoneal carcinomatosis and she was submitted to pelvic and parietal peritonectomy and segmental enterectomy. At two year follow up the patient was diagnosed with an isolated recurrence in the left upper abdominal quadrant. At this time the recurrence was resected en bloc with parcelar gastrectomy, distal pancreatectomy, splenectomy and left colectomy. During the postoperative course the patient developed grade B pancreatic fistula which was successfully treated in a conservative manner. At one year follow up she is free of recurrence.

Conclusions: left upper abdominal quadrant resections can be safely performed as part of debulking surgery for relapsed ovarian cancer and may improve survival

(132) The relationship between osteoporosis and body mass index in postmenopausal women

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Objectives: To assess the relation between body mass index and bone mineral density in postmenopausal women.

Method: We performed a retrospective study among women aged 55-83 years who addressed to the Bone Density Scan Laboratory of University Hospital of Emergency Bucharest between October 2014 and March 2016. The bone mineral density was tested using central DEXA (lower spine and hip), and the median T score recorded. Body mass index was also recorded. We performed a statistic analysis to assess the relationship between BMI and BMD.

Results: The statistical analysis was performed using Pearson's correlation coefficient, with a R value of 0.8141, a strong positive correlation, which means that high BMI values goes with high BMD scores (and vice versa). The value of R2, the coefficient of determination, was 0.6628.

Conclusions: There is a proportional relationship between osteoporosis and BMI, women with low BMI being at risk of osteoporosis.

(134) Surgical treatment of neglected locked posterior dislocation of the shoulder: case report and literature review

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Objectives: The locked posterior shoulder dislocation is a relatively uncommon pathology and we want to evaluate the treatment options.

Methods: We searched the available literature using PubMed, ScienceDirect, Retina Medical Search for neglected locked posterior shoulder dislocation.

We also present the case of a 35-year-old male with a neglected locked shoulder fracture-dislocation (over 6 months at the moment of presentation) and a reverse Hill Sachs defect of less than 20 percent of the articular surface. We used the McLaughlin procedure (transfer of the subscapularis into the anteromedial humeral head defect) followed by 6 weeks of shoulder immobilization in an external rotation brace and physiotherapy.

Results: There are few studies concerning this subject, most of them case reports or small series. The treatment options include conservative treatment, McLaughlin procedure (standard and modified), humerus rotational osteotomy, posterior glenoid augmentation, reconstruction of the humeral head with bone graft and prosthetic replacement. The most common complications are recurrent dislocation and shoulder stiffness.

In our case the results were in concordance with the literature, being able to obtain a stable shoulder with pain-free and acceptable range of motion at the 6 months follow-up.

Conclusion: The neglected locked posterior shoulder dislocation is difficult to treat, so early diagnosis is very important.

The McLaughlin procedure is a good option in this pathology, in cases with humeral head defect of less than 40% and when the degenerative changes are not very important.

(136) Transfistular choledocojejunostomy – a therapeutic option in external biliary fistula

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Objective: External biliary fistula is a matter of concern for biliary tract surgery.

Methods: We present a case of a 39 years old patient, treated in our clinic during December 2015 - April 2016. The patient was admitted for

jaundice and asthenia. Laboratory tests showed leukocytosis, hepatic cytolysis syndrome, increased bilirubin, and inflammatory syndrome. Abdominal ultrasound revealed dilated intrahepatic bile ducts, discretely dilated common bile duct (CBD), and thick wall gallbladder containing a gallstone of 20 mm.

During surgery we discovered gangrenous hydropic lithiasis acute cholecystitis and inflammatory block including hepatic pedicle, making impossible to visualize the CBD. Anterograde cholecystectomy and external transcystic biliary drainage was performed. Postoperative evolution was favorable and biliary drainage was about 600 ml / 24 h.

Nine days after surgery cholangiography showed distal CBD stenosis, which does't allow the passage of contrast into the duodenum. ERCP confirmed the distal CBD stenosis. Wide papilosfincterotomy was performed without possibility of passing a stent through biliary stenosis or removing lithiasic material from the choledoc. After that we performed MRI of biliary ducts and abdominal CT, which revealed distal CBD stenosis, with no evidence of any neoplastic lesions at this level. We still tempted duct stenting twice; duodenal papilla biopsy was performed without evidence of malignancy.

During the hospitalization the patient's evolution was favorable with no clinical symptoms and improved results of biological samples, but with persistent cholestasis syndrome; biliary drainage was about 1.000 ml/24 h.

Eleven weeks after the first operation we performed transfistular choledocojejunostomy side to side (omega loop), Braun anastomosis and transanastomotic drainage a la Witzel. Postoperative evolution was uneventful, with the extraction of transfistular drainage tube after 24 days; the patient left the hospital with normal values of biological samples.

Conclusion: Transfistular choledocojejunostomy represents a therapeutic option in case of postoperative external biliary fistula.

(138) Using the lateral cephalogram radiograph as a predictor of difficult airway in a Down syndrome patient

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Objectives: According to previous studies, complications of anesthesia are more likely to occur in individuals with Down syndrome because of soft tissue and skeletal changes encountered in this type of patients. A safe anesthesia requires evaluation of the patient. The study aimed to evaluate craniofacial skeleton abnormalities using lateral cephalometric radiograph (LCR) and was followed by comparing these paraclinical parameters with the clinical ones.

Methods: A 12-year-old male, cytogenetically diagnosed with mosaic Down syndrome, was examined clinically and paraclinically in order to assess the difficulty of the endo-tracheal intubation. To fit the patient into a risk group, there were measured the weight, the height and the head, neck and abdominal circumferences. Patil and Savva tests were used in order to determine the thyromental and sternomental distances. The intraoral evaluation consisted in measuring the maximal mouth opening and the dental mobility. The Mallampati score was determined as well. LCR was used to measure the inclinations of the upper and lower incisors, the effective length of the mandible (Kdl-Gn), the atlanto-occipital gap (C0-C1), the C1-C2 gap (atlas - axis) and the Delegue maxillo-pharyngeal angle (MA-PA). Finally, there were correlated the larynx position on LCR with the thyromental distance.

Results: The following results were obtained: B.M.I. 13,5 kg/m^2, abdominal circumference 65 cm, neck circumference 29 cm, head circumference 50 cm. The maximum mouth opening was limited to 34 mm. The thyromental distance was 5.5 cm, sternomental distance 15 cm and the Mallampati score II (not difficult to intubate). On the LCR, the inclinations of the upper incisors was 71.5° and for the lower incisors - 96°, the effective mandibular lenghth (Kdl-Gn) was 120 mm, the atlanto-occipital gap - 9 mm, C1–C2 gap - 8 mm and the maxillo-pharyngeal angle was 84°.

Conclusions: From this study, it was concluded that the LCR is a valuable tool for the preop-

erative examination and, it brings additional information which can be correlated with the clinical examination in order to establish the difficulty degree of the intubation. This type of comprehensive approach is particularly important in patients with Down syndrome taking into account their physiological and pathological particularities.

(160) Misleading case report of an abdominal lipoma: anterior or retroperitoneal?

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Objective: Lipomas are mesenchymal tumors characterized by the abnormal proliferation of adipocytes. We describe a case of retroperitoneal lipoma in a class III obese patient.

Lipomas occur in almost all parts of the body where fat normally exists, such as the trunk, limbs, mediastinum and pelvis, but are rarely found in the retroperitoneal space. In April 2016, the patient, a 43-year-old woman, without a significant medical record and no abdominal symptoms, but experiencing a mild discomfort in the left hypochondriac region, was referred to our surgery unit for further investigation of an anterior abdominal wall lipoma suspected on a CT investigation performed in March 2016. Nevertheless, the imagistic description was one of a 9/10/11 cm tumor spread all over the left lumbar region. Due to the morbid obesity, the clinical examination was inconclusive. There were no signs of peritoneal irritation, neither of pain.

Methods and Results: Given the fact that the surgical team was expecting to find an anterior abdominal wall lipoma, a midline incision was performed. Though, the intraoperative finding was one of a retroperitoneal ferm-elastic consistency tumor, very suggestive for a lipoma. A complete surgical excision followed. A histological confirmation is expected. The postoperative evolution was favorable and the patient was discharged showing no signs of complications.

Discussions: Differential diagnosis of an anterior abdominal wall mass can be made with: desmoid tumors, leiomyomas, soft tissue sarcomas and rhabdomyosarcomas, whilst the one of the retroperitoneal tumor can be made with: liposarcomas, rhabdomyosarcomas, retroperitoneal lymphadenopathies, lymphomas and renal angiomyolipomas.

Conclusion: Although the medical literature reports only few cases of retroperitoneal lipomas, the treatment protocol consists of a curative low-risk surgical procedure, followed by the full recovery of the patient. A correct and complete excision guaranties a small risk of recurrence.

(161) Malnutrition risk and associated factors for the surgical patient

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Objectives: Assessing malnutrition risk and associated factors in patients with surgical pathology by analyzing their demographic and behavioral profile and the correlation between morbidity profile, clinical severity and nutritional risk score.

Method: Cross-sectional descriptive study, on a sample of 211 patients, admitted in the General Surgery Department of Colentina Clinical Hospital in Bucharest, between January and April 2015. The following data were recorded: demographic data, behaviors which may influence nutritional status, personal pathological medical history, number of hospitalizations in the last year, elements of clinical severity (length of current stay in hospital, number of treatments administered, presence of nosocomial infections, new admissions after 30 days, condition upon discharge). The data were collected using a questionnaire administered with the interview method, and the malnutrition risk assessment has been performed using the MUST (malnutrition universal screening tool) questionnaire. Data were statistically processed with the SPSS software.

Results: 57.3% of patients were women and 42.7% of patents were men (N=90). The average age in men was significantly higher than in women (62.71 years vs. 56.21 years, $p = 0.002$). In the studied sample, 54.4% of subjects showed a high risk of malnutrition (MUST ≥ 2). The nutritional risk score varied from 0 to 6, reaching an average value of 1.69 and a mean of 2.

Malnutrition risk increased with age ($r = 0.280$, $p < 0.001$), with positive and significant correlation between nutritional risk score and

number of associated diseases (r=0.280, p<0.001), number of previous hospitalizations (r=0.295, p <0.001), length of hospital stay (r=0.194, p-0.005) and number of administered drugs (r=0.251, p<0.001).

Conclusions: Our study shows that patients admitted for a surgical pathology are under a malnutrition risk and this leads to a longer hospitalization period on average and a high number of administered drugs, bearing on healthcare costs.

Implementing malnutrition screening upon admission allows to identify risk patients and to initiate certain measures contributing to the improvement of clinical results and to the reduction of costs associated with medical care of such patients.

(165) Surgery with vascular reconstruction for extensive retroperitoneal tumor with important vascular relations – Case report

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Objective: Retroperitoneal tumors often become symptomatic only at impressive dimensions when they developed tight contact with important vascular structures. The histopathological diagnosis and detection of tumor origin are possible only by biopsy, sometimes after surgical resection, when feasible, these being significant in adjuvant therapeutical decision.

Methods: Here it is presented the clinical case of a 64 years old patient investigated by CT and MRI exams for diffuse abdominal pain and flatulence. She was diagnosed with massive retroperitoneal tumor predominant on the right side with left extension being in intimate contact with the inferior vena cava, portal vein, right renal pedicle and the superior mesenteric artery. At laparotomy the surgical resection was appreciated as feasible due to identification of a cleavage plan between the tumor and vicinity tissues.

Results: The dissection and preservation of the inferior vena cava, portal vein and right renal pedicle were possible but the close contact of superior mesenteric artery required it's segmental resection with termino-terminal anastomosis. The postoperative antithrombotic therapy consisted of Zibor, Vessel due, Ilomedin and Dextran.

Conclusions: Surgery for retroperitoneal tumor requires abdominopelvic CT scan completed by MRI for the most accurate identification of the tumor rapport with nearby organs and large vessels. The final decision should be chosen intraoperatively. The intimate rapport of vascular structures warns the surgeon about the necessity of vascular reconstruction which may rise serious treatment problems, for prevention or treatment of potential lethal complications.

(166) Charcot foot IV Brodsky surgical solution

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Objective: Charcot neuropathic osteoarthropathy associated foot deformity can result in joint instability, ulceration, amputation. Reconstructive surgical intervention is a useful treatment option for the patient who has severe musculoskeletal deformity and often avoid amputation.

