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ABSTRACT BOOK

Oral & E-Poster Presentations



Athens, Greece, March 22-24, 2018
10th International Congress of Internal Medicine
e-Abstract Book
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Oral Presentations

HEART FAILURE WITH MID-RANGE EJECTION FRACTION: THE UNWANTED MIDDLE CHILD FINDS A UNIQUE PLACE AMONG PATIENTS WITH NON-VALVULAR ATRIAL FIBRILLATION -DATA FROM THE MISOAC-AF REGISTRY

Athanasios Samaras, George Fotos, <u>George Dividis</u>, Eleni Paschou, Ioannis Goulas, Eleni Thomaidou, Dimitra Vasdeki, Evropi Forozidou, Paraskevi Tsoukra, Eleni Kotsi, Anastasios Kartas, George Giannakoulas, Haralambos Karvounis, Apostolos Tzikas

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Background: Heart failure (HF) often coexists with atrial fibrillation (AF) increasing the risk for throm-boembolic events. Data associated with the newly defined group of patients with heart failure and mid-range ejection fraction(HFmrEF) in the substrate of AF are currently lacking.

Aim: To determine the differences of HFmrEF patients' characteristics, rate and rhythm control among the rest of HF patients in a non-valvular AF (NVAF) dataset.

Methods: Patients with HF were classified in three groups according to their ejection fraction(EF) [HF with reduced EF:<40%(HFrEF),HF with mid-range EF:40-49% EF(HFmrEF),HF with preserved EF:>=50%(HFpEF)]. All the patients had coexisting NVAF.

Results: 307 NVAF-HF patients were studied (HFpEF: 52%, HFmrEF: 19%, HFrEF: 29%). When compared with HFrEF patients, HFmrEF patients were associated with higher frequencies of female gender (38% vs 23%, p=0.043), prior episodes of lower gastrointestinal bleeding (14% vs 3%, p=0.025) and palpitations as their main symptom at admission (19% vs 6%, p= 0.015), while lower frequencies were observed at the use of implantable cardioverter defibrillator (6% vs 14%, p=0.048) and the coexistence of dilated cardiomyopathy (2% vs 15%, p=0.009). In comparison to the HFpEF patients, HFmrEF patients were more likely to be men (62% vs 39%, p=0.003), younger [mean age: 74(+- 10) vs 77(+-9), p=0.03)], with higher risk of bleeding [HASBLED>=3: 45% vs 27%, p=0.038] and increased coexistence of ischemic cardiomyopathy (7% vs 1%, p=0.019) and coronary artery disease (66% vs 44%, p=0.005). Paroxysmal AF was more frequently observed at HFpEF compared to HFmrEF patients (37% vs 22%, p=0.047), although more of the last had at least one attempt of prior electrical cardioversion (17% vs 7%, p=0.035). HFmrEF patients received at discharge more regularly calcium channel blockers (22% vs 6%, p=0.01) and less often amiodarone (6% vs 25%, p=0.007) compared with HFrEF patients and more frequently beta blockers (96% vs 80%, p=0.002) compared with HFpEF patients.

Conclusions: Among the AF community, HFmrEF patients have distinct differences with the rest of the HF patients, which are related to their special characteristics, comorbidities and rate and rhythm control strategies. Their unique identity demands further studies on the subject.

WHAT DO WE KNOW ABOUT OUR PATIENTS WITH MYOCARDIAL INFARCTION WITH NON-OBSTRUCTIVE CORONARY ARTERIES?

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Background/Aim: Myocardial Infarction and Non-Obstructive Coronary Arteries (MINOCA) is an important subtype of MI type 1 where epicardial vessel shows a stenosis < 50%. The aim of this study is to describe prevalence, clinical features, management and prognosis of patients diagnosed with MINOCA.

Methods: A restrospective observational study of patients admitted to Intensive Care Unit with diagnosis of acute MI was performed between January 1st 2007 and December 31 st 2016. Data were extracted from the ARIAM Andalucia registry. All patients underwent coronary angyography. Patients with MI and no were diagnosed as MINOCA. Follow-up data were obtained from DIRAYA.

Results: A total of 1676 patients with diagnosis of acute MI were registered but only 54 patients fulfilled inclussion criteria for MINOCA disease. The prevalence of MINOCA was 3.2 % with a mean age of 60.59. MINOCA was more frequent in women than in men. Most frequent cardiovascular risk factors were hypertension (55.6%), smoking (51.9%) and hyperlipemia (35.2%). Median risk score GRACE was 123±32.68 and CRUSADE 27.4±16.07. Left ventricular ejection fraction (LVEF) was preserved in 59.39%, mildly reduced in 24.1%, moderately reduced in 11.1% and severely reduced in 5.5% patients. Preferred treatments at discharge were aspirin (96%), statins (86%), ACEI/ARBs (80%), beta-bloquers (70%) and DAPT (64%). One patient died at 3-month follow-up (1.85%).

Conclusions: MINOCA disease has an important prevalence and short-term mortality. Diagnostic work-up of these patients is often suboptimal so its management is not completely accurate. Therefore, more studies on aetiology and management of MINOCA are needed.

(OP01-OP09)

OP03

QUEST OF EMBOLIC STROKE SOURCE(S) IN ELDERLY PATIENTS: A CASE REPORT REMINDING THAT ATRIAL FIBRILLATION IS NOT ALWAYS THE ANSWER

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Background/Aims: Cardioembolism is one of the commonest aetiologies of Acute Ischaemic Stroke (AIS); 9.3-38% in large case series (Schneck MJ et al, Cardioembolic stroke, Medscape 2015). Data suggest that although Atrial Fibrillation (AF) is the most widely recognised source in patients aged >60 years, isolated AF is present in only 22% (Arboix A. Curr Cardiol Rev. 2010). The aim of this case report is to highlight the non-AF related sources of cardioembolism.

Case Report: A 81-year old man with a history of previous MI was admitted with an acute left frontal lobe cortical infarct. His work-up revealed non-significant carotid atherosclerosis bilaterally and unremarkable blood tests. His ECG and 11-hour cardiac rhythm monitoring did not reveal AF; prolonged monitoring not feasible due to cognitive problems. His transthoracic cardiac ultracound showed a hypermobile mass attached to the mitral valve in keeping with a vegetation and left ventricle (LV) ejection fraction of 25-35%. The absence of an LV thrombus was confirmed with a contrast study. The patient did not meet any other major or 3 minor Duke criteria for infective endocarditis. Regarding marantic endocarditis lupus anticoagulant and antiphospholipid antibodies were negative and there were no signs of disseminated intravascular coagulation, malignancy or systemic lupus erythematosus. A transoesophageal cardiac ultrasound and cardiac MRI could not be performed due to minimal cooperation. Despite the patient's advanced age, AF was not among the 2 cardioembolic sources identified as probably related to his recent stroke.

20-YEAR TRENDS OF CHARACTERISTICS AND OUTCOMES OF STROKE PATIENTS WITH ATRIAL FIBRILLATION

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Objective: We aimed to report the overall, age- and sex-specific secular trends of characteristics and outcomes of patients with acute ischemic stroke (AIS) and atrial fibrillation (AF) between 1993 and 2012 in the Athens Stroke Registry.

Methods: We used Joinpoint regression analysis to calculate the average annual percent changes and 95% confidence intervals.

Results: Among 3314 stroke patients, 1044 (31.5%) had AF. Between 1993-2012, there was: average annual percentage reduction (AAPR) (0.8%, 95%CI:-1.5%;0.0%) in the proportion of AF-patients among all AIS patients; AAPI (7.1%, 95%CI:5.4%;8.9%) in the proportion of newly-diagnosed AF-patients among all AF-patients; AAPR (2.9%, 95%CI:-2.7;-3.2%) in the proportion of previously-known AF-patients among all AF-patients; AAPR (2.4%, 95%CI:-1.2;-3.6%) in the proportion of previously-known AF-patients not receiving any antithrombotic treatment at admission; AAPI (6.4%, 95%CI:1.2;11.9%) in the proportion of previously-known AF-patients on anticoagulants at admission; AAPI (2.3%, 95%CI: -0.4;5.0%) in the proportion of previously-known AF-patients on aspirin at admission; AAPI in the proportion of AF-patients who were prescribed anticoagulant (3.5% for patients with mRS<4; 7.2% for mRS:4-5) and AAPR in the proportion of AF-patients who were prescribed aspirin (5.8% for mRS<4; 1.6% for mRS:4-5) or no antithrombotic at discharge (7.1% for mRS<4 and 5.3% for mRS:4-5); AAPR in stroke recurrences (5.8%, 95%CI:-8.6;-3.0%), cardiovascular events (6.5%, 95%CI:-8.3;-4.7%) and deaths (7.9%, 95%CI:-9.2;-6.5%).

Conclusions: Between 1993-2012, the proportion of AF-patients on proper antithrombotic treatment and the rate of newly-diagnosed AF increased significantly. Rates of stroke recurrence, cardiovascular events and mortality reduced significantly.

CLOSURE OF PATENT FORAMEN OVALE VS. MEDICAL THERAPY IN PATIENTS WITH CRYPTOGENIC STROKE OR TRANSIENT ISCHEMIC ATTACK: UPDATED SYSTEMATIC REVIEW AND META-ANALYSIS

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Background: Previous systematic reviews and meta-analyses compared the efficacy and safety of patent foramen ovale(PFO) closure vs. medical treatment in patients with cryptogenic ischemic stroke or transient ischemic attack(TIA). Recently, new evidence from randomized trials became available.

Methods: We searched PubMed until 24/9/2017 for randomized trials comparing PFO closure with medical treatment in patients with cryptogenic stroke/TIA using the items: "stroke or cerebrovascular accident or TIA" and "patent foramen ovale or paradoxical embolism" and "trial or study".

Results: Among 851 potentially eligible articles, 5 were eligible for the meta-analysis. In 3627 patients (1829 in the PFO-closure arm and 1798 in the medical treatment), there was statistically significant difference in ischemic stroke recurrence (2.02% vs. 4.17% respectively, odds-ratio (OR):0.43, 95% confidence intervals (CI): 0.21-0.90, relative-risk-reduction (RRR):50.53%, absolute-risk-reduction (ARR):2.15%, number-needed-to-treat (NNT):46.5), whereas there was no statistically significant difference in TIA (3.09% vs. 3.80% respectively, OR:0.80, 95%CI:0.53-1.19) or death (0.71% vs. 0.88% respectively, OR:0.73, 95%CI:0.34-1.56). New-onset atrial fibrillation occurred more frequently in the PFO-closure arm (4.75% vs. 0.94% respectively, OR:5.15, 95%CI:2.18-12.15, relative-risk-increase:403.1%, absolute-risk-increase:3.8%, NNT:26.2) and resolved in 72% of cases within 45 days, whereas the rates of myocardial infarction (0.33% vs. 0.27% respectively, OR:1.22, 95%CI:0.25-5.91) and any serious adverse events (27.97% vs. 27.20% respectively, OR:1.07, 95%CI:0.92-1.25) were similar.

Conclusions: In patients with cryptogenic stroke/TIA and PFO who have their PFO closed, ischemic stroke recurrence is less frequent compared to patients receiving medical treatment and atrial fibrillation is more frequent but mostly transient. There is no difference in TIA or death or myocardial infarction.

(OP01-OP09)

OP06

ACUTE HEART FAILURE (AHF) IN A PATIENT WITH LOWER URINARY TRACT INFECTION (LUTI): A SECONDARY REVERSE TAKOTSUBO CASE REPORT

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Background: Takotsubo cardiomyopathy is typified by a transient systolic dysfunction of the apical segments of the left ventricle (LV) -apical ballooning- mimicking myocardial infarction in the absence of obstructive coronary artery disease (CAD), possibly due to acute catecholaminergic myocardial stunning. Reverse takotsubo, a variant form in which the basal and midventricular segments of the LV are akinetic, occurs in a minority of patients. Some Takotsubo cases occur in patients already hospitalized for another medical condition. In these patients, sudden activation of the sympathetic nervous system or a rise in catecholamines precipitates an acute Takotsubo syndrome as a complication of the primary condition. Such cases are diagnosed as secondary Takotsubo syndrome.

Case Report: A 73 yo male was hospitalized due to LUTI with pyrexia and elevated inflammation indexes. The second day of hospitalization he complained of chest pain and developed pulmonary edema with low blood pressure. The echocardiography revealed low EFLV=25%, the troponine levels increased and he was transferred to the ICCU. After several days, the patient was stabilized and underwent a coronarography, which was free of obstructive CAD. The left ventriculogram showed a reverse Takotsubo pattern, with hypercontractility of the apical and akinesia of the basal and midventricular segments. The patient got discharged with treatment for heart failure (b-blockers, ACEI, MRA). A month later a cardiac MRI was performed, which showed normal EFLV=60% and no signs of myocardial necrosis.

COMPARISON OF SAFETY OUTCOMES BETWEEN PCSK9 INHIBITORS AND STANDARD OF CARE: SYSTEMATIC REVIEW AND META-ANALYSIS OF 47 RANDOMISED CONTROLLED TRIALS

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Background: Recent trials of monoclonal antibodies to proprotein convertase subtilizin/kexin type 9 (PCSK9) reported robust low-density lipoprotein cholesterol reductions.

Objective: To assess the safety of PSCK9 inhibitors in published trials of PCSK9 inhibitors.

Methods: We performed a systematic review and meta-analysis of randomized controlled trials of PSCK9 inhibitors vs. standard-of-care (SOC). The search items in PubMed and Web of Science were: (Proprotein convertase subtilisin/kexin type 9 inhibitor OR PSCK9 inhibitor OR alirocumab OR bococizumab OR evolocumab) AND (prospective OR randomized OR trial). Safety outcomes assessed included haemorrhagic stroke, new-onset diabetes mellitus (DM) or worsening of pre-existing diabetes, cancer, myalgia, CK> x3 the upper limit of normal (ULN), liver transaminase > x3ULN or ALT>3 ULN, cataract and neurocognition.

Results: There was no statistically significant difference between PCSK9 inhibitors and SOC in DM (HR: 1.03,95%CI: 0.80-1.33 in 12 studies and 43,122 patients); cancer (HR: 1.10,95%CI: 0.67-1.82 in 8 studies and 6,650 patients), cataract (HR: 0.94,95%CI: 0.78-1.13 in 1 study and 27,525 patients), neurocognition (HR: 1.14,95%CI: 0.75-1.73 in 16 studies and 46,492 patients), high CK levels (HR: 0.82,95%CI: 0.69-0.97 in 28 studies and 54,364 patients), myalgia (HR: 0.95,95%CI: 0.71-1.27 in 19 studies and 22,864 patients), higher liver transaminase levels (HR: 0.78,95%CI: 0.61-1.01 in 25 studies and 27,181 patients), haemorrhagic stroke (HR: 1.16, 95%CI: 0.68-1.98 in 1 study and 27,564 patients).

Conclusions: There was no major statistical difference between PSCK-9 inhibitors and SOC for the safety parameters of cancer, diabetes mellitus, cataract, CK, liver transaminases, myalgia, neurocognition and haemorrhagic stroke.

CHARACTERISTICS AND TEN-YEAR PROGNOSIS OF PATIENTS TREATED WITH ASPIRIN PRIOR TO A FIRST-EVER ACUTE ISCHEMIC STROKE. DATA FROM THE 'ATHENS STROKE OUTCOME PROJECT'

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Aims: To assess the clinical characteristics and the ten-year prognosis of patients treated with aspirinprior to a first-ever acute ischemic non-cardioembolic stroke (AINCS).

Methods: This was a retrospective study involving a total of 1,782 patients hospitalized due to a first-ever AINCS; of those, 14% (n=257) were treated with aspirin (ASA group) for elective purposes, while 1,525 patients received no antiplatelets (non-ASA group) prior to the index event. Primary endpoints included: time tostroke recurrence, composite cardiovascular event (stroke recurrence, myocardial infarction, unstable angina, coronary revascularization, peripheral atherosclerotic artery diseases, or sudden death), and all-cause mortality.

Results: Subjects pre-treated with aspirin had higher composite cardiovascular event-free survival (log rank test: 4.79, p=0.029) and 10-year mortality (log rank test: 6.8, p=0.012) compared with the non-ASA group, while there was no difference in time to stroke recurrence (log-rank test: 0.039, p=0.84). Age (hazard ratio, HR 1.07; 95%CI: 1.04-1.09, p<0.001), stroke severity on admission (HR: 1.05; 95%CI: 1.03-1.08, p<0.001), heart failure (HR 2.32; 95%CI: 1.24-4.36, p<0.01) and peripheral artery disease (HR 2.25; 95%CI: 1.15-4.39, p<0.05) were associated with higher 10-year mortality in the ASA group. Of note, the rate of cardiovascular events was higher among male patients (HR 2.27; 95%CI: 1.04-4.98, p<0.05) but lower among those treated for dyslipidemia prior to the index stroke (HR0.58; 95% CI: 0.36-0.93, p<0.05).

Conclusions: This study indicates that elective treatment with aspirin prior to an AINCS does not affect long-term stroke recurrence but increases mortality and cardiovascular morbidity.

A CASE REPORT OF EMBOLIC STROKE OF UNDETERMINED SOURCE: SHOULD ANTIPHOSPHOLIPID SYNDROME TESTING BE PERFORMED IN PATIENTS WITH KNOWN ACTIVE MALIGNANCY?

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Background/Aim: Studies demonstrate a higher prevalence of anti-cardiolipin antibodies (ACLAs) in patients with malignancies compared to controls (22 versus 3%) (Zuckerman et al. 1995). Amongst cancer patients, ACLAs positive individuals are at significantly higher risk of thromboembolic events (Zuckerman et al. 1995). Recent studies that compare direct oral anticoagulants versus antiplatelets in patients with embolic strokes of undetermined source have not included ACLAs as a mandatory investigation in patients with active malignancy. The aim of this case report is to highlight the need to consider screening patients with active malignancy and acute cryptogenic ischemic stroke for ACLAs as this may identify patients that have an indication for anticoagulation.

Case Report: A 75-year old woman with a recently excised invasive ductal breast carcinoma presented with expressive aphasia and reduced right-hand coordination shortly after her first radiotherapy session. Brain MRI confirmed an acute posterior left middle cerebral artery cortical infarction and established silent bilateral cerebellar infarcts and right corona radiata / peri-Rolandic cortex infarct. MRA head and neck showed mild atherosclerotic changes at the carotid bifurcations bilaterally but normal posterior circulation and intracranial arteries. A 7-day cardiac rhythm monitor and a transthoracic cardiac ultrasound did not reveal major cardioembolic sources or a patent foramen ovale. Antiphospholipid screen revealed ACLAs and b2-Glycoprotein IgG antibodies more than 8 times higher than the upper normal limit; titres unchanged at 3 months. The patient was diagnosed with antiphospholipid syndrome and anticoagulated with warfarin; INR target 2.0-3.0. She has not suffered any thromboembolic events 13 months later.

OP10

THE ROLE OF NEWER DAAS IN THE TREATMENT OF CHRONIC HEPATITIS C PATIENTS WITH GENOTYPE 5

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Background: Chronic hepatitis C patients harboring genotype 5 are rare in our country apart from a region in south Greece. We have already published our experience in treating these patients with the conventional therapy. The international experience on treating these patients with newer direct acting antiviral (DAAs) drugs is limited.

Aim: We report our experience on CHC patients with genotype 5, treated with DAAs

Methods: Twenty CHC patients with genotype 5, were included in the present study (M/F=3/15, mean age 68.3). All patients have had advanced fibrosis and/or cirrhosis as was assessed by transient elastography (Fibroscan). All cirrhotic patients (15/20) included in the study had compensated cirrhosis. 7/20 patients had received double conventional treatment in the past. Fifteen patients were treated using sofosbuvir 400mg/day plus ribavirin (according to the patient's weight: <75 kg 1000mg/day, >75 Kg 1200 mg/day) for 12 weeks, and five received ledipasvir/sofosbuvir plus ribavirin for 12 weeks. HCV-RNA in the serum was tested 12 weeks after the end of therapy.

Results: All patients had negative HCV-RNA at the end of therapy (EOT). Sustained virological respond (SVR) was noted in 17/17 patients who were tested 12 weeks after the end of therapy (15/17 had received sofosbuvir plus ribavirin). No significant adverse events were noticed during therapy (3 patients developed anemia). Conclusions: Our results indicate that the newer DAAs proved very efficacious in CHC patients (genotype 5) with advanced fibrosis and/or cirrhosis. The combination of sofosbuvir plus ribavirin resulted in high SVR rate.

OP11

ASSESSMENT OF HEALTH RELATED QUALITY OF LIFE IN GREEK PATIENTS WITH PRIMARY BILIARY CHOLANGITIS USING THE PBC-40 QUESTIONNAIRE

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Background: Primary biliary cholangitis (PBC) is a chronic, autoimmune cholestatic liver disease with a complex clinical phenotype. Quality of life of PBC patients can be frequently impaired by symptoms such as fatigue and itch, which can occur at any point in the disease course. PBC-40 questionnaire, originally validated in UK PBC patient, is considered a useful tool for evaluation of health related quality of life (HRQoL) in PBC. **Aim**: Our aim is to assess HRQoL in Greek PBC patients by using PBC-40 and SF-36 questionnaires.

Materials and methods: The PBC-40 questionnaire was translated to Greek using the forward-backward method. Both questionnaires were self-administrated to 60 PBC (95% females) patients up to now, attending our outpatient Liver clinic. The internal consistency was assessed by using Cronbach's α coefficient. Data regarding diagnosis, laboratory characteristics and therapy were collected. Results: The average PBC-40 score was 74.23±22.16; the highest mean domain score was seen for fatigue (22.94±8.57) and the lowest for itch (2.91±2.64). The overall internal consistency of the PBC -40 was 0.94. Reliability was above 0.7 for all the domains of PBC-40, except for the domains "fatigue" (α =0.68) and "social" (α =0.69). High correlations were seen between PBC-40 and SF-36 concerning the domains "fatigue", "social" and "emotional" (p<0.001).

Conclusions: This is the first validation of PBC-40 in Greek PBC patients. From our preliminary data, PBC-40 seems to be an efficient and valid questionnaire in assessing HRQoL in PBC. More work is needed to establish PBC-40 as a valuable scientific tool for Greek PBC patients.

OP12

DETERIORATION OF SUBCLINICAL ATHEROSCLEROSIS MARKERS DURING AND AFTER PEGYLATED INTERFERON AND RIBAVIRIN TREATMENT FOR CHRONIC HEPATITIS C

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Background/Aim: Despite the increased incidence of adverse cardiovascular events in chronic hepatitis C (CHC) patients under pegylated-interferon-ribavirin (PR), the prospective association of PR-therapy with vascular indices has not been studied so far. In this study, we assessed the changes in vascular markers of subclinical atherosclerosis during and after PR-treatment.

Methods: All participants who completed PR, were prospectively evaluated across 3 visits (base-line-T1, end-of-treatment-T2 and 24-weeks-post-treatment-T3. Vascular function measurements included: peripheral and central-systolic (SBP) and diastolic-blood-pressure (DBP); flow-mediated, endothelium-dependent-vasodilation (FMD) (%); carotid-femoral-pulse-wave-velocity (PWV)(m/s); augmentation-index (Al%) and time-for-return-of-reflected-waves (TR)(miliseconds); intima-mediathickness (IMT) of the carotid artery.

Results: 26 consecutive patients [46.2% male, age 45 (31.7-53.5)], non-smokers with CHC and 51 healthy-controls were enrolled. Significant un-adjusted changes in demographic, hemodynamic and vascular variables were not observed at baseline and across the follow-up period in both groups. In contrast, a significant temporal effect of treatment was established in terms of vascular parameters in CHC patients by linear mixed model analysis. More specifically, antiviral treatment was associated with unfavorable changes in FMD and PWV between T3 and T1 compared to controls (P=0.015 and P=0.017, respectively). This effect was independent of age, gender and longitudinal changes in SBP and waist circumference. Moreover, HCV patients presented increased Al and a trend for early decrease in TR concomitant to treatment administration (between T2 and T1) as compared to controls (P=0.043 and P=0.077, respectively), after adjusting for the above parameters.

Conclusions: Surrogate markers of subclinical atherosclerosis deteriorate in patients with CHC during PR. This deterioration continues at least 6 months post-treatment.

OP13

EVALUATION OF TRANSIENT ELASTOGRAPHY IN THE DIAGNOSIS OF CYSTIC FIBROSIS LIVER DISEASE

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Background/Aim: In cystic fibrosis (CF), liver disease (CFLD) is the third leading cause of mortality. As liver biopsy has been considered inconsistent in diagnosis of CFLD, a combination of modalities were utilized in the conventional Debray criteria (DC). More recently, transient elastography (TE) and non-invasive-liver-fibrosis-biomarkers (NILFB) were included in the New criteria (NC). In this study, we aimed to evaluate transient elastography (TE) and NILFB for the diagnosis of CFLD in adults.

Methods: Longitudinal data were collected from a cohort of genetically confirmed CF patients. CFLD was diagnosed by both DC and NC.

Results: 62 patents with CF, [56.5% male, age at enrollment 25 (22-31) years], were prospectively followed-up for 33 (28-36) months. TE was performed in all the patients. 16 (25.8%) and 26 (41.9%) met the classical DB and NC, respectively. Patients with CFLD had higher liver stiffness than those without, by both DC and NC (P=0.03 and P<0.001, respectively). ALP and INR correlated with TE (Spearman's r=0.413, P=0.001 and r=0.532, P<0.001, respectively). Patients with an abnormal Fibroscan (>6.8 kPa) had higher AST (P=0.007), γGT (P=0.005), ALP (P<0.001), INR (P=0.001), APRI (P=0.04) and FIB-4 (P=0.003) vs those with ≤6.8 kPa. TE has an optimal specificity and positive-predictive-value to detect CFLD by NC but lags sensitivity.

Conclusions: The cutoff value of 6.8 kPa by TE is highly accurate to detect true CFLD according to the NC but it lags sensitivity probably due to the patchy histologic nature of the disease. TE is more accurate than NILFB to detect CFLD.

OP14

EVALUATION OF THE NEW CRITERIA IN THE DIAGNOSIS OF CYSTIC FIBROSIS LIVER DISEASE

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Backround/Aim: In cystic fibrosis (CF), liver disease (CFLD) is the third leading cause of mortality. As liver biopsy has been considered inconsistent in diagnosis of CFLD, a combination of modalities were utilized in the conventional Debray criteria (DC). More recently, transient elastography and noninvasive-liver-fibrosis-biomarkers [AST/ALT ratio (AAR), FIB-4 index and APRI] were included in the New criteria (NC). In current study, we aimed to evaluate the NC for the diagnosis of CFLD.

Methods: Longitudinal data were collected from a cohort of genetically confirmed CF patients. CFLD was diagnosed by both DC and NC. RESULTS: 62 patents with CF, [56.5% male, median age 25 (22-31) years], were prospectively followed-up for 33 (28-36) months. 16 (25.8%) patients met the classical DC for CFLD. According to NC, 26 (41.9%) had CFLD. AST (P=0.001), ALP (P=0.002), g-GT (P=0.002), INR (P=0.023), liver stiffness (P<0.001), AAR (P=0.035), FIB4 (P<0.001) and APRI (P=0.001) were higher in CFLD vs no CFLD patients. 13 (50%) of patients who were classified as CFLD according to the NC had evidence of diffuse liver disease/cirrhosis in imaging and all of them had at least one additional parameter. From the 13 (50%) patients with no evidence of diffuse liver disease, 38.4%, 30.8% and 30.8% had 2, 3 and 4 of the four sets of parameters, respectively, classifying them as CFLD.