Methods: We report the case of a 47-year-old man who presented to our department in March 2016 with complaints of vicious position of right foot, marked functional impotence, important swelling, ulceration of right foot and ankle pain. From personal history, we notice poorly controlled diabetes, over than 10 years; stage IV peripheral arteriy disease and diabetic polyneuropathy on daily insulin and Metforminum treatment, morbid obesity. Physical examination showed: extreme vicious position of right foot, varus 90Ţ on the rest of the ankle, skin infection and subcutaneous perforating the front side of the ankle and half side of the plant-foot, low local toes temperature, erythema and cyanosis on fingers I,II,III. Laboratory tests: leukocytosis, inflammatory syndrome, hyperglycemia (HbA_{1c}=8.6 mmol/L), bacteriological examination of the lesion found *Pseudomonas aeruginosa*. Preoperative foot x-

ray: Charcot foot with peritalar subluxation and hindfoot and midfoot remodeling. Right foot CT-scan: Charcot neuropathic osteoarthropathy with sequels to the tarsus and ankle joint, (stage 3-Eichenholtz), amputation of IV-V toes and possibly cuboid. Our diagnosis was: sequelae of Charcot right foot, peritalar subluxation, poorly controlled type 2 diabetes complicated with peripheral arteriy disease, polyneuropathy and morbid obesity. We performed right tibial-calcaneal arthrodesis with intramedullary rod, negative pressure therapy and bandages every 2-3 days with non-medicated tulle dressing of a water repellent polyester tulle impregnated with fatty acids(Atrauman) with favorable postoperative evolution and discharged after 33-days with rehabilitation recommendations and antibiotics, painkillers, anticoagulants, vasodilators, appropriate diabetes treatment. Postoperative x-ray: ankle arthrodesis with trans-calcaneal intramedullary rod.

Conclusions. We present the case of a young patient with poorly controlled diabetes and Charcot neuropathic osteoarthropathy of the right foot, which was late hospitalized and raised issues regarding the management of reconstructive surgery. It is important to emphasize the education importance of diabetic population presenting to the doctor as soon as possible because, with the suitable surgical techniques, appropriate postoperative care and patient compliance, stability can be restored and management can be valuable for the patient and surgeon.

(167) Atypical endometriosis findings – case report

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Objective: Endometriosis is defined as the presence of endometrial-like tissue (glandular and stromal) outside the uterus. The abnormal localisation induces a chronic inflammatory response which frequently has cyclic manifestations like pain, dysmenorrhea, and dyspareunia. It represents a debilitating condition due to high recurrence rate of the episodes. A quarter of the patients are asymptomatic. However the most common symptom is abdominal and pelvic pain. The incidence is about 10% percent in the general female population. Infertility is one of the most important health problem secondary to endometriosis.

Methods: We present the case of a 41-year-old woman who was admitted to the clinical hospital Prof. Dr. Panait Sirbu Bucharest in April 2016. She was completely asymptomatic, with no history of pain. The ultrasound scan revealed the corpus of the uterine in the ante flexion position, an intraparietal formation about 5cm in diameter and another posterior of 3/4cm (suggestive for uterine myomas) and an endometrial polyp. The right adnexa examination suggested hydrosalpinx.

Having the informed consent of the patient, a laparoscopy was performed. It revealed multiple uterine formations with anterior and posterior origin from 5 cm to 1.5 cm in diameter that proved to be endometriomas. Moreover, a pseudo cyst probably of adhesion origin with 10 cm diameter was found among multiple peritoneal endometriosis lesions.

Conclusion: Endometriosis presents multiple aspects. Even though multiple lesions can be observed during examination, the patient may remain asymptomatic. The most common places where it may occur, are: the ovaries, the fallopian tubes, the bowl and the uterosacral ligaments.

The particularities of this case were the atypical forms of endometriosis and the lack of symptomatology of the patient.

(169) Unique case, double Salter-Harrys type IV fracture localized at the distal extremity of the tibia and fibula of an 8 year old

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Objective: Salter-Harris fractures are fractures through a growth plate and it is the most common fracture that affects the growth plate. These type of fracture is described only in children and teenagers in which the growth process hasn't stopped yet. The deteriorated bone may grow at an accelerated or decelerated rate witch may result in noticeable length discrepancies.

They represent 15-35% of child fractures and is usually encountered between the ages of 10 to 15 years.

Method: An 8 year old patient presents himself with a Salter-Harris type IV fracture localized

at the distal left tibia and fibula. The fracture occurred from a falling trauma from a great height.

The fracture was reduced using a single incision. The incision was made along the inter tibiofibular space and was continued lateral and inferior of the maleola. The fracture had a "dumbbell" appearance, the two metaphysis and epiphysis fragments being connected by the ventral tibiofibular ligament. The posterior tibiofibular ligament was situated between the two bone fragments and the inter tibiofibular space. Osteosynthesis aims to anatomicaly reduce the tibial fragment through fixing 2 Herbert screws. These screws are epiphyseal placed on the splint without injuring the maturing cartilage. This is done because injuries could lead to limb inequality through the shortening of the shin or through axial deviation in valgus or varus.

Because the fibular bone fragment was too small, it could not be stabilized using only Herbert screws, thus the need of using ephyphisiocentromedular osteosynthesis to assure a correct fixation of the bone fragments and to avoid the use of a cast. The posterior tibiofibular ligament was placed in its original place.

Results and conclusions: A Salter-Harris type IV fracture was reduce by means of a minimum invasive procedure in order to achieve an anatomical reduction thus avoiding early and late complications. The firm fixation of the bone structures allows early mobilization of the leg with partial weight support in two weeks and full weight support between 30 and 40 days if the recover maneuvers begin as soon as the third day. Mobility of the leg is regained in 30 days.

(170) Platelet indices in pregnant women with severe early intrauterine growth restriction

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Early intrauterine growth restriction (IUGR) (with onset before 32 weeks of pregnancy) results form uteroplacental insufficiency and shares pathological features with pre-eclampsia (PE). In both PE and IUGR there is endothelial cell dysfunction, increased platelet activation and peripheral thrombocytopenia. Platelet indices (mean platelet volume - MPV, platelet distribution width and plateletcrit) might reflect these changes and are modified prior to the onset of PE.

Objectives: The aim of this study was to evaluate platelet number and platelet indices in pregnant women with severe early IUGR requiring delivery for fetal indication before 32 weeks+6 days.

Methods: The study included 27 cases of severe early IUGR: 19 with associated PE (IUGR+PE) and 8 without superimposed hypertension (IUGR) followed between 2010 to 2015 in our unit. Complete blood count (CBC) was taken before delivery. CBCs from 35 normal matched pregnancies were used as control (CTRL).

Results: Platelet count was significantly reduced in the IUGR groups as compared to control: IUGR+PE – 229x103/μl, IUGR - 216 x103/μl vs CTRL - 293 x103/μl (p= 0,009 and p= 0,02). MPV was increased in severe early IUGR: IUGR+PE – 8.9fL, IUGR – 8.8 fL and CTRL - 8.09 fL (p=0,0007 and p=0,03). There was no significant difference in platelet indices between the two IUGR groups.

Conclusion: In pregnancies with severe early IUGR, platelet indices are modified and this can reflect the pathopysiological features underlying the condition.

(172) Secondary septic hip osteoarthritis with no identified primary location – case presentation

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Objective: We want to present the difficult case of a patient with secondary septic hip osteoarthritis and significant associated pathology.

Method: We followed the evolution of a 60 years old patient who first came to our department for pain and marked limitation of hip range motion with an x-ray exam compatible with the diagnosis of advanced osteoarthritis. The lab results have shown a significant inflammatory syndrome. He was sent for further investigations, revealing a Grawitz tumor for which radical nephrectomy was performed. After 4 months the

patient returned to our department accusing severe hip pain. The lab result have shown a significant inflammatory syndrome, and the x-ray exam revealed an osteolytic supra-acetabular lesion. A bone scan and a MRI were performed, but we couldn't exclude a possible metastasis, so we decided to perform a biopsy. The histopathological result was negative for tumor cells, but the bacteriological exam (joint liquid aspirated intraoperatively through the intact capsule) identified coagulase-negative staphylococci sensitive to all tested antibiotics. The patient was admitted afterward to an infectious disease department where they continued the investigations without being able to find the primary septic origin and was given specific antibiotic treatment for 2 months. The clinical evolution was complicated by the worsening of hip pain and significantly increased inflammation markers. We decided to perform a resection of the femoral head and took samples of tissue and joint fluid for histopathologic and bacteriologic exam, but the results were negative. We implanted a vancomycin-loaded spacer and continued intravenous and oral antibiotherapy. The evolution was slowly positive with normalization of inflammatory markers and at 3 months postoperatively we performed a cemented total hip replacement.

Results: At the 6 months follow-up the evolution was very good with no residual hip pain, good function, normal biology and no x-ray signs of loosening.

Conclusions: In this case we suspected a hematogenous septic hip arthritis in the context of neoplastic immunodepression, but we weren't able to locate the primary septic origin.

In case of patients with multiple associated pathology (neoplastic, infectious, and degenerative) there are significant diagnostic and therapeutic challenges, so the interdisciplinary cooperation is crucial.

(177) Pharyngolaryngeal cancer

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Objectives: Pharyngolaryngeal cancer is a rare type of malignant tumor that develops frequently (5:1) in the male population over the age of 60. The occurrence rate of pharyngolaryngeal cancer may be compared with the one of oral cancer and thyroid cancer, but is less common than the one for lung cancer. Smoking is the main factor in the evolution of this tumour.

Methods: Patient, aged 44, chronic smoker for 27 years, without past personal pathologies is hospitalised for dysphagia, the feeling of foreign body in the throat, and for the emerge of a left latero-cervical adenopathy around one month ago in order to get diagnosis and specialised treatment. ENT clinical examination correlated with other medical investigations show an infected, ulcerous, infiltrated, vegetative tumoral formation with the starting point at the left pyriform sinus level, with extension to the left hemilarynx, nasal septum and a hypertrophy of the inferior nasal level. Subsequently, under general anesthesia and orotracheal intubation, a biopsy is performed from the pharyngolaryngeal region and the piece is sent to histopathological examination. Due to the extension of the tumor, the pacient is referred to an oncology specialist for further radio and chemotherapy.

Results: The postoperative evolution is favourable under the use of systemic antibiotics, anti-inflammatory drugs and pain killers. The patient carries out a cervical CT with contrast substance from which it can be concluded that pharyngolaryngeal cancer had spread.

Conclusions: The purpose of the treatment is to completely eliminate the tumoral tissue, while preserving as much of the functions of the larynx. In this case, an under-the-isthmus tracheotomy (T4-T5) is performed. The postoperative evolution is favorable. Due to the extension of the tumor, the pacient is referred to an oncology specialist for further radio and chemotherapy.

(183) Clinical results of the talus fracture in young patients

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Objectives: A talus fracture appears after excessive dorsiflexion movements and requires careful monitoring of the clinical results to prevent specific complications.

Methods: A retrospective study that was conducted over a period of three years, from January

2013 to December 2015, in which were included patients hospitalized with fractures of the talus treated surgically in the Department of Orthopedics and Traumatology at the Emergency University Hospital Bucharest.

The study included a total of eighteen patients with fractures of the talus, with the age between 18 and 36 years, with an average of 23. From the total number of patients, eleven patients are male and seven patients are female. Nine patients had the fracture on the right side, six patients had on the left side and the rest had the bilateral fracture.

The average time from the injury until the surgery was three days (between one day and eleven days). The mean hospital stay was three days (between two and fourteen days). Most patients had neck fractures (Hawkins III).

Results: In Hawkins I type fractures fixation pins were preferred in two cases and in Hawkins II and III type fractures open reduction and fixation was performed with 2-3 screws in sixteen cases. Subtalar arthrodesis was practiced on a patient with avascular necrosis. The same procedure was used on a patient with Hawkins III type neck fracture of the talus that presented aseptic necrosis. Complications occurred after an average time of nine months (the duration between six and thirteen months).

Average result of the American Orthopaedic Foot and Ankle Society (AOFAS) at three months postoperative was 91 (between 67 and 96).

Conclusion: The talus is an important structure because of its characteristics: it is 60% covered with cartilage, it is dependent on the main vascular sources and has no muscle inserts. Therefore, these fractures in the talus require close attention.

(186) Rare simultaneous lesion – giant uncomplicated hydatid hepatic cyst and ruptured spleen

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Objective: The presentation of a simultaneous lesion composed of an acute illness – traumatic ruptured spleen and a chronic condition – right lobe giant hydatid hepatic cyst.

Methods: We report the case of a 30 year old woman who presents at the emergency room of the Bagdasar Arseni Emergency Hospital for lipothymia (she fell in the bathroom). She accuses severe abdominal pain, predominant in the left hypochondrium. Patient is tachycardic, unstable hemodynamic with skin and pale mucous. From history: the patient is without known pathological personal antecedents. An abdominal ultrasound has been made immediately that showed intraperitoneal liquid, at the level of Morrison's Space and at the bottom of Douglas bag. The liver has increased size, unhomogeneous from the presence of a formation, that replaces the area of the right hepatic lobe level of approximate 12/10 cm with mixt content and unhomogeneous spleene. At the CT - thoraco - abdominal exam persiplenic fluid showed but in medium quantities with spleene rupture and an increased size cystic tumor formation that occupies the whole right hepatic lobe, suggesting the presence of hydatid cyst. Considering her hemodynamic instability, the posttraumatic hemoperitoneum created by the spleen rupture and the possible hydatid cyst rupture the decision is to immediately sent the patient to surgery.