Conclusions: The NC are able to identify 16.1% more CFLD patients compared to historical ones. The multiple non-invasive biomarkers incorporating in New criteria may enhance the ability to detect CFLD.

CORRELATION BETWEEN VITAMIN D RECEPTOR SNP APAI AND LIVER FIBROSIS IN HCV PATIENTS FROM THRACE, GREECE

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Background: Chronic hepatitis C is a leading cause of liver fibrosis, cirrhosis and hepatocellular carcinoma, worldwide. In addition, vitamin D deficiency as well as certain single nucleotide polymorphisms (SNP) in the Vitamin D Receptor (VDR) gene, which result to its compromised affinity to D3, have also been associated with liver fibrosis.

Aim: To associate VDR Apal (rs7975232) genotype of HCV mono-infected patients from Thrace-Greece with liver fibrosis progression.

Methods: Sixty-seven HCV viremic patients (Caucasian, Male: 46, Average Age: 51 years, HCV genotype1: 36, HCV genotype3: 22) were studied. Patients were genotyped for Apal SNP (rs7975232, G/T) using PCR and Apal digestion. To assess fibrosis stage, patients underwent transient elastography (FibroScan), resulting into classification into four groups: F0-1 (n=25), F2 (n=10), F3 (n=8) and F4/cirrhotic (n=24).

Results: Patients were grouped in low (F0-1, F2/n=35) and high (F3, F4/n=32) fibrosis. Apal (rs7975232) genotype GG was negatively associated with liver fibrosis (Fisher exact test, P=0.032). Excluding patients with FibroScan F2 and F3 did not alter the results (Fisher exact test, P=0.016) and statistical significance between TT and TG genotype and advanced fibrosis/cirrhosis was reported (P=0.006). Checking for presence or absence of G no significant relation to fibrosis was found (Fisher exact test, P=0.218).

Conclusions: These preliminary results suggest that VDR Apal genotype GG is linked with low fibrosis progression, in contrast to the TT and TG genotypes that are linked to advanced fibrosis and cirrhosis. Further work is in progress to confirm the above-mentioned results.

THE PREVALENCE OF VIRAL HEPATITIS INDEXES (HAV, HBV, HCV) AND HIV IN PWID AND FOLLOW A LOCAL SUBSTITUTION PROGRAM (OKANA)

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Background: The persons who inject drugs (PWID) represent a high risk group for viral hepatitis and HIV.

Aim: To investigate the epidemiological characteristics and the prevalence of viral hepatitis indexes (A, B and C) and HIV in PWID who follow a local substitution program.

Methods: In this study, all PWID persons who followed a local substitution program were included (N=323, M/F=261/62, men age 35.6 years, range 22-59). All persons were tested for anti-HAV (IgG, IgM), HBsAg, anti-HBc, anti-HBs, HBeAg, anti-Hbe, anti-HCV, anti-HIV (EIA-3). All positive samples for anti-HCV were furtherly tested for HCV-RNA (with PCR) and for HCV genotype.

Results: In total, there were tested 305/323 persons. HBsAg was positive in 3/305 (0.98%), anti-HBc (+) in 60/305 (19.67%), and 52/60 were also positive for anti-HBs. Anti-HBe were found positive in 29/305 (9.50%). Anti-HAV-IgG were detected in 73/305 (23.9%), and only 3/305 (0.98%) persons found positive for HIV. Anti-HCV (+) were found in 160/305 (52.45%) cases. From the 160 cases found positive for anti-HCV the 132/160 (82.5%) had HCV-RNA positive (with PCR). Regarding to the HCV genotypes we had :genotype-1 52/132 (39.3%), genotype 2/3 45/132 (34.0%), and genotype-4 35/132 (26.5%).

Conclusion: In this local population of PWID who follow a substitution program, the high prevalence of HCV was confirmed as expected, however the prevalence of HBV and HIV were low. We had an increase in the prevalence of HCV genotypes 1 and 4 as compared with historical controls.

OP17

CLINICAL PROFILE OF CHOLANGITIC ABSCESS IN COMPARISON TO LIVER ABSCESS: A STUDY FROM A TERTIARY CENTER FROM INDIA

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Introduction: Cholangitic liver abscess is an extremely rare disease. This is the first study which details about the clinical features of cholangitic liver abscess in the world as far as our knowledge.

Methods: We have conducted the present study on 2,08,486 patients who have got admitted during in the hospital during the year January 2013-June 2017. The data was collected from the discharge summary of the patient admitted with diagnosis of cholangitic abscess and liver abscess. All the collected data was analyzed windows excel

Results: Prevalence of 6 cases per 1,00,000, age distribution with minimum age 45 years and maximum age 74 years with a mean age of 54 years, gender distribution showed 8 males and 5 females. Geographical distribution -costal area. Mean duration of hospital stay was 20 days with minimum 6 days and maximum 45 days. Mean readmission within 20 days and 2 admissions with 6month. 1-mortality. Presenting complain -fever and severe right hypochondrial pain (9), jaundice with weight loss (4). Type 2 diabetes was the main comorbid conditions. The mean liver enlargement of 15 cm. The right quadrant mainly involved and segment 5 and 7 were involved. The mean LFT showed of all the patient showed BilirubinTotal (4), Bilirubin Direct (2), Protein (6), albumin (2.6), globulin (3.5), AST (85), ALT (84), ALP (338). The mean hemogram analysis showed WBC (15), Neutrophil (81%), Lymphocyte (11%), Monocyte (5%), Platelet (274). MPV (8), Inflammatory marker analysis showed CRP (219), neutrophil-lymphocyte ratio (NLR) (11), platelets-lymphocyte ratio (PLR) (34).

Conclusion: We conclude from this study that cholangitic abscess and liver abscess though have similar presentation, they have a totally different etiology and plan of management. Only if they are diagnosed correctly they can be managed appropriately and the recurrence can be prevented.

UTILITY OF NEUTROPHIL-LYMPHOCYTE RATIO (NLR), PLATELET-LYMPHOCYTE RATIO (PLR) AND MEAN PLATELET VOLUME (MPV) AS DIAGNOSTIC AND PROGNOSTIC MARKERS IN LIVER ABSCESS IN A TERTIARY CARE CENTER IN INDIA

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Introduction: The objective of our study is to evaluate the indicative potential of NLR, PLR and MPV to be used as diagnostic and prognostic markers in patients with liver abscess.

Methods: The study was conducted by screening 2,08,486 patients who got admitted as in patients during the period January2013 - June2017. The data collected were analyzed for NLR, PLR, MPV and CRP. Control group were taken to find the normal cut off value of NLR, PLR and MPV. Inclusion criteria: Patients of all age group with liver abscess USG/CT proven. **Exclusion criteria:** All cases other than liver abscess and other source of infection.

Result: Liver Abscess revealed male preponderance. The incidence was highest in coastal area Ernakulum 15 cases, Alaphuza and Kottayam 13 cases each. Study revealed, NLR (p - value 0.000) & PLR (p - value 0.001) were statistically significant when compared to CRP. As per ROC analysis, CRP is first and PLR and NLR stands next. This indicates PLR is next best marker to CRP. MPV was statistically insignificant to be used as prognostic marker.

Conclusion: We conclude that NLR, PLR are better and cost-effective predictors and prognostic marker of liver diseases as compared to CRP which is an expensive investigation. These ratios of NLR and PLR can be interpreted from a peripheral smear at the primary health care level in rural part of the country where testing of inflammatory markers like CRP are not available. This simple and cost-effective test will reduce the financial burden and better patient care in early identification and monitoring the prognosis.

HEALTH RELATED QUALITY OF LIFE IN GREEK PATIENTS WITH CHRONIC HEPATITIS B

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Background: Health related quality of life (HRQoL) in patients with chronic hepatitis B in Greece is sparsely reported.

Aim: The aim of the present study was to evaluate the HRQoL of patients with chronic hepatitis B (CHB) using 3 different questionnaires: EQ5D (3-level), Short form 36 (SF36) and Chronic Liver Disease Questionnaire (CLDQ).

Methods: All consecutive patients with CHB referred to the Hepatology Outpatient Clinic of 2nd Department of Internal Medicine of Aristotle University of Thessaloniki, Greece, during the last 6 months were recruited. Data were analyzed with SPSS (IBM SPSS Statistics, Version 22.0. Armonk, NY:IBM Corp).

Results: Fifty eight (30 males, 52%) out of 66 patients agreed to participate (response rate 85%). The participants had similar characteristics with those who refused participation. All dimensions of HRQoL estimated with EQ-5D and SF36 were similar to those of the general population. Except of the anxiety/depression dimension estimated with EQ5D which showed higher proportion of patients had anxiety/depression problems (60% vs 11%). The CLDQ results were similar to those previously reported. Several HRQoL dimensions (mobility, role limitations-Physical health, EQ-VAS) were different according to sex. No correlation was found between any HRQoL dimension to fibrosis stage, treatment or HBsAg positivity. However, there was a significant correlation between worry estimated with CLDQ and HBV-DNA positivity (p=0.046).

Conclusion: The HRQoL in patients with CHB is similar to the general population with the exception of anxiety/depression. More than half of the patients with CHB experience anxiety/depression problems.

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(OP19-OP027)

OP20

THE PREVALENCE OF OCCULT HEPATITIS B INFECTION IN BLOOD DONOR POPULATION

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Introduction: Occult hepatitis B virus (HBV) infection (OBI) refers to the presence of HBV DNA in the absence of detectable hepatitis B surface antigen. The prevalence of OBI varies according to the different endemicity of HBV infection, cohort characteristics, and sensitivity and specificity of the methods used for detection.

Aim: To investigate the prevalence of occult hepatitis B (OBI) in blood donor population in the last five years.

Methods: 34.928 blood samples were tested from 21.447 blood donors volunteers since 1/1/2012 till 31/12/2016. Serology test was performed using the chemiluminscence technique (CMIA, Architect). The discriminatory NAT was performed using the PCR, Cobas-TaqScreen-MPX and the Procleix-Ultrio-Plus (sensitivity to HBV-DNA=2.3 and 2.1 mlU/ml respectively). All negative samples to HBsAg, anti-HCV, HIV Ag/Ab with positive NAT and negative discriminatory test were tested for anti-HBc, anti-HBs, HBeAg and anti-HBe.

Results: In total, there were found 60/34.628 (0.17%) cases with HBsAg (+). Among them 37/60 were NAT (+) with discriminatory test for HBV-DNA (dHBV) positive and 23/59 NAT negative. Another 29 samples found NAT (+) and HBsAg (-). Among them 10/29 were dHBV (+). The remaining 19 samples were positive to HBV antibodies and considered probable OBI with the following serology profile (1 anti-HBc+, anti-HBs+, and anti-HBe+, 7 anti-HBc (+) and anti-HBs (+), and 1 with anti-HBc (+) and anti-HBe (+).

Conclusions: In a large blood donor population, the percentage of occult hepatitis B proved very low (0.02%), however its presence has not to be ignored. Early identification of OBI using molecular techniques is mandatory.

TREATMENT OF HCV WITH DIRECT ACTING ANTI-VIRALS (DAAs)

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Background: Treatment of CHC patients with DAAs has increased significantly in the last years in Greece. Studies show excellent safety profile with SVR 90-100%.

Aim: To present the new treatment options especially in patients with advanced liver disease and serious complications.

Methods: CHC patients treated with DAAs and completed their treatment. The stage of liver disease was determined by elastography. Patient tracking was performed by laboratory and clinical testing.

Results: 75 patients, 64% men (28-84) BMI 27 \pm 0.3, including: a) 66% Greeks b) 29% East Europeans c) 3% Balkans and 2% others. 23% (16) patients had diabetes, 37% (26) were smokers, 27% (19) had alcohol abuse, 24% (17) had psychiatric problems. 78.5% (55) patients had failed previous PEG IFN-RIB therapy. The main source of infection was blood transfusion and drug use (75%), while in 25% the cause remained unknown. PCR HCV-RNA was 3.90 x 10 6 \pm 9.64 x 10 5 IU / ml. The genotypes were 7% G1a, 28% G1b, 5% G2, 45% G3 and 15% G4. 65% were F4 by Metavir score and 35% F3. Patients were treated with: 3D \pm R x 12 weeks (n = 25), 2D + R x 12w (n = 12), SOF + daclatasvir \pm R x 12w (n = 7), Peg + R + sofosbuvir (SOF) x 12w (n = 9), SOF + R x 12w (n = 10), SOF + simeprevir \pm R x 12w (n = 7), ledipasvir+sofosbuvir \pm R x 12w (n = 5). All patients completed their treatment with SVR 98%.

Conclusions: The treatment of CHC patients with second-generation DAAs was extremely tolerable and without complications. All antiviral drugs (DAAs) used to treat patients with CHC were extremely safe and effective, administered according to international guidelines.

(OP19-OP027)

OP22

HUMAN BETA-DEFENSIN-1 IS A HIGHLY PREDICTIVE MARKER OF MORTALITY IN PATIENTS WITH ACUTE-ON-CHRONIC LIVER FAILURE

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Background/Aim: Human beta-defensin-1 (hBD-1) is a natural antimicrobial peptide expressed in the epithelia of multiple tissues including the digestive tract. Acute-on-chronic-liver-failure (ACLF) is defined as an acute deterioration of liver disease with high mortality in patients with cirrhosis.

Methods: 125 patients were divided into 3 groups: 39 with ACLF, 46 with acute-decompensation-without-ACLF (AD) and 40 with decompensated cirrhosis without acute event (DC). 15 healthy individuals were used as controls.

Results: Serum hBD-1 levels were higher in ACLF compared to AD (P<0.001) and more elevated in AD compared to DC-group (P<0.001). In contrast, CRP values showed a blunt association with severity of liver disease. Controls demonstrated lower values compared to cirrhotics (P<0.001). Serum hBD-1 levels were not correlated with CRP (r=0.224). In ROC curve, the value of 30.635 ng/ml was associated with the best prediction of 60-day-mortality in ACLF-group (c-statistic 0.931). CRP was less accurate in predicting mortality (c-statistic 0.792). In AD-group neither serum hBD-1 nor CRP seemed to be associated with poor survival. In DC-group serum hBD-1 and CRP were equally accurate markers in predicting mortality (c-statistics 0.800 and 0.808, respectively). In ACLF-group, patients with high hBD-1 had a poor prognosis compared to those with low values (log-rank P=0.001). In multivariate cox regression analysis only serum hBD-1 and MELD score emerged as independent predictors of mortality in ACLF group.

Conclusions: High serum hBD-1 was detected at presentation in patients with ACLF who died during the 60-day-follow-up period. Serum hBD-1 is an accurate predictor of short-term mortality in patients with ACLF.

MOVING FROM EARLY TO MODERATE OR ADVANCED BIOCHEMICAL DISEASE STAGE DURING FOLLOW-UP IS ASSOCIATED WITH AN INCREASING RISK OF CLINICAL EVENTS IN PRIMARY BILIARY CHOLANGITIS PATIENTS (PBC)

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Background/Aim: Nowadays the majority of PBC patients are diagnosed at an early biochemical disease stage. We aimed to investigate the transition rates to biochemical moderate or advanced disease and the impact of these transitions on event-free survival.

Methods: Patients data were obtained from the Global PBC Study Group database. Patients with an early biochemical stage (normal albumin and bilirubin) at baseline were included. At every visit patients who transited from biochemical early- to moderate- (abnormal bilirubin or albumin) or advanced stage (abnormal bilirubin and albumin) were identified. We used a composite endpoint of cirrhotic decompensation, development of hepatocellular carcinoma, liver transplantation or death. Cox-proportional hazard analyses were used to assess the impact of transition on event-free survival with time until the first transition as a time-dependent covariate.

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(OP19-OP027)

Results: We included 2039 PBC patients (92% female, median follow-up 7.7 years) of whom 481 (24%) transited to moderate disease and sequentially 123 (6%) to advanced disease. Transition rates to moderate disease at 1, 3, 5 year(s) were 6%, 11% and 17%, and 12%, 20% and 24% for transition from moderate to advanced disease. During follow-up 296 patients experienced a clinical event. Once patients reached a moderate disease stage, the event-free survival rate at 1, 3 and 5 year(s) were 98%, 94% and 91%. For transition to advanced disease stage these rates were 73%, 52% and 40%. Biochemical transition during follow-up from early to moderate disease [time-dependent HR 1.5 (1.1-2.1)] and from moderate to advanced disease [time-dependent HR 10.6 (7.6-15.1)] were associated with a higher probability of a clinical event.

Conclusion: Almost one out of five patients presenting with a mild PBC will progress towards a more severe disease stage within 5 years. This was associated with a high increasing risk of a clinical event, underlining the importance of clinical surveillance even in early stage PBC presenting patients.

VALIDATION OF THE ULTRASOUND B-MODE SUBJECTIVE ESTIMATION OF LIVER STEATOSIS BY MAGNETIC RESONANCE PROTON DENSITY FAT FRACTION (MRI-PDFF) AND STEATOTEST™

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Background: Grading of liver steatosis is traditionally estimated by Ultrasound (US) B-Mode comparison to right kidney echogenicity. The method is subjective and operator-dependent.

Aims: To compare B-Mode steatosis scores, estimated by two experienced radiologists, with data given by MRI-PDFF and Steatotest™ in a large number of diabetic patients studied prospectively.

Methods: Aixplorer® apparatus was used for US B-Mode measurements. The MRI PDFF fat was quantified in a 1.5 T GE Healthcare apparatus with IDEAL-IQ software. Liver fat was analyzed as total liver fat (TLF) in grams, or as percentage of liver volume (%LF). For Steatotest™, directions by Biopredictive SA were followed. MRI-PDFF and Steatotest™, were kindly provided charge-free by Biomedicine and Biopredictive.

Results: One-hundred diabetic patients were studied [males 60.3%; median (IQR) age 61.6 (56.4-66.5) years; known diabetes 9.5 (4.0-15.0) years; BMI 30.6 (27.5-34.6)]. The overall TLF was 159.0 (61.9-305.3) grams; the %LF 8.5% (4.0-15.0) and Steatotest 0.50 (0.33-0.61). Liver steatosis scores by B-Mode corresponding to %LF were: grade-I: 5.4%, -II:35.1%, -III: 47.3%, -IV: 12.2%. B-Mode grading was highly related to TLF and %LF by Kruskal-Wallis testing (P<0.0001 for both variables). The AUC for steatosis detection, in decreasing sequence, was for: %LF 0.794±0.069 (P=0.0001); TLF 0.774±0.069 (P=0.0004); Steatotest 0.696±0.068 (P=0.0107); B-Mode 0.682±0.070 (P=0.0174). The TLF, %LF and Steatotest did not differ significantly in the corresponding B-Mode steatosis scores given by the two operators.

Conclusions: Subjective grading of liver steatosis by B-Mode ultrasound, are reliable and reflect the actual degree of liver fat, if performed by experienced operators.

(OP19-OP027)

OP25

A DEEP LEARNING APPROACH TO THE SIGNIFICANT LIVER FIBROSIS BINARY CLASSIFICATION PROBLEM USING PATIENT'S GENDER AND SHEAR WAVE ELASTOGRAPHIC MEASUREMENT

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Background: Conventional methods such as: hematologic tests e.g. FIBROMETER®, strain, shear wave elastographic (SWE) stiffness cut-off values e.g. FIBROSCANTM, Supersonic Imagine, and parameters derived from image analysis e.g. color clustering of SWE, are used for the significant liver fibrosis binary classification (SLFBC) problem. The AUC of the above methods is: 0.82, 0.82, 0.84 and 0.87 accordingly.

Aim: The aim of this study was to design and tune a deep neural network (DNN) in order to automate classification of a patient's liver fibrosis stage (F≤F1, F≥F2) with high accuracy, sensitivity, specificity and AUC.

Methods: Our data set consisted of 103 liver biopsy validated patients with chronic liver disease from which 52 were F≤F1 and 51 were F≥F2. Input parameters for our model were: {patient gender} and SWE measurement of right lobe (SWE-RL). We designed a DNN with two hidden layers and used the 10-fold cross validation (CV) technique in order to manage underfitting, overfitting, bias and variance issues.

Results: A 10-fold CV provided the following results: Accuracy: 0.9364+/-0.0914, Sensitivity: 0.909, Specificity: 0.9583, AUC: 0.9317 with 95% CI [0.733 - 1.0].

Conclusions: We proposed a different approach using deep learning on SLFBC problem. Our preliminary results demonstrate improved accuracy, sensitivity, specificity and AUC (all > 0.90) compared to conventional diagnostic methods. Our DNN model could be used as a decision support tool to assist clinicians on their medical report. Larger data sets are required to further validate our algorithm.

A DEEP LEARNING APPROACH TO THE NON-ALCOHOLIC FATTY LIVER DISEASE BINARY CLASSIFICATION PROBLEM USING PATIENT'S GENDER AND FEATURES DERIVED FROM B-MODE ULTRASOUND IMAGES

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Background: Different approaches have been developed using machine learning techniques on features derived from US B-mode image analysis in order to automate classification of a patient's liver steatosis stage. All of these approaches fail to achieve all scores: accuracy, AUC, sensitivity and specificity, greater than 0.90.

Aim: The aim of this study was to define an algorithm using deep neural network (DNN) in order to automate classification of a patient's liver steatosis stage (S=S0, S≥S1).

Methods: Our dataset consisted of 63 subjects from which 27 were healthy (S0) and 36 were liver biopsy validated NAFLD patients (S≥S1). Five B-mode images in different speeds of sound {1420, 1480, 1540, 1600, 1660} m/s containing parts of liver parenchyma (LP) and right kidney (RK) cortex were acquired by a radiologist. Features extracted from radiologist's selected ROIs of LP and RK: lateral sharpness (LS), lateral speckle size (LSS), echogenicity of LP (EL) and RK (ERK) accordingly. Input parameters for our model were: {gender, max(LS), min(LSS), EL, ERK}. We designed a DNN with two hidden nodes and used the 10-fold cross validation (CV) technique in order to manage bias and variance issues.

Results: A 10-fold CV provided the following results: Accuracy: 0.9683+/-0.0898, Sensitivity: 0.9474, Specificity: 1.000, AUC: 0.963 with 95% CI [0.800 - 1.0].

Conclusions: We proposed a new approach on NAFLD assessment using deep learning. Our results demonstrate improved scores (all > 0.94) compared to other methods. Our DNN model could be used as a decision support tool to assist clinicians on their medical report.

DETECTION AND SIGNIFICANCE OF *PD-1.3* SNP (RS11568821) AND *IL28B* SNP (RS12979860) IN PATIENTS WITH CURRENT OR PAST HEPATITIS B VIRUS (HBV) INFECTION

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Background: Controversy exists regarding the role of *programmed cell death-1 (PD-1)* and *interleukin-28B (IL28B)* in HBV infection.

Aim: To establish *in-house* assays for genotyping *PD-1.3* (rs11568821) and *IL28B* (rs12979860) single nucleotide polymorphisms (SNPs) and investigate their impact on HBV infection susceptibility and interferon-treatment responses.

Methods: 208 patients with chronic hepatitis B, 100 with chronic HBV infection (inactive carriers) and 93 with spontaneous HBV clearance (past infection) were included. Two subsets of 78 and 14 interferon-treated patients were further analysed for the impact of *IL28B* and *PD-1.3* SNPs on interferon-treatment responses, respectively.

Results: Whole-blood and serum samples were used for SNPs genotyping by end-point allelic discrimination analysis. The results were verified by direct sequencing and/or PCR-restriction fragment polymorphism (RFLP) analysis. *IL28B* genotypes (CC, CT, TT) were successfully determined in total group using serum samples, while *PD-1.3* genotypes (GG, GA, AA) were determined in 120 subjects using whole-blood due to low-quality genomic DNA in serum samples. No significant difference was found regarding the frequency of *IL28B* and *PD-1.3* genotypes between different groups with current or past HBV infection (p=0.283 and p=0.725, respectively). *IL28B* CC genotype was associated with higher treatment response rates (p<0.05), while no association was found in regards to *PD-1.3* genotypes (P=0.396).

Conclusions: *PD-1.3* (rs11568821) and *IL28B* (rs12979860) SNPs were successfully genotyped by *in-house* assays and found no association with genetic susceptibility to HBV infection in our Greek population. However, *IL28B* SNPs are related to different response to interferon treatment. Further studies with higher number of patients are needed in order to draw general conclusions.

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OP28

THE KNOWLEDGE OF SELECTED CANCER RISK FACTORS AND PREVENTION METHODS IN POLISH OUTPATIENTS

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Background: Mortality connected with cancer increase nowadays, due to demographic changes and increasing number of health risks leading to cancer. The primary cancer prevention is based on avoiding exposure to identified cancer risk factors. Therefore, the awareness of basic health hazards is necessary.

Objectives: The purpose of this study was to assess the knowledge of selected cancer risk factors and prevention methods in Polish outpatients.

Methods: This was a survey involving Polish primary care patients. The study was based on an original questionnaire designed for this purpose and was distributed among primary care patients in either hardcopy (among primary care patients in the urban settings of the city of Lodz) or over the Internet.

Results: As many as 612 respondents took part in the study, of which women accounted for nearly 2/3 (56.9%). Tobacco smoking is a well-known cancer risk factor, what was admitted by 97.2% of respondents. Respondents were aware that smoking cause the lung cancer (88.8%), laryngeal cancer (39.1%), oropharyngeal caner (16.5%), and others. Second-hand smoke exposure in the workplace was reported by 18.3% of the respondents, more often by those with secondary education then with university degree (28.6% vs 14.7%). Second-hand smoke exposure was strongly connected with the age, the older the person the more often smoke exposure was reported (4.8% vs 16.0% vs 22.0%).

Conclusions: Tobacco smoking is a well-known cancer risk factor. Second-hand smoke exposure remains a serious problem in Poland despite a total ban on smoking in the workplace and public places.

OP29

EFFECTS OF PALMITIC ACID ON THE EXPRESSION OF GROWTH AND MYOGENIC REGULATORY FACTORS IN CARDIAC MYOTUBES

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Background: Fatty acid metabolism is a vital mechanism for generating energy in the heart. However, excessive uptake of fatty acids can have negative effects on cardiomyocytes, since lipotoxicity induces impairment in energy metabolism and eventually cell apoptosis (Chen, Y et al., 2016; Li, Y et al., 2013).

Aim: We investigated the effects of the most abundant systemic fatty acid, palmitic acid (PA), on the expression of anabolic and myogenic regulatory factors (MRFs) in cardiomyoblasts during their differentiation, in vitro.

Methods: H9C2 cardiomyocytes were cultured in growth medium supplemented with 10% FBS till they reached ~80% confluence, and then were switched into differentiation medium (2% horse serum) for 3 days. Differentiated myotubes were subsequently treated with 0.5 mM of PA for 48 hours, while fresh media was provided every 24hours. Treatments were performed in triplicate and non-treated cells served as controls. Q-Real-time PCR was used to monitor the mRNA expression changes of the IGF-1 isoforms (IGF-1Ea and IGF-1Eb) and MRFs (MyoD, MyoG and MRF4), while phosphorylation of ERK1/2 was determined by immunoblotting. Results PA reduced significantly (p<0.05) the expression of the IGF-1 isoforms and MRFs in a time dependent manner, while it resulted in decreased activation of ERK1/2 in the differentiating cardiomyocytes.

Conclusions: The decreased phosphorylation levels of ERK1/2 in combination with the down-regulation of myogenic and anabolic factors after PA administration may indicate a drive towards inhibition of differentiation and atrophy of cardiomyotubes, potentially due to lipid overload and a consequent dysregulation of their metabolic/anabolic pathways (Ghosh and Rodrigues, 2006).

OP30

ASSOCIATION OF BONE MINERAL DENSITY WITH VITAMIN B12 LEVELS IN PATIENTS AGED 65 YEARS AND OVER

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Background/Aim: With the ageing world population, osteoporosis becomes a major health issue. Vitamin and mineral deficiencies are the preventable causes of osteoporosis; and data regarding the effects of vit B12 deficiency on BMD remain conflicting. Consequently, we aimed to investigate the effects of vit B12 deficiency, which is common in patients older than 65 years of age, on osteoporosis.

Methods: This prospective study was performed on 118 patients aged 65 and over who were admitted to the Internal Medicine outpatient clinics of the Umraniye Education and Research Hospital. Patients were divided into 3 groups based on their vit B12 levels: vit- B12 levels lower than 200pg/mL (group 1), between 200-300pg/mL (group 2) and over 300pg/mL (group 3). BMDs obtained from the total hip, femoral neck and lumbar spine regions were compared between groups. Serum Ca, foliate, thyroid stimulating hormone (TSH) and free T4 (FT4) levels were also compared between groups.

Results: There was a statistically significant difference between groups regarding femur neck BMD(p<0.001).

Conclusion: We suppose that, vit-B12 levels above 300pg/ L would also protect the individuals from the osteoporotic hip fractures besides preventing neuropsychiatric symptoms, in elderly people.

OP31

MULTIPLE OSSEOUS AND SOFT TISSUE LESIONS: REMEMBER NON-SECRETORY MULTIPLE MYELOMA

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Background: Multiple myeloma (MM) is characterized by plasma cells proliferation resulting in monoclonal immunoglobulin (M-protein). The predominant types are IgG, IgA and light-chains, comprising the 90% of MM, while the rest consists of IgD, IgM, IgE, and non-secretory types (1-5%). Regarding IgE MM, less than 50 cases have been reported worldwide. Although its clinical features are similar to the common types of MM, the IgE M-protein presents in trace amounts, resulting in a small or undetectable spike in electrophoresis.

Case Report: We describe a 60-year-old woman presented with pathologic fractures in left femur and arm. Additionally, CT scan revealed a soft tissue tumor in left iliac infiltrating the surrounding bone. Guided biopsy revealed a predominant population of plasma cells of varying degrees of differentiation positive for CD138, CD38, IgE and λ-light chain, leading to diagnosis of IgE MM. The patient had normal serum calcium, hemoglobin and creatinine value. Serum electrophoresis identified no M-protein spike, while serum IgG and IgM concentration was decreased. There was no Bence-Jones proteinuria. Concentration of IgE was normal. During disease progression, multiple soft-tissue plasmatocytomas developed in different parts of her body. The patient is under chemotherapy with bortezomib, thalidomide and dexamethazone. Additionally, targeted radiotherapy has been performed. Over the last 9 months, no serious adverse events were observed.

Conclusion: Despite the absence of circulating M-protein, anemia and hypercalcemia, when there is high index of clinical suspicion for MM, bone lesion biopsy and extensive diagnostic work-up is necessary to rule-out non-secretory, rare cases of MM including IgE type.

OP32

BILATERAL FACIAL NERVE PALSY IN A PATIENT WITH CHRONIC HEPATITIS B INFECTION: CASE REPORT

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Backround/Aim: Facial diplegia or bilateral facial nerve palsy is an extremely rare condition (1 case per million), caused in the majority of patients by an underlying condition. The broad differential diagnosis of facial diplegia causes a major diagnostic challenge.

Case report: We report the case of a 71-year-old patient, with past medical history of chronic HBV infection (treated with Tenofovir), with sudden onset of bilateral facial nerve palsy and mild right hypoglossal nerve paresis. Laboratory and imaging investigation was without significant findings. Cerebrospinal fluid examination (CSF) showed increased protein (69mg/dL) and mild CSF leukocytosis (39/µL), with negative further CSF investigation regarding infections or CNS malignancies. Facial nerve conduction studies and electromyography showed significant denervation and recent peripheral neuropathy of the V, VII and XII cranial nerves. The diagnosis of Guilain-Barré syndrome variant was the most likely and the patient recovered significantly after intravenous immunoglobulin administration.

Conclusion: The possibility of an association of the cranial nerve palsies and the chronic HBV infection cannot be excluded, since unilateral cranial nerve palsy and HBV / HDV infections have been described in literature.

OP33

RHABDOMYOLYSIS DIAGNOSED IN THE DEPARTMENT OF INTERNAL MEDICINE

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Background/Objectives: Rhabdomyolysis is the destruction of muscle fibers with the transfer of toxines to the systemic circulation. It is characterized by hyperkalemia, metabolic acidosis and acute kidney failure. The objective of this study is to know the casuality of rhabdomyolysis to characterize the presence of risk factors, complications, and treatment efficacy.

Methods: All cases of diagnosed rhabdomyolysis in our hospital in the last five years were retrospectively reviewed. Epidemiological and analytical data, toxins, symptom prevalence, kidney support necessity, exitus data were collected.

Results: We found 27 cases of diagnosed acute rhabdomyolysis in our database, most of them attended in the Internal Medicine Unit (52%) and in the Critical Care Unit (33%). 23 cases (85%) were men; average age 61±21 years; mean length-of-stay 14±14 days. The main risk factors observed were alcohol consumption (22%), drugs of abuse (7%), myotoxicity due to drugs (18%), immobility (41%), direct muscle injury (52%), hypothermia (11%), intense muscular activity (26%), infections (78%), sepsis (33%). Symptoms and signs: fever (48%); dehydration (59%), arterial hypotension (52%). Median CPK was 5140 UI/L. 29% of the patients presented arrythmia. Kidney failure was evidenced in 70% cases, haemodialysis was needed in 11% cases, hepatic failure in 18% cases. Eight patients died during the admission (30%).

Conclusions: These data let us to assert that rhabdomyolysis concerns young men, due to direct muscle injury, immobility and, lesser, because drugs and alcohol. The most frequent clinical sign was reversible kidney failure, and it is important to remember that is a serious complication in immobilism and traumatisms.

OP34

RELATIONSHIP BETWEEN PROGNOSTIC AND ORGAN FAILURE SCORING SYSTEMS AND NUTRITION SCORES IN GERIATRIC PATIENTS IN INTENSIVE CARE UNIT

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Background/Aim: The frequency of geriatric patients is increasing in intensive care units (ICU). Determination of nutritional status and treatment goal is very important for intensive care follow-up and treatment. In our study, the relationship between prognostic scoring systems and nutritional scores were investigated in geriatric patients in ICU.

Methods: Forty-five geriatric patients who were admitted to Internal Medicine ICU were included in the study. Patients with malignancies were not included in the study. The nutritional status of the patients was evaluated by mini nutritional assessment (MNA) and nutrition risk screening 2002 (NRS-2002) test. Prognostic and organ failure scoring systems such as SOFA, MODS, SAPS II, APACHE II and GCS were calculated.

Results: Of the 45 patients who participated in the study, 53.3% were female and 46.7% were male. The mean age was 75.6. According to MNA score, malnutrition was detected in 18 of 45 patients and malnutrition risk was found in 22. According to NRS-2002, all patients were at risk of malnutrition. There was a negative, moderate correlation between MNA and simplified acute physiology score to predict hospital mortality (SAPS II), a weak, negative correlation with multiple organ dysfunction score (MODS), and a positive, moderate, statistically significant correlation with GCS. A positive, moderate correlation was found in between NRS-2002 and APACHE II, SAPS II, MODS, SOFA. A negative, moderate, statistically significant correlation was observed between GCS and NRS-2002.

Conclusions: Our study has shown that malnutrition may have an important effect on organ failure and prognosis in patients in ICU. As nutritional status worsens in intensive care patients, the prognostic scores used in patients worsen.

OP35

ASSOCIATION BETWEEN A1C LEVELS AND NON-HDL CHOLESTEROL IN TYPE 2 DIABETIC PATIENTS

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Background/Aim: Non-HDL (high density lipoprotein) cholesterol is measured by subtracting the HDL cholesterol level from total cholesterol. Recently, non-HDL cholesterol has been used to detect cardiovascular risk associated with dyslipidemia. In the present study, we aimed to assess, the relationship between non-HDL cholesterol and A1c in Type 2 diabetic patients.

Method: 17486 patients who applied to our hospital during the last 5 years were included to study. Age, sex, glucose, A1c, triglyceride, total cholesterol, HDL cholesterol and LDL cholesterol levels were recorded in all patients. Spearman correlation test is used for correlation analysis.

Results: The present study included 11126 (63.6%) female and 6330 (36.4%) male patients. The mean age of all patients was 55.29 ± 12.82 (18-106). The mean A1c in all patients was $7,46 \pm 2,05$, while the mean glucose was 155.92 ± 75.1 . There was a statistically significant correlation between A1c and non-HDL cholesterol (r = 0.120, p = 0.0001). There was also a statistically significant correlation between glucose and non-HDL cholesterol (r = 0.111, p = 0.0001). There was no statistically significant relationship between A1c and glucose and LDL cholesterol (p > 0.05).

Conclusions: Non-HDL cholesterol and triglyceride in diabetic patients have a stronger association with A1c than total cholesterol. Non-HDL cholesterol should be considered in the identification of cardiovascular risk of diabetic patients and in management of diabetes mellitus.

Table 1. Demographic datas of patients

n=17486	Mean±SD	Median	Min-Max
Age(year)	55,29±12,82	56,00	18-106
A1C	7,46±2,05	6,800	5-17,09
Glucose	155,92±75,1	129,00	22-708
Total cholesterol	208,03±48,28	205,00	66-1089
Triglyceride	175,29±148,21	144,00	18-9283
HDL cholesterol	48,78±14,35	47,00	2-152
NonHDL	159,24±47,94	156,00	21-667

SD; Standart deviation, Min; Minimum, Max; Maximum, A1C; glycosylated hemoglobin, HDL; High density lipoprotein,

OP36

CLINICAL PROFILE OF HYPONATREMIA IN TERTIARY CARE CENTER IN INDIA: RETROSPECTIVE HOSPITAL BASED OBSERVATIONAL STUDY

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Background: Hyponatremia is the common of electrolyte abnormality. Hyponatremia is associated with altered sensorium, seizures, falls and cognitive dysfunction. Even mild hyponatremia could lead to severe complications and prolonged hospital stays. Understanding the emerging trends in manifestations and treatment of hyponatremia will help in efficient management of hyponatremia and allied comorbidities.

Methods: We have conducted the present study on 980 patients who have got admitted in AIMS, Kochi, Kerala. They were categorized based on serum sodium level under 3 groups of Hyponatremia (Mild, Moderate and Severe). The data collected were analyzed for Clinical presentations, Severity, Etiology of hyponatremia.

Results: Hyponatremia was observed predominantly in the age group >70yrs (37.3%), with male predisposition (63%). Altered sensorium is the most common presentation of hyponatremia. The number of patients with disorientation is more in the moderate hyponatremia (64%) compared to severe hyponatremia (20%). SIADH was observed as leading cause of hyponatremia. Respiratory causes pneumonia, asthma, OAD were the predominant causes of SIADH, followed by Dilutional hyponatremia and Drug Induced Hyponatremia. Of the various types of carcinoma, lung and genitourinary cancer were the main causes of SIADH. The infections associated with hyponatremia were UTI (68%), chest Infection (15%) and cellulitis (14%). 42% population with hyponatremia had Diabetes Mellitus, of which 64% had peripheral neuropathy and 10% had complications like diabetic foot and necrotizing fasciitis.

Conclusion: This study summarizes the varied presentations of hyponatremia, its causes and comorbidities which will provide better understanding of hyponatremia. Also aid the physician in diagnosing the precise cause of hyponatremia.

AN OBESE 17 YEAR OLD PATIENT PRESENTING WITH DIABETIC KETOACIDOSIS (DKA) AS THE FIRST MANIFESTATION OF DIABETES TYPE 2 (DM2)

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Backround: DKA is the most serious hyperglycemic emergency in patients with diabetes and is present in 25-40% of children and adolescents with newly diagnosed DM and in 5-25% as a first manifestation in children with DM2.

Case Report: A 17 year old patient presented to the Emergency Department with a 2 days history of severe, diffuse, sudden onset abdominal pain. He reported symptoms of upper respiratory tract infection and a 6 week history of polyuria and polydipsia. He was morbidly obese, acanthosis nigrigans was observed at the maxillary region. The haematological results showed elevated glucose levels (590 mg/dl), reduced potassium levels (2,8 mmol/l), elevated white blood cells (18.850 with 90% neutrophils). Glucose (+++) and ketones (+++) were found in the urine analysis. The ABGs confirmed severe DKA (pH:7,11, HCO3:9,7, Lactic acid:1,2). The HbA1c was found elevated (11,8%) and confirmed the diagnosis of diabetes. The anti-GAD, anti-IAA and anti-IA2A were found negative. We measured c-peptide (0, 6 min) within normal range and the glucagon and dexamethasone suppression test were normal. The serum and cortisol levels as well as serum metanephrines, VMA and TSH were found within the normal limits.

Conclusions: DKA has long been considered as a key clinical feature of DM1. However, in recent years, an increasing number of ketoacidosis cases without precipitating cause have also been reported in children and adolescents who are usually obese, with strong family history of DM2 (Ketosis Prone Diabetes, KPD). We present an interesting case with possible diagnosis of KPD.

THE DIFFERENCE BETWEEN GLYCEMIC CONTROL OF TYPE 1 AND TYPE 2 DIABETIC PATIENTS

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Aim: Type 1 and Type 2 diabetes are clinically different from each other in terms of age of onset, ketosis tendencies, family history, and metabolic differences. We investigated whether there was a difference between glycemic control of type 1 and type 2 diabetic patients who were referred to our hospital.

Method: 17985 patients who applied to our hospital for the last 5 years were included. Age, sex, glucose, A1c, triglyceride, total cholesterol, LDL, HDL and TSH levels of all patients were recorded. Patients were divided into two groups, Type 1 and Type 2 diabetes.

Results: In Type 1 (2.8%) diabetic patients, the ratio of female/male was 270 (54.1%) / 229 (45.9%) while in Type 2 (97.2%) diabetic patients, 11126 (63.6%) / 6360 (36.4%). The difference between glycemic and lipid parameters between the two groups is shown in Table 1. Glucose (p = 0.0001) and A1c (p = 0.0001) values were found to be statistically higher in type 1 diabetic patients. In Type 2 diabetic patients total cholesterol, LDL cholesterol and TG levels significantly higher, while there was no statistically significant difference in HDL and TSH levels.

Conclusion: Although Type 1 diabetics are younger, they appear to be worse in glycemic control. Psychosomatic incompatibilities following diabetes, starting at an earlier age, can be an important factor in terms of micro and macrovascular complications that may occur in the process. Frequent follow-up, long-term medical and psychosocial support may be more important in diabetic patients during childhood and adolescence.

Tablo 1. The difference between glycemic control of type 1 and type 2 diabetic patients

n=17985	Type 1 n=499			Type 2 n=17486			n dožori
	Mean±SD	Median	Min-Max	Mean±SD	Median	Min-Max	p değeri
Age (year)	46,64±17,51	49,00	18-89	55,29±12,82	56,00	18-106	0,0001
Glucose	201,70±97,1	174,00	42-545	155,92±75,10	129,00	22-708	0,0001
A1c	8,80±2,26	8,50	5,1-17,8	7,47±2,05	6,80	5-17,09	0,0001
Total cholesterol	195,23±45,83	191,00	98-419	208,03±48,28	205,00	66-1089	0,0001
Triglyceride	157,24±125,85	128,00	38-1347	175,29±148,21	144,00	18-9283	0,0001
HDL cholesterol	50,38±15,88	48,00	6-116	48,78±14,35	47,00	2-152	0,103
LDL cholesterol	119,01±39,09	115,20	23,2-345	128,13±40,36	125,85	6-466	0,0001
TSH	2,83±5,46	2,05	0,02-61	2,75±5,68	1,88	0,005-165	0,626

SD; Standart deviation, Min; Minimum, Max; Maximum, A1C; glycosylated hemoglobin, HDL; High density lipoprotein,

LDL; Lowdensity lipoprotein, TSH; Thyroid stimulated hormone

ASSESSMENT OF THE LINK BETWEEN VITAMIN D AND METABOLIC SYNDROME COMPONENTS

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Background: Vitamin D deficiency is one of the most common health problems worldwide. Growing evidence have shown that vitamin D likely plays a role in the development of Metabolic syndrome (MetS). We aimed to define relationship between vitamin D serum concentration and components of MetS.

Methods: In this cross-sectional study, 248 with MetS and 106 healthy participants were recruited by consecutive random sampling. We used IDF criteria for MetS diagnosis. Serum 25(OH) D was measured with an enzyme immunoassay kit in a single laboratory using the same lab assay. Serum 25-hydroxyvitamin D (25(OH) D) and MetS components were determined.

Results: 25(OH)D levels were lower than 25ng/mL in the patient and control groups $(23,65\pm12,95 ng/ml vs. 16,06\pm10,73 ng/ml, p<0,01)$. We found that serum 25(OH) D (ng/ml) levels of control group were significantly lower than the patient group (p<0, 01). In our study, 25(OH) D levels indicated negative correlation with waist circumference, systolic and diastolic pressure (r=-0,120, p=0.05; r=-0,164, p=0.01; r=-0,197, p=0.002) but we did not found any significant correlation of other MetS components.

Conclusion: Serum 25(OH) D concentration was only associated with waist circumference and hypertension among the metabolic syndrome components. Low vitamin D levels of control group and the link between vitamin D and metabolic syndrom components suggest us the presence of invisible part of the iceberg for Turkish population. Larger controlled studies are required to confirm these findings. Keywords: Metabolic syndrome, MetS components, vitamin D.

Table. Relationship between vitamin D and other variables

	r	Р
BMI (kg/m²)BMI	-0,202	0,001**
Waist Circumference (cm)	-0,120	0,05*
Systolic pressure (mmHg)	-0,164	0,01**
Diastolic pressure (mmHg)	-0,197	0,002**

BMI: Body mass index Statistical signifance: *p<0,05, ** p<0,01

SEVERE HYPOGLYCEMIA REQUIRING MEDICAL ASSISTANCE IN PATIENTS WITH DIABETES IS ASSOCIATED WITH SIMULTANEOUS PROLONGATION OF QTC INTERVAL

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Objectives: Severe hypoglycemia is considered a state, that may lead to sudden death as a result of cardiac arrhythmia. Aim of our study was to explore the association between severe hypoglycemic events requiring medical assistance and QT interval, in diabetic patients.

Methods: Nine clinics, in five cities of Greece, participated in a 16-month prospective survey of documented iatrogenic hypoglycemia at the emergency departments (ED). According to the protocol, a 12-lead ECG was obtained simultaneously or immediately after the management of hypoglycemia and no later than 30 minutes after the administration of glucose. The patient- ECGs were compared to those from a control group, matched for age and gender. QT and RR intervals were measured blindly by three independent cardiologists, while QTc was calculated according to the Bazett formula. QTc measurements of≥440msec were considered abnormally prolonged. Patients receiving medications possibly affecting the QTc intervaland those with hypokalaemia (serum potassium < 3.5mEq/l) were excluded from the analysis.

Results: 295 episodes of iatrogenic hypoglycemia in 294 diabetic patients were identified and 223 ECGs were obtained. 46 ECGs were excluded from the analysis, due to the presence of the above mentioned criteria.177 ECGs from hypoglycemic patients were analyzed (mean age 72.7±15.7 years, 48.6% women, 9% with type 1 diabetes) and compared to 91 controls. Mean QTc interval was significantly prolonged in patients compared to controls (440.4±45.1 msec vs. 413.9±32.5msec, p<0.001).

Conclusions: In patients with diabetes, severe iatrogenic hypoglycemia requiring medical assistance is associated with a both statistically and clinically significant prolongation of QTc interval.

PREVALENCE AND GEOGRAPHICAL DISTRIBUTION OF TYPE 1 DIABETES MELLITUS IN CHILDREN AND YOUNG ADULTS IN GREECE

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Objectives: Type 1 diabetes mellitus (T1DM) is a heterogeneous disorder characterized by autoimmune destruction of pancreatic beta cells, leading to absolute insulin deficiency. Its prevalence displays wide geographic differences. Herein, we aimed to identify all children and young adults with T1DM in Greece and to further explore the geographical distribution of the disease.

Methods: The electronic prescription database of the National Organization for Health Care Services Provision was used. Individuals < 35 years old, who received at least two fully-reimbursable insulin prescriptions with an ICD-10 code of E10 (insulin-dependent diabetes), between June 1st, 2014 and May 31st 2015 were identified. The size of the total Greek population was defined according to the 2011 census of the Greek population by the National Statistics Agency.

Results: The study population consisted of 4,081,093 individuals, accounting for 95% of the Greek population equal or younger than 35 years old. There were 6,183 cases with type 1 diabetes, corresponding to a prevalence of 1.51‰. A slight male predominance was observed (53.9%). There were no remarkable geographical differences, with highest prevalence, however, being observed in the Aegean. In the Attica area, which represents almost 50% of the total Greek population, the prevalence was 1.56 ‰.

Conclusions: This is the first study to investigate the prevalence of T1DM in the total population of Greek children and young adults. A low prevalence of 1.51‰ was observed, without north-to-south differences. However, a moderately higher prevalence was revealed in the islands of the Aegean sea, but not in Crete.

CLINICAL PROFILE OF DIABETIC PATIENTS WITH ATRIAL FIBRILLATION

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Background: There is a gap in evidence for the incidence of comorbidities among diabetic patients with atrial fibrillation (AF) and according to the underlying antidiabetic treatment.

Aim: To determine the differences of various comorbidities in diabetic versus vs non-diabetic patients with AF and among diabetic patients according to their antidiabetic treatment.

Methods: The study included consecutive patients who were hospitalized to the cardiology department with any diagnosis and coexisting AF from December 2016 to May 2017. A comparison was made between diabetic and non-diabetic patients for various cardiovascular risk factors, such as hypertension (HT), dyslipidemia (DSL), as well as comorbidities, such as vascular disease (VD) and chronic kidney disease (CKD). The diabetic patients were furtherly divided into 3 subgroups according to the underlying antidiabetic treatment: patients treated with antidiabetic pills, patients treated with insulin and patients treated with both pills and insulin.

Results: 741 patients were studied (mean age 73.02 years, 45.5% women) 34.5% of whom were diabetic. Diabetic patients had more frequently a history of HT (p=0.001), DSL (p=0.001), VD (p<0.001), stroke (p=0.008) and myocardial infarction (p=0.029), angina (p=0.015) and CKD (p<0.001) compared to non-diabetic patients. Patients who received both antidiabetic pills and insulin showed lower frequency of HT compared to those who received only antidiabetic pills and those under insulin (p=0.023).

Conclusions: AF patients with diabetes mellitus are under a greater risk for developing HT, DSL, VD, and CKD compared to non-diabetic patients. The combination of antidiabetic pills and insulin may have a protective effect against HT in diabetic patients with AF.

XPNPEP2 PROMOTER HAPLOTYPE AND ANGIOEDEMA ATTACKS

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Background: A life-threating side effect of angiotensin I-converting enzyme inhibitors (ACEi) is bradykinin-mediated angioedema (ACEi-angioedema). Recently, La Corte et al have shown that a functional haplotype in the 5'-regulatory region of *XPNPEP2* gene, encoding aminopepetidase (APP), is significantly associated with both a reduced plasma of APP activity and an increased prevalence of ACEi-angioedema. The **aim** of our study was to confirm this finding in a Greek cohort of patients with bradykinin-mediated angioedemas.

Methods: Nineteen patients with hereditary angioedema due to C1-inhibitor deficiency (HAE-CINH) (male/female: 10/9, mean age: 45.5 years, range: 25-86), 14 with bradykinin-mediated angioedema attacks of unknown origin (Unknown Angioedema, male/female: 10/4, mean age: 54 years, range: 40-82) and 29 healthy controls (male/female: 18/11, mean age: 51.5, range: 21/90) were enrolled. Two patients with HAE-CINH and 6 with unknown angioedema reported attacks related to the administration of ACEi. The detection of the three single nucleotide polymorphisms (SNPs) c.-2399C>A, c.-1612G>T, and c.-393G>A, which define the ATG-haplotype, was performed by allele-specific PCR for the first SNP and by PCR-RFLP for the rest and confirmed by sequencing.

Results: The prevalence of ATG haplotype in HAE-CINH, Unknown Angioedema and healthy controls was 31.5%, 7.0% and 24.1%, respectively. Interestingly, no Greek patient exhibiting ACEi-angioedema displayed the ATG haplotype. The allele frequency of c.-2399C>A was 21.4%, 5.6% and 20.0%, of c.-1612G>T was 36.0%, 16.7% and 25.0% and of c.-393G>A was 5.0%, 11.0% and 5.0% for HAE-CINH, Unknown Angioedema and healthy controls, respectively.

Conclusions: The ATG haplotype is not associated with the ACEi-angioedema in a Greek cohort. Obviously, the increased prevalence and the effect of ATG haplotype in HAE-CINH needs further investigation.

FAMILIAL MEDITERRANEAN FEVER (FMF): A SINGLE GREEK CENTER EXPERIENCE

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Background/Aim: FMF is a hereditary autoinflammatory disease, caused by mutations in the Mediterranean Fever gene (MEFV) encoding pyrin protein. Aim of the study was to evaluate the clinical characteristics and the spectrum of MEFV alterations in a cohort of patients diagnosed in our Department.

Methods: We retrospectively reviewed 46 FMF patients, tested for MEFV alteration in exon-2 and exon-10 by non-isotopic RNase-cleavage assay and subsequent sequence analysis.

Results: The patients (23 females) had a mean±SD age of 37.3±17.8 years, (disease duration: 58.9±98.6 months). Among all 46-patients, 38 (82.6%) presented fever, 30 (65.2%) abdominal pain, 15 (32.6%) joint involvement, 9 (19.6%) peritonitis, 9 (19.6%) pleuritis, 4 (8.7%) pericarditis, 3 (6.5%) rash, 2 (4.3%) infertility, 2 (4.6%) severe liver involvement, 2 (4.3%) periaortitis/retroperitoneal fibrosis and 1 (2.2%) meningitis. One patient presented with end-stage disease. Mutations/polymorphisms were detected in 39/46 (84.8%) [homozygotes 10/46, compound heterozygotes 8/46, heterozygotes 17/46, polymorphisms 4/46]. The mutations identified were R202Q (37%), M694V (21.7%), E148Q (8.7%), V726A (8.7%), M694I (6.5 %), E230K (4.3%), M680I (4.3%), E167D (4.3%), F479L (4.3%) and K695R (2.2%). Apart from one patient who died at the time of diagnosis due to amyloidosis, all patients were treated initially with colchicine with response in 44/45 (97.7%). One patient needed several immunomodulatory agents including canakinumab to achieve remission.