Results: Intraoperative exploration of the abdominal cavity revealed an enlarged liver, with the cyst in its right lobe, the rupture of the spleen and hemoperitoneum. At the inferior pole of the spleen there where multiple blood clots, blood and lacerations. Splenectomy is performed.

We decided to postpone the surgical treatment of the hydatid cyst because it was not ruptured and the liver was undamaged. We also postponed the surgery because de pacient needed a preoperative treatment with Albendazol. Postoperative evolution was favorable.

Conclusions: The most frequent complication of a patient with liver hydatid cyst after and abdominal trauma is the rupture of the cyst that may cause anaphylaxis and sudden death. Even though our patient had a giant liver hydatid cyst, the only complication of abdominal trauma was spleen rupture.

(187) Pancreatic pseudocyst - complication of acute pancreatitis

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Objective: Presentation of a case of a cephalic cyst of the pancreas that occurred after the surgery for acute pancreatitis, treated by an anasto-

mosis between the pseudocyst and the stomach.

Methods: We report a case of a 42 year old woman who was admitted in the General Surgery Clinic of the Bagdasar Arseni Emergency Hospital with upper abdominal pain.

The patient presented an episode of severe acute pancreatitis 3 years ago which required surgical treatment. Then, a Roux-en-Y anastomosis between the pancreas and the jejunum was performed. At this point, physical examination revealed an epigastric mass in 7 cm diameter, relatively well demarcated, with semi-solid consistency, attached to the deep layers.

Imaging tests (ultrasound, CT, Upper gastrointestinal endoscopy) revealed a cephalic pancreatic pseudocyst around 76/78/100 mm in size, with thick fibrous walls, between the inferior vena cava and the origin of the portal vein, compressing the right hepatic lobe, the duodenal frame and the regional intestinal loops. The endoscopic procedure for the cyst drainage failed, so we decided that the best option is to treat it by open surgery.

Results: Considering the size of the cyst and the associated symptomatology, the pathology had absolute indications for surgical treatment, so it was agreed with the patient to treat it with open surgery consisting in a cystogastrostomy (Jedlicka procedure).The cystic cavity was cleaned and a nasogastric tube was inserted as a precautionary measure.

Postoperative evolution was favorable, with parenteral nutrition for 4 days.

Conclusions: Despite the modern techniques of endoscopic drainage of the pancreatic pseudocyst, this treatment is not always possible, so the classic surgery remains the gold standard.

(188) Periprosthetic fractures in elderly patients with total hip arthroplasty

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Objectives: Implant-related fractures are becoming increasingly frequent as the population ages and prevalence of prosthetic implants increases. Solving this particular fracture is a surgical challenge due to the nature of the elderly patient: multiple comorbidities associated, fractures are often complex and multifragmentary and bone quality is poor.

Methods: A retrospective study included ten patients previously treated with total hip prosthesis in the Department of Orthopedics and Traumatology at the Emergency University Hospital Bucharest. The added subjects had Vancouver B2 and B3 periprosthetic fracture, age of the patients was between 62 and 74, a mean age of 66 years. The surgical treatment was open reduction and fixation with Dall-Miles system and in one specific case surgical revision of the hip. Harris postoperative hip score was used six weeks after surgery to evaluate the clinical function.

Results: The number of operated patients was ten and the mean period of hospitalization was eight days (with the duration between 7 and 10). Four patients had the fracture on the right side and six on the left. One patient had a secondary loosening of the femoral component and required arthroplasty with modular prosthesis. The postoperative management of the patient consisted of: at two weeks inspection of the wound and physiotherapy; at six weeks radiographic examination and mobilization with progressive support on the operated lower limb; at twelve weeks radiographic examination and if there are signs of consolidation, mobilization with total support on the operated leg. The average time to union was fourteen weeks. The Harris postoperative hip score was 80.3 after twelve weeks. No infection of the wound occurred but two patients experienced delays in consolidation.

Conclusion: The goal, as it is in the cases of hip fractures, is to allow the patient to resume all activities. However this type of fracture requires specialized equipment and training for a good postoperative recuperation at an increased cost.

(189) The importance of phonatory rehabilitation with prosthesis for laryngectomy patients

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Objectives: Laryngeal carcinoma lately has a higher incidence. Unfortunately the greater majority of cases are diagnosed in advanced stages that from a surgical perspective are limited to the sole option of total laryngectomy. This procedure implies total removal of vocal cords with loss of respiratory, phonatory and olfactive functions. Phonatory rehabilitation is a major step for increasing the quality of life for laryngectomy patients. Currently there are three procedures: esophageal voice, laryngophone and phonatory prosthesis. However the gold standard is the vocal implantable prosthesis used in the last two decades. The insertion of the device can be primary during the total laryngectomy or secondary after the completion of oncology treatment. Coltea ENT Clinic has begun performing the insertion of phonatory prosthesis since 2005. This retrospective study shows our experience performing this procedure.

Method: This retrospective study gathered a group of 65 patients with laryngeal carcinoma undergoing total laryngectomy at Coltea ENT Clinic during January 2014 and March 2016 and benefited from phonatory rehabilitation through the insertion of Provox prosthesis.

Results: Our data show a male predominance among the study group with only one woman undergoing this procedure. 29 procedures were performed in 2014 and 26 in 2015. All cases benefited from manual HME devices that need manual compression of the phonatory device implanted secondary to the laryngectomy procedure. Concerning the phonatory outcome the data revealed an immediate post procedure phonation for one in three patients. Later results are due to local massive edema, blood clots and excess secretions jamming the prosthesis or in case of low compliance with the use and maintenance of the devices.

Conclusions: Voice restoration using a phonatory prosthesis is an important step for social and professional reintegration of laryngectomees. The prosthesis is inserted in an outpatient procedure and the total cost is covered by healthcare insurance, but for optimum results is necessary patience for patient's education concerning the use and daily maintenance of the device.

(190) Using blocks of tantalum in bone defects of the cotyloid cavity in the revision of hip surgery

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Objective: The aim of the study is to track the clinical and functional outcomes of the patients with hip revisions with massive acetabular bone defects.

Method: A retrospective study conducted over a period of 3 years (January 2014-January 2016) in which were included patients with hip prostheses with massive acetabular bone defects that required replacement with blocks of tantalum. In the study, we've included 11 patients (8 men and 3 women). The average age was 71 years (between 64 and 78 years). The average time of follow-up was 23 months (between 11 and 36 months). For the preoperative evaluation of bone defects was used The Radiological Classification Paprosky. In 9 cases, the bone defect was Paprosky type 2B and in 2 cases type 3A. To determine the outcome of functional results in both pre- and postoperative time we used the Harris score.

Results: 6 patients used prostheses for osteoarthritis secondary to dysplasia, 2 patients for aseptic necrosis secondary osteoarthritis and 3 patients for primary osteoarthritis.

The average time elapsed between the primary arthroplasty and the necessitate revision surgery was 11 years (between 7 and 16 years). The post-operative radiological evaluation showed an improvement when it came to the hip rotation centre with a vertical average preoperative 3.1 cm (between 1.2 and 4.6 cm) and a post-

operative average position of 1.1 cm (range between 0.5 and 2.3). Average result of preoperative Harris score were 36 (that range between 11 and 56.7) and the postoperative average result were 86 (ranging between 39 and 96). During the regular check-ups there weren't any recorded cases of early loosening, infection or dislocation of the prosthesis.

Conclusions: The blocks of tantalum used in large bone defects in the revision is a good solution, correcting the centre of rotation and significantly improving the functional score.

(200) Strategy for an Addison patient during pregnancy

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Addison disease is rare and affects primarily young women. Association with pregnancy is more rarely. We aim to present the case of primigravida with Addison disease diagnosticated following an adrenal crisis 2 years ago. With steroid replacement (glucocorticoid and mineralocorticoid therapy) the pacient obtained a pregnancy, Ecografic scan shows normal development both at first trimester with a low risk for cromosomial abnormality, and second trimester. She underwent cesarian section for obstetrical conditions and a healthy baby weighing 2650 g was delivered at 36th week of gestation. During delivery she was given intravenous steroids so that she can handle the physical stress. The dosage of electrolytes was necessary before and after delivery.

Pregnancy outcomes have been proven to be unfavorable in many cases of Addison disease. Multidisciplinary care with an endocrinologist, obstetrician, maternal-fetal specialist and neonatologist is necessary for optimizing the management of Addison disease in pregnancy.

(202) What the nature can do when somebody wants to obtain a pregnancy? Case report and review of the literature

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Objective: Pregnancy is miracle for a family that wish it so much and a challenge for the obstetrician in selected cases. A pregnancy may have a normal evolution during all the trimesters of pregnancy and it may have lots of complication at term.

Method: We report the case 28 years of age woman who had a normal pregnancy until 38 weeks of pregnancy. She came at the emergency room for uterine contraction and we had to perform cesarian section for obstetrical indication (disproportion between the maternal pelvis and fetal dimensions according to clinical and ultrasound evaluation).

Results: In our case we performed cesarian section using Joel-Cohen modern technique. During laparotomy we observed an important adhesion process on the pelvis. We performed superficial adhesiolisis. We delivered a baby boy of 4200 g and IA 10. We realized the uterine closure without any difficulty and we explored the abdominal cavity. We observed that the adhesion process was extended on the right iliac fossa and the patient had no right adnexa (ovary and fallopian tube). Exploring the left adnexa we observed a very thin fallopian tube, normal left ovary and important vascular adhesions. The question was how did she conceived with such modified anatomy?

Conclusion: The particularity of this case is that a patient with no medical history (surgical interventions or pelvic inflammatory disease) and severe modified internal genital organs obtained a pregnancy in natural way.

(203) The strange pathology behind a diffuse abdominal pain – Idiopathic retroperitoneal fibrosis

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Objectives: Idiopathic retroperitoneal fibrosis (IRF) is an uncommon disease, characterized by extensive fibrosis development throughout the retroperitoneum, in the lumbar area, with the entrapment and obstruction of retroperitoneal structures, such as the aorta, inferior vena cava, and ureters, uni or bilateral, often culminating in severe uremia. IRF is generally idiopathic, but can also be triggered by certain drugs, infections, malignancy and surgery, or secondary to an autoimmune disease. Clinical manifestations are unspecific, such as: abdominal discomfort, constipation, diffuse lumbar pain.

Methods: We present the case of a 57-year-old male with diffuse abdominal pain, discomfort in the left flank, with left hydronephrosis, but normal global renal function and a tumor present in the left retroperitoneum, involving the left ureter, revealed by the CT scan. Because the initial pathology report suggested a low grade non-Hodgkin lymphoma, partial removal of the tumor en bloc with the left kidney was performed. Immunohistochemistry staining later revealed the benign fibrous nature of the tissue. Immunosuppressive treatment was conducted for one year, with good response and regression of the mass. Three-year follow-up was normal, afterwards discontinued. Five years later, he complaint about right flank pain, abdominal discomfort and mild constipation. Laboratory tests showed uremia and elevation of CRP and fibrinogen levels. The CT scan revealed a retroperitoneal mass surrounding bilateral common iliac vessels and the ureter, with obstruction of the kidney.

Results: After the placement of a double J ureteral stent, followed by open right ureterolysis with omental wrapping, the patient regained normal kidney function. Pathology report showed benign fibrous tissue. Immunosuppressive treatment was reinitiated and the double J catheter was removed 6 weeks later.

Follow-up at 3, 6, 9, 12 and 18 months were normal and showed a discrete recession of the mass.

Conclusions: IRF is a rare, but challenging condition, which requires an early diagnosis and a correct medical and surgical treatment. It is very important to be up-to-date regarding this pathology, in order to be properly diagnosed it. If it goes untreated it can cause severe complications, such as end-stage renal failure and death. For this pathology, long term follow-up is indicated.

(208) Pelvic osteosarcoma resection and reconstruction of the abdominal wall defect with pedicled vastus lateralis flap – case report

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Objectives: We present the case of a 17 year-old patient, diagnosed with conventional osteosarcoma of the left ala of ilium with pelvic extension and multiple pulmonary metastases, treated with 9 cures of chemotherapy and 28 sessions of radiotherapy.