Conclusions: High-index of clinical suspicion even when the clinical phenotype of the disease is not complete along with molecular analysis is mandatory to achieve timely FMF diagnosis and initiate treatment in order to prevent the late complications of the disease.

(OP43-OP48)

OP45

INFLAMMATION SUSCEPTIBILITY BIOMARKER FREQUENCIES IN SOUTH EASTERN EUROPEAN CAUCASIANS (TNF-A, IL6 AND CRP)

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Inflammation is a complicated, well-orchestrated process by a variety of cells and chemical mediators such as TNF-a, IL-6 and CRP. The less common A allele of TNF-a gene polymorphism rs1800629 seems to increase TNF expression levels. The mutated C allele of IL-6 gene polymorphism rs1800795 and T allele of CRP gene polymorphism rs1205 are related to lower levels of IL-6 and CRP, respectively. A frequency distribution analysis of rs1800629, rs1800795 and rs1205 polymorphisms in a South Eastern European Caucasian (SEC) population sample was performed. DNA from buccal swabs of 852 non related SEC was collected and analysed. Gene distribution for polymorphism rs1800629 was G:G=81.8%, G:A=17.4% and A:A=0.8. The wild-type G allele frequency was 90.5%. Frequencies for rs1800795 were G:G=54.8%, G:C=38.7% and C:C=6,5%. The wild-type G allele frequency was 74.2%. The frequencies for rs1205 were C:C=47.7%, C:T=41.9% and T:T =10.4%. The wild-type C allele frequency was 68.6%. The frequency distribution of all analysed polymorphisms of the SEC population differs significantly when compared with other populations (SEC v/s Europeans, Africans, East Asians and South Asians for rs1800629, v/s global, Europeans, Africans, East Asians and South Asians for rs1800795 and v/s Africans and East Asians for rs1205).

Although not statistically significant, the investigated SEC population has great similarity to the global population regarding the allele distribution of rs1800629 and to the European and South Asian population regarding the allele distribution of rs1205. Inflammation is affected by multiple factors, however, the genotyping analysis of polymorphisms may play a significant role in susceptibility of inflammation.

ATTITUDE OF GREEK DIABETIC PATIENTS VS. GENERAL POPULATION SUBJECTS TOWARDS COMMON VACCINES: THEORY AND PRACTICE, DIFFERENCES AND SIMILARITIES

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Aim: To study the attitude of Greek diabetic patients (pts) vs. subjects of the general population towards vaccination against common pathogens.

Materials/Methods: 120 pts (group A) and 275 subjects of the general population without diabetes (group B) were included in the study. All were asked to fill in a specific questionnaire concerning their practice on vaccination against influenza and pneumococcus.

Results: 45% of group A vs. 29% of group B, had positive attitude towards flu vaccination, p=0.003). However, when comparing group A with a subgroup of group B with at least one risk factor- indication for vaccination (population at risk), no such difference was found (p=0.409). Furthermore, 31,7% of group A and 20,4% of group B stated that they are regularly vaccinated every year against influenza (p=0.015). However there was no difference between group A and the subgroup (p=0.344). 30% of group A and 23,3% of group B stated that they were vaccinated during the last vaccination period (p=0.157). However significantly greater percentage of the population at risk were in fact vaccinated (43,1% vs 30%, p=0.039). In both groups (A and B) low rates of vaccination against pneumococcus were recorded (14,2% vs 12,4%, p=0.623). The same was true when population at risk was evaluated (p=0.761).

Conclusions: Although in the high risk group, overall our diabetic pts and general population subjects are not sufficiently vaccinated against both influenza and pneumococcus. Greater effort is needed to convince all subjects belonging to risk groups on the necessity of vaccination.

DEVELOPMENT OF PYELONEPHRITIS IN PATIENTS ADMITTED WITH ACUTE ISCHEMIC STROKE REFLECTS STROKE SEVERITY AND DOES NOT AFFECT OUTCOME

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Background: Patients admitted with acute ischemic stroke have increased risk for pyelonephritis. However, there are limited data regarding the effect of pyelonephritis on the outcome of this population.

Aim: To evaluate the association between pyelonephritis and acute ischemic stroke outcome.

Methods: We prospectively studied 922 consecutive patients admitted with acute ischemic stroke (42.2% males, age 79.6±6.9 years). The severity of stroke was assessed at admission with the National Institutes of Health Stroke Scale (NIHSS). The outcome was assessed with dependency rates at discharge (modified Rankin scale 2-5) and in-hospital mortality.

Results: During hospitalization, 34 patients developed pyelonephritis (3.7% of the total study population). Patients who developed pyelonephritis had higher rates of dependency at discharge than patients who did not develop pyelonephritis (85.2% vs. 59.9%, p<0.05). Independent risk factors for dependency were age (relative risk (RR) 1.08, 95% confidence interval (CI) 1.04-1.12, p<0.001), history of ischemic stroke (RR 1.89, 95% CI 1.22-2.94, p<0.005) and NIHSS at admission (RR 1.49, 95% CI 1.39-1.62, p<0.001). Patients who developed pyelonephritis had similar rates of in-hospital mortality than patients who did not develop pyelonephritis (8.8% vs. 9.5%, p=NS). Independent risk factors for in-hospital mortality were diastolic blood pressure at admission (RR 1.05, 95% CI 1.03-1.07, p<0.001) and NIHSS at admission (RR 1.20, 95% CI 1.16-1.25, p<0.001).

Conclusions: In patients admitted with acute ischemic stroke, the development of pyelonephritis reflects the severity of stroke and is not independently associated with the outcome.

REPORTING PATTERNS OF LEISHMANIA INFECTION IN WESTERN GREECE: A 5-YEAR EXPERIENCE

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Background: Leishmania species represents an emerging pathogen in developed countries in the context of increasing population of immunosuppressed patients.

Aim: We aimed to explore patterns of Leishmania infection during the last five years in Western Greece.

Methods: This was a single centre, retrospective, observational study conducted at a Greek tertiary university hospital, representing a referral centre for Leishmania cases in Western Greece. Computerized searches were used to identify patients using a list of ICD-10 codes suggesting cutaneous or visceral Leishmaniasis. Available data from respective files were analysed accordingly. Results shown as median (range).

Results: Nineteen patients with a diagnosis of Leishmaniasis [n=18 (95%) visceral, 1 (5%) cutaneous] were identified through electronic searches from January 2012 to September 2017. Median age of patients was 22 (2-52) years, 12 (63%) were male, 3 (16%) reported previous canine contact while in only 3 (16%) immunosuppression was observed. Fever of 39 (38-39) was the most commonly presenting symptom (100%), followed by rigors (42%) and lymphadenopathy (37%). Splenomegaly and/or hepatomegaly was present in 63 and 36% of patients respectively. Diagnosis was made in approximately 12 (1-240) days upon fever presentation through rK39 Ag detection 17 (90%), bone marrow biopsy 3 (16%) or both 2 (11%). Fever subsided in 2 (1-4) days upon treatment initiation. All patients recovered following common therapeutic schemes of liposomal Amphotericin B in accordance with international guidelines, and discharged 8 (5-21) days later.

Conclusions: Identification of Leishmania cases requires high clinical suspicion, in view of non-specific clinical manifestations and observations of delayed diagnosis.

e-Posters

EVALUATION OF VASCULAR ENDOTHELIAL GROWTH FACTOR AS A PROGNOSTIC MARKER IN INOPARABLE HEPATOCELLULAR CARCINOMA

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Background: Hepatocellular carcinoma (HCC) ranks as the seventh most common malignancy in males and ninth most common in females. HCV infection is a major risk factor for HCC. Greece has high prevalence of HCV and rising rates of HCC.

Methods: This was a prospective study evaluating the prognostic value of vascular endothelial growth factor (VEGF) in 75 inoperable hepatocellular carcinoma patients treated with at least one session of transarterial hemoembolization (TACE). VEGF was measured before and after intervation.

Results: Partial response was achieved in 22 patients (29%) while, 36 patients (48%) had stable disease. Time to disease progression was 6.2 months. Pretreatment serum VEGF level was of prognostic value.

Conclusion: Pretreatment VEGF could be used as a prognostic marker for inoperable HCC treated with TACE.

ATYPICAL PRESENTATIONS OF HEPATOCELLULAR CARCINOMA: 2 CASE REPORTS

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Background: Hepatocellular carcinoma (HCC) represents the third cause of cancer-related mortality worldwide with a steadily increased incidence, strongly associated with chronic liver disease. We here present two cases of atypical clinical presentations of HCC.

Case Report 1: A 70-year old man was referred to our hospital due to deteriorating dyspnoea. CT thorax done on an outpatient basis was suggestive of pulmonary embolism and revealed a solitary liver lesion. Further work up with MRI showed a 17.8 x 14.3 x 15.5 cm right liver lobe lesion with imaging features characteristic of HCC. Tumor tissue invasion was noted in the inferior vena cava and, following the anatomical course of the vein, extended into the right heart atrium. Serum alpha fetoprotein levels (AFP) were increased (167 ng/mL, normal range: 0.9-8.8). Echocardiography confirmed the presence of tissue in the atrium and pulmonary embolism was subsequently attributed to neoplastic emboli. Serologic tests showed that the patient suffered from chronic active hepatitis B.

Case Report 2: An 86-year old man presented with fatigue and a palpable, progressively growing, painless mass over the left scapula. Subsequent biopsy revealed histopathologic markers indicative of metastatic infiltration from HCC. Diagnosis was later supported by a significantly elevated serum AFP level and the presence of multiple liver lesions in the context of a cirrhotic liver, due to alcohol abuse. Both opted for Best Supportive Care.

Conclusion: In patients with known risk factors, the physician should be alert for potential HCC development, that might present with less anticipated clinical manifestations.

A DEEP LEARNING APPROACH TO THE SIGNIFICANT LIVER FIBROSIS BINARY CLASSIFICATION PROBLEM USING GENDER, MORPHOLOGIC AND HEMODYNAMIC MEASUREMENTS DERIVED FROM B-MODE ULTRASOUND IMAGES

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Background: Conventional methods such as: hematologic tests e.g. FIBROMETER®, strain, shear wear elastographic (SWE) stiffness cut-off values e.g. FIBROSCANTM, SuperSonic Imagine SWE, and parameters derived from image analysis e.g. color clustering of SWE, are used for the significant liver fibrosis binary classification (SLFBC) problem. The AUC of the above methods is: 0.82, 0.82, 0.84 and 0.87 accordingly.

Aim: The aim of this study was to design and tune a deep neural network (DNN) in order to automate classification of a patient's liver fibrosis stage ($F \le F1$, $F \ge F2$).

Methods: Our data set consisted of 199 liver FIBROSCANTM validated patients with chronic liver disease from which 68 were F≤F1 and 131 were F≥F2. Input parameters for our model were: {patient gender}, B-Mode morphologic longitudinal diameter (LD) measurements: {right lobe, caudate lobe, left lobe, spleen} and one hemodynamic parameter {portal vein LD}. We designed a DNN with two hidden layers and used the 10-fold cross validation (CV) technique in order to manage underfitting, overfitting, bias and variance issues.

Results: A 10-fold CV provided the following results: Accuracy: 0.9648+/-0.0594, Sensitivity: 0.9696, Specificity: 0.9552, AUC: 0.9591 with 95% CI [0.78 - 1.00].

Conclusions: We proposed a different approach using deep learning on SLFBC problem. Our preliminary results demonstrate improved accuracy, sensitivity, specificity and AUC (all > 0.95) compared to conventional diagnostic methods. Our DNN model could be used as a decision support tool to assist clinicians on their medical report. Larger data sets are required to further validate our algorithm.

NUTRITION IN CHRONIC LIVER DISEASE: WHAT IS KNOWN AND HOW TO IMPLEMENT IT IN EVERYDAY CLINICAL PRACTICE FOR VALID NUTRITIONAL INTERVENTIONS

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Background: Due to altered substrate utilization and extend body fluid transports, the cirrhotic patient needs to adapt to a special diet. However, due to different disease progression and co-morbidities, the appropriate diet varies substantially. At the same time, the risk for undernutrition is as high as to be considered "the norm" among these patients.

Objectives: This review aims to exhibit the most rigid nutritional guidelines for chronic liver disease, as well as to highlight new assessment techniques that allow a more accurate diagnosis of the patient's nutritional/ hydration status.

Methods: Review of the latest ASPEN and ESPEN guidelines on chronic liver disease and review of the recent (since 2007) research on relevant assessment techniques.

Results: The energy needs of the cirrhotic patient are usually highly increased, whereas protein needs are only moderately increased. The type of the administered aminoacids also matters, e.g. branched-chain aminoacids have a therapeutic effect in encephalopathy. Non-protein calories should mainly come from complex, fiber-rich carbohydrates and considerably less from sugars and fats. Additionally, when portal hypertension or ascites arise, the cirrhotic patient should utterly change to a low-sodium diet. Lastly, an efficient nutritional intervention should also tackle anorexia, dysphagia, anemia etc. As for the most promising assessment techniques, bio-electric impedance vector analysis stands out, as more precise and highly applicable to bed-side patients.

Conclusions: The general recommendation for low-sodium diet cannot suit all patients with chronic liver disease. And no nutritional intervention can be as much beneficial, as when proper assessment techniques have been preceded.

ANTIPHOSPHOLIPID SYNDROME AND CHRONIC HEPATITIS C VIRUS: COEXISTENCE OR A RARE CLINICAL HCV MANIFESTATION

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Background: Hepatitis C virus (HCV) has been associated with some systemic autoimmune diseases (Sjögren syndrome, rheumatoid arthritis, and systemic lupus erythematosus) but its association with the antiphospholipid syndrome (APS) is controversial. APS is an autoimmune disease characterized by arterial or venous thrombosis and often by multiple fetal losses and (usually moderate) thrombocytopenia. It is diagnosed with the presence of antiphopholipid antibodies (aPLs) (mainly anticardiolipin antibodies [aCLs] and lupus anticoagulant [LA]).

Case report: A 73-year-old man was admitted to Department of Internal Medicine of the General Hospital of Nikaia with sudden loss of vision. He was diagnosed with HCV genotype 1b (viral load=260.000 IU/ml) in 2013. The patient was diabetic and had developed vein thrombosis. Temporal artery biopsy did not show giant cell arteritis. Initial biochemical tests showed normal liver function but blood count revealed a moderate low platelet number (118.000 to 144.000/µL the past 5 years, n = 150.000-450.000/µL). Transient elastography (FibroScan) produced a measurement of 7.2 kPa. Tests for the presence of aPLs were positive for IgM aCL (39MPL, n < 13 MPL) but negative for LA (35.7 sec, n = 31-44 sec). He was treated with a standard combination of interferon (IFN) and ribavirin (RBV) and with anticoagulants. The patient performed a follow-up examination a year later that turn out negative for IgM aCL.

Conclusion: Although the association of HCV with APS needs further clarifications the negative result for IgM anticardiolipin antibody after treatment of HCV could be an indication that APS constitutes an extrahepatic manifestation of HCV.

SUCCESSFUL TREATMENT OF CHRONIC HEPATITIS B AND D WITH PEGYLATED-INTERFERON PLUS TENOFOVIR

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Background/Aim: Interferon-based regimen has been used to treat hepatitis D virus (HDV) super-infection on top of hepatitis B virus (HBV); however, viral relapse is frequent after stopping therapy.

Case report: A 32-year-old Caucasian male with HBeAg negative chronic hepatitis B (HBV) and hepatitis delta (HDV) co-infection, presented with a persistent elevation of serum alanine aminotransferase (ALT), low levels of HBV DNA (402 IU/ml) and HDV RNA levels of 1042 IU/ml. He received combination therapy of pegylated-interferon α -2a plus tenofovir. Decline of ALT levels, undetectable HBV DNA and HDV RNA were noted 15 months of therapy, while he was still HBsAg positive. After almost 3 years of combination treatment, the patient has decided, by himself, to discontinue treatment and has been lost from follow-up. He came in outpatient liver clinic for re-evaluation 1.5 years later: ALT levels were in normal range accompanying by HBsAg loss and undetectable HBV DNA / HDV RNA levels.

Conclusions: Pegylated interferon is the most widely used drug for the treatment of chronic hepatitis D but only approximately 25% of patients maintain a sustained viral response after 1 year of treatment. The best marker of therapeutic success would be the clearance of HBsAg, but this data is rare in clinical practice.

WILSON'S DISEASE UNVEILED AFTER CESAREAN SECTION IN A 17-YEAR-OLD FULL TERM PREGNANT PATIENT

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Aim: A rare presentation of a rare disease.

Case report: A 17 years old 34-weeks pregnant patient was admitted in the O&G department of a district hospital with a 3-day history of pruritus, nausea and lower limb edema, with slightly raised aminotransferases (AST 67u/L, ALT 24u/L) and prolonged INR (1.82). Due to her condition, a csection was performed. Twenty-four hours later, she became jaundiced with a total Bilirubin of 11mg/ dl and with thrombocytopenia (96000/µL) and two days later, the patient was transferred to our ICU for further management and monitoring. On admission, she was hemodynamically stable with no signs of encephalopathy. A thorough clinical examination revealed no signs of chronic liver disease and the initial laboratory tests revealed: a Coombs-negative hemolytic anemia (Hb 9g/dl), raised total bilirubin (13mg/dl), and slightly raised aminotrasferases. A provisional diagnosis of acute fatty liver of pregnancy was made and a thorough diagnostic work up was undertaken to rule out other possible diagnoses. Imaging revealed hepatosplenomegaly with no other abnormal findings. Serological tests for viral and autoimmune causes of hepatitis were negative. In the next few day bilirubin continued to rise with a peak total bilirubin of 45 mg/dl, but with no significant change in INR and aminotransferase levels. Serum Ceruloplasmin levels were low (16 mg/dl), 24h urine copper levels were raised (80µg/24h)a nd a diagnosis of Wilson's disease was suspected. The patient was transferred to a liver transplant unit, where the diagnosis of Wilson's disease was established. She was started on D-penicillamine and gradually improved.

Conclusion: Wilson's disease needs to be considered in pregnant patients with acute liver failure.

A YOUNG WOMAN WITH OVARIAN HYPERSTIMULATION SYNDROME AND LARGE VOLUME ASCITES - A CASE REPORT

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Background/Aim: The ovarian hyperstimulation syndrome is a rare iatrogenic complication following infertility treatments such as assisted reproduction technology. The syndrome occurs after the administration of gonadotropins and it is fully manifested several days after the oocyte retrieval or assisted ovulation. The main characteristic of the syndrome is the enlargement of the ovaries due to multiple cysts and the acute loss of fluids to the extravascular space. The complications of the syndrome include ascites, hemoconcentration, hypovolemia and electrolyte imbalances. We present a woman with severe ovarian hyperstimulation syndrome manifested with huge ascites.

Case report: A 31-year-old woman was transferred from a private clinic to our hospital because of suspected ovarian hyperstimulation syndrome (OHSS). She was at the 8th day of the ovarian stimulation stage. The patient complained of epigastric pain and vomiting. The imaging tests showed extensive accumulation of fluid in the abdomen and small bilateral pleural effusions. Oliguria was noticed as well as deterioration of the renal function. The ascitic fluid was classified as exudate (SAAG<1.1). A pelvic ultrasound showed bilateral enlargement of the ovaries, suggestive of OHSS. The patient was treated with intravenous administration of human albumin, small molecular weight heparin and daily removals of ascitic fluid (20 liters totally in 5 days). One week after hospitalization her medical condition had progressively improved.

Conclusion: The ovarian hyperstimulation syndrome as a rare complication of assisted reproduction technology requires a multidisciplinary team in order to be successfully managed, especially in its severe manifestation (ascites, pleural effusions and renal dysfunction).

NEW ONSET OF WILSON'S DISEASE PRESENTED WITH ASCITES A FEW DAYS AFTER DELIVERY-A CASE REPORT

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Background: Wilson's disease is a genetic disorder in which copper accumulates in the body. This disease may have various manifestations depending on the age of diagnosis and the affected organs. Neurological symptoms, liver involvement and the Kayser-Fleisher ring are the more characteristic findings of the disease. Wilson's disease may be asymptomatic or with atypical findings for many years.

Aim: To present a woman who developed ascites a few days after delivery and diagnosed with Wilson's disease.

Case presentation: A 27-year-old pregnant woman had a history of proeclamsia during her first pregnancy and was to a close monitoring during the last weeks of her second pregnancy. Four days after labor she developed significant abdominal swelling due to the presence of ascites. The examination of ascitic fluid showed findings consistent with the presence of portal hypertension (serum albumin - ascites albumin: SAAG>1.1). The patient underwent a thorough investigation to diagnose the cause of liver involvement (viral hepatitis, autoimmune hepatitis etc). An examination by oculist revealed the presence of Kayser-Fleisher rings in the cornea of the eyes. Serum ceruloplasmine levels and 24h urine copper measurement showed findings consistent with the presence of Wilson's disease. The patient started treatment with trientine, and her condition showed gradual but significant improvement over a period of 3 months.

Conclusions: Wilson's disease has to be always in the differential diagnosis in a patient with liver involvement and especially in younger patients.

A RARE CASE OF AUTOIMMUNE POLYENDOCRINE SYNDROME TYPE 3 COMPLICATED WITH AUTOIMMUNE HEPATITIS

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Background: Autoimmune polyendocrine syndrome 3 (APS3) is a rare autoimmune disease defined by the presence of a thyroid autoimmune disease (TAD) (excluding Addison's disease) and other autoimmune diseases (type 1 diabetes mellitus, chronic atrophic or pernicious anaemia and vitiligo, alopecia or myasthenia gravis).

Case report: A 62-year-old male, obese with type 2 diabetes mellitus, was admitted to the General Hospital of Nikaia-Piraeus for monitoring of the APS. The patient had a history of subclinical hypothyroidism, generalized vitiligo and autoimmune hepatitis depicted in the permanent abnormal hepatic enzymes values, the presence of cholestasis and lymphocytosis. The clinical examination revealed thyroid-associated ophthalmopathy (unilateral exophthalmos-left eye). Examination excluded the presence of Addison's disease and type 1 diabetes mellitus. The patient underwent an esophagogastroduodenoscopy (EGDS) that did not reveal any pathological findings. High levels of high levels of AST, ALT, γ -GT and ALP were detected. A liver biopsy was conducted and a diagnosis of autoimmune hepatitis was performed. In view of the above, the type 3 autoimmune polyendocrine syndrome was defined.

Conclusion: Up until now, only 2 other cases of APS-3 complicated with autoimmune hepatitis have been described so far. To our knowledge, this is the first reported case of endocrine ophthalmopathy, vitiligo and autoimmune hepatitis progressing to cirrhosis. Treatment required a multidisciplinary therapeutic approach.

MULTIPLE, LARGE PYOGENIC ABSCESSES TREATED CONSERVATIVELY: A CASE REPORT

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Background/Aim: Pyogenic liver abscesses are a rare cause of admission. They may be caused by hematogenous dissemination, ascending cholangitis or cysts' superinfection. Treatment includes antibiotics (cephalosporins or quinolones plus metronidazole and/or aminoglycosides) and surgical intervention (aspiration, drainage or resection), when indicated: age >55 years, size ≥5cm, involvement of left or both lobes, duration of symptoms more than 7 days. Conservative treatment usually fails with high mortality (45-95%), except from solitary or small abscesses. An unusual case of a patient with multiple, large abscesses of left lobe treated conservatively is described.

Case Report: An 85-year old lady presented with fever and abdominal pain. Her medical history included hypertension and cholecystectomy. Abdominal ultrasound revealed multiple, left lobe, cavities (6.2, 5.6 and 3.26cm). Laboratory investigation showed increased WBC (17.800/µL), ESR (100/1h), glucose (184mg/dL), urea (71mg/dL), creatinine (2.2mg/dL), SGOT (73IU/L), SGPT (58IU/L) and CRP [16.3mg/dL, (<0.5)]. Abdominal CT depicted multiple cavities of left liver lobe with irregular, thick borders and faint enhancement after contrast administration. Antibodies against echinococcus, Entamoeba Histolytica and blood cultures were negative. The patient denied any surgical intervention. A combined regimen was started (IV ciprofloxacin 400mgx2, metronidazole 500mgx3) with addition of ampicillin/sulbactam (12gr/day) and amikasin (1gr/day) because of failure. Fever was sustained for two weeks with gradual remission. The patient was discharged afebrile ten days later with ciprofloxacin and metronidazole for four weeks. Her blood tests were normal. Her follow-up revealed gradual reduction of abscesses' size (less than 2cm).

SAFETY, EFFICIENCY AND BIOCHEMICAL RESPONSE OF HCV THERAPY BY DIRECT ACTING ANTI-VIRALS (DAAS)

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Background: Patients with HCV infection have a low response to combination therapy with PEG IFN-RBV with a high rate of undesirable side effects and discontinuation of therapy.

Aim: To investigate the safety, efficacy and biochemical response (normalization of hepatic biochemistry) of HCV infection therapy with DAAs

Methods: Treatment with DAAs, confirmation SVR by PCR and analysis of biochemical markers at different time points.

Results: Sample of 51 patients (24 M / 27 W), mean age 45.5 years. 70.6% of patients had META-VIR Stage IV fibrosis and 29.4% Stage III. Frequent genotype: 1b (44.0%), INR: mean 1.24, creatinine 0.87. 5.9% received Sofosbuvir and Ribavirin, 25.5% Daclatasvir -Sofosbuvir, 23.5% Simepre-vir-Sofosbuvir, 17.7% Ledipasvir-Sofosbuvir, 21.6% Ombitasvir/Paritaprevir/Ritonavir/Dasasbuvir, 5.8% Ombitasvir/Paritaprevir/Ritonavir/ Ribavirin. Overall response (SVR) was 94.1% without discontinuation of treatment and no serious undesirable side effects. The values of ALT-AST were significantly reduced from baseline to end of treatment (p <0.001) and from the end of treatment up to 24 weeks after treatment (p <0.01). The mean reduction from the baseline of up to three months after treatment was for ALT 56.2 IU / ml and for AST 61.1 IU / ml. Three patients (5.9%), two men (49 and 52 years) with genotype 4 (Daclatasvir-Sofosbuvir) and 1b (Sofosbuvir and Ribavirin) and one female (47 years) with genotype 1b (Ledipasvir- Sofosbuvir) did not achieve SVR, all were with compensated cirrhosis.

Conclusions: Treatment of HCV infection with DAAs is safe, effective without side effects and discontinuation of medication with clear biochemical benefit.

OVERLAP OF IGG4-ASSOCIATED CHOLANGITIS AND PRIMARY BILIARY CIRRHOSIS

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Background: Primary Biliary Cirrhosis (PBC) is an autoimmune liver disease of unknown aetiology distinct from IgG4-associated cholangitis (IAC), which is classified as a biliary manifestation of IgG4-related disease (IgG4-RD). Up until today only a few cases of overlapping PBC and IAC have been reported.

Case report: A 79-year-old woman was admitted to the Department of Hepatology of the General Hospital of Nikaia with abnormal liver function tests: elevated ALP (382 IU/L, n=40-125 IU/L), γ -GT (1105 IU/L, n=5-55 IU/L) and AST (58 IU/L, n=10-40 IU/L). Glucose was borderline high (105 mg/dL, n=70-100 mg/dL), albumin below normal (2.9 g/dL, n=3.4-5 g/dL) and extremely elevated CRP (165.7 mg/L, n<3 mg/L). Blood count tests revealed low haemoglobin (11.3 g/dL, n=11.8-17.8 g/dL) and hematocrit (34.1%, n=37.7-47.9%) and a high platelet count (387 K/ μ L, n=150-350 K/ μ L). Tumor marker tests came back negative. The patient had elevated IgG4 concentration (573 mg/dL, n=8-140mg/dL) and a normal total IgG level (1350 mg/dL) and was positive for the ANA test (titer >1:640, n<1:80), the anti-CENP-B antibody, the AMA (1:160, n<1:40) and the anti-M2 (83.9 U/ml, n<15 U/ml). Liver biopsy stained with Masson's trichrome stain showed fibrosis and cholestasis. MRCP images revealed: a) two large gallstones within the intrapancreatic portion of the bile duct causing obstruction and b) a small subcapsular lesion occupying segment VIII.

Conclusion: We reported a rare case of IAC-overlapping with PBC in a 79-year-old woman. When liver enzymes are elevated it is recommended to perform immunodiagnostics test for the detection of IgG4-RD.

A COMPARATIVE ANALYSIS OF METAPLASIA RATES IN PATIENTS WITH H. PYLORI RELATED CHRONIC GASTRITIS AND GASTRITIS TYPE A

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Background: In clinical practice, atrophic gastritis related to hp infection and type A gastritis (AG-A) represents the two more common forms of chronic gastritis. Intestinal metaplasia requires patient's surveillance in order to detect early dysplastic lesions. It is established that incomplete metaplasia predispose earlier in dysplastic areas of the gastric mucosa.

Aim: To assess metaplasia incidence and type in patients with AG-A in comparison with metaplasia found in patients with hp related atrophic gastritis. Patients

Methods: It is a prospective study which included 66 patients with hp related chronic gastritis [34 (51.5%) men / 32 (48.5%) women] and 38 patients with type A atrophic gastritis [14 (36.8%) men and 24 (73.2%) women]. Mean age of the study population was 58 years old. All patients underwent an upper GI endoscopy with biopsies. Data were analyzed with SPSS 21.0.

Results: Patients with autoimmune gastritis presents significant more frequent intestinal metaplasia in comparison with patients with hp related atrophic gastritis [19/38 (50%) vs 19/66 (28.8%), p: 0.03]. However both teams have a higher relative risk for metaplasia in comparison with the general population [RR: 2.474 95%CI L:1.079-H:.]. Patients with type A chronic gastritis presents significant more frequent incomplete metaplasia in comparison with hp related atrophic gastritis [4/38 (10.5%) vs 1/66 (1.5%), p<0.04].

Conclusion: Patients with type A chronic gastritis must be under surveillance in shorter periods in comparison with patients with hp related chronic gastritis because they present more frequent incomplete intestinal metaplasia. Patients with hp infection should benefit of treatment.

STRONG CORRELATION BETWEEN ESOPHAGITIS SEVERITY AND GASTRO ESOPHAGEAL VALVE PATHOLOGY IN PATIENTS WITH GERD

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Background: Lower esophageal sphincter and the diaphragm are fundamental elements of the gastroesophageal area along with its geometry that was calibrated on an endoscopic scale (Hill I-IV) and proposed as better prognostic indicator of gastroesophageal reflux disease than the junction's pressure.

Aim: To assess the relationship of the esophagitis grade of symptomatic patients with GERD in relation to the gastroesophageal valve Hill pathology.

Methods: Our study includes 68 consecutive patients with GERD symptoms who underwent an upper GI endoscopy. Hill classification has been used for staging gastroesophageal valve and Los Angeles classification for staging severity of esophagitis.

Results: Of the 68 patients, 45 (66.2%) were male and 23 (33.8%) were women with an average age of 51.3 years (range 18-82). Patients with severe oesophagitis C and D had significantly higher COSB III and IV [18 (85.7%) vs 3 (14.3%, P = 0.014].

Conclusion: Severity of oesophagitis was more frequent found in patients with more advanced stage of the Hill classification, indicating that pathology of the gastro-esophageal geometry seems to be significantly associated with reflux severity.

Hill stage	Esophagitis A or B Nr.=47 (%)	Esophagitis C or D Nr.=21 (%)	P	
Hill I+II	22 (46.8)	3 (14.3)	0.014	
Hill III+IV	25 (53.2)	18 (85.7)	0.014	

Table: Relation between esophagitis severity & staging of Hill's valve

MALABSORPTION SYNDROME AS A FORM OF PRESENTATION OF MIXED CONNECTIVE TISSUE DISEASE

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A 78-year-old woman admitted to Internal Medicine with chronic diarrhea of 6 months with lower limb disability, retrosternal pain, asthenia and palpitations. Blood test with hypokalemia and severe hypomagnesemia, acute renal failure, normocytic normocytic anemia, high ESR, total protein deficit, albumin and vitamin D. ECG with supraventricular paroxysmal tachycardia in relation to severe hypokalemia. Chest radiography, ultrasound and abdominal MRI, colonoscopy, echocardiogram and octreoscan were normal.

The autoimmunity study revealed ANA positive with mottled pattern, Ac AntiRNP, Ac AntiSM and Anti SS-A / Ro positive. Recover renal function and correct metabolic disorders, start oral corticosteroid treatment with striking clinical improvement, finding a real asymptomatic date.

The definitive diagnosis of the mixed connective tissue disease is complex, since the manifestations of the disease are usually presented sequentially, and may depend on criteria of several connective tissue diseases but with a different prognosis than the rest. Therefore, it is important not to forget this entity when it comes to patients with multiple clinical manifestations carried over time. The initial clinical manifestations of nonspecific alterations to joint, mucocutaneous, cardiovascular, pleuro-pulmonary, gastrointestinal, neurological or renal manifestations. Within the gastrointestinal tract, malabsorption due to bacterial overgrowth and enteropathy loses proteins and alterations that occur frequently.

ACUTE PANCREATITIS DUE TO SEVERE HYPERTRIGLYCERIDEMIA. A CASE REPORT

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Background: Acute recurrent pancreatitis induced by hypertriglyceridemia is a rare condition. Usually serum triglyceride levels more of 1000mg/dl represents the causal factor. Clinical course and outcome presents no differences with other causes. Several treatment modalities have been proposed such as insulin and heparin administration or plasmapheresis.

Case report: We report a rare case of a 40 years old male patient with obesity and hyperlipidemia who has been admitted in our department with fever, epigastric pain, belching and bloating. He presented with 103 pulses/min, temperature: 37,6, blood pressure 155/93mmHg and a respiratory rate of 28/min. Laboratory findings reveals: wbc: 14.7k/μL, Hb:16.3 gr/dl, plt:183 k/μL, pt:13.2sec, INR:1, aptt:26.7sec, dbil:1 tbil:1.3, CK:30, LDH:230, SGOT:90, SGPT:450, ALP:88, γGT:45iu/L, Gluc:252mg/dl urea:19,8mg/dl, creat:0,61mg/dl, Trigl:5940mg/dl, K:4,5mEq/L, Na:127mEq/L Ca:9,2mg/dl Alb:4,2gr/dl, Amylase:541iu/L, Lipase:1550,4u/L, CRP:6.2mg/dl. Blood Gas: Ph: 7.45, pCo2:29.9, pO2:72.2, sO2%:95.4. Abdominal ultrasound reveals fatty liver infiltration without focal lesions, gall-blader and bile-duct without stones. Abdominal x-ray typically with sentinel loop. We perform a computer tomography which reveals pancreatic enlargement with peripancreatic fat stranding and a small left pleural collection. Initial treatment of the patient included analgesics narcotis and intravenous fluids. Moreover, insulin administration along with heparin results in a significant clinical improvement of the patient in only 48 hours. Also, laboratory tests prove this with amylase levels of 157iu/L and lipase of 225u/L. Triglyceride levels' reduction was also impressive with 713mg/dl in 48h.

Conclusions: Patients with hypertriglyceridemia induced acute pancreatitis is an urgent incident. Insulin and heparin seems to be an effective rescue therapy.

EXTREMELY HIGH CA 19-9 LEVELS, IS IT ALWAYS CANCER?

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Background/Aim: Carbohydrate antigen 19-9 (Ca19-9) is a common serum-based marker for diagnosis and follow up of pancreatic and other gastrointestinal malignancies. According to the literature, a CA19-9 value higher than 1,000 U/ml has almost 100 % specificity for pancreatic carcinoma. Nevertheless, few cases of benign disease including chronic pancreatitis, cirrhosis, cholangitis and choledocholithiasis with elevated CA19-9 levels have also been reported.

Case report: A 45-year-old male patient presented to our Emergency Department with a 4-week history of abdominal and left hip pain. Except for past alcohol abuse his medical history was otherwise unremarkable. Clinical and laboratory examination indicated diabetic ketoacidosis, which was treated properly and an extremely elevated CA 19-9 serum level (1200 U/ml). Additionally, antibodies for diabetes mellitus type 1 were negative. Abdominal CT scan and MRI demonstrated pancreatic lesions suspicious for pancreatic cancer, enlarged peripancreatic lymph nodes and osteolytic lesion in the left hip. Suspicion of metastatic pancreatic cancer was raised and a PET scan was performed but no metabolic activity was detected. CA 19-9 levels were checked two weeks later and found within normal range. Symptomatology and pancreatic lesions were attributed to past acute pancreatitis and osteonecrotic lesion to alcoholism history.

Conclusions: Elevated serum CA 19-9 levels should be interpreted cautiously as a diagnostic marker.CA 19-9 by itself is insufficient for diagnosing pancreatic cancer and should be evaluated according to clinical context and imaging findings.

SIADH SECONDARY TO ACUTE INTERMITTENT PORPHYRIA, A DIAGNOSTIC CHALLENGE THAT CAN NOT BE DELAYED

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Case Report: A 30-year-old woman with persistent abdominal pain of 1 week of evolution, going to the hospital emergency department for treatment with NSAIDs, benzodiazepines, spasmolytics and opiates with no response to oral and intravenous administration. Physical exploration without findings.

Analytical study highlights hyponatremia: 116ng / ml, with decreased plasma osmolarity, sodium in urine of 146 mEq / l, urinary osmolality of 447 mOsm / kg with renal function and normal urinary sediment. Negative pregnancy test. Rx were normal. Abdominal CT with no significant retroperitoneal adenopathy, jejunum discreetly distended without evident cause. Gynecological assessment without findings. Surgery rules out acting on your part. In the presence of hypoosmolar hyponatremia with normal extracellular volume, we consider the initial differential diagnosis of SIADH, hypothyroidism or adrenal insufficiency. Start treatment with water restriction and hypertonic serum with very slight improvement. It is ruled out in analytical thyroid and adrenal pathology, continuing the etiology of SIADH without result until we receive a result of porphyrins in urine that are positive. In the interval between the availability of the results and the haematin for treatment, the patient developed motor neuropathy with proximal symmetric muscle weakness in the upper extremities that required admission to the ICU.

Conclusions: This case should remind us of the diagnostic possibility of an acute intermittent porphyria in the face of recurrent abdominal pain with hyponatremia, which should be diagnosed as soon as possible since delays in the initiation of treatment may lead to a fatal evolution or irreversible neurological damage.

are absent.

ePP20

EOSINOPHILIC ENTERITIS PRESENTED WITH IRON RESISTANCE IRON DEFICIENCY ANEMIA

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Background: Iron deficiency anemia is a global health problem and prevalent medical condition encountered in everyday clinical practice. Female are more commonly affected. The cause of iron deficiency should always be investigated especially in young male as it could be caused by serious diseases. Evaluation by clinical history, urinalysis and serological tests for celiac disease, gastroscopy and colonoscopy are the key diagnostic tools for investigation. We must insist on diagnostic evaluation in the absence of response to oral iron, or if the anemia is severe or clinical suspicion of important disease persists. Repeat endoscopic studies should be deliberated in many cases and

random mucosal biopsies are strongly suggested even if endoscopically identified mucosal lesions

Case report: We describe a 40-year-old male presenting iron resistance iron deficiency anemia, chronic watery diarrhea and unintentional weight loss. Laboratory studies showed microcytic anemia and peripheral eosinophilia (total eosinophil count: 3708). He was under 200mg iron supplement when he presented to our clinic. However, Iron level was 17ug/dL, TIBC 408ug/dL, and Ferritin level 1.7ng/mL. Esophagogastroduodenoscopy and colonoscopy were performed with random biopsy, revealing eosinophilic infiltration in the duodenum and terminal ileum. The patient was eventually treated with oral prednisolone and elimination diets with complete resolution of symptoms.

Conclusion: This case highlights the diagnostic challenge of a condition that presents with common symptoms and apparently normal investigations. These findings should motivate and encourage the clinician to consider rarer diagnoses and pay special attention to seemingly unimportant clues such as peripheral eosinophilia.

AUTOIMMUNE HEPATITIS IN AN ELDERLY TURKISH MAN

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Backgound: Autoimmune hepatitis (AIH) is an uncommon chronic progressive inflammatory disease of the liver, characterised by hypergammaglobulinaemia, circulating autoantibodies and the histological change of interface hepatitis, which is responsive to immunosuppressive therapy in the majority of cases.

Case Description: A 78-year-old man presented to our outpatient clinic with jaundice. He had known hypertension and coronary heart disease. He had no history of smoking, drinking alcohol, using any herbal medicine. On examination he was icteric, he had no lymphadenopathy or hepatosplenomegaly. His liver panel showed AST 1039U/L, ALT 1134U/L, ALP 183U/L, GGT 167U/L, total bilirubin 9,8g/dL, direct bilirubin 6.5mg/Dl, albumin 3 g/dL and INR 1.39. He tested negative for HBsAg, anti-HBs, anti-HBc total, HBV DNA by PCR, anti-HCV, HCV RNA by PCR. ANA was positive at 1:1320 and ASMA was positive at 1:3200 dilution but tests for AMA, anti-M2, anti-LKM 1 were all negative. Serum IgG was 2700mg/dL. Ultrasonography of abdomen revealed coarse ecotexture of liver with irregular. Percutaneous liver biopsy was planned but the patient did not accept it. We diagnosed him as type-1 AIH according to AIH scoring system and treated with 40 mg prednisolone per day with reduction of the dose. After 15 days treatment, hepatic tests were in normal range and he remained in remission at 3-month follow-up.

Discussion: Diagnosis of AIH often seems to be delayed in the elderly, presumably because AIH is erroneously considered to be a disease of young age. AIH should be considered in the older patient to avoid delayed initiation of immunosuppressive therapy.

ACUTE LIVER FAILURE FOLLOWING PHYSICAL EXHAUSTION

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Case report: We present a rare case of acute liver failure. A 28-year-old albanian male patient was brought in by ambulance, after being found drowsy and exhausted. A 5-6 hour walk in a hot day had preceded as he tried to pass the borders on foot according to witnesses. He was admitted in our ICU drowsy but easily rousable, hypotensive, and tachycardic. Due to hypovolemia, he was started immediately on iv fluids, vasopressors and antibiotics. Laboratory tests revealed acute kidney injury with serum creatinine of 2.4 mg/dl, rhabdomyolysis, raised aminotrasnferases with prolonged INR. The patient gradually improved as his blood pressure stabilized and he became more alert. However, the laboratory test values continued to worsen with a rise in the aminotransferase levels (AST 4800 u/L, ALT 6600 u/L), CK levels (peak value 59940 units/L), INR (peak level 4) and development of jaundice (peak total bilirubin 13 mg/dl). Serology testing for Hepatitis A, B,C, HIV,HSV,EBV,CMV, leptospirosis, autoimmune screening as well as blood and urine cultures were negative, ceruloplasmin levels were normal and ultrasound of the abdomen showed mild hepatomegaly with no other abnormal findings. When the patient recovered, he gave no significant past medical history and denied taking any medication, herbs, illicit drugs or any mushrooms. Conservative treatment with iv fluids was continued and a few days later the laboratory values started to improve until discharge to the Gastroenterology ward.

Conclusion: This is an interesting case of acute liver failure, as only few cases of acute liver injury secondary to physical exhaustion have been reported.

AN INTERESTING CASE OF A PATIENT WITH CHRONIC PANCREATITIS PRESENT WITH ANEMIA

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Background/Aim: Aneurysm of the splenic artery is uncommon and constitutes about 60% of the visceral aneurysms. We report a case of a patient with past medical history of chronic alcoholic pancreatitis and chronic HBV infection who had been hospitalized for anemia.

Case report: A 55-year-old patient with multiple hospitalizations due to chronic alcoholic pancreatitis, presented to the hospital with generalized weakness and fatigue. The blood tests showed an Hb:5.6 mg/dl. The gastroscopy revealed an active hemorrhage from the ampulla of Vater. Computed tomography of the abdomen demonstrated a pancreatic pseudocyst detectable on previous imaging, while digital angiography showed stagnation of the contrast agent inside the pseudocyst which communicated with the splenic artery. Ulcers of the splenic artery which were illustrated through the way of the pseudocyst were consistent with aneurysm. Embolization of the splenic artery was considered as the treatment of choice since the patient was at high risk. The first attempt was unsuccessful while it revealed a pseudoaneurysm in the middle area of the splenic artery. A new successful attempt was made a week later.

Conclusions: Aneurysm of the splenic artery is uncommon and the angiography confirms the diagnosis. Pre-existing conditions related to the formation of these aneurysms are fibrodysplasia, portal vein hypertension with splenomegaly and an increased number of pregnancies. Other uncommon causes like the patient's described above, are inflammatory diseases (chronic pancreatitis) and mycotic aneurysms. The embolization consists the treatment of choice in high risk patients.

OLMESARTAN-INDUCED ENTEROPATHY: A CASE REPORT

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Background/Aim: We present a case of severe malabsorption in a hypertensive woman treated with olmesartan.

Case Report: A 80-year-old Caucasian woman with hypertension, without any history of cardio-vascular disease, diabetes, and gastrointestinal disease, presented with chronic diarrhea, nausea and anorexia resulting in weight loss. The patient was treated with olmesartan (20 mg/d) until that time. Physical examination revealed muscle weakness and signs of hypocalcemia. Laboratory exams showed severe malabsorption as demonstrated by severe hypocalcemia, hypokalemia, hypophosphatemia, hypoalbuminemia and anemia. Olmesartan was stopped, and parenteral nutrition, electrolyte correction and intravenous vitamin D supplementation were initiated. The patient underwent endoscopy which revealed aphthous ulcers in the terminal ileum. She was put on treatment with budesonide awaiting the biopsy results. Patients' status rapidly improved in the next 10 days, and she was discharged with instructions for oral electrolyte and mineral supplementation. Biopsy showed chronic nonspecific ileitis and chronic inflammation accompanying by villous atrophy.

Conclusions: Olmesartan has been associated with sprue like enteropathy. This case report presents a case of severe malabsorption due to olmesartan, treated successfully with discontinuation of the offending drug and a short scheme of budesonide. Olmesartan induced enteropathy should always be included in the differential diagnosis of chronic diarrhea in hypertensive patients treated with this agent.

RECURRENT NON-VARICEAL UPPER GASTROINTESTINAL BLEEDING (NVUGIB) CAUSED BY SIMULTANEOUS EXTRAVASATION OF TWO DIFFERENT VESSELS TREATED WITH EMBOLISM

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Background: Acute NVUGIB is a common condition with significant morbidity and mortality, commonly from peptic ulcers. Endoscopic criteria determinate the type of treatment. A second attempt is recommended at rebleeding following index endoscopy with endoscopic hemostasis if indicated. In case of failure trans-arterial embolization (TAE) or surgery may be considered.

Case Report: A 92 years old woman in anticoagulants hemodynamic stable was admitted to the ER due to hematochezia and melena. Few hours later a new episode of hematochesia with decrease of Hemoglobin led to gastroscopy. A deep ulcer in the anterior duodenal bulb wall with clean base (Forrest IIc) was observed without red blood in the stomach. Patient received RBC transfusion and remained homodynamic stable. The following fifth and sixth day afterwards, hematochesia was reported with decrease of Hemoglobin. Upper endoscopy revealed active bleeding from the ulcer at the duodenal bulb (Forrestlb) treated with endoscopic methods. Three days later a new episode of hematochesia and reduction of Hemoglobin lead to another upper endoscopy where an adherent clot was observed on the duodenal bulbe's ulcer with active bleeding. Two hemostatic clips plus diluted epinephrine controlled the hemorrhage. However, 12 hours later angiography was performed because of a large volume hematochesia. Dysplastic vessels in the bulb without extravasation but extravasation in the distal area of 2nd part of duodenum were responsible for bleeding they were both successfully treated with embolism.

Conclusions: TAE is very effective method of control of NVUGIB particularly in rare cases of active bleeding from multiple sites.

THE MOST COMMON CAUSES OF GASTROINTESTINAL BLEEDING ALONG WITH THEIR ASSOCIATED SEVERITY

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Background: Depending on its location, gastrointestinal bleedings are classified into upper and lower ones.

Objective: To underline the most common causes of gastrointestinal bleeding along with their associated severity.

Methods: 176 patients that underwent upper or lower gastrointestinal tract endoscopy during the period 2014-2016 were included while a complete medical history was obtained.

Results: 58% presented with an upper gastrointestinal tract bleeding, 26% with a lower tract bleeding and 16% were found to have both upper and lower tract bleeding. The antiplatelet and anticoagulant therapies, were the most common causes, with a 58% of the patients having received either antiplatelet or anticoagulant therapy. Active GI bleeding during endoscopy was found in 73% of patients under any type of anti-clotting medication and in 84% of patients receiving NSAIDs. Upper GI tract bleeding was more common in males (69% of males presented with an upper GI tract bleeding whereas 41% of females presented with a lower GI tract bleeding). Finally, 53% of men and 82% of women were over 75 while 47% of men and 18% of women were under 75.

Conclusion: The use of any type of anti-clotting medication was considered as the most common cause of gastrointestinal bleeding whereas the role of antiplatelet agents was underlined. The low rate of use of newer anticoagulant agents (NOACs) was also noted. Another important finding worth mentioning is the fact that in a large proportion of patients receiving antiplatelet therapy, there was active bleeding at the time of endoscopy.

COMPARATIVE STUDY BETWEEN SEROLOGICAL AND HISTOPATHOLOGICAL FINDINGS FOR COELIAC DISEASE AND PREVALENCE OF COELIAC DISEASE IN A MEDITERRANEAN POPULATION OF MALE YOUNG ADULTS

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Aim: This study was conducted to draw the attention of clinicians concerning the reliability, sensitivity and specificity of established serological testing versus jejunal biopsy for coeliac disease (CD) as well as to implement an established serological screening procedure for CD and to estimate the prevalence of CD in a Mediterranean population of male young adults.

Materials-Methods: Serum samples were collected from 5739 military recruits, mean age 22 years (range 18-26 years). All the samples were tested for IgA-serum levels to exclude IgA deficiency. Samples with total IgA within the normal range were tested for IgA antibodies against native human-tissue transglutaminase (anti-tTG). Samples that were anti-tTG positive were tested for IgA antiendomysial antibodies (EMA). All antibody positive subjects were asked to undergo jejunal biopsy procedure. Results: Results of both tests (anti-tTG and EMA abs) were concordant. Of the 5739 subjects 35 (0,61%) had positive tissue transglutaminase (t-TG) and endomysial antibody (EMA) tests. Of the 35 subjects with positive antibody assays 33 subjects agreed to undergo biopsy and 31 (0,54%) had evidence of CD on biopsy. Of the 31 subjects with evidence of CD on biopsy 27 were considered to be asymptomatic and 4 were presented with a subclinical course.

Conclusions: The minimum prevalence of CD among male young adults in southern Greece and Cyprus is estimated to be 0,54%. The presence of serum tissue transglutaminase and endomysial antibodies is predictive and indicative of CD which allow better selection of patient for jejunal biopsy findings (villous atrophy, crypts hyperplasia and intraepithelial lymphocytes).

A CASE OF POSSIBLE PRIMARY CATASTROPHIC ANTIPHOSPHOLIPID SYNDROME

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Backround: Catastrophic antiphospholipid syndrome (CAPS) is a rare, lifethreatening condition than differs considerably from the simple/classic antiphospholipid syndrome (APS) in several aspects, viz, the rapid development of multiorgan failure (within a week) following precipitating factors, infection, trauma including minor surgery like biopsy, lupus flares, anticoagulation problems ,malignancies. The multiorgan failure predominantely results from small vessel occlusion although large vessel occlusion can occur (deep vein thrombosis, arterial occlusion causing stroke or peripheral ischemia). It can be primary or secondary to immune disease, particulary lupus.

Case presentation: A 37 years old woman was admitted in the Vascular Surgery Department because of critical ischemia of the left limb and significant occlusion of polpiteal artery on angiography, wheareas there was an usuccessfull attempt of angioplasty. Because of the prolonged aPTT there was a strong suspicion of APS and Tinzparine was started. Three days after she displayed fever, respiratory distress and worsening renal function with proteinuria. In conjunction with high levels of anticardiolipin antibodies, positive LAC, presence of cryoglobulins and negative serology for lupus and vasculitis primary CAPS was suspected and patient started plasmapheresis, pulses of methyl-prednisolone followed by oral administration, cyclophosphamide and warfarin, with significant clinical and serologic improvement. Twenty-five days after a succesfull angioplasty was performed with Tizaparine use before and after the procedure. Eighteen hours later she displayed acute respiratory distress, hemodynamic colapsus and she died within one hour probably due to massive pulmonary embolism (family refused autopsy).

Conclusions: Primary CAPS is a rare severe condition with high mortality even with early diagnosis and treatment initiation.

BEHÇET'S DISEASE PRESENTING AS RECURRENT ORCHEO-EPIDYDIMITIS IN A PATIENT PREVIOUSLY MISDIAGNOSED AS JUVENILE RHEUMATOID ARTHRITIS

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Background: Behçet's Disease (BD) is a rare systemic vasculitis, occurring mainly in Asia, Middle East and Mediterranean, characterized by recurrent, typically self-limiting, attacks of acute inflammation, manifestating with aphthous stomatitis with genitourinary, eye, skin, gastrointestinal, nervous, vascular and joint involvement.

Aim: Presentation of a BD case, previously misdiagnosed as juvenile Rheumatoid Arthritis (JRA) in childhood, fully developed in adulthood.

Case report: An 18-years-old male with history of childhood-onset uveitis (diagnosed as JRA, treated with adalimumab) presented with recurrent testicular pain, fever and diarrhea. On examination, tenderness of testicle and epididymis, rebound tenderness in lower abdomen, painful splenomegaly, oral painful-aphthous ulcers (>3 times last 6 months) and acneiform back lesions were noted. Significant laboratory findings: elevated inflammation markers, hyperglobulinemia. Scrotal ultrasonography: Enlargment and increased blood flow of right epididymis. Patient was treated empirically with antibiotics based on abdomen CT findings indicative of inflammatory bowel disease (IBD). GI endoscopy revealed aphthous ulcerations of colon and atrophy of intestinal villi. After remission of initial symptoms, erythema nodosum-like lesions appeared on both knees with concomitant painful pustules at the sites of venipuncture (pathergy phenomenon). Lesion biopsy revealed plasma and lymphocyte infiltration and granulomatous inflammation with deep ulceration. Meeting the criteria of BS, supported by HLA-B51 positivity, adalimumab, azathioprine and colchicine were administered with subsequent remission of skin lesions and aphthous ulcers in MR enterography.