Methods: The pelvic MRI highlighted an extracompartimental left ilium wing tumor described as heterogeneous and septated, with necrosis and T1 hypersignal areas (-calcifications). Caudally, the bone involvement extends up to the superior part of the acetabulum, without acetabulum cortical or intra-articular extension. Serial thoracic CT-scans showed multiple, bilateral metastases, almost completely calcified, most of them being dimensionally stable. The histopathologic exam result (after the biopsy performed in a different department) was conventional osteosarcoma. After interdisciplinary consults (-oncology and thoracic surgery) we decided to start with the resection of the primary tumor and afterwards the thoracic surgeon would proceed with successive, bilateral resection of the metastases.

Results: We performed an Enneking type I+II resection, followed by reconstruction with allograft and fixation (2 cables and a reconstruction plate). The histological exam confirmed the diagnosis of conventional osteosarcoma and tumor-

free margins. Three days post-op skin necrosis developed on a 9 cm^2 area, between the ilio-inguinal incision and the post biopsy scar. We performed necrectomy and used negative pressure therapy, in association with Vancomycin instillation for two weeks. The evolution was favorable, with granulation tissue formation. Two weeks later we performed the reconstruction of the skin defect with a pedicled vastus lateralis flap.

Conclusions: The excision of the tumor was complete and it will be followed by the successive, bilateral resection of the pulmonary metastases. The evolution was complicated by the skin necrosis, (probably determined by the previous radiotherapy and the placement of the biopsy incision). The reconstruction with muscle flap is a good solution for patients who develop skin necrosis after radiotherapy and major oncologic surgery.

(210) Tissue reaction to orthopaedic implants, multidisciplinary approach

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Objective: Tissular reaction to orthopedic implants has been thoroughly studied, since it can be responsible for invalidating pain, as well as for implant loosening, thus requiring implant removal (which otherwise, has no specific indications). The reaction is enhanced by certain characteristics of the host, such as age, comorbidities, as well as co-existence of different implants. Yet, there are no well-defined clinical protocols and different views on the matter are still in discussion. We propose to evaluate the extent of different background specialists that could be required in proprely managing, diagnosing and treating a patient with tisular reaction to orthopaedic implant.

Method: To describe this topic we analyzed 14 cases with tissular reaction to implant that underwent implant removal in Clinical Emergency Hospital, Bucharest, Romania between 2013-2016.

Results: Usually when an implant removal procedure is done, a multidisciplinary team is required, including: an orthopaedic surgeon to put the surgical indication and to perform the intervention, a radiologist for selected cases with doubtful imagistic findings and an anesthesiologist as medical specialists. In particular cases, when there are signs of an infection the team should also have an infectionist.; an allergy specialist must help with the management of the patient when an allergy is the cause of implant removal. Last but not least the macroscopic findings of the tisular reaction must be correlated with the microscopy, interpretation done by the patholog specialist.

Conclusions: Although implant removal surgery is a routinely done procedure, it has very few clear indications for it. The management of a patient is complex and is carryed out by an inderdisciplinary team, in which every specialist has its role in diagnosing and treating the patient's condition.

(217) Organ transplant: the mystery of the cellular intelligence

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Objectives: We heard about the changes that happen in a recipient's body as a result of an organ transplant from a television show, so, we wanted to come across a scientific explanation for those transformations. Moreover, we wanted to discover which are the similarities in these changes and also what makes those cases differ from one another, things not even doctors or scientists would expect to happen.

Methods: We studied Donate Lifes America's 2011 statistics and also twenty individual cases with their characteristics. Three interviews with three different recipients explaining how they felt after the transplant gave us a great insight into understanding how much their lives have changed and we also learned about their physical and psychical constantly changing features.

Another important source was the research conducted by School of Nursing at the University of Hawaii in Honolulu which studied 10 patients (recipients) paralleling with the history of the donors.

Results: It did not come as a surprise to us that each patient has gone through some minor behavioral and physical changes such as: a patient who received the heart of a young man declared that he felt full of energy or another recipi-

ent whose life has substantially improved after getting a new liver. We were taken aback by some cases in which changes were totally unexpected: there were reported situations in which the recipient's hair colour had changed, as well as the skin colour. They were strengthened by behavioral ones such as new different taste in music and food. What was even more surprising was a case of a 18 years old woman whose blood type has changed and, more than that she acquired the immune system of the donor.

Conclusion: To conclude with, we would like to emphasize the fact that transplants turn out to have a great impact on those who undergo such a procedure. It is fascinating how human body works and how many efforts it must make in order to reestablish its balance.

(222) The use of acellular biological grafts in gynecologic surgery

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Objectives: To present our personal experience regarding the use of the latest generation of acellular biological grafts in various pelvic pathologies for reconstructive purposes.

Method: Acellular biological grafts represent an optimal alternative treatment in multiple gynecological pathologies. From our personal experience, their use has had favorable results in cases of vulvar or vaginal neoplasia, anterior vaginal wall erosion caused by synthetic meshes, repeated resection of vulvar or vaginal mucosa or relapsing recto-vaginal fistula. Also their major role in pelvic reconstructive surgery was revealed by the creation of a neovagina, in cases of vaginal atresia post radical colpohisterectomy and radiotherapy for carcinoma of the cervix or congenital atresia caused by Rokitanski-Kuster-Hauser syndrome.

Results: Vaginal and perineal reconstruction using acellular biological grafts post- vulvar/vaginal carcinoma or erosion of anterior vaginal wall caused by polypropylene meshes was followed by achieving of a functional vagina approximately 2 months postoperatively. A relapsing recto-vaginal fistula treated with multiple excisional interventions was treated successfully, the one year postoperative follow-up not showing signs of recurrence. Creating a neovagina in case of congenital atresia or postsurgery obtained a completely epithelialized vaginal wall 2 months postoperative, with a vagina of 7-8 centimeters in length, functional 4 months postoperatively.

Conclusions: Our personal experience allows us to affirm that biological acellular third generation grafts represent an important therapeutic option in pelvic reconstructive surgery.

(241) Chondroblastic osteosarcoma – Case report

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Chondroblastic osteosarcoma is a high grade malignant bone tumor with high fatality rate if untreated due to early pulmonary metastases. The incidence is quite low and it can occur at any age. In the near past, ablative surgery was the only surgical treatment option, which in most of the cases represented amputation of the affected limb. Nowadays the keyword in this pathology is limb salvage surgery, followed by reconstruction surgery with specific modular prosthesis. The indication of this kind of surgery unfortunately is limited, the patient has to be diagnosed as soon as possible without having any metastases. A 25 year old male patient presented to our department with night pain of the left knee, without having any injury. Radiological findings were poor, biopsy of the affected segment showed a chondroblastic osteosarcoma. The patient underwent wide resection of the tumor and reconstruction with a modular distal femur and knee prosthesis.

Surgery in tumoral pathology is a major challenge, requiring good surgical experience, and it still has a poor outcome. The main goal is to not harm the quality of daily life and to obtain a fast rehabilitation and social reintegration. This case represents and highlights the possibilities of specific tumor treatment like modular reconstruction

in early stages of chondroblastic osteosarcoma of the femur.

(251) Voluminous adenocarcinoma of the splenic angle of the colon, invasive into the greater gastric curvature

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Colorectal cancer is a neoplasia with growing frequency both worldwide and in Romania, representing the third neoplasia among the newly diagnosed ones and the first neoplasia of the digestive tract. We present a case study of a 64 years-old female patient who was admitted for abdominal pain localized in the lower left quadrant and radiating to the lumbar area, rectal hemorrhage, melena, constipation, loss of weight (10 kg during the last 4 months), nausea and vomiting. The patient was previously diagnosed through a CT scan with a tumor of the splenic angle of the colon of 75/80 mm diameter, irregular in contour and an imprecise demarcation from the great gastric curvature. From her medical history we note: cholecystectomy, a rectocele operation, accidental laceration of the extensor tendons of the right hand. Clinical examination : pale skin, dehydration signs, non-perceptible superficial lymph node system and an abdominal mass detected through palpation in left upper quadrant. Laboratory findings: in the normal range, except hemoglobin 5,8 g/dl, fibrinogen 503,4 mg/dl, neutrophilia (8.95 ^ 10 3) leukocytosis, hypoproteinemia 5.6 g/dl. Upper GI tract endoscopy: On the great gastric curvature we observe a vegetant and ulcerated mass. Several biopsies are performed. Rectosigmoidoscopy: At 40 cm from the anal opening we observe a vegetant and ulcerated mass which obstruct the colonic lumen. Several biopsies are performed. Chest X-ray: A small quantity of liquid in the left costo-diaphragmatic recess.

Preoperative preparation consisted of hematologic and hydroelectrolytic rebalancing, painkiller management, antisecretory and nutritional support.

Surgery consisted in total gastrectomy en-bloc with splenic loop colectomy, splenectomy and locoregional lymphadenectomy, followed by reestablishing the digestive continuity by "Y" en Roux end-to-side eso-jejunostomy and end-to-side colo-colic anastomosis. Then a feeding jejunostomy is performed. Postoperative evolution was favorable, the patient only developing a properitoneal abscess, that was conservatively treated using targeted antibiotic therapy and daily wound dressing.

(252) Cholecystic-choledocolithiasis: open treatment vs minimally invasive treatment – comparative analysis of costs

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Objective: Before the laparoscopic era the mixed gallbladder stones and common bile duct (CBD) stones benefited from open cholecystectomy and choledocholytotomy, followed up by external Kehr drainage of the CBD or choledocho-duodeno-anasthomosis, the hospitalization duration having an average of 14 to 16 days. In the last decades, the progress of modern technology made the entry in a new era of biliary surgery possible, the era of minimally invasive techniques, both laparoscopic and endoscopic, represented by laparoscopic cholecystectomy and interventional endoscopic retrograde cholangiography (ERCP).

Method: This paper is a descriptive type study, using a transversal approach focusing on the analysis of direct costs for two techniques of mixed stones (gallbladder and CBD): open approach versus laparoscopic-endoscopic technique under a sole general anesthesia.

Results: The cost analysis has shown that the open approach is 2.34 times more expensive than the endoscopic approach. The open surgery approach has proven be more expensive: 62.8% for the operatory stage, 23.6% for anaesthesia. The biggest cost difference is being displayed in the post-operatory stage, the classic treatment uses 300.4% more resources compared to the laparoscopic treatment (the open approach post-operatory stage is 4 times more expensive than the laparoscopic alternative).

Conclusion: Having all of this considered, we must recommend and encourage the usage of the laparoscopic-endoscopic technique in the treatment of the biliary mixed gallbladder and CBD stones.

(253) ERCP under general anesthesia – method of choice in endoscopic treatment of biliary pathology in very elderly patients

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Objectives: We present the main aspects of interventional biliary endoscopy under general anesthesia in the very elderly patient (over 80 years).

Methods: We recorded in the 1st Surgical Clinic of the University Emergency Hospital Bucharest during 2008-2015 a total of 14 patients aged over 80 years. Of these, the majority were men (9) and 5 were women. Jaundice pathology for which we practiced ERCP was represented by Vater ampuloma -four patients, cephalo-pancreatic neoplasia - 4 cases and and one common bile duct cholangiocarcinoma.

Results: The choice of general anesthesia as a form of sedation was imposed by ASA score, which was established by preanesthetic consultation. All patients over 80 years had a higher score 2 or 3, due to age, general serious condition caused by the biliary disease (severe jaundice, cholangitis, impaired liver and kidney function), or predictable difficult endoscopic surgery (multiple stones, large stones, tumor pathology, duodenal periampullar diverticula). An hour before surgery we systematically administered parenterally antibiotic therapy, piperacillin-tazobactam usual, ½ bottle. Fentanyl was used for anesthesic induction, whenever possible in the in the lowest dose (due to its unwanted spastic effect on the Oddi sphincter), etomidate and succinylcholine. Maintenance of general anesthesia after intubation was provided with sevoflurane and Atracurium. All patients had a good outcome after surgery, there were no incidents or major accidents during general anesthesia or after awakening. There were no postoperative complications and no deaths in this very elderly patients. Adverse prognostic factors and post-procedural complications are mainly due to co-morbidities that these patients may have.

Conclusions: Age itself does not constitute a contraindication to interventional billiary-pancreatic endoscopy, when it is performed under general anesthesia.

(267) Reconstruction of the thumb tip using cross-finger flap – a case series

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Objective: The thumb is responsible for 50% of the function of our hand. For this reason, the length and function of this finger must be restored whenever is possible after traumatic fingertip amputation. Using a cross-finger flap in order to cover the defects of the thumb tip is a good surgical option, therefore this paper aims to show the short-term clinical results of this procedure in a number of three cases.