Conclusions: This is a unique case of BD, presenting as uveitis in childhood, while full-blown disease developed in late adolescence. Atypical presentation, mimicking acute orcheo-epididymitis and IBD, delayed diagnosis.

ATYPICAL PRESENTATION OF FAMILIAL MEDITERRANEAN FEVER AT ADVANCED AGE

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Background: Familial Mediterranean Fever is the most common autoinflammatory disorder. Even though it is inherited by autosomal recessive manner, it is referred that this disorder manifests in heterozygotes as well. Usual age of manifestation is at an age of less than 20 years at a percentage of 65-90%, however at a percentage of less than 0.5% it can manifest at an age of greater than 50.

Case report: A 58 year-old woman, Greek-Cypriot, β-heterozygous anemia was admitted due to fever over the last 20 days. Blood tests showed microcytic hypochromic anemia and elevated levels of ESR 75 mm/1h, CRP 115 mg/L and serum amyloid 68.8 mg/dl. Negative immunological tests. At the CT scan was observed pericardial effusion 1.4cm, pleural effusions and hepatomegaly 22.3cm. Biopsy of the rectum and congo red stain was positive. Additionally, the genetic control for TRAPS and CAPS syndrome was negative, but the FMF test was positive with heterozygoty in exon 2 - E148Q. The patient was administered Colchicine 2mg/daily with gradual reduction of pericardial effusion.

Conclusion: Genetic variations of the exon 2 are related with mild non specific inflammatory manifestations. Pericardial effusion in Familial Mediterranean Fever could present in less than 1% in homozygote cases and in a lesser percentage in case of heterozygotes. In cases of inflammatory syndromes and secondary amyloidosis independent of age, autoinflammatory disorders must be excluded.

MYOPERICARDIAL INVOLVEMENT IN A CHURG STRAUSS SYNDROME PATIENT

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Background/Aim: Churg-Strauss syndrome (CSS) is a necrotizing vasculitis of small vessels characterized by upper and lower airway disease followed by peripheral eosinophilia and multiple organ involvement. We present an interesting case of a woman with CSS and myopericardial disease. Cardiac involvement is evident in 40-50% of CSS cases and carries poor prognosis. Some of the features of myocardial CSS involvement can be evaluated by echocardiography however cardiac MRI is advocated as the gold-standard method with crucial role in the prompt recognition and management of such patients.

Case description: A Caucasian 45-year old woman, with a kwown history of CSS under no medication, presented with dyspnea NYHA III of recent onset. Her chest-X-ray revealed bilateral pleural effusions and the ECG showed sinus tachycardia, left ventricular hypertrophy and diffuse horizontal ST segment depression. Blood analysis was remarkable for leukocytosis, severe eosinophilia (=15,000/μl), abnormal troponin and BNP levels. Initial transthoracic echocardiogram (TTE) revealed EF=45%, hypokinetic inferior and inferolateral and mid/apical anteroseptal segments with marked hyperechogenicity of inferior and inferolateral wall involving both the subendocardial and subepicardial segments. The patient received 1 gr methylprednizolone/24hrs x 3days with clinical improvement. Repeat TTE, 5 days later, demonstrated improved EF=55% and slightly less infiltration. Cardiac MRI was performed and all three facets of the inflammatory process namely acute/chronic inflammation and healing were evident in various degrees with signs of fibrosis. The patient was discharged receiving, metoprolol, ramipril and monthly cyclophosphamide IV. Her global systolic function remains normal.

BACTERIAL OVERGROWTH SYNDROME WITH MALABSORPTION DUE TO INTESTINAL PSEUDO-OBSTRUCTION IN A CASE OF LIMITED SYSTEMIC SCLEROSIS

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Background: Intestinal bacterial overgrowth syndrome is a clinical entity, which can be derived from intestinal motility dysfunction.

Aim: Case report of first diagnosed limited systemic sclerosis with over 2 years persistent intestinal symptomatology.

Case report: A 79 years old female with history of essential hypertension was admitted because of chronic diarrhea and significant weight loss. History of multiple hospitalizations due to similar symptomatology and recent colonoscopy with colorectal adenoma (biopsies negative for malignancy). Physical examination: BP 140/80 mmHG,T:36.3°C,SatO2: 98%,HR: 75/min, dehydration. Labor: severe hypokalemia, hypocalcemia, hypomagnesemia.

Results: Clinical and laboratory improvement after parenteral K, Mg, Ca substitution. CT-Abdomen: small-intestinal dilated loops with air fluid levels. Labor: Stool analysis: fat, undigested food components. Stool culture/ova and parasites examination: negative Cl. Difficile (Ag, Tox): negative. Thyroid function normal. Hormones: Chromogranin A, Gastrin, Glucagon, VIP, Calcitonin, Thyroglobulin: normal. Serology: (-) anti-tTG, anti-EMA anti DGP. (+) ANA (1:320), anti-ENA, anti-SCL-70 anti-RNP, anti-Ro, anti-Sm. Gastroscopy: atrophic gastric mucosa, atrophic duodenal folds (biopsy: atrophic villi, hyperplastic crypts, lemphocytes proliferation of lamina propria). Oesophageal-PH-manometry: incomplete relaxation of the lower esophangeal sphincter. Echocardiogram: negative for pulmonary hypertension. Under the diagnosis bacterial overgrowth syndrom with malabsorption due to limited systemic sclerosis, therapy with rifaximine and prokinetic agents. Gradual recession of the diarrhoic syndrome, and the patient was referred to a rheumatology clinic.

Conclusions: Intestinal motility disorders caused by systemic sclerosis can lead to malabsorption due to bacterial overgrowth, and subsequently to chronic diarrhea. In this case, considering the absence of the typical manifestations of systemic sclerosis, the diagnosis was based on serologic testing.

AN INTERESTING CASE OF GIANT CELL ARTERITIS IN AN ASYMPTOMATIC 72-YEAR-OLD PATIENT

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Background: Giant cell arteritis (GCA) is a common vasculitis especially in elderly, female patients. It mainly involves medium to large size vessels and expresses itself with classic symptoms, such as headache, jaw claudication, visual disturbance, fever or even acute visual loss. Asymptomatic cases often cause diagnostic problems and underline the importance of including GCA in the differential diagnosis of anemia and high inflammatory markers in the elderly population.

Case Report: The present study reports an interesting case of a 72-year-old female who was admitted to our hospital for further investigation of her anemia and elevated C-reactive protein and erythrocyte sedimentation rate. The patient did not present any of the classic symptoms of giant cell arteritis. However, the lack of explanation for her anemia and elevated inflammatory markers prompted a biopsy of her right temporal artery. The result was consistent with the diagnosis of giant cell arteritis. The patient was immediately commenced on oral prednisone, thus avoiding potential irreversible complications and additionally she was referred to a rheumatologist. The inflammation markers decreased and her blood tests normalized.

Conclusion: Although anemia and elevated inflammatory markers are infrequent initial manifestations of giant cell arteritis, physicians should always include it in their differential diagnosis in the elderly population, mainly because the disease could ultimately have disastrous effects on the patient's vision and health.

NEUROLEPTIC SYNDROME

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Case report: 25-year-old patient with a deep autistic spectrum disorder is admitted to Psychiatry Department for psychomotor agitation and at the fourth day of admission started with fever of 39.6°C and muscular stiffness. Initially treated with haloperidol because of the agitation and antibiotics due to tooth infection. Blood analysis revealed CPK elevation (up to 30000 U/L) with an elevation of acute phase reactants (PCR and VSG), plus acute renal failure. The patient was treated with dantrolene started after blood and urine culture extractions, with the suspicion of malignant neuroleptic syndrome, and the antibiotic spectrum is increased. Despite the start of dantrolene 2 mg/kg every 8 hours during 15 days, the fever remains between 37.5-39 degrees every day, and appearance of edema in both arms. Due to lack of peripheral venous access, a central venous catheter was channeled, later with appearance of late complication as deep venous thrombosis of upper right arm confirmed by Doppler ultrasound and anticoagulation is started. Central venous catheter tip is cultured and multi-sensitive Klebsiella Pneumoniae is isolated. Rest of blood and urine cultures are negative. Echocardiography and abdominal ultrasound without abnormalities. Dantrolene is removed from the treatment after 15 days, and two days later that bromocriptine is added to treat the fever. Within the 48 hours after the start of bromocriptine, the fever disappears. The patient was discharged after 7 days without fever, maintaining a progressively decreasing dosis of bromocriptine for 2 months at home, until totally finishing the treatment.

SYSTEMIC LUPUS ERYTHEMATOSUS FLARE IN A PREGNANT WOMAN WITH HISTORY OF ARTHRITIS ASSOCIATED WITH POSSIBLE NON-PRIMARY CMV INFECTION

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Background: Pregnancy is associated with a high rate of systemic lupus erythematosus (SLE) flares ranging from 25-60%. Early diagnosis and management is essential for managing an uneventful pregnancy.

Case Report: A 29-year-old female at 16 weeks gestation with history of seronegative rheumatoid arthritis in remission with no current treatment and Hashimoto's thyroiditis, presented with fever up to 39oC for two weeks and sore throat. She had been prescribed cefuroxime without response. Virology testing before pregnancy indicated latency for CMV infection (positive IgG). Clinical examination revealed multiple erythematous macules on the trunk and aphthous stomatitis, without palpable lymphadenopathy. Laboratory test showed CRP:2mg/dl, ESR:88mm/hr and lymphocytopenia:400/µl. Blood, urine, vaginal cultures proved sterile and abdominal ultrasonography was normal. She progressively developed arthritis of the proximal interphalangeal, carpometacarpal joints and reported arthralgias at both knees and shoulders with morning stiffness. CMV IgM titers were positive suggesting reactivation or reinfection. Testing for EBV, Toxoplasma, Parvo, HSV and Coxsackie were negative. Immunology results showed ANA:1/1.280, anti-ds-DNA:816IU/ml, positive anti-SS-A(Ro) and hypocomplementemia. Renal, liver function and urine sediment were normal. A rheumatologist was consulted and the patient was diagnosed with SLE flare during pregnancy. She was treated with prednisolone and hydroxychloroquine with gradual remission of fever, arthritis and rash. During the next five months, there were no complications and she gave birth to a healthy girl.

Conclusion: Infections commonly trigger SLE flares. The clinical distinction between infection and lupus is challenging. Whether SLE promoted CMV reactivation or CMV was the trigger for the SLE flare is unclear.

PATIENT WITH POEMS SYNDROME PRESENTING WITH VEIN DEEP THROMBOSIS

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Case report: 60-year-old female with a history of 6 years of disabling peripheral neuropathy treated with corticosteroids whithout improvement. She was admitted into our Hospital with bilateral numbness in the distal lower limbs, followed by a progressive loss of strength. Physical examination revealed hypertrichosis and mild edema of the lower limbs, hepatosplenomegaly and lymphadenopathy, with sclerosis on fingers and hands. Neurological examination revealed moderate muscle weakness and mild sensory disturbance of both lower limbs, the Achilles tendon reflex was absent bilaterally. Laboratory testing showed moderate renal faillure, CRP 2.2 mg/dL, ESR 30 mm/h and elevated levels of ACTH and cortisol. Monoclonal IgG lambda-type protein was detected by immunoelectrophoresis.

The results of autoimmune and peripheral neuropathy autoantibodies were negative. Plasma VEGF levels were markedly elevated 609 pg /mL. Transthoracic echocardiography revealed normal left ventricular volumes and ejection fraction, mild pericardial effusion, sever tricuspid regurgitation, and pulmonary hypertension. Body CT-Scan showed pericardial and pleural effusion, hepatosplenomegaly with ascites, osteosclerotic lesions with an expansive lesion at the posteromedial border of the left iliac crest with periosteal reaction. Electromiyography confirmed chronic inflammatory demyelinating polyneuropathy. The findings are consistent with previous reports of bone lesions in patients with POEMS syndrome, confirmed by the biopsy of the lesion with an infiltration of plasma cells.

Conclusions: POEMS is a multisystemic disease that is difficult to diagnose due to its low incidence and prevalence, the fact that the appearance of signs and symptoms does not occur simultaneously. Our patient showed favorable responde to melphalam and dexametasone.

CHRONIC DIARRHEA AS DEBUT OF MIXED CONJECTIVE TISSUE DISEASE

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Case report: 78-year-old woman with arterial hypertension was taken to the hospital due to supraventricular tachycardia with secondary hemodynamic angina and hypokalemia. She presented chronic diarrhea for several months with associated weight loss, without identifying the origin of diarrhea, with all the normal complementary study (TAC body, gastroscopy, opaque enema, celiac disease, stool culture and Clostridium difficile toxin), being high with the diagnoses of hypokalemia secondary to chronic diarrhea syndrome not affiliated. The physical examination in our hospitalization was normal. Evolutionary analysis revealed: urea 169 -> 25 mg/dl, creatinine 3.62 -> 0.54 mg/dl, potassium 1.5 -> 4.5 mmol/L, total protein 5.2 g/dl, Hb 12.1 g/dl, leukocytes 15200/dl (92% neutrophils), fibrinogen 687 mg/dl, 25-OH-Vitamin D 4 -> 9, ANA 1/640 (homogeneous standard), anti-RNP Ac positive. Other normal (Ac antiphospholipids, TSH, trypsin in faeces, serology Giardia lambdia, cytomegalovirus, toxoplasma, HIV, HCV and HBV). The remaining complementary tests were anodyne (chest X-ray, abdomen ultrasound, abdomen MRI, octreoscan and colonoscopy). The evolution was favorable, normalizing the deficit analytical parameters due to malabsorption after hydroelectrolitic replenishment and systemic corticosteroids, with the disappearance of diarrhea and recovery of body weight.

Conclusion: We consider this case interesting because malabsorption is a rare (and described) presentation of a mixed connective tissue disease.

FUO AND ARTERIAL THROMBOSIS, IS IT LUPUS?

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Background/Aim: Fever of unknown origin is a common reason of hospitalization and a demanding diagnostic medical field. Herein, we present a case of persistent fever in a young woman, triggered by acute myocarditis.

Case report: A 33 year's old woman with a medical history of deep vein thrombosis, preeclampsia and type 1 diabetes mellitus was admitted to the cardiology department due to acute myocarditis, with positive Coxsackie IgM antibodies. She gradually improved; however, on the third week of hospitalization, fever and pancytopenia occurred. From the physical examination, palpable spleen and inflammation of the right forearm (on the intravenous catheter site, used in the coronary angiography) were noted. Upper limb Doppler ultrasound revealed thrombosis of the right radial artery. Blood tests revealed pancytopenia and ESR 68. Blood and urine cultures were negative. Immunologic profile suggested of positive ANA (1:1280), positive ENA screen and anti-Sm, anti-RNP mildly positive. Also, low levels of C3 and C4 complement and positive direct Coombs test. Thrombophilia screening came positive for anticardiolipin (aCL) antibody, and anti-beta-2glycoprotein I antibody (anti-B2GPI). Diagnostic criteria of both lupus and antiphospholipid syndrome were fulfilled, so the patient was treated with LMWH bridging therapy, till acenocoumarol-achieved therapeutic levels, and prednisolone. Fever subsided quickly after corticosteroid therapy initiation. The patient was discharged and referred to a rheumatology department, with the diagnosis of SLE and APS, possibly triggered by a viral myocarditis.

Conclusions: SLE is a common cause of persistent fever, and must be diagnosed promptly, especially in cases of major thrombotic events.

A RARE CASE OF A PATIENT ACTUALLY TREATED FOR SARCOIDOSIS THAT PROVED TO BE PRIMARY SJOGREN'S SYNDROME

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Background: Sjogren's syndrome is an autoimmune chronic inflammatory disease affecting the exocrine glands that is mainly characterized by diminished salivary and lacrimal gland function. Sjogren's syndrome may appear as an individual disease (primary SS) or as secondary along with another disease such as Rheumatoid arthritis and others. Sjogren's syndrome rarely might also have non-exocrine gland involvement

Case Report: The patient is a 62-year-old male who presented to his primary care physician with a two-month history of gradually worsening fatigue and dyspnea on exertion. He was then examined by a cardiologist and a respiratory medicine specialist and treated for sarcoidosis. The initial diagnosis was based on chest X-ray findings, chest computed tomography scan findings and bronchoscopy results. Two months later the patient presented in the emergency department with fever and shortness of breath. On admission to the hospital he had hypoxemia and elevated WBC, ESR, CRP. He was treated for a respiratory tract infection. His personal medical history was reviewed and he had a thorough laboratory investigation and a CT scan repeated. He was found to have a strongly positive anti-Ro antibody titer, positive Schirmer's test and proteinuria along with interstitial lung disease. Salivary gland biopsy was also performed. Primary Sjogren's Syndrome diagnosis was established.

Conclusion: Sjogren's syndrome is one of the most common autoimmune diseases which mainly affects salivary and lacrimal gland function. It may have serious complications such as interstitial lung disease or proteinuria and we should always consider it when a new complex symptom develops.

MORPHOLOGICAL CHANGES OF NASAL MUCOSA IN CHILDREN WITH GENERALIZED NASAL POLYPOSIS: REVIEW OF LITERATURE

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Background: Nasal polyps are soft, pink or pearl white outgrowths usually connected with nasal mucosa by flaccid crus. In children, generalized nasal polyposis is uncommon and mostly characterizes Cystic Fibrosis (CF) as a result of the inflammatory-bioelectric formation of nasal mucosa which was proposed by Bernstein in 1994.

Objectives/Aim: To describe the morphological changes of nasal mucosa in children with generalized nasal polyposis.

Methods: A retrospective systematic review was conducted of articles, by using appropriate search terms such as [(generalized nasal polyposis) AND children], on an initial search of medical literature data base (PubMed).

Results: 4 articles describe CF as an inherited multisystemic disorder that results in a generalized dysfunction of exocrine glands and presented in children with generalized nasal polyposis. A light- and electron microscopical examination of histological sections reveal under a thick layer of respiratory epithelium with a high proportion of goblet cells, the seromucous glands display abnormal morphological structures with wide mucous cells and cystic dilatation. The glandular cells show inhomogeneous glandular droplets in the supranuclear cell portion. The nucleus contains dispersed chromatin as a sign of increased activity and the structures of the Golgi apparatus are clearly detectable.

Conclusions: Nasal polyposis was mentioned in the Hippocrates's notes from 4th century B.C. and was confirmed by 3rd century B.C. inscription on the King Sabur's tombstone. However, generalized nasal polyposis is a rare disease in children and required a histological examination to diagnosed CF.

SINONASAL FINDINGS IN GRANULOMATOSIS WITH POLYANGIITIS (GPA): REVIEW OF THE LITERATURE

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Background: Granulomatosis with polyangiitis (GPA), formerly Wegener granulomatosis, is a multi-system, necrotizing, medium/small-vessel granulomatous vasculitis, that also occurs in the sinonasal cavity.

Objectives / Aim: To describe the imaging characteristics, distribution, and location of sinonasal pathology in patients with GPA.

Methods: A retrospective systematic review was conducted, of English language articles, by using appropriate search terms, which reported the findings specific to sinonasal disease in patients with GPA.

Results: A total of 14 articles were identified on an initial search of medical literature data base (PubMed). Commonly reported symptoms included headache/facial pain, nasal obstruction, chronic congestion, nasal discharge, nasal ulcerations and epistaxis. Computed tomography and magnetic resonance imaging findings in patients with GPA were: mucosal thickening, bone destruction, and septal erosion. Nasal endoscopy, nasal biopsy, erythrocyte sedimentation rate, and autoimmune antibody levels such as anti-neutrophil-cytoplasmatic-antibody (ANCA), anti-peroxidase-antibody (anti-PR3) and serum IgG4 levels were performed in all patients with evidence of sinonasal involvement. Bony structure erosion was independent of ANCA status or systemic involvement. ANCA were usually positive in patients with GPA.

Conclusions: In patients, GPA is often present as sinonasal disease. The diagnosis ultimately relies on a constellation of radiographic findings (septal erosion, mucosal thickening, and bone changes), laboratory values, and accurate clinical history. A high index of suspicion should be maintained, especially in younger age groups, followed by repeated ANCA testing, biopsy, and imaging where indicated. Histological diagnosis remains the gold standard in patients with persistent isolated sinonasal involvement although is accurately identified by PET.

HEPATORENAL POLYCYSTOSIS

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60-year-old patient is admitted to Internal Medicine Department with a constitucional syndrome for study. She had loss 10 kg with nausea and intake decrease and in last 24 hours started with dyspnoea (capillary saturation 88% at FiO2 21%). Abdominal perimeter was increased and present jaundice. Blood test was realized finding renal insufficiency with clearance creatinine CKD EPI 34.77 ml/min/m2 (phase IIIb A1) and Bilirubin 4.2 mg/dl, DB 3.6 mg/dl. In thoracoabdominal-CT Scan findings were compatible with polycystic kidney and liver disease and diaphragm was located at scapular level. The angio-CT scan was without thromboembolic disease and ecocardiography without disease. The final diagnosis was rectrictive lung disease treated with domiciliary chronic oxygenotherapy and polycystic disease. The patient was proposed to double transplant, kidney and lung, and was admitted in waiting list.

The family study was realized finding two sisters with the same diagnosis so the final diagnosis was Hepatorenal polycystosis.

ATYPICAL HEMOLYTIC UREMIC SYNDROME IN ADULT PATIENT: CASE PRESENTATION

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Aim: HUS in MAHA is common among children. It comes to clinic with the signs of TTP, MAHA, ARF, fever, thrombocytopenia and CNS dysfuction. Here we differentiate thrombocytopenia and anemia in this case.

Case Report: 19 years old women with no chronic disease presents with thrombocytopenia, headache and fever above 38 centigrade degree. She has had bloody diarrhea for ten days. She is unconfused, blood pressure is 100/70 mmHg, heart rate is 100 bpm, oxygen saturation is 98%. On urinary examination, there is no pathological sign except 3+ erythrocytes and 3+ albuminuria. All haemostatic parameters are normal. On peripheral blood smear, schistocytes are seen. Thrombocyte count is 9000/mm3. Haptoglobulin is under 6.5 mg/dl, reticulocytes are 15.5%, LDH is above the optimum. Direct coomb's is negative. The patient is internated to ward with the pre-diagnoses 'TTP and HUS'. D-dimer is 1.45 mg/dl as thrombotic processes. ADAMTS13 activity is 91.18%. All rheumatologic markers are negative. infectious causes are excluded. Plasmapheresis with fresh frozen plasma and 1 mg/kg/day methylprednisolone therapy are started in terms of atypical hemolytic uremic syndrome. For the patient who is not complete the criteria of the response to plasmapheresis, eculizumab is applicated with the diagnosis of atypical hemolytic uremic syndrome.

Conclusions: Atypical HUS is 10% of all HUS cases. Mostly we do not see diarrhea but there are also diarrheal forms. The treatment of atypical HUS consists of plasmapheresis, steroids and eculizumab orderly. It is important to early diagnosis of HUS with relapsing course to prevent renal replacement therapy.

Table 1. the laboratory parameters on first visit				
Hemoglobin	7,7 gr/dl	Urea	113 mg/dl	
Hematocrit	22,8%	Creatinin	1,9 mg/ dl	
MCV	82,9 fl	AST	67 u/l	
Leucocyte	10,42 K/dl	ALT	24,6 u/l	
Thrombocyte	9000 K/dl	Direct Bilirubin	0,38 mg/dl	
LDH	1596 IU/dl	Indirect Bilirubin	1,17 mg/dl	

AN EVALUATION OF OUR ACUTE RENAL FAILURE CASES ADMITTED FROM THE EMERGENCY DEPARTMENT

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Aim: Acute renal failure (ARF) is a syndrome characterized by a rapid decrease in hours or weeks in glomerular filtration rates and the accumulation of nitrogen breakdown products. We analyzed 50 patients presenting to the emergency department and admitted to the internal diseases clinic.

Materials and Methods: We retrospectively analyzed data from 50 patients presenting to the emergency department of a research and training hospital and admitted to the internal diseases department.

Results: 25 patients were female and 25 were male, with a mean age of 67.6 years. Thirty-two patients were aged over 65. ARF was present in 28 patients, 14 of whom had chronic kidney failure (CKF). Acidosis was present in 20 patients, nine of whom had CKF-based ARF (four hyperpotassemic), nine had ARF (three hyperpotassemic) and two had CKF (one hyperpotassemic). Six of the 28 patients were admitted for dialysis with acute dialysis indication. Three of the patients admitted for dialysis were enrolled on a routine dialysis program; two died and one was referred to the intensive care unit. Infection was involved in the etiology of 10 of the 28 ARF cases, hypervolemia in six and hypovolemia in 12.

Conclusion: Since the great majority of cases of community-acquired ARF are secondary to a decrease in volume, potentially reversible causes are present in 90% of cases presenting to the emergency department. The most common causes of ARF-related mortality in the presence of dialysis were sepsis and cardiopulmonary failure. Well-designed studies with large patient groups are now needed.

ACUTE KIDNEY INJURY DUE TO ACYCLOVIR IN A 30-YEAR-OLD PATIENT

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Background: Acyclovir is an antiviral drug generally well tolerated. However, in certain cases it can induce acute kidney injury within 24-48 hours of its administration, as indicated by a rapid rise in the serum creatinine. Hemodialysis may be needed in severe cases, although an accurate and rapid diagnosis and a treatment involving intravenus fluids and furosemide are of extreme importance and often can reverse the drug's nephrotoxicity.

Case Report: The present study reports an interesting case of a 30-year-old male, with no known health problems, who was admitted to our hospital due to fever, intense headache with vomiting and sensitivity to light. After undergoing a brain CT scan and a lumbar puncture, whose results were indicative of viral meningitis, he was started on treatment with intravenous (iv) acyclovir. The patient gradually improved, but his renal function began to worsen and eventually his creatinine levels reached a peak of 8.35 mg/dl over the following 4 days. The iv acyclovir was immediately discontinued. Aggressive hydration and diuretics such as furosemide were given to the patient in order to increase his urine output over 150 ml/hr and his renal function normalized over the following week.

Conclusion: This case reminds the physicians once again of the importance of a close clinical and laboratory monitoring of the hospitalized patients under treatment with acyclovir, which in turn may prevent any unfortunate side effects and at the same time protect the patients' renal function.

PERITONEAL ULTRAFILTRATION: AN INCREASINGLY DEVELOPING ALTERNATIVE FOR THE MANAGEMENT OF REFRACTORY CONGESTIVE HEART FAILURE

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Background: Refractory congestive heart failure (RCHF) is a major cause of mortality and morbidity in the world. The aim of peritoneal ultrafiltration (UF) is to improve quality of life in patients with RCHF avoiding frequently hospital readmission and restoring their personal autonomy.

Methods: 15 patients meeting the inclusion criteria were included in the peritoneal dialysis program. Men 73,3 % with a mean age of 66,2 years. Ultrafiltration with PD was tried in three other patients in whom peritoneal catheter was placed but during the maduration periode two of them died for cardiac causes and other one did not perform PD due to abdominal mechanical problems. Once included, the tenckoff catheter was placed and maturation technique was carried out for two weeks. Subsequently they underwent exchanges of icodextrin +/- dextrose according to the presence of renal disease. Our patients completed the Short Form-36 Health Survey (SF-36) before and after they underwent PD ultrafiltration so we could analyze how their quality of life improved.

Results: Outcomes of this program after a year of follow-up (Table 1).

Conclusions: Peritoneal ultrafiltation helps patients with refractory congestive heart failure to improve their quality of life avoiding frequent hospital readmissions and restoring their personal autonomy.

Outcomes	PD Group Baseline (N=15)	PD Group one year of follow-up (N=15)
hospitalization rates		
 Mean number of hospital admissions previous year. 	6,2	3
 Average days of hospital stay per year. 	28	2,1
health status - SF-36 Health Survey	28±2	58±1
heart function.		
 Left Ventricular Ejection Eraction – (%) 	31,6 <u>+</u> 14,4%	41,2±10,4%
- NYHA Class - no. (%)		
ol	0 (0)	0 (0)
o II	0 (0)	15 (100)
o III	3 (20)	0 (0)
o IV	12 (80)	0 (0)
Renal function		
 Median estimated GFR – ml/min/1.73m² 	37,4 <u>+</u> 18,8	40,6 <u>+</u> 34
- CKD stage – no. (%)		
0.1	0 (0)	0 (0)
o 2	6 (40)	8 (53,3)
03	3 (20)	1 (6,7)
0.4	6 (40)	1 (6,7)
o 5	0	5 (33,3)
Median blood pressure – mmHg		
- Systolic	108	109
- Qiastolic	66	68
Fluid gyerload		
- Edema grading – no. (%)	Severe 15 (100)	None 9 (60) Mild. 6 (40)
- Ascites - no. (%)	1 (6,7)	0
Adverse clinical outcomes		
- Peritonitis	0	3*1
 procedure-related complications*2 	0	2
- Death from any cause	0	0

Die 36-Item Short Form Health Survey (SF-36). NYHA New York Heart Association, GFR Glomerular Eltration Rate, CKD Chronic Kidney Bisease.

[&]quot;Two assettics peritonitis in the same patient and one bacterial peritonitis.

^{**} One auticoupresenting two egispies of obstruction of the catheter by omental (ringes)

A CASE REPORT: CHRONIC PHIMOSIS AS A CAUSE OF RENAL REPLACEMENT THERAPY

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Background: True phimosis is inability to retract the foreskin. This clinical case represents that chronic, untreated phimosis may be a cause of terminal kidney failure.

Case report: A 23-year-old man with phimosis was admitted to Emergency ward in a critical general condition. He had severe dyspnea, Glasgow coma scale 12 points. His creatinine level was 1443 (44 - 97 mkmol/ml) and glomerulal filtration rate (GFR) 4 ml/min/1,73 m². Because of renal failure and hyperhydration patient had anasarca with pulmonary edema and secondary dilatation cardiomiopathy with ejection fraction 20%, severe anaemia and arterial hypertension. CT showed hydronephrosis in both kidneys grade 2 - 3 and thin kidney parenchyma. Patient admitted that he had problems with urination for several years and developed progressive shortness of breath in last months. Circumcision was performed and patient spent one week in intensive care unit with continuous haemodialysis. MRI of heart was performed to exclude untreated heart pathology and showed no pathological changes. 3 months later patient was discharged and is on peritoneal dialysis.

Conclusion: Phimosis may be a cause of chronic kidney desease which leads to chronical renal replacement therapy.

SJÖGREN'S SYNDROME AND ACUTE RENAL FAILURE

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56-year-old woman with primary Sjögren's syndrome diagnosed in 1996 had undergone xerostomia, xerophthalmia, asthenia, non-erosive polyarthritis in hands with functional limitation, lymphopenia, hyperganmaglobulinemia, anemia and hypocomplementemia, on treatment with indomethacin and corticotherapy. She has referred pain after dental implant for 3 months, is associated with edema, difficulty in eating and dyspeptic symptoms. An increase in prednisone at 30 mg/d and indomethacin at 50 mg/8 h was decided. Two days later he went to Emergency for marked asthenia, decreased diuresis and dark urine. Upon examination, tachycardia and marked hypoventilation of pulmonary bases were noted. Analytical hemoglobin of 9.2 mg/dL, Leukocytes 6200/dl and Platelets 125000/dl was performed. Creatinine 2.9 mg / dl, Potassium 6.7 mmol/L and metabolic acidosis. Chest x-ray with bilateral pleural effusion. Echocardiogram with moderate pericardial effusion with telesystolic right atrial collapse and LVEF 70%. Rheumatoid factor 113 mg/dl, complement C4 1.6 mg/dl, C3 69 mg/dl. ANA positive, Anti Ro positive. The patient suffers renal failure requiring hemodialysis and is prescribed methylprednisolone and cyclophosphamide. In the renal biopsy, the glomeruli were observed with massive occlusion of the capillary lumen by proteinaceous PAS material. With positive immunofluorescence for IgM, C3 Kappa and lambda and negative for fibrin.

This together the positive determination to 50% of cryoglobulins in blood made us reach the diagnosis; Cryoglobulinemic glomerulopathy.

MANIFESTATIONS OF RENAL DYSFUNCTION IN DIFFERENT SUBTYPES OF ISCHEMIC STROKE

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Background and objectives: Stroke is a heterogeneous syndrome, depending on its etiology and pathogenesis. There were no studies on renal dysfunction (RD) in different subtypes of ischemic stroke (IS) yet.

Materials and methods: We studied 302 patients with first-ever IS in order to reveal RD, depending on stroke subtypes. Depending on kidneys function, 302 IS patients were divided into two groups: 1 - with RD - 196 patients (64.9%); 2 - without RD - 106 patients (35.1%). All patients underwent standard laboratory-instrumental examinations. Renal function was assessed through serum creatinine, urea, estimated glomerular filtration rate (eGFR), urine dipstick-methodology. Stroke subtypes were determined by TOAST and our own method.

Results: 122 (40.4%) patients had atherothrombotic stroke (ATS), 118 (39.1%) - lacunar stroke (LS), 37 (12.3%) - cardioembolic stroke (CES), 11 (3.6%) - stroke of other etiology (SOE), 14 (4.6%) - cryptogenic stroke (CS). RD markers were most often diagnosed in acute and late recovery periods, as well as in a period of persistent residual symptoms in the form of albuminuria, proteinuria, slight decrease in eGFR and renal insufficiency. RD was often noted in ATS (41.3%; RR=1.07; OR=1.12; EF=6.4), LS (39.8%; RR=1.05; OR=1.09; EF=5.2) and CS (5.6%; RR=1.98; OR=2.04; EF=49.6).

Conclusions: RD is a heterogeneous syndrome of impaired renal function, clinical manifestations of which vary in different heterogeneous subtypes of IS. Most of RD manifestations were noted in LS, least in ATS. The highest number of signs and variants of RD was found in cryptogenic stroke.

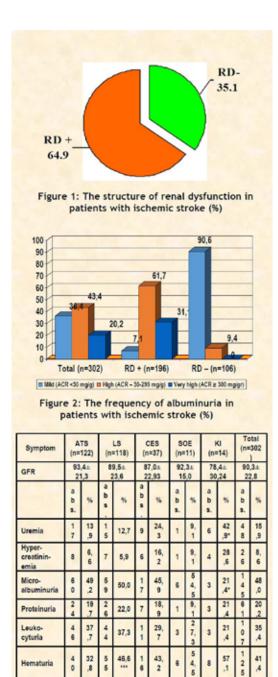


Figure 3: Characteristics of markers of renal dysfunction in patients with ischemic stroke, depending on its pathogenic heterogeneity (%)

RISK FACTORS FOR ANGIO-CEREBRO-RENAL DYSFUNCTION IN ISCHEMIC STROKE

Khurshidakhon Rasulova, Botir Daminov

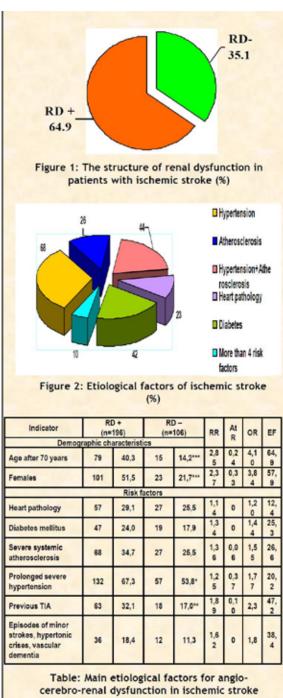
Tashkent Pediatric Medical Institute, Uzbekistan

Background/Aim: Angio-cerebro-renal dysfunction is frequently observed in stroke, but this has not been well studied yet. This study sought to evaluate risk factors in ischemic stroke (IS) patients with renal dysfunction (RD).

Methods: The study included 302 patients with IS, who underwent standard laboratory-instrumental examinations. Renal function was assessed through serum creatinine, urea, estimated glomerular filtration rate (eGFR), urine dipstick methodology.

Results: Stroke subtypes were determined by TOAST and our own method. Depending on kidneys function, stroke patients were divided into two groups: 1 - with RD - 196 patients (64.9%); 2 - without RD - 106 patients (35.1%). In all patients, we studied cerebrocardiovascular risk factors. Significance was evaluated through relative risk (RR), atributable risk (AtR), odds ratio (OR), etiological factor (EF), t-Student's test, Pearson's correlation coefficient. Age after 70 years (40.3%; RR=2.85; AtR=0.24; OR=4.10; EF=64.9), female gender (51.5%; RR=2.37; AtR=0.33; OR=3.84, EF=57.9), prolonged severe hypertension (67.3%; RR=1.25; AtR=0.37; OR=1.77; EF=20.2), systemic atherosclerosis (34.7%; RR=1.36; AtR=0.06; OR=1.55; EF=26.6), diabetes (24%; RR=1.34; AtR=0; OR=1.44; EF=25.3), heart pathology (29.1%; RR=1.14; AtR=0; OR=1.20; EF=12.4), previous TIA (32,1%; RR=1.89; AtR=0.10; OR=2.3; EF=47.2), episodes of minor strokes, hypertonic crises, vascular dementia (18.4%, RR=1.62; AtR=0; OR=1.8; EF=38.4) were risk factors for angio-cerebrorenal dysfunction in IS. Moreover, cryptogenic stroke (5.6%; RR=1.98; AtR=0; OR=2.04; EF=49.6) and vertebro-basilar stroke (25%; RR=1.77; AtR=0.02; OR=2.02; EF=43.4) also had high etiological share in development of this syndrome. Stroke patients have high rate of angio-cerebro-renal dysfunction because of combination of risk factors with vascular system generalized lesions.

Kidney damage itself is a "new" cerebrocardiovascular risk factor.



(%)

CORRELATION OF MITRAL, AORTAL, TRICUSPID CARDIAC VALVE CALCIFICATIONS WITH NUTRITIONAL, INFLAMMATORY AND OTHER BIOCHEMICAL PARAMETERS IN HEMODIALYSIS PATIENTS IN GREECE

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Background: Cardiac valve calcification (CVC) is a very common disorder in hemodialysis patients and it has been recognized as an important risk factor for cardiovascular morbidity and mortality.

Aim: To investigate the factors associated with (CVC) in hemodialysis patients.

Methods: In 42 patients (aged 72.97±11.65, duration of dialysis 4.8±4.1 years), Valve Calcifications (VC) were detected by using bidimensional echocardiography. Biochemical parameters such as CRP, PAI-1, IL6 ferritin, transferrin, total proteins albumin, SGA score, PTH, 25(OH)D, calcium, phosphorus, total cholesterol, HDL, LDL, triglycerides were measured and investigated in relation to VC. All correlations were performed by using Pearson, Spearman, Partial Coefficient tests. Ordered logistic regression analysis was conducted to estimate the relative importance of the pre-mentioned risk factors.

Results: Regression analysis showed that total cholesterol decreased the risk in both mitral (OR=0.81, p=0.04) and aortal calcification (OR=0.71, p=0.01). HDL tended to increase the risk in mitral (OR=1.16, p=0.08) and in aortal (OR=1.25, p=0.04), whereas LDL also increased the risk in both valves (mitral OR=1.24, p=0.05, aortal OR=1.46, p=0.01). On the contrary, concerning tricuspid calcification, HDL reduced the risk (OR=0.65, p=0.03) and LDL also tended to reduce the risk (OR=0.73, p=0.08). Total proteins, and malnutrition increased significantly the risk in mitral and aortal calcification.

Conclusions: Malnutrition, elevated serum levels of total proteins, ferritin, CRP seemed to be aggravating risk factors for mitral and aortal calcification. Total cholesterol presented a rather protective effect against mitral and aortal calcification, whereas lipoprotein fractions tend to appear a contradictory effect on various valve calcifications.

RELATIONSHIP BETWEEN VASCULAR, VALVE CALCIFICATION AND LEFT VENTRICULAR HYPERTROPHY IN PATIENTS WITH CHRONIC DIALYSIS TREATMENT

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Introduction: Vascular calcifications (VC), cardiac valve calcification (CVC) and left ventricular hypertrophy (LVH) are frequently observed in chronic kidney disease (CKD) patients. The aim of this study was to investigate the relationship between VC, CVC and LVH in CKD patients.

Methods: We performed a cross-sectional study in 85 stable prevalent hemodialysis patients and 41 PD patients being in RRT for more than 6 months during December 2012-March 2013. Two-dimensional echocardiography was performed by an experienced cardiologist who was blinded to all clinical details of patients. Plain X-ray images of lateral lumbar spine from all subjects were studied to obtain images of the lower abdominal aorta using semiquantitative scores as described by Kauppila et al.

Results: Left ventricular hypertrophy was present in 86.7%, concentric hypertrophy was found in 64 (50.7%) and eccentric hypertrophy in 46 patients (36.7%). Among the 126 patients, 70.5% of the patients have one valve calcified and 38.3% of the patients have both valve calcified. Eighty-seven patients (69.4%) were identified with aortic abdominal calcification, and the mean Kauppila score was 4.91 ± 4.05 . The mean Kauppila score significantly associated presence of CVC (r= 0.6, p=0.03). Logistic regression analysis found Kauppila score as an independent risk factor associated with LVMI (odds ratio [OR], 1.07; 95% confidence interval (CI), 1.01 to 1.29; P = 0.001).

Conclusion: Vascular, valve calcifications are highly prevalent in dialysis patients and independently associated with LVMI. Vascular calcifications and LVM interrelated together and both contribute to CV morbidity in dialysis populations.

UNILATERAL RENAL AGENESIS AND THE AWARENESS OF MOSTYN EMBREY SYNDROME

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Background/Aim: Mostyn Embrey syndrome is a rare disorder associated with unilateral renal agenesis and malformations of the female reproductive tract. Delayed diagnosis is associated with serious diagnostic difficulties that may lead to inappropriate management including harmful surgery. The aim of this paper is to describe the first case of this rare syndrome in Iraq and to make a recommendation that pediatricians, and pediatric nephrologists need to be aware of this syndrome to avoid unexpected presentations which may lead to delayed diagnosis and some times to inappropriate management.

Case report: An 18-years old female presented with acute abdominal pain and poor urine output associated with retention of urine; about three years after the onset of menses. The pain was radiating to the back and pelvis. Her menstrual cycles started at the age of fifteen, and were lasting seven days. Cycles were associated with normal flow. The first physician the patient consulted considered the diagnosis of uterine tumor and the need for hysterectomy, but the family of the patient consulted an other physician. Vaginal exam was performed and showed bulging left vaginal wall. The diagnosis of hematocolpos was made. A clotted blood was drained by trans- vaginal approach. Abdominal MRI showed left renal agenesis, and two uterine bodies, cervices, and vaginas with normal myometrium and endometrium (uterine didelphys), and normal ovaries.

Conclusion: A greater awareness of this syndrome by pediatricians and pediatric nephrologists should contribute to making early accurate diagnosis and early appropriate management before puberty.

THE MENTAL HEALTH AND HAEMODIALYSIS

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Chronic, end-stage renal failure is a non-curable health disease. Mental health contributes to the quality of life of these patients.

Method: The research was aimed at the estimation of mental health's level of patients in Haemodialysis Unit. A proper questionnaire, known as SF 36 (Medical Outcome Study short form Health Survey, 36 items), was delivered, adjusted to facilitate elderly patients

Patients: we studied 26 patients: 15 males and 11 females, aged 38 to 94 years old.

Results: Patients have adjustment difficulties regarding the nature of the disease, such as a persistent sense of fear and anxiety. Concerning the social attitude and communication they exhibit weakness to respond to family obligations and non-participation in social activities. Women appear much more stressed about family responsibilities. All patients experienced great anxiety upon joining in dialysis. Approximately 92% of patients are not keen on friendships, 27% of them indicate pain during the initial puncture and two patients had pain throughout the session. In addition, 54% of them experiences anxiety, during every session of haemodialysis. At the end of dialysis, they feel too much physical fatigue. Before haemodialysis, seven patients had a regular workday; two are still working. Meanwhile, they experience very lower levels of energy and vitality. In conclusion, the quality of life in every chronic disease depends on the specific nature of the disease and its treatment. The assessment of mental health is an essential tool and a basic endpoint of the followed therapeutic schedule.

ACUTE RENAL FAILURE AND SEVERE LACTIC ACIDOSIS WITH METFORMIN: A CASE REPORT

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Background/Aim: Metformin is a rare cause of lactic acidosis in patients with predisposing factors for acidosis. Purpose of this presentation is to present a case of severe lactic acidosis in a lady, after metformin administration.

Case Report: A female patient, 70 years old, presented with vomits and abdominal pain the last 5 days. The first day she had revisited the emergency department without any clinical or laboratory findings. Her medical hispory included dementia and diabetes mellitus under metformin/vildagliptin. The patient was disoriented, afebrile, tachypnoic, oliguric with diffuse abdominal tenderness. A blood gas analysis was performed with severe lactic acidosis (>15mmol/Lt), pH=6.84, PC02=7mmHg, p02=133mmHg, glucose=57mg/dl, HC03<3mmol/Lt. In laboratory examination, there were creatinine=5.3mg/dl, urea=152mg/dl, WBC=17.000µL, ESR=43mm/h, Ht=37.3%, Na=133mmol/Lt, K=4.4mmol/dl. Bicarbonates 4.8% (4fl), fluids (3lt), dopamine (diuretic dose) and furosemide 160mg were administered with no improvement and the patient performed hemodialysis. Blood and urine cultures were negative. Meropenem was administered in case of severe sepsis. During the first day of admission, ischemic lesions of ECG were noticed which subsided after intravenous glyceryl trinitrate administration. Ultrasounds of heart and abdomen, thoracic x-ray and abdominal CT were normal. Low-grade fever was noticed during the first day while she remained afebrile for the rest of hospitalization. Nevertheless, due to persistent lactic acidosis and low bicarbonates despite renal failure improvement, she submitted herself to 3 hemodialyses. There was a gradual improvement of mental condition and the patient was discharged after 8 days with urea=59mg/dl and creatinine=1.6mg/dl. In her follow-up, 20 days later, creatinine was 1mg/dl.

SECONDARY ACUTE KIDNEY FAILURE A SCLERODERMIC CRISIS

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Case Report: A 48-year-old male admitted to the Nephrology Service with abdominal pain, diarrheic bowel movements, and acute oligoanuric renal failure with progressive worsening of renal function requiring renal replacement therapy. As a personal history, a diffuse systemic scleroderma of recent diagnosis by skin biopsy and fulfilling criteria according to the ACR/EULAR 2013 classification, with polyarticular, esophageal, pulmonary and cutaneous involvement. The examination of the abdomen was depressible with pain on palpation without signs of peritoneal irritation, accelerated transit. Blood analysis hemoglobin 10.1g/dl, hematocrit 30%, leukocytes 13200/dl, platelets 84000/dl. The smear is compatible with microangiopathic hemolytic anemia. Urea 291mg/dl, creatinine 8.51mg/dl, normal ions, total proteinY4.2g/dl, albumin 2.5g/dl, LDH 982U/L, haptoglobin 108md/dl, ADAMTS negative, IgG 722, IgM 42, IgA 33. Negative immunological study. Systematic urine and sediment proteins 500mg/dl, erythrocytes 2010/ul, ratio Alb/Cr 333mg/g. Abdominal ultrasound with kidneys with a discrete increase in cortical echogenicity, although with preservation of cortico-medullary differentiation. Renal Doppler records flow with normal wave morphology and preserved resistance indices. Echocardiogram shows severe global chronic pericardial effusion with mild tamponade data. MRI-scan revealed gliotic-like lesions as sequelae of vasculitis due to systemic scleroderma. Initial diagnosis of renal scleroderma crisis with normal blood pressure levels, treated with angiotensinconverting enzyme inhibitors, corticosteroids and cyclophosphamide. The risk factors of the renal crisis are the use of corticosteroids at high doses, diffuse and rapidly progressive skin involvement, and the winter months.

Conclusion: This case is interesting because of normotension presentation, and remember that corticosteroids should be used with great caution in scleroderma crisis.

COLYMICIN-INDUCED ACQUIRED BARTTER-LIKE SYNDROME: A DIAGNOSTIC CHALLENGE OF A RARE ENTITY

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Introduction/Aim: Acquired Bartter-like syndrome (BLS), a very rare condition, characterized by hypokalemic metabolic alkalosis, hypocalcemia, hypomagnesemia and normal kidney function, can be induced by diuretics or antibiotics. Herein, we present a rare case of colimicin- induced BLS in a young female patient with thrombotic thrombocytopenic purpura (TTP) and bacteremia. Acquired BLS -though a rare entity- should be suspected in patients with sustained electrolyte disturbances and certain antibiotic treatments such as colimicin.

Case description: A 30-year old Caucasian woman, with a history of class III obesity and TTP, was transferred to our clinic after a two-week hospitalization in our ICU department due to TTP relapse. She was diagnosed with deep vein thrombosis of her right leg and concomitant severe cellulitis. She was febrile and Acinetobacter baumanii was isolated from two blood cultures. She was treated with Meropenem 2 grx3IV and Colimicin 4.5x10⁶x2 IV. From the 3rd day of antibiotic treatment, the patient presented with sustained hypokalemic metabolic alkalosis, hypocalcemia and hypomagnesemia. Serum creatinine, sodium and chloride levels were within the normal limits, while urine analysis revealed hypercalciuria and significant renal potassium loss without natriuresis. Renal ultrasonography and abdomen CT scan were also normal. Serum renin and aldosterone levels were high. Electrolyte levels were difficulty kept within normal ranges with IV supplementation. Since colimicin was thought to be the cause of the patient's syndrome, it was discontinued after 12 days of IV administration. The patient's electrolyte levels returned to normal from the second day of colimicin cessation.

AN APPARENT DIAGNOSIS OF ALCOHOL INTOXICATION? NOT SO FAST!

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Background: Humans lack the ability to rapidly metabolize D-lactate anions, one of the main products of bacterial metabolism. D-lactic acidosis has been well documented in ruminants overfed with grain, often resulting in death of the animals. This rare form of acidosis can occur in humans with the short bowel syndrome when provided with a large carbohydrate load. Acidosis and encephalopathy dominate the clinical picture and can be life threatening in the presence of AKI or CKD.

Case report: A 70-year-old woman presented shortly after midnight with symptoms of inebriation. Her history included hypothyroidism, cholecystectomy and a jejunoileal bypass 40 years ago. Apart from tachypnea, confusion, ataxia and slurred speech, her physical examination was normal. A CT scan of the brain revealed no abnormalities. Arterial blood gas analysis showed a severe high-anion-gap metabolic acidosis with normal lactate levels, and serum chemistry was normal except for mild hypokalemia. She reported having eaten a lot of halva (confection made from tahini or semolina) after dinner and denied consumption of alcohol, drugs and other possible toxins. D-lactic acidosis was diagnosed after excluding all other possible causes of high-anion-gap metabolic acidosis. The patient remained fasted and potassium with bicarbonate were administered i.v. Vancomycin was administered orally to suppress intestinal bacterial overgrowth. Within 18 hours her clinical condition normalized completely.

Conclusion: Routine lactic acid assays measure only L-lactate. Thus, the diagnosis of D-lactic acidosis is often one of exclusion and requires a high index of clinical suspicion based on a patient's history and clinical presentation.

A RARE CASE OF MERCURY TOXICITY AFTER ABDOMINAL LAVAGE WITH MERCURY SOLUTION

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Backround: Acute mercury toxicity is usually due to accidental ingestion or suicidal attempt. In the past, mercury solutions were used in cancer treatment. Renal injury is due to direct tubular injury, glomerulonephritis or interstitial nephritis.

Case presentation: A 32 old female was transfered in the ICU from the Cancer Hospital because of oliguric acute kidney injury and respiratory distress. Five days before she underwent surgery for ovarian cyst removal which was like to be teratoma (not confirmed by pathologist). During surgery, because of cyst rupture the abdomen was instiled with mercury solution (SUBLIME 1/1000). After excluding obvious causes of AKI (hemorhage, sepsis, drugs) mercury levels were ordered and found extremely high (950µg/I,nr,10). CVVHD was initiated together with chelating therapy (Dimercaptol for 10 days, followed by Dimercaptosuccinic acid-DMSA for 14 days). After her transfer in the Nephrology Department she continued on line HDF for one month together with another two 10 day courses of DMSA. Blood and urine mercury levels progresivelly decreased. Renal biopsy shown interstitial nephritis and her renal function completely recovered after 50 days. Three months later she was admitted in the Neurology Department because of seizures wich was estimated to be related to mercury toxicity despite noral blood and urine levels. The seizures resolved within three months with valproic acid.

Conclusions: Mecury toxicity after instillation is very rare but lifethreatening condition and for this reason, according to expert opinion this use should be avoided.

RENAL AND LIVER INVOLVEMENT IN A CASE OF SARCOIDOSIS PRESENTING WITH **HYPERCALCEMIA**

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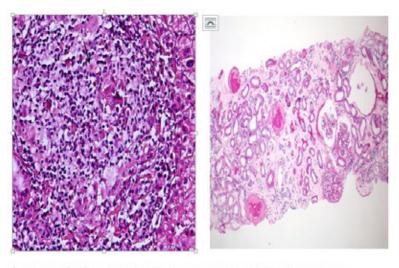
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Background: Sarcoidosis is a multisystem disease, characterized by non-caseating granulomatous reaction with undetermined etiology. Hypercalcemia is a rare metabolic complication of sarcoidosis and seen 10-20%. We present a patient with hypercalcemia and renal failure; further diagnosed renal and liver sarcoidosis.