Method: Three patients with oblique and transverse fingertip amputations underwent a two-stage reconstruction procedure in order to regain normal function of the thumb. In the first stage reconstruction procedure, a cross-finger flap was harvested from an adjacent finger on the dorsal side of the middle phalanx in one case and proximal and middle phalanx in the other two cases down to the epitenon. A dorsal hinge was preserved to ensure vascularisation. The cross-finger was sutured to the injured finger to provide with neo-pulp tissue. The secondary defect on the dorsal side of the donor finger was covered

using a full-thickness skin graft taken from the medial aspect of the arm on the same side. A thick dressing and a splint was used for four weeks to provide immobilization and shock absorption. After 21 days the cross finger flap was divided. The following parameters were evaluated: occurrence of complications, function recovery, cold discomfort and patient satisfaction (0 to 10 on VAS).

Results: The follow-up was three months after the first surgical procedures in all three cases. There were no postoperative complication such as infection, necrosis of the flap, wound dehiscence or donor site morbidity. There were no cases of neuroma or neuropathic pain. No patient reported cold sensitivity. All patient were satisfied with the visual result of the reconstruction procedure (9 on VAS).

Conclusions: In the amputation of the thumb tip, if the bone is intact but there is not enough soft tissue to cover it in order to preserve the length of the finger and restore its usefulness, the cross-finger flap is a proper solution in order to achieve the recovery of the function and a satisfying visual aspect.

(271) Incidence of preterm deliveries before 32 weeks in a tertiary unit in Romania

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Objective: Prematurity under 32 weeks represents only 1% of all births, but involves the most important neonatal risks and the highest costs for medical care.

Scope: This study aims to evaluate the incidence of preterm deliveries under 32 weeks in between 2010 to 2015 in Filantropia Clinical Hospital, Bucharest and the obstetrical implications around them.

Methods: We studied the total number of births and the premature births under 32 weeks which took place in our hospital between 2010-2015. We evaluated the incidence of preterm births, the way of birth and the status of membranes at admission.

Results: We had a total of 20.543 births in 6 years, with 396 (1.92%) preterm birth under 32 weeks of gestation. The incidence of preterm births was 1.17% in 2010, 1.51% in 2011 and in 2013 reached 2.95%. In 61.11% cases the way of birth was cesarean section. Over 40% of all patients were admitted with ruptured membranes.

Conclusions: The incidence of preterm births under 32 weeks of gestation in our clinic has doubled in the last years, fact that reflects the increasing addressability to our tertiary unit. Although the most infants were born throw cesarean section, the number of vaginal births tends to rise in 2015. The premature rupture of membranes is an important cause of preterm births.

(273) Treatment of enchondroma by simple curettage with or without augmentation: case report and literature review

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Objective: Enchondromas are benign cartilaginous tumors, often found incidentally and diagnosed by the radiographic appearance. Enchondromas/low grade chondrosarcomas are diagnosed by clinical symptoms and possibly an aggressive appearance on the radiographs.

The objective of this study is to compare the outcomes of the surgical treatment with and without artificial bone augmentation.

Methods: The subject case included a patient with humeral enchondroma treated with simple curettage with synthetic bone augmentation compared to a historical group of patients with enchondroma treated with hydroxyapatite reconstruction who were enrolled as controls. Treatment outcomes, including perioperative complications (e.g., infection, functional loss, recurrence, postoperative fracture), were surveyed. Differences in the period needed for bone formation among the patient groups defined by various preoperative patient conditions were also analyzed. A literature review was performed (ScienceDirect, PubMed, NCBI) searching for comparisons with the presented case.

Results: The follow-up period ranged for most studies from 6 to 60 months.During the follow-up period, no surgery-related complications occurred. Tumor size categorized by two-dimensional measurements was significantly correlated with the bone formation period. Polycystic lesions required a prolonged postoperative bone

formation period compared with monocystic lesions. The bone formation period did not significantly differ between the simple curettage group and the historical control group. In most studies there was no statistically significant differences in terms of clinical results.

Conclusion: Enchondromas are usually diagnosed incidentally. Frequently they associate adjacent pathognomonic soft tissue pathologies, which are main source of the symptoms. They are often confused with other malignancies especially sarcoma, which may be due to the lack of education on bone tumors for both the imagist and general orthopedists surgeon. Curettage with augmentation proved to be a safe, promising modality for the treatment of small enchondromas of the upper limb, hand and foot.

(279) Hysteroscopic myomectomy: our technique and perioperative assessment

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Hysteroscopic myomectomy represents the "gold standard" treatment for submucous myoma. We conducted a retrospective analysis from September 2014 to March 2016. We reported a series of 35 cases with submucos myomas, detected by transvaginal ultrasonography in symptomatic patients: infertility and abnormal uterine bleeding (menorrhagia, metrorrhagia and menometrorrhagia). We performed an hysteroscopic bipolar resection of all myomas. This procedure has the advantages of reducing myometrial trauma and decreasing postoperative risks of adhesion formation. Our data suggests that hysteroscopic myomectomy is a safe and effective surgical treatment. All patients had a short hospitalization. No serious complications occurred. The techniques depends on the intramural extension of the myoma, as well as on personal experience and available equipment.

(289) Squamous cell carcinoma on an old burn scar: diagnosis and treatment

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Objective: Cutaneous squamous cell carcinoma is a malign tumor of the skin, which usually evolves from precursor lesions, with an invasive character and metastatic potential. In rare cases (2%), scuamous cell carcinoma can arise on chronic wounds or old scars, having a more aggressive pattern. The purpose of this paper is to present the diagnosis and therapeutic management of a scuamous cell carcinoma developed on an old burn scar.

Methods: We report the case of a 60 year old patient who was admitted in the Plastic Surgery Department with a tumor on the dorsal part of the proximal interphalangeal joint of the right third finger, developed over an old burn scar. The tumor had an ulceroproliferative growth, induration of the base, friable consistency and was bleeding. No regional lymphadenopathy was present. To establish the proper treatment finger radiography and tumor biopsy was performed.

Results: The radiography revealed no invasion of the phalangeal bones. The result of the histopatological examination was scuamous cell carcinoma and surgical amputation of the finger was decided. No local complications were encountered, the patient was referred to an oncology center and adjuvant treatment was started over.

Conclusions: Scuamous cell carcinoma developed on a burn scar is called Marjolin ulcer and is considered a highly aggressive tumor with a rapid rate of regional metastases, being necessary a resection margin of 2 cm or more. Amputation is not a rule, but in our case was necessary because otherwise we could not achieve adequate margins.

(291) Importance of rectoragy in sigmoidian adenocarcinoma

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Usually, people consider that clinical testing is unnecessary and just time consuming. But if they have the slightest pain or other symptoms, in the best case scenario, they come running to the hospital. And that's a good thing because it allows detection of pathologies in relatively early stages.

That was the case of a 64-year-old patient that presented in the clinic, disturbed by rectoragy and abdominal pain.

The clinical exam showed a mild pain in the abdomen and right iliac fossa. The rectal exam did not show anything abnormal. He is proposed for a colonoscopy. During this procedure, we discovered a tumoral formation, ulcero-hemorrhagic, 25 cm above the anal orifice(AO).

CT scan showed a circumferential thickening of the sigmoidian wall at approximately 20 cm above AO, with a slight perisigmoidal fat infiltration and enlarged perilesional lymph nodes. During the digestive endoscopy, a biopsy was taken from the lesion.2 weeks after the endoscopy, the histopathological diagnosis was sigmoidian adenocarcinoma and the patient was proposed for surgery.

The patient decided in the next days to under-go surgery and it was performed a Dixon low anterior resection, with latero-terminal colorectoanastomosis.

The postoperative evolution was so good that the patient was discharged in day 6 with intestinal transit present for feces and gas and is currently cancer free.

The importance of this case is that it attests the good prognosis in the evolution of the disease of patients with early-bleeding malignant tumor formation.

(292) Invasive basal cell carcinoma of the lower eyelid in a patient with pulmonary tuberculosis

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Objective: The main cause of eyelid and canthus defects are skin tumours, basocellular carcinomas being diagnosed in 90% of the cases. Full-thickness lower eyelid defects may lead to exposure keratopathy, corneal ulceration, and even blindness, total reconstruction of the lower eyelid being considered an essential and also challenging procedure.

Methods: We describe the case of a 48 year old patient admitted in the Plastic Surgery Department with a tumour involving the lower eyelid, the medial canthus and a quarter of the upper lid. After additional medical tests the patient was suspected with pulmonary tuberculosis which was diagnosed and treated in a Pneumoftiziology Institute. After 5 months, he returned in our department, the skin tumour was excised and the lower eyelid was reconstructed using a cartilage graft from nasal septum which was covered with a cheek rotation flap.

Results: The result of the histhopatological examination was basocellular carcinoma completely resected, with safety margins.

Clinical examinations revealed no complication in day 10 after removing the sutures. After 2 months, there was no evidence of recurrence.

Conclusions: The main rule in tumour surgery of the eyelids is to assure radical excision in order to prevent recurrences. Despite the size and the invasion of the tumour on the lower eyelid, medial canthus and upper eyelid, complete resection was possible with an adequate reconstruction, the postoperative scars being functionally and also cosmetically acceptable.

(294) Parasitic twin syndrome: case report

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Obectives: Heteropagus or "parasitic" twins are asymmetric conjoined twins in which the tissues of a severely defective twin (parasite) are dependent on the cardiovascular system of the other, largely intact twin (autosite) for survival. Parasitic twins occur when a monozygotic twin embryo begins developing in utero, but the pair does not fully separate, and one embryo maintains dominant development at the expense of the other. The aim of this report is to present a case of asymmetric conjoined twins.

Methods: We report the case of a 35 year old pregnant woman without any prenatal care, who gave birth by a caesarean section to a female infant in her 37th week of gestation. The neonate presented on his right lateral side a parasitic lumbosacral vertebral column, a pelvis and both inferior limbs. The appropriate diagnosis in this case is parasitic twin syndrome.

Results: The only option for the autosite to survive and to have a normal life is to surgically remove the vestigial twin. In the majority of the cases, the procedure is done immediately after birth, especially if the infant has a life-threatening situation. If the child is stable and early surgery is not indicated, the procedure is usually delayed until the infant reaches the age of 6 to 12 months. In this case, the neonate is larger and more capable of tolerating better the surgical procedure. Separation in asymmetrical twins has a 92% survival rate. In the reported case the surgical intervention is scheduled to be done at the age of 12 months.

Conclusion: The estimated incidence of parasitic twin syndrome is approximately 1 per 1 million live births. Due to ultrasonography, the diagnosis of this syndrome is made early and the parents have the opportunity to evaluate their options. If the malformation goes undiagnosed either because of the absence of prenatal care or because the parents decide not to terminate the pregnancy, complete excision of the vestigial twin is curative and it permits the exact confirmation of the diagnosis.

(295) Interdisciplinary approach in a rare disease – Launois-Bensaude adenolipomatosis

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Objectives: We propose in this paper to analyze the valences of the interdisciplinary approach in a rare disease – Launois-Bensaude adenolipomatosis (Madelung disease, Brodie syndrome). Along with colleagues in other specialties we have developed a treatment plan that virtually dictated the operatory moment, the tactics adopted and the postoperative follow-up plan.

Methods: We bring to your attention a 65 years old patient, without significant surgical history for the current episode, which shows multiple symmetric lipomatosis especially in the cervical area, accentuated in the last 2 years, fatty liver disease, hypercholesterolemia, stages II-III hypertension insufficient controlled by medication.

Results: Ln terms of postoperative outcome, the results are at least comparable with those in the literature, but with a better control of cardiovascular risk factors and an obvious benefit in terms of postoperative scars. This is probably due to both the adopted therapeutic plan and the follow-up of the patient.

Conclusions: The inter/multidisciplinary approach especially for rare diseases brings short-terms benefits and especially medium and long term benefits by contribution of each specialty, follow-up of the patient made by the entire team and by modifying the therapeutic attitude whenever necessary.

(297) Diagnosis and treatment of endometriosis involving the sacral plexus

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Objective: Endometriosis involving the sacral nerve roots is a rare pathology, often poorly understood and neglected. The clinical signs suggesting intrapelvic nerve involvement include perineal or sacral pain or pain irradiating to the lower limbs, lower urinary tract symptoms, tenesmus or dyschezia, gluteal pain (often misinterpreted as lombosciatalgia). Up to 24% of pelvic pain is subsequent to endometriosis. Laparoscopic approach of the plexus sacralis in endometriotic infiltration of the pelvis is a feasible procedure for trained laparoscopic surgeons who have a good knowledge of the retroperitoneal pelvic neuroanatomy

Methods: We present the case of a 35 years old patient presented with sacral pain radiating down the anterior aspect of the left leg into her foot; the pain first appeared 5 months prior to presentation and was accentuated in the upright position. Clinical examination showed no significant deficits of the inferior limbs, normal reflexes, hypoesthesia in the territory of innervation by the S1, especially on the left side. MRI examination showed a cystic sacrum tumor at S2-S3 level, of approximately 3 cm in diameter, migrated toward the pelvis in the left obturator space. Clinical examination, laboratory investigations and imagistic findings led to the diagnosis of cystic sacrum tumor.

Results: The patient suffered a surgical intervention. A laparoscopic approach was chosen. Multiple hemorrhagic areas suggestive for endometriosis were found on the urinary bladder. Dissection revealed a cystic tumor of approximatively 3/3cm on the lateral left margin of the sacrum. The tumor was resected and laparoscopic neurolysis of the sacral plexus was performed. The patient has a favorable postoperative outcome, with remission of pain and hipoestesia. Patient was discharged with no sacral pain; she showed no paresthesia or signs of sphincter defects.

Conclusions: In young patients, with chronic lombosciatalgia, where no neurological/orthopedic etiologies have been found, endometriotic infiltration of the pelvic wall may be implicated as a potential etiology and an indication for laparoscopy must be discussed for both diagnosis and treatment. Laparoscopic resection of the endometrial tissue, especially of cystic and nodular lesions, combined with presacral neurectomy is proven to be effective in treating pelvic pain.

(302) Proper selection of patients with sural neurocutaneous flap in presence of peripheral arterial disease: a study of digital subtraction angiography performed in 47 cases

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Objective: Sural flap has now become a mainstay for reconstruction in the distal leg. Risk factors, particularly arteriopathy, can influence results. Secondary arterial supply had been proposed.

Methods: Results from digital subtraction angiography of the lower limb in 47 patients were analyzed, regarding the patency of perimaleollar septocutaneous perforators, calcaneal and lateral tarsal artery. Analysis of angiography was performed with OsiriX Imaging Software for MacOS, viewing vessels greater than 0,1 cm diameter. Comparison with Doppler echography in a similar group of patients was performed.

Results: Patients had a mean age of 52, with male gender dominance (n=37). Patency of perimalleolar septocutaneous perforators was confirmed in 24 cases (51 percent), of the calcaneal artery in 15 cases (32 percent) and of lateral tarsal artery in 13 cases (27 percent) - fig. 1. The last two were both observed in 10 cases (21 percent). Patency of all three sources were observed in eight cases (17 percent) - fig. 2. Angiography could offer similar results with better visualization of arterial network distribution in comparison with standard Doppler echography ($p<0,05$), evaluated in an equivalent group of patients (n=28).

Conclusion: Our study confirms the likelihood confirmation of arterial sources and could minimize necrotic complications of the sural flap, in patients with arteriopathy. A backup arterial network was observed, related to a collateral vascular network development. Preoperative digital subtraction angiography evaluation of patients with defects located in lower leg, heel and foot could minimize complications. The vascular anatomy of sural flap in such patients appears different from that found in normal subjects.

The protocol was approved by the ethics committee of the University Emergency Hospital Prof. Dr. Agrippa Ionescu.

(312) Treatment and management of cervical incompetence in pregnancy after conization

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Objective: Cervical incompetence occurs in 0.5-1% of all pregnancies, sometimes resulting in significant pregnancy lost. Laparoscopic cervicoisthmic cerclage is less invasive, has fewer complications and should replace the traditional laparotomy technique.

Methods: We present the case of a pregnant, aged 28, at first pregnancy with a history of conization for HSIL at Pap test with the result CIN III. At her first visit to our hospital she was 10 weeks. Vaginal examination revealed an exceedingly short cervix that was flush with the lateral vaginal fornix. Counselling regarding the risks and benefits of the procedure performed either laparoscopically or via laparotomy were provided. A laparoscopic cervicoisthmic cerclage (LCC) was inserted at 12 weeks of gestation. The procedure was uncomplicated and she was discharged from hospital one day after laparoscopy.

Results: A caesarian section was planned for 38 weeks of gestation but the patient went into labor at 36 weeks. At caesarian section there was a scar tissue covering the cerclage knot. A transverse lower segment incision was employed to deliver a male infant with Apgar scores 9.

The cervicoisthmic cerclage was left in situ.

Conclusions: The case shows that laparoscopy reduce postoperative pain, adhesions and hospital stay and provides faster recovery than laparotomy. LCC may be performed during the first and early second trimesters, because is less bleeding and no risk to induce a miscarriage. LCC is minimally invasive, extremely safe and should replace the traditional laparotomy technique.

(313) Ten years-experience analysis with the distally based sural flap: results, complications and optimization of results

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Objectives: Wound closure in the distal lower extremity, has always been a difficult problem. Debridement must be followed by coverage with well vascularized tissues. Treatment options are difficult by a lack of available mobil skin, frequent poor surrounding vascularity, weight bearing requirements, frequency of external fixation devices and comorbidities. Since its introduction the distally based sural flap has evolved through a variety of technical modifications and has now become the author's mainstay for reconstruction of the distal leg, heel and foot. We will describe our experience with the distally based sural flap and the variety of anatomical configurations used.

Methods: We performed 34 sural flaps over a 10 year period. Mean patient age was 49.2 yrs. Causes of defects included trauma, osteomyelitis, arterial and venous insufficiency, unstable scars and cancer resection. The wounds included skin, fascia, tendon and skeletal structures. Nine patients had comorbidities. Additionally, 4 had an external fixation device in place. Of these flaps, 24 were fasciocutaneous, 8 musculocutaneous and 2 were fascia only. Two flaps were delayed. The final criteria for success were a healed wound, normal unassisted ambulation, with a 12 month follow up.

Results: Success was achieved in 31 of the 34 patients. There were 9 early complications - 2 of which were major, leading eventually to amputation and 7 minor complications, all of which resolved with wound care. Additionally, there were 2 late complications, one major leading to amputation. Flap surface dimensions ranged from 35 to 240 cm sq.

Discussion: We found a statistically significant correlation between complications and vas-

cular comorbidities (p=0.03) also with patient advanced age (p=0.008), consistent with other studies (2). We have not found significant differences in outcome between free flaps and sural flaps for similar wounds up to 240cm sq in size (p=0.02). We did not need to remove external fixation devices.

Conclusions: Sural flaps were successfully used for a variety of distal leg, heel and foot wounds. In our experience, there is no difference in outcome between free flaps and sural flaps for equivalent wounds. Outcome can be enhanced by flap delay, microsurgical venous outflow augmentation, or intermittent venous drainage.

(316) A clinical case of gastrointestinal stromal tumor stage IV – diagnostic, therapeutic and monitoring challenges

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Background: Gastrointestinal stromal tumors are the most common mesenchymal malignancies of the digestive tract and are considered to originate from neoplastic transformation of either the intestinal pacemaker cells of Cajal or the precursor pluripotential stem cells.

Methods: A 32-year-old female patient had a surgery in 2010 for gastrointestinal stromal tumor of the ileum, Krukenberg tumor of the right ovary and peritoneal disseminations in the pouch of Douglas and in the round ligament of uterus.

Results: She underwent a segmentary enterectomy with termino-terminal anastomosis, a resection of the metastatic tumor of the ovary and of the peritoneal metastases. After the surgery, adjuvant chemotherapy treatment with tyrosine kinase inhibitors was initiated: Nilotinib (March-May 2011), Imatinib (June 2011-March 2014), Sunitinib (April 2014-October 2015). However,in 2015 she presented with multiple bilateral hepatic tumors and with hilar adenopathy. 3D image reconstruction of the liver revealed the location of the most massive tumor as well as multiple other metastases beyond 2 cm in the right lobe. In February 2016 she underwent a maximal cytoreduction of the left lobe with widening the debulking on segments I, V, and VIII of the right hepatic lobe as well as lymphadenectomy and the resection of the bile duct. There were no postoperative complications. The treatment was decided according to the histopathological and imunohistochimic exams.

Conclusions: The aggressive treatment for this patient with GIST stage IV is justified by trying to obtain at least 5 year survival from diagnostic.

(317) Common bile duct stones – a comparison between different surgical approaches

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Objectives: Common bile duct stones (CBDS) can be categorized into primary (calculi formed inside the CBD) or secondary (originating from the cholecyst). Being able to differentiate the two of them is a key aspect when dealing with CBDS, as this, aside from the usual parameters (risk, effectiveness, etc.) will decide which type of treatment should be applied. Even if the clinical manifestations are common for the two conditions (biliary colic, nausea, vomiting and others), the laboratory tests and the imagining findings are able to determine the cause of CBDS.

We will examine and compare the three main surgical approaches: endoscopic retrograde cholangio-pancreatography (ERCP) with endoscopic biliary sphincterotomy (EST), laparoscopic and open surgical bile duct clearance.

Methods: We examined a number of patients from the Floreasca Emergency Clinical Hospital, comparing the outcomes following different surgical therapies for CBDS. Apart from this, we compared our results with the findings from previous studies.

Results: Due to the success rate varying between 85% and 95%, the low mortality rate and the less serious post-operation complications, the laparoscopic procedure still remains the elected surgical intervention. Having in mind factors such as the number and size of the calculi, the diameter of the cystic and common bile ducts and the presence of intrahepatic stones, surgeons can either use a trans-cystic or a trans-ductal approach.

When speaking about the ERCP/EST, the main inconvenience is considered the requirement of multiple interventions (in about 25% of the cases). However in the last decade, an impressive alternative of the technique has been developed, namely the endoscopic balloon dilation of the papilla.

As a last resort an open surgical procedure can be used. Even though it has many disadvantages, it is also more successful than the other methods.

Conclusion: Nowadays, CBDS benefits from a wide range of possible surgical. Choosing one treatment or another can be a very difficult and complex task. The surgeon must rely on the risk factors, the possibility of difficult laparoscopic or ERCP/EST procedures and of course on their clinical judgement, when deciding which intervention has the best outcome.

(319) Repair of an uncommon patellar tendon rupture correlated with patellar tendinitis and the injection of local corticosteroid

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The patellar tendon ruptures are quite rare. However, the complications of an untreated rupture of the extensor mechanism can be extremely disabling. Surgical intervention allows an excellent recovery of motion and strength. The focus of this case presentation is acute patellar tendon rupture at a person that was discovered to suffer of a patellar tendinitis treated with local infiltration of corticosteroid substance.

A fit and well, 30-year-old male presented in the emergency room with pain and functional impotence at the right knee after an accident in a recreational sport (football). There were made a clinical and Rx exam and the diagnosis of patellar tendon rupture was established. An eco exam was also made after admission.

Anamnesis revealed a 5 year old patellar tendinitis that was treated with local infiltrations of a corticosteroid substance (BETAMETHASONUM).

The patient was operated within 48 hours of arrival. With a tourniquet applied, the tendon was exposed through a midline longitudinal incision extending from the upper patellar pole to the tibial tuberosity. Rupture of the tendon in the middle part was observed which is an unusual localization, probably due to the corticosteroid infiltration that affected the collagen fibers in the patellar tendon.

The free tendon edges were cleaned of remaining soft tissue and prepared with whipstitch sutures. The sutures were made to set the height of the patella, using the previously calculated Insall–Salvati ratio of the uninjured knee.

At six-month he was able to walk unaided with full active knee extension and 130° of flexion, achieving pre-injury functional levels.

The rupture of the patellar tendon in the middle part is a rare occurrence and the exact incidence remains unknown.

This case confirms what studies postulate that the incidence of patellar tendon rupture rises in the case of a chronic suffering or local corticosteroid therapy.

A proper diagnosis and the correct early treatment favors for total recovery of the patient.

(321) Synchronous rectal and gastric adenocarcinomas. Case presentation

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Objectives: The development of synchronous colon and stomach cancer is particularly rare, accounting 3 to 5% of gastric cancer patients. The incidence of multiple primary adenocarcinomas in most of the studies was under 4.3% of gastrointestinal tumors. The aim of this presentation is to review the management of patients with synchronous lesions, and to draw conclusions regarding their optimal diagnosis, treatment and evolution.

Methods: We report the case of a 67 year-old patient who presented lower gastrointestinal bleeding, transit disorders (constipation) and weight loss. Colonoscopy revealed a bleeding rectal mass of 6-7 centimeters, at 12-13 centime-

ters distance from the anus. An abdomino-pelvic computed tomography was performed and no other pathological changes were identified in the gastrointestinal tract. An anterior protectomy with end-to-end colorectal mechanic anastomosis was decided in view of the diagnosis of rectal cancer. During the operation, inspection of the abdominal cavity incidentally revealed the presence of gastric cancer and a liver tumor of 2/2 centimeters with a hemangioma aspect, on the underside of the left hepatic lobe. Subtotal gastrectomy with Billroth II end-to-side gastrojejunostomy and an Omega loop and Braun entero-enterostomy were performed.

Results: Histopathological examination revealed a moderately differentiated gastric adenocarcinoma (pT3N2) and a well differentiated rectal adenocarcinoma (pT2N0), both with lymph nodes metastases, and a hepatic hemangioma. Nine months after the surgery, there is no evidence of recurring disease.

Conclusion: The synchronous carcinomas detected in a gastric cancer patient are most frequently located in the colon and rectum, followed by the lung, esophagus and liver. Considering that the incidence of synchronous cancers is increasing, the present study cautions the necessity for a detailed and accurate preoperative staging, imagistic investigations and intraoperative examination to identify multiple primary tumors, in order to ensure an appropriate care, management and surgical intervention for these patients.

(323) Limits of anticoagulation therapy in patients with bleeding gastric neoplasms that associate metalic valvular prostheses

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Objectives: anticoagulant treatment is indispensable for the patients that have metallic heart valves prostheses. If the patient associates another lesion that contraindicates the anticoagulant treatment, then there must be a well-established balance in the beneficial anticoagulant dose for the cardiac pathology and the non-beneficial dose for other pathologies.

Methods: we present the case of a 71 years old female patient known with aortic mechanical prosthesis mounted for severe rheumatic aortic insufficiency that had a treatment with acenocoumarol (Sintrom) at home, admitted to the Cardiology Department of Bagdasar-Arseni Clinical Emergency Hospital, where she was given instead unfractionated heparin. Subsequently, the patient developed an episode of upper gastrointestinal bleeding with melena, haemoglobin levels reaching 3,54 g/dl. The occurrence of the gastrointestinal bleeding required the emergency stop of the anticoagulation treatment and the carrying of a superior digestive endoscopy. The endoscopy revealed an antral protrusive, prolonged tumour, with multiple ulcerations on its surface, but no active bleeding was identified. The patient was afterwards transferred into the General Surgery Department for the surgical procedure. The performed abdominal ultrasonography highlighted disseminated metastases in both the hepatic lobes.

Results: after a minimal hematologic rebalance, we performed a hemigastrectomy with a Reichel-Polya type gastro-jejunum anastomosis. Given the macroscopic appearance of the liver and the poor cardiac state of the patient, the surgical procedure was limited to a palliative one, the main goal being the haemostasis in the digestive tract and the possibility of resuming as quick as possible the anticoagulant treatment. Postoperatively the patient resumed the treatment with unfractionated heparin. Surgical the patient had favourable outcome, with the suppression in the eight day of the nasogastric tube and the progressive resumption of the nutrition, also with progressive correction of hemodynamic parameters. The patient was discharged 12 days after the surgery with treatment with Sintrom at home.

Conclusions: correct dose of anticoagulant varies with each patient and disease. The association with another lesion that contraindicates the anticoagulant treatment predisposes the doctors to both a surgical and cardiological therapeutic challenge.

(324) Sino-nasal fibrous dysplasia: management and therapy challenges

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Objectives: Although a benign disease in nature, fibrous dysplasia can cause serious issues due to the replacement of normal bone and marrow with woven bone and fibrotic tissue. The disease is rarely located at the level of the paranasal sinuses, but when this situation occurs, it can raise important problems regarding the best therapeutical options.

Method: The correct management of a patient with fibrous dysplasia implies a complete evaluation performed by a multidisciplinary team. Although the final diagnosis requires a histopathological examination, complete imagistic investigations are mandatory. The surgeon must always have in mind the fact that the most important key factor in the correct management of these patients is choosing the right time for surgery. For this, we must take into account the severity of the symptoms, the risk for complications, but also the possible negative outcomes of surgery.

Results and conclusions: For patients with a low growth rate of the abnormal bone and no complications the "watch and wait" approach with periodic imagistic investigations and reassessments may be the best therapeutic option, especially in cases where the growth period is not completed. However, in situations where an intervention is necessary, we must choose between the minimally invasive endoscopic approaches and the more radical classical open approaches, trying to reach a balance between the desired status of "disease free" and the approach that guarantees the best quality of life for the patient.

(328) Giant retroperitoneal liposarcoma – case report

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Objective: This is a rare case of giant liposarcoma developed in the mesentery root in an old female patient, with no suggestive symptoms of retroperitoneal invasiveness.

Methods: We present the case of an 83 years old patient, with no significant medical history, presented in Bagdasar Arseni Emergency Hospital, General Surgery Clinic as a non-emergency, with a large abdominal tumor of approximately 20/20 cm. The abdominal mass was firm, non-adherent on the anterior abdominal wall, fixed on the posterior abdominal wall, with pain response on palpation. Abdominal ultrasonography showed a 20/25 cm tumor situated in the inferior abdominal cavity with mixt content – solid and liquid without being able to establish an organ appartenance. CT scan of the abdominal cavity was not possible due to technical difficulties. Biological samples showed anemia.

Results: Surgical intervention was performed. Median laparotomy revealed a large tumor developed in the mesentery root; the small intestinal mass was pushed towards anteriorly. The superior pole of the tumor was situated near the eso-gastric junction and the inferior pole was in the pelvis. The tumor developed entirely in the retroperitoneal space, invading the large vessels, the kidneys and the ureters. The previous mentioned structures were dissected with difficulty. Dissection led to diffuse bleeding that required hemostatic wrapping which was removed after 48 hours. Histopathological exam revealed retroperitoneal liposarcoma. Patient had a favorable postoperative outcome.

Conclusions: Case particularity consisted in the lack of symptoms specific for a retroperitoneal tumor, despite the large dimensions reached by this particular giant tumor and its invasiveness.

(337) Decreasing donor site morbidity in arthroscopic ACL reconstruction using hamstring tendon autograft – early results

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Objective: The aim of this paper is to discern arising complications in using only one hamstring tendon – triple bundled in the anterior cruciate ligament reconstruction in comparison with the classic two hamstring tendons – quadruple bundled through analysis of clinical parameters recorded pre-operatively and at 12 month follow-up.

Method: Out of the 40 patients enrolled, 6 were lost to follow-up, and the remaining 34(18 females and 16 males) were examined before surgery, and 12 months follow-up.17 patients benefited from the classic quadruple bundle technique and the remaining 17 from the triple bundle technique for arthroscopic ACL reconstruction. Clinical parameters (Lachman and pivot shift test) and differential laxity measurement using the Rolimeter arthrometer were recorded and analysed.

Results: The postoperative data proved consistent with a favourable and simetric evolution between the two groups, in comparison with preoperative score values. All patients had positive preoperative Lachman. Postoperatively, 3 patients had positive grade I Lachman test (2 in the triple bundle group). Pivot shift was grade I positive in 6(3 in each group) patients at follow-up compared to 32 patients pre-operatively. The average Rolimeter differential laxity improved from from 6.63 mm (6.41 mm for the triple bundle group and 7.11 mm for the quadruple bundle group) pre-operatively to 1.70 mm post-operatively. None of the patients suffered graft failure, infection or donor site complications.

Conclusion: For arthroscopic ACL reconstruction, the triple bundle technique is comparable with the classic quadruple bundle technique, regarding clinical parameters, with the advantage of decreased donor site morbidity.

(338) Chondrosarcoma – case report

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Chondrosarcoma is a musculoskeletal tumor which, unlike other primary bone tumors that appear in children and adolescents, can affect patients of any age. Its aggressiveness is determined by its grading, with low grade chondrosarcomas having a good survival rate, and high grade ones having an increased chance of metastases and a grim prognosis. The treatment for these tumors is mainly surgical, because chemotherapy and radiotherapy are not very effective against them. This further underlines the importance of early detection of the tumor which, if detected at an early stage, can save a patient from amputation. A 22 year old male patient presented in our department with pain in the left hip, without any injury. A set of investigations were performed, including X-rays, CT, MRI, scintigraphy. The tumor was then biopsied and confirmed to be a chondrosarcoma. The patient underwent a wide resection of the proximal left femur and reconstruction with modular hip and proximal femur prosthesis. Subsequent check-ups found no metastases and an overall good evolution. The surgical treatment is essential in the evolution and prognosis of this affection and it depends on the grade of the tumor and its location. Sometimes amputations are unavoidable, but when found early on, limbs can be preserved and with the help of reconstruction prostheses patients can experience a good quality of life and an early rehabilitation.

(339) Narrow band imaging-early detection method for ENT malignancies

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Objective: Early detection of malignancies is the key for successful management in this type of pathology. The outcome of the surgical and onco-

logical treatment depends on the stage and the grading of the neoplasm. Early diagnosis of malignant tumors offers a greater possibility of cure, with a good 5 year survival rate. The endoscopic examination of the nose, larynx and pharynx is an important part of the modern methods of ENT examination. Narrow band imaging improves early detection for small tumors in ENT malignancies.

Method: Narrow band imaging is a modern endoscopic examination technique that uses filters with specific wavelength for white light that are absorbed differently by haemoglobin, allowing a better evaluation of the superficial epithelium. Assessment of the vascular pattern of a small tumor can indicate the benign or malignant character of that tumor.

Results: The use of narrow band imaging is an important gain for early detection methods of ENT malignancies. By using this technique we can diagnose superficial mucosal lesions that would be missed by regular white light endoscopy. However, narrow band imaging does not replace the pathological examination of the tissue fragments taken from the tumor.

Conclusions: Efforts to achieve the earliest detection of malignant disease have led to the development of new endoscopic examination methods that make possible the detection of very small (up to a few millimeters) tumors. Better long term outcomes in the management of ENT malignancies are expected after introducing these diagnostic methods in every day medical practice.

(345) Organ dysfunctions – importance for the surgery of retroperitoneal tumors

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Objective: Retroperitoneal space is characterized by the development of some of the most aggressive tumor forms that can reach monstrous dimensions and respond inconstantly to therapies. During their growth, they often determine visceral afflictions that supplementary contribute to patient precarious biological status that comes in contradiction with extended radical surgery. In retroperitoneal tumor surgery there is still lack of clarifications regarding the essential factors to be considered in the selection of operable patients. The aim of the current study was to investigate the relevance of some patient biological parameters for their ability to select candidates for radical surgery that would not develop unwanted postoperative complications.

Methods: The current study was conducted on a group of 160 patients operated on in the First Surgical Clinic, Bucharest Institute of Oncology Prof. Dr. Al. Trestioreanu, over a period of 16 years. We aimed the acquisition of data referring to patient preoperative biological status, associated diseases, and markers of organ dysfunctions, such as liver diseases, that were preexistent or appeared as a consequence of visceral tumoral compression/invasion. In this regard, we evaluated the usefulness of these parameters in selecting radically operable patients and predicting some unwanted intra- and postoperative events, influencing patient prognosis.

Results: An important percent of patients presented at their admission either preexistent visceral dysfunctions (e.g. liver disease as for viral hepatitis; kidney failure) or secondary to the expanding tumoral process. We could remark that especially the patients presenting preoperative signs of liver dysfunction associated more frequently intraoperative complications, of hemorrhagic type or anastomotic dehiscences, with important impact on surgical results, with a decrease in patient survival.

Conclusions: Retroperitoneal tumor surgery associates a particular complexity due to patient advanced tumor stages at the initial diagnosis and difficulty of access in retroperitoneal space. Patient precarious biological status either due to tumor progression or preexisting, adds an additional dimension of difficulty in patient surgical approach. The description of certain limits in the selection process of operable patients for which biological status allows an extended surgical intervention compatible with a postoperative recovery void of significant complications is of utmost importance for patient survival.

(347) Intra- and postoperative predictive parameters for the evolution of the patients with retroperitoneal neoplasias

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Objective: Retroperitoneal neoplasias, despite their rarity, are distinguishable by their associated low 5-year survival rates even after complex radical surgical interventions. The frequent involvement of several visceral or important vascular structures by these voluminous tumors determines however a significant level of complexity for the surgical interventions, characterized by important risks and complications. Even after radical surgery, often achieved with the cost of tissue sacrifices, 5-year survival rates remain low, of approximately 40-50%. The heterogeneous characteristics of this group of tumor impeded until now a detailed characterization of the factors that could improve the postoperative prognostic of the patients. The aim of the current study was represented by the evaluation of the significance of intraoperative parameters for the immediate and long-term evolution of operated on patients.

Methods: We conducted an extensive retrospective and prospective study on a group of 160 patients with different types of retroperitoneal neoplasias, over a period of 16 years. We evaluated the importance of several intra- and postoperative factors on patient overall survival, recurrence and metastatic rates.

Results: The radicality of the surgical interventions represented the main positive prognostic factor. The occurrence of intraoperative and immediate postoperative complications, even if diagnosed precociously and treated intensively, determined a decrease in patient survival and a more frequent development of postoperative locoregional recurrences. Along with the achieved type of surgery, the duration of the operation, intraoperative blood loss, requirement of digestive anastomoses, had a special significance for the therapeutic results. Precocious preoperative complications, although rare, associated lower patient overall survival rates.

Conclusions: The acknowledgement of the fundamental intra- and postoperative factors determining therapeutic success in retroperitoneal tumor surgery is of utmost importance. As the radicality of the surgical interventions represents the major positive prognostic factor, an approach of these tumors in multidisciplinary surgical teams after a rigorous preoperative patient selection becomes necessary. The knowledge of other operative factors on which the surgical result and the avoidance of complications depends should lead to improved therapeutic tactics of special impact on patient long-term survival.

(352) Short-term results concerning combined reconstruction for anterior cruciate and anterolateral ligaments

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Objectives: To present our surgical technique and short-term results for combined minimal invasive reconstruction of ALL and ACL.

Methods: 12 patients underwent combined ACL and ALL reconstruction in Foisor Orthopaedic Hospital between 15.08.2015 – 15.02.2016. Selection criteria for combined reconstruction were chronic ACL injury, grade 2-3 pivot shift test, high level of sporting activity and involvement in pivoting sports. We used an outside-in drilling and fixation technique for the ACL graft, using a triple beam graft (2X Semitendinosus, 1XGracilis) and a V shaped double tunnel tibial fixation using 2XGracilis graft. Clinical testing included Lachmann and Pivot shift tests. Knee range of motion was measured using a goniometer. A Rolimeter arthrometer was used to measure knee laxity pre-operatively and post-operatively. There were no short term complications recorded in the patient group.

Results: We analysed the progress made by patients at 6 weeks. There were no short term complications. All patients achieved full extension and mean flexion value was 124° (110-130). Pre-operative mean Lysholm score was 73.83 (62-82). The mean pre-operative subjective IKDC score was 76.46 (72-81). Regarding the objective

IKDC score, preoperatively 9 patients scored C values, 1 patient scored D and two B. The mean differential anterior laxity measured with the Rolimeter pre-operatively was 8±1.1mm and this was significantly reduced to 0.8±0.5mm. Postoperatively the objective IKDC score was improved for all patients, 8 scoring A and 4 scoring B. Lachman and pivot shift signs were negative for the entire group. All patients followed the same recovery protocol as for ACL reconstruction.

Conclusion: The combined reconstruction of the ACL and ALL is an effective and safe procedure without significant complications on short-term and with good results at initial stages of follow-up.

(356) Reconstruction after surgical treatment of a rare case of Bowen's disease

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Objective: Bowen's disease (BD) or squamous cell carcinoma in situ of the skin is a malignant neoplasm restricted to the epidermis without evidence of dermal invasion. Etiology of BD is not clearly understood but various strains of human papilloma viruses, arsenic exposure and immune suppression have been considered as risk factors. This case is about an atypical site for developing this disease associated with human papilloma virus(HPV) 16 as a risk factor for which we designed a particular local flap for reconstruction after the surgical ablation of the tumor.

Methods: A 67-year-old male was referred for pain and itching on the volar aspect of the hand near the base of the index and middle finger. In his past medical history, a biopsy was made after a dermatoscopy was performed which revealed BD. The patient was guided to a plastic surgery clinic where, under local anesthesia, the tumor was removed with safety edges. Direct skin closure was not possible, so in order to cover the defect (2.3 cm/2.4 cm) on a functional area, a local flap was designed. The flap was harvested from the dorsal aspect of the proximal phalanx down to the epitenon and rotated on the volar aspect of the hand between the index and the middle finger. A thick dressing and a splint was used for two weeks, then the suture material was removed and motion recovery was allowed. The tumor was sent for Pathology exam and for open-architecture xMAP technology assay.

Result: There were no postoperative complications. Motion was recovered completely. The flap integrated very well even if the pedicle was passing through a narrow space between the two fingers. There were no turns in skin color during motion. There were no recurrence of the tumor during follow-up (6 months). The Pathological exam showed no residual tumor and multiplex assay revealed HPV 16+.

Conclusion: Bowen's Disease are extensive lesions which can be associated with HPV and usually need surgical removal, therefore local or free flaps must be designed in order to cover large skin defects, making the plastic surgeon the most suited to treat BD.

(360) The multidisciplinary management of the sinonasal melanoma

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Objective: The purpose of this paper is to present the multidisciplinary management of the sinonasal malignant melanoma.

Method: Melanomas are tumors arising from melanocytes, which can be found in the basal layers of the epidermis, in the respiratory ephithelium of the nasal cavity, in the nasal glands, in the stroma of the nasal septum and in the middle and inferior turbinates. Melanomas located at the level of the nasal and sinusal mucosa are rare and their incidence varies between 0.3-2% of all malignant melanomas. Their evolution is characterized by the early local recurrence, extension and frequent metastasis to lymph nodes and viscera, making it one of the most dangerous forms of nasal and paranasal sinus tumors. The most common symptoms on presentation are nasal obstruction, epistaxis, swelling of the nose or visible mass in the vestibule, pain and nasal discharge. The macroscopic aspect of the tumor may vary from macular to nodular or ulcerated. The imagistic exams reveals an uniform soft tissue mass,

while the histopathological report shows epithelial cells with abundant eosinophilic cytoplasm, round nuclei or spindle cells. The surgical approach consists of total resection of the tumor with local safety margins and neck nodes control. Medical management, prescribed and supervised by the oncologist, is reserved for adjuvant therapy of patients with advanced melanomas; agents used in this kind of treatment are: interferon alfa, pegylated interferon and granulocyte-macrophage colony-stimulating factor (GM-CSF). Two relevant cases for this pathology will be presented.

Results: The follow-up at 3 and six months after surgery and adjuvant therapy showed no signs of recurrence.

Conclusions: Surgery is the treatment of choice for early stage melanomas but it can also be used in well selected cases of advanced stage melanomas along with adjuvant medical treatment.

(365) Rare digestive fistula – intraperitoneal drainage tube lesion – case presentation

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Objectives: Digestive fistulas by intraperitoneal drainage tube lesions are extremely rare complications in abdominal surgery, sometimes secondary to poor quality of the alloplastic material. Tissular modifications at the location site may be a contributing factor for the appearance of a digestive fistula. Furthermore, an important role is held by the patient's biological and functional status.

Methods: We present the case of a 81 years old patient, with severe neglected cardiovascular pathology, presented with severe abdominal pain. The patient affirmed the lack of bowel movement and the inability to pass gas for 10 days. At admission the patient was with an extremely poor clinical condition, hypotensive, tachycardic. The abdomen was distended and diffusely tender, showing signs of peritoneal irritation. Abdominal X-ray in a standing position showed hydroaeric levels while abdominal ultrasonography revealed a large amount of fluid in the abdomen.

Results: Emergency surgery was performed which revealed neglected stercoral peritonitis caused by a cecum diastatic perforation and a 4/5 cm obstructing tumor, localised at the hepatic colonic flexure. Right hemicolectomy with terminal ileostomy was performed. Histopathological exam – tubulo-papilar partial mucosecretory adenocarcinoma, stage IIIB. After surgery patient was transferred to the Intensive Care Unit requiring vasopressor support and mechanical ventilation. Initial surgical evolution was favourable, until the 11th postoperative day, when peritoneal drainage aspect turned from serous to bilious. Surgical intervention was decided. Enteral fistula produced by drainage tube lesion was revealed at 150 cm distal from the Treitz angle. Intestinal lesion was sutured. 72 hours after surgery, the aspect of the abdominal drainage became bilious. Surgical exploration of the abdominal cavity showed a suture dehiscence. Segmental enterectomy with excision of the lesion and terminal jejunostomy was performed. Postoperative evolution was unfavourable. The patient died 24 hours later.

Conclusions: Digestive fistulas by intraperitoneal drainage tube lesions are extremely rare complications encountered in abdominal surgery. The occurrence of a fistula in this particular type of cases (patients with severe comorbidities) may dramatically change the postoperative result.

(371) Mixed osteosynthesis in fractures of distal radial epiphysis

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Objectives: Mixed osteosynthesis, although less practiced in multitude of cases of tibial pillar fractures plays an important role in their postoperative evolution, representing a required surgical solution.

Method: The retrospective study conducted over a period of five years (01.2011-01.2016), were enrolled 21 patients. The included patients in the study were patients with high energy trau-

ma, fractures with a high degree of comminution. There were created two groups of patient: (GI) -12 patients who were practiced closed osteosynthesis percutaneous with screws and external fixation and (GII) -9 patients who were opted for open osteosynthesis with plate and screws under the protection of an external retainer. Patients were evaluated at 6 months postoperative using the score of Foot & Ankle Disability Index (FADI).

Results: From the total of 21 patients, including 16 men and 5 women, with the age between 21 and 54 years, the average age being 37.5 years.

In group GI were used on average 4 screws (of between 3 to 6) under the protection of the external retainer and for GII were used nine AO boards under the protection of the external retainer.

No significant differences were recorded of the results of The Foot & Ankle Disability Index (FADI) Score between the two groups at 6 months. The scores were the following: an average of 84.6 in GI group (of between 68.3 and 90.4) -and in group GII - an average of 86.8 (range between 66.9 and 92.1). In GI group was one case of delayed of consolidation, while GII group was one case of infection which/ that necessitate the removal of the osteosynthesis material.

Conclusion: Mixed Osteosynthesis with plate and screws or just screws under the protection of the external retainer, represents a necessity solution in the cases of fractures with a high degree of comminution and the functional differences at 6 months between the two types of osteosynthesis are not significant statistically, but in the case of group GII the rate of local complication was higher.

(373) Mixed osteosynthesis in complex comminutive fractures of tibial pillar

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Method: The retrospective study conducted over a period of five years (01.2011-01.2016), were enrolled 21 patients. The included patients in the study were patients with high energy trauma, fractures with a high degree of comminution. There were created two groups of patients: (GI) -12 patients who were practiced closed osteosynthesis percutaneous with screws and external fixation and (GII) -9 patients who were opted for open osteosynthesis with plate and screws under the protection of an external retainer. Patients were evaluated at 6 months postoperative using the score of Foot & Ankle Disability Index (FADI).

Results: From the total of 21 patients, there were 16 men and 5 women, with the age between 21 and 54 years and the average age being 37.5 years.

In group GI were used on average 4 screws (of between 3 to 6) under the protection of the external retainer and for GII were used nine AO boards under the protection of the external retainer. No significant differences were recorded of the results of The Foot & Ankle Disability Index (FADI) Score between the two groups at 6 months. The scores were the following: an average of 84.6 in GI group (of between 68.3 and 90.4) -and in group GII - an average of 86.8 (range between 66.9 and 92.1). In GI group was one case of delayed of consolidation, while GII group was one case of infection which/ that necessitate the removal of the osteosynthesis material.

Conclusion: Mixed Osteosynthesis with plate and screws or just screws under the protection of the external retainer, represents a necessity solution in the cases of fractures with a high degree of comminution and the functional differences at 6 months between the two types of osteosynthesis are not significant statistically, but in the case of group GII the rate of local complication was higher.

(375) Reconstruction of the tip of the nose using a long and narrow single lobe transposition flap – case report

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Objective: A common site for basal cell carcinoma (BCC) is usually the nose. In most cases,

after removal of the tumor with safety edges, local flaps must be designed in order to cover the skin defect when the skin graft is not an option. In this case report, a large defect was covered using a long and narrow single lobe transposition flap after removal of a BCC.

Method: A 73-year-woman was admitted in our plastic surgery clinic after being diagnosed with BCC using dermatoscopy. Under general anesthesia, the tumor of the tip of the nose was removed with safety edges, down to the muscles and cartilage plan. The defect resulted (1,5 cm/1,6 cm) was covered using a single lobe transposition flap which measured 4 cm length, 1,2 cm at the base of the flap and 1,3 cm at the tip of the flap. In order to avoid tension and lift of the right nostril the incision was prolonged inferior to the right base of the alar where small dissection was performed. The dissection was prolonged also in the internal cantus in order to be able to close de secondary defect without tension. The tumor was sent for pathological examination. The following parameters were evaluated: occurrence of complications (infection, necrosis of the flap, wound dehiscence or donor site morbidity, recurrence) and patient satisfaction using Visual Analogue Scale (VAS).

Results: Minor complications were noted. The patient presented lower eyelid edema and ecchymosis, venous insufficiency at the tip of the flap and small blisters after surgery. After a few days the flap gained a normal aspect, also the edema and ecchymosis were in remission. The local management involved ointment application. The pathological exam showed no residual tumor. The visual aspect of the flap was well appreciated by the patient (9 on VAS).

Conclusion: In this case, a long and narrow flap was designed in order to achieve a good aesthetic result, pushing a little bit the limits of a normal flap measurements. Even if minor complications can occur experience is the key to success in such cases.

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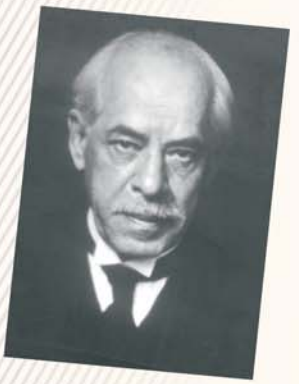

George Marinescu

Ion Cantacuzino

Francisc Rainer

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