Case Report: 71-year-old man presented with weight loss, poor appetite. Physical examination was unremarkable except hepatosplenomegaly. In blood tests; serum creatinine 5,68 mg/ dl, urea 183 mg/dl, albumin 3.52 g/dl, calcium 13 mg/dl, hemoglobin 9.22, mcv 82, leukocyte 5300, plt 151000. Erythrocyte sedimentation rate was 9 mm/hour. Urine sediment showed 1 leukocytes, 6 erythrocytes in every field. Proteinuria was 800 mg/24-hour. Serum ACE was 57 U/L (8-52 U/L). Ultrasound revealed hepatosplenomegaly and grade I renal parenchymal disease. Computerized tomography of chest revealed septal reticulation, interlobular thickening. Kidney biopsy revealed focal segmental glomerulosclerosis (Figure). He was treated with intravenous hydration, furosemide and zolendronic acid. Liver biopsy was performed due to hepatomegaly and high ALP, GGT; revealed non-necrotizing granulomatous reaction (Figure). He was started on pulse 1 gr/day in three days metilprednisolone followed by oral prednisone at 1 mg/kg for 1 week, tapered to 0.5 mg/kg at discharge. Serum calcium levels decreased and renal functions improved, at last follow-up were stable at 1.9 mg/dL and 8.9 mg/dl respectively.

Conclusion: Concomitant renal and hepatic sarcoidosis is a rare phenomenon. Once extra pulmonary sarcoidosis is diagnosed, liver sarcoidosis should be screened.



ecrotizing granulomatosis reaction (right)

PHYTOLACCA AMERICANA INTOXICATION: A CASE REPORT

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Background: Phytolacca Americana is a plant that produces white to purplish flowers and round clusters of black berries. It is used in herbal medicine for the treatment of a variety of rheumatoid disorders, as a laxative or as a weight loss medication. However, all parts of the plant are toxic, with the root generally acknowledged as the most toxic part. A rare case of Phytolacca Americana intoxication is presented herein.

Case report: A 62-year-old male presented to the emergency department with a 3-hour complaint of severe abdominal pain, multiple episodes of vomiting and watery diarrhea. Clinical history revealed recent ingestion of an "unknown" root. Physical examination showed normal blood pressure, sinus tachycardia, severe diffuse abdominal pain and increased bowel sounds. Laboratory examination demonstrated acute renal failure and metabolic acidosis. The patient was asked to bring the plant for inspection. Photographs were sent to the national poison center and the diagnosis of Phytolacca Americana intoxication was established. Renal function returned to normal after a five-day hospitalization and treatment with fluid replacement.

Conclusion: Phytolacca Americana ingestion could be considered as a rare causative factor for acute renal failure and clinical history is of paramount importance for reaching the correct diagnosis.



Figure: The photographs show the leaves, flower-berries and the root of the plant Phytolacca Americana that were digested by our patient and caused the intoxication

IMPORTANCE OF C-PEPTIDE IN TREATMENT OF DIABETES

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Aim: Serum C-peptide measurements can be used to assess endogenous insulin secretion. The purpose of our study is to evaluate the relationship between C-peptide levels, insulin usage and duration of diabetes, in Type 2 diabetic patients.

Material And Method: Age, body mass index (BMI), diabetes duration, insulin usage period, glucose and HbA1c levels, C peptide, creatinin, albumin/kreatinin levels on spot urine, total cholesterol, Low density lipoprotein (LDL) levels were recorded retrospectively who applied to our diabetic outpatient clinic. The patients were divided into 3 groups by diabetes duration; 0-9 years Group 1, 10-19 years Group 2, more than 20 years Group 3.

Results: 224 women (60.4 %) and 147 men (39.6 %) total 371 patients were included to our study. Mean age was $54,72\pm10,96$ years Insulin usage rates were 34% for Group 1, 52.2% for Group 2, was 84% in Group 3. Age, insulin usage period, glucose, A1C, C peptide, urine alb/cre levels and serum creatinine levels were found significant different (Table 1). There was a negatif correlation between diabetes duration and C peptide levels (r=-0,122; p=0,019). There was statistically significant difference either between groups 1 and 3 (p = 0,0001) or groups 2 and 3(p=0,0001), except between groups 1 and 2(p = 0.872).

Conclusion: The clinical utility of C-peptide measurement in the care of diabetic patients gets more importance nowadays. Our results showed that c peptide levels were getting decreased while diabetic history prolonged. We conclude that c peptide levels may have changed the treatment of diabetes, especially for insulin preference.

Table 1. The statistical comparasion between three groups

n=371	Group 1 n	= 244	Group 2 n=	Group 2 n= 101		=26	
	Mean±SD	Median	Mean±SD	Median	Mean±SD	Median	p value
Diabetic period (year)	3,78±2,49	3,00	12,28±2,6	11,00	23,04±3,9	20,50	0,0001
Insulin usage period (year)	3,27±2,8	3,00	6,47±3,96	6,00	12,29±8,07	13,00	0,0001
Age(year)	52,04±10,9	52,00	58,85±8,67	60,00	63,77±9,95	65,00	0,0001
ВМІ	31,09±5,99	30,43	31,88±6,61	31,24	30,7±6,03	29,76	0,666
Glucose	157,75±75,64	133,50	185,99±63,28	173,00	214,04±114,99	181,00	0,0001
Hb A1c	7,67±2,09	6,90	8,53±1,91	8,15	8,9±2,5	8,30	0,0001
C-Peptide	2,48±1,27	2,34	2,5±1,3	2,26	1,51±1,05	1,17	0,0001
Urine Alb/Cr	56,62±155,62	11,07	151,33±470,33	20,90	515,41±1462,84	25,02	0,0001
LDL cholesterol	127,80±54,62	124,00	130,24±55,53	120,90	117,62±47,72	117,30	0,713
Creatinine	0,78±0,19	0,76	0,83±0,30	0,74	0,96±0,36	0,84	0,036

Mean; Avarage, SD; Standart deviation, BMI; Body Mass Index, Hb A1C; Glycated hemoglobin, Alb/cr; Albumin/Creatinine, LDL; Low-density lipoproteine

THE AFFECT OF BODY MASS INDEX ON URINARY ALBUMIN/CREATININ LEVELS IN TYPE 2 DIABETIC PATIENTS

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Aim: In patients with diabetic nephropathy, it has also been shown that weight loss contributes to reduce proteinuria independently from medications. In this study, we evaluated the relationships between body mass index on microalbuminuria in type 2 diabetic patients.

Materials And Methods: We evaluated retrospectively 402 patients who applied to our diabetic outpatient clinic in 2017 within 3 months.Patient's diabetes duration, duration of insulin use, age, body mass index (BMI), glucose, glucosylated hemoglobine (A1c), c-peptide, creatinine, urine albumine/ creatinine ratio, low density lipoprotein (LDL), total cholesterole, alanine transaminase (ALT), thyroid stimulating hormone (TSH) and hemoglobine levels were recorded.The patients, whose BMI<30 kg/m2 is Group 1, BMI>30 kg/m2 is Group 2.

Results: 235 women (58.3 %) and 167 men (41.4%), total 402 patients were included to study. The mean age was found 54.61 ± 11.31 yr (Min.16-max.86).C peptide (p=0,0001) ALT (p=0,011) and TSH (p=0,024) were statistically significant between two groups. The datas were shown in Table 1. There is no statistically significant correlation between BMI and urine albümine/creatinine ratio. (p=0,117).

Conclusion: BMI is a modifable factor and high BMI has negative affect on diabetic outcomes including proteinuria .That is why weight control is an important goal in diabetic and overweight patients. But in our study, there is no statistically significant correlation between BMI and proteinuria in diabetic patients. We need more clinical trials with a larger number of patients and prospective analysis.

n=402	Group 1 n	=187	Group 2 n		
11-402	Mean±SD	Median	Mean±SD	Median	p value
Diabetics period (year)	7,69±6,72	5,00	7,57±6,16	6,00	0,9540
Insulin usage period (year)	6,41±6,29	5,00	5,36±4,16	5,00	0,8220
Age (year)	54,81±12,65	55,00	54,43±10,03	55,00	0,6680
BMI	26,21±2,68	26,49	35,56±4,90	34,11	0,0001
Glucose	163,02±70,15	140,00	172,76±80,59	148,00	0,2710
Hb A1C	7,85±2,04	7,20	8,12±2,19	7,70	0,2570
C-Peptide	2,13±1,48	2,01	2,76±1,42	2,48	0,0001
Urine Alb/Cr	77,45±310,41	12,93	164,14±600,51	16,13	0,0510
Creatinine	0,84±0,28	0,77	0,79±0,23	0,76	0,2050
LDL Cholesterol	128,79±54,11	123,00	128,16±61,71	121,30	0,2740
ALT	26,39±36,34	19,00	30,47±36,76	22,00	0,0110
TSH	2,20±1,76	1,79	2,57±2,31	2,10	0,0240
Hemoglobin	13,74±1,57	13,70	13,71±1,71	13,60	0,8370

Group 1; Non-obese patients, Group 2; Obese patients, Mean; Avarage, SD; Standart deviation, BMI; Body Mass Index, Hb A1C; Glycated hemoglobin, Alb/cr; Albumin/Creatinine, LDL; Low-density lipoproteine, ALT; Alanin aminotransferase, TSH; Thyroid stimulation hormone.

ARE TSH AND HB-A1C ASSOCIATED WITH TRIGLYCERIDE LEVELS IN DIABETIC PATIENTS?

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Aim: Triglyceridemic levels are higher than 150 mg/dl in hypertriglyceridemia. Hypothyroidism and non-regulated diabetes may cause hypertriglyceridemia. In our study, we aimed to find the effect and relation of TSH and A1c in patients with low triglyceride levels and severe hypertriglyceridemia. **Methods:** We chose 18373 patients retrospectively who applied outpatient clinic within last 5 year. Patient's age, glucose, glycated hemoglobin (A1c), triglyceride (TG) thyroid stimulating hormone (TSH) and hemoglobin levels are recorded. We divided patients to two groups. Triglycerid level<150 is group 1 and >1000 is Group 2.

Results: The results were evaluated statistically with Kruskal Wallis test. We checked correlation analysis with Spearman Bivariate test. RESULTS: In all patients, mean age is 55,3±12,73 (18-106). Female patients 11647 (63,5%) male patients 6699 (36,5%). Type 1 DM 545 (3%), Type 2 DM patient number is 17828 (97%). When both groups were compared, A1c and TSH with triglycerid were statistically significant correlated. There was positive correlation in triglyceride levels with A1c and TSH for Group 1. There was also positive correlation in triglyceride levels with A1c but no significant correlation with TSH for Group 2. (Table 1)

Conclusion: Triglyceride levels may increase in non-regulated diabetic patients,metabolic syndrome and hypothyroidism. In our study, there was no relation between TSH and severe hypertriglyceridemia (>1000 mg/dl). Instead of TSH, there was strong relation with A1c. As a result, the regulation of diabetes treatment in patients and the reduction of A1c values must be prior target and it is clinically more preliminary.

Table 1. TG and A1c,TSH relations in each group

TG	Gro	up 1	Group 2		
10	r value	p value	r value	p value	
A1c	0,135	0,0001	0,247	0,049	
TSH	0,045	0,0001	0,127	0,427	

TG; Triglyceride, A1c; Glycated hemoglobin, TSH; Thyroid stimulating hormone

ASSOCIATION BETWEEN VITAMIN D LEVEL AND MICROVASCULAR COMPLICATIONS IN PATIENTS WITH TYPE 2 DIABETES

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Background: Prevalence of vitamin D deficiency is high in diabetes patients. Vitamin D effects glucose metabolism by modulating inflammatory response andinvolves in insulin sensitivity by controlling calcium flux through the membrane in both β cells and peripheral insulin-target tissues. In the light of these data we aimed to study the association of the hypovitaminosis D with the clinical features and microvascular complications of type 2 diabetes.

Methods: Cross-sectional case-control study of 206 Type 2 diabetes patients, who met the American Diabetes Association criteria 2102 were conducted. Participants were evaluated for the presence of diabetic retinopathy, nephropathy and neuropathy. Serum 25(OH)D was measured with an enzyme immunoassay kit. The definition of vitamin D deficiency was defined as a 25(OH)D level lower than 20ng/ml and 21-29 ng/ml was considered insufficiency of vitamin D according to WHO definition.

Results: The serum 25-OH vitamin D levels were significantly low in the T2DM patients. (11,16±3,99 ng/ml vs. 15.58±3.16 ng/ml, p<0.05). %25,7 of them have retinopathy (n=53), %31,6 of them have neuropathy (n=65), %29,1 of them have microalbuminuria(n=60). Serum 25(OH)D levels decreased significantly in relation to the presence of retinopathy and neuropathy (p<0.05 for both), however there is no significant association between vitamin D levels and microalbuminuria.

Conclusion: We found an inverse relationship between circulating 25(OH)D levels and the prevalence of retinopathy and neuropathy in type 2 diabetes patients. Further interventional studies are needed to investigate whether vitamin D supplementation decrease the prevalence of microvascular complications. Keywords: Vitamin D deficiency, Type 2 diabetes, microvascular complications.

Table: The effect of Vitamin D on complications

		25-OH Vitamin D (ng/ml)			
		N	median	SD	ар
Retinopathy	+	53	23,31	6,75	0,026
Neuropathy	+	65	23,15	7,42	0,039
Microalbuminuria	+	60	24,10	7,31	^b 0,286

^aStudent test

^bKruskal Wallis test

SERUM TRACE ELEMENTS IN TYPE 2 DIABETES MELLITUS

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Background: Studies suggested that the imbalances of several trace elements may play an important role in normal glucose and insulin metabolism. The aim of present study was to evaluate the changes in serum levels of copper, zinc, iron, and magnesium in type 2 diabetes mellitus patients and their effect on glycemic control.

Methods: Sixty Type 2 Diabetes Mellitus female patients and seventeen healthy subjects were enrolled in this study. Trace elements were studied in the atomic absorption spectrometer. Correlation analyses of trace elements with the metabolic parameters were analyzed with Spearman's correlation coefficient.

Results: The type 2 diabetes patients had a significantly higher fasting plasma glucose, HbA1C, and microalbuminuria levels than the control subjects (p<0,05). The serum magnesium levels were significantly lower in the type 2 diabetes patients compared to the healthy controls $(2,0\pm0,2\text{ng/ml} \text{ vs. } 2,3\pm0,2\text{ng/ml}, \text{ p}<0.05)$. The serum copper levels showed negative correlation with diabetes duration (r=-0.338, p=0.011), and iron levels were found to be negatively correlated with BMI and CRP (r=-0.407, p=0.009; r=-0.390, p=0.017). The serum magnesium levels indicated negative correlation with HbA1C and creatinine clearance (r=-0.371, p=0.049; r=-0.462, p=0.023) but we did not found any significant correlation of other variables with zinc levels.

Results: The present study found low levels of magnesium, iron, copper, and zinc in Women with T2DM, which supports a close relationship of the above trace elements with glucose metabolism. Low magnesium levels has been linked to poor glycemic control in T2DM; therefore, magnesium deficiency should be prevented in patients with diabetes.

Table: Association of serum Cu, Fe and Mg levels with metabolic parameters

	Cu		Fe		Mg	
	R	р	r	Р	r	Р
Diabetes duration	-0.338	0.011*	-0.019	0.908	-0.020	0.911
BMI	0.028	0.839	-0.407	0.009*	0.028	0.877
Fasting blood glucose	-0.154	0.267	-0.205	0.429	-0.617	0.033*
HbAIC	-0.088	0.534	-0.060	0.733	-0.371	0.049*
HDL	0.008	0.952	0.632	0.007*	-0.014	0.967
CRP	0.094	0.501	-0.390	0.017*	0.017	0.927
Creatine clearence	0.169	0.401	-0.181	0.376	0.462	0.023*

Pearsoncorrelation *p<0,05 Cu: Copper, Fe:Iron, Mg: Magnesium

QUALITY OF LIFE IN PATIENTS WITH DIABETES MELLITUS

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Background: Several studies indicate that the presence of a chronic disease is strongly correlated with the emergence of depression and anxiety symptoms and that psychological support to patients may improve their quality of life Objectives To investigate certain social and psychological parameters and to compare them with basic demographic information, such as the gender, the education and occupation of patients suffering from diabetes mellitus (DM) Design -

Methods: A cross-sectional study of 100 diabetic patients. Psychological factors were assessed with questionnaires, including the Short-Form Health Survey (SF-36), the Life Orientation Test-Revised (LOT-R) and the Cardiac Anxiety Questionnaire (CAQ). The associations of psychological with socio-demographic factors were assessed through logistic regression analysis Results Women patients had higher levels of heart-focused anxiety psychopathology than men and therefore women tend to avoid activities that burden the heart. Men patients had a significantly higher index of physical functionality than women. For the patients with elementary education, lower levels of mental health (SF-36-MCS) were observed. Retirees presented the lowest vitality (SF-36-VT) and general health (SF-36-GH) values.

Conclusions: The chronicity of the disease aggravates the psychopathology of the patients thereby creating adverse impact not only on health but also on efforts for compliance. A personalized approach by the health professionals could contribute in addressing the psychological factors that accompany DM and improve their quality of life.

COPING BEHAVIOR IN PATIENTS WITH DIBETES MELLITUS

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The aim of this study was the evaluation of coping behavior in patients with Diabetes Mellitus (DM).

Patients And Methods: In our study 60 (42 male and 18 female age: mean \pm SD 62,4 \pm 13.4) patients were entered. As an instrument, the F.Helm questionnaire was used.

Results: It was revealed the prevalence of the following forms of coping strategies: behavioral -altruism, "active avoidance" (23%). "distraction"(51%), emotional optimism (48%), "repression of emotions "(23%), cognitive - presence of self control and dissimulation (23%). Using diabetes mellitus as a model has shown the prevalence of emotional adaptive coping mechanisms over maladaptive in patients with psychosomatic disorders that allow estimating positively their adaptation abilities.

Conclusion: From the result of our study, it seems necessary to apply cognitive-behavioral psychotherapy in the system of treatment methods of patients with diabetes mellitus to facilitate the acquiring of more constructive forms of coping behavior.

EDUCATION AND PSYCHOSOCIAL ADAPTATION OF DIABETIC PATIENTS

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The aim of this study was to investigate the impact of the education on diabetic patient's self-image and the impact of the education on diabetic patients social environment relationship.

Patients And Methods: 280 (160 men and 120 women, age 15-52 years) patients suffering from Diabetes Mellitus entered the study experimental group (E, n=140) and control group (K, n=140)all matched regarding age and educational level. The patients of E group differed in regard to their previous education; this group underwent the Greek Program "Learning to live with Diabetes Mellitus" over 3 months. Both groups answered questionnaire specifically designed to assess self-image of diabetic patients and relationship with the social environment.

Results: The education significantly improved self-image in E group when compared to K group (p<0.02). There was no significant difference in education between E and K group with regard to the social relationship (p>0.02).

Conclusions: The education has an important contribution in establishing self-management approach in which patients assume responsibility for their behavior, for changing their environment and for planning their future. For successful diabetic patients' psychosocial adaptation and social participation, it is necessary that the whole society provides more resources for psychosocial support.

TYPE D PERSONALITY, PSYCHOLOGICAL DISTRESS AND QUALITY OF LIFE IN PATIENTS WITH DIAABETES MELITUS

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Introduction: Studies have shown that distressed personality (Type D) is associated with Diabetes Mellitus (DM) and have prognostic implications. The aim of this study was to assess Psychological distress and Quality of life (QoL) in patients with DM.

Patients And Methods: In this cross-sectional study, 100 (54 males, 46 females) first time diagnosed (3-12 weeks) DM patients (WHO criteria) were selected. Type D personality was assessed with Distress Scale (DS-14). Psychological distress (Anxiety, Depression) was measured with Hospital Anxiety and Depression Scale (HADS) while QoL was assessed with WHO Quality of life scale (WHOQOL-BREF).

Results: 59% of DM patients were identified with Type D personality traits (27 males,32 females). Type D personality was identified as significant predictor of impaired QoL [OR: 1.06 95% CI (1.02-1.11) p \leq 0.01], Depression [OR:1.11 95% CI (1.06-1.16), p \leq 0.01] and Anxiety [OR 1.09 95% (1.04-1.14) p \leq 0.01]. The results also revealed that Type D DM patients have impaired QoL (mean=73,3[SD=15.6] versus 85.9 [SD 17.3], respectively t=3.8 p \leq 0.01), elevated levels of Anxiety and Depression compared to non type D patients.

Conclusions: This study highlighted the importance of Type D personality in research on DM as a determinant of adverse psychological outcomes. It also emphasized the need for routinely psychological assessment of DM patients along with medical treatment to improve their QoL and rehabilitation.

ePP71 QUALITY OF LIFE IN PATIENTS WITH DIABETES MELLITUS AFTER PSYCOLOGICAL REHABILITATION

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The aim of this study was to assess Quality of Life (QoL) in Diabetes Mellitus patients undergoing the program of psychological rehabilitation.

Patients And Methods: 32 DM patients after treatment participated in the program of social, psychological, juridical support for DM patients and their relatives. Patients completed SF-36 questionnaire at baseline in three months after the program start.

Results: Before the program SF-36 QoL parameters related to psychological functioning were worse than the ones related to physical well-being. In 3 months after the program start the improvement of all QoL variables was observed with the significant increase of general health (change from 28.2 to 41.2; p=0.020). Significant improvements in role functioning (from 52.5 to 68.3 p=0,027), pain (from 45.2 to 26.1; p=0.05), sleep disturbances (from 59.5 to 36,6; p=0.05) were identified. Other QoL parameters had a marked tendency to improvement.

Conclusions: QoL assessment is the sensitive method of evolution of the effectiveness of rehabilitation programs for DM patients. The program of psychosocial rehabilitation of these patients nd their relatives appeared to be effective. Improvement of different QoL parameters during the program was revealed.

SLEEP DISTURBANCES AND DEPRESSION IN PATIENTS WITH DIABETES MELLITUS

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The aim of this study is to estimate the degree of sleep disturbances, as well the possible contributing factors in patients with diabetes mellitus (DM).

Patients and methods: 41 patients concluded in our study. 28 were female and 13 male with mean age of 51 (range 29-74). These patients underwent a clinical psychiatric interview according to the diagnostic criteria of ICD 10, The degree of sleep disturbances during the month prior to patients evaluation was assessed through the Athens Insomnia Scale (AIS) and psychopathology was assessed through the Montgomery Asberg Depression Rating Scale (MADRS).

Results: There was a strong correlation between the score of the AIS and that of the MADRS for all 41 patients (r: 0.40,p<0.01). 13 of our patients complained of insomnia. These patients scored higher on the MADRS than the ones without sleep difficulties (z:-3.032, p=0.002).

Conclusions: The result of our study suggests that sleep disturbance (insomnia) in patients with DM is a probable indicator of depression. Furthermore, these data suggest that insomnia in these patients is one of the factors mediating the association between depression and impairment in their functioning.

TELEMEDICAL MONITORING OF DIABETIC RETINOPATHY

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Introduction: Diabetic retinopathy is the leading preventable cause of blindness in people under 60 years of age. Annual screening examination is necessary to prevent manifestation of the microangiopathy, control its progress and prevent ultimate blindness. Due to the limited number of ophthalmologists available, Teleophthalmology has therefore been deployed to fill in the gap in an attempt to recreate the clinical encounter at a distance for patients residing in areas characterized as remote or secluded.

Aim: The aim of this article is to provide a database of hardware and software solutions currently available on the market, which are eligible for remote screening and follow-up of diabetic retinopathy in both a real-time and a store-and-forward setting.

Materials and Methods: We reviewed current literature, peer reviews, tech specs derived from each manufacturer's official page, while also acquiring relative hands-on experience.

Results: Both real-time and Store-and-forward settings seem to cater for the needs of the screening programme, each in their own terms. Phone-docked fundus cameras seem to be the most viable solution when on the go and on a limited budget. The best image quality though is provided by portable fundus cams. Complementary software facilitates a smoother user experience. Messaging services and cloud service act as the key mediators between the patient and specialist(s).

Conclusion: The use of portable tech facilitates timely and convenient access to retinopathy screening for patients with diabetes experiencing barriers to accessing eye care. Further research should be conducted in terms of automated evaluation and scoring as well as self-evaluation and monitoring.

ACQUIRED CHYLOMICRONEMIA-INDUCED ACUTE PANCREATITIS

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Backround/Aim: Pancreatitis is an acute inflammatory response of the pancreas characterized by abdominal pain and elevated pancreatic enzymes. A serum triglyceride level of more than 2000 mg / dl is a rare, but well-known identifiable risk factor. The clinical course and routine management of hypertriglyceridemia-induced pancreatitis is similar to other causes. A thorough family history is important, as is the identification of secondary causes of hypertriglyceridemia. The mainstay of therapy includes dietary restriction of fatty meal and fibric acid derivatives. Alcoholism itself effectuates acquired hypertriglyceridemia, since it causes an increase in the synthesis of triglycerides (TGs) and TG-rich lipoproteins in the liver, while it stimulates lipolysis in fatty tissue resulting in a larger supply of fatty acids to the liver. Herein we present a case of an alcoholic patient presenting with acquired chylomicronemia-induced acute pancreatitis.

Case Description: A 48-year old Greek man, with a history of chronic consumption of ethyl alcohol(>50g/d) , was admitted to our clinic due to progressively worsening of abdominal pain for the last 24 hours and two episodes of vomiting. Similar signs have been reported in the recent past. Blood chemistry revealed severely elevated TGs (Tg=3500 mg/dl)and transaminasemia. Hepatomegaly and fatty liver disease were found in the upper abdomen ultrasound, whereas the CT scan findings were compatible with chronic pancreatitis (calcification of the pancreatic duct). Fenofibrate 145mg/d and $\omega 3$ fatty acids were initiated along with standard pancreatitis treatment. The patient showed outstanding clinical and laboratory response and was discharged after six days of hospitalization.

IT IS NOT ALWAYS A MATTER OF GENES: A CASE REPORT OF AN ELDERLY PATIENT WITH UNTREATED FAMILIAL HYPERCHOLESTEROLEMIA

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Introduction/Aim: Familial hypercholesterolemia (FH) is a common genetic disorder, characterized by elevated levels of low density lipoprotein cholesterol (LDL-C) and early cardiovascular manifestations. It is distinguished in the heterozygous FH which is the most common type, with a frequency of 1/300 in the general population and in the homozygous FH which is more rare with a frequency of 1/10^6 and manifestations of the disease in early childhood. Men present complications of the disease during the 4th-5th decade of their life, while women a decade earlier. Herein we present an interesting case of a man with non-treated FH, who underwent a transient ischemic attack in a quite advanced age, in order to highlight the cardioprotective role of running a healthy life despite the presence of a genetic predisposition.

Case Description: A 84-year old Greek patient, fit enough despite his age, with a history of hypertension under medication, was admitted to our clinic due to hypoesthesia of the right upper and lower limb which lasted less than 20 minutes. Similar symptoms were reported a month before. No findings were revealed from the brain CT scan. Physical examination was unremarkable apart from a systolic murmur in the right carotid artery. From blood chemistry, elevated levels of total cholesterol (T-Chol=270mg/dl) and LDL-C=220mg/dl with normal serum TG levels, were found. Right carotid artery stenosis (~45%) was found in Doppler ultrasound. Treatment with a high-dose statin (rosuvastatin 20mg/d) and an antiplatelet agent (salospir 100mg) was initiated; the patient was discharged in 5 days.

FACTORS AFFECTING SURVIVAL IN PALLIATIVE CARE PATIENTS

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Aim: The aim of this study is to investigate the survival of patients in a palliative care center and to investigate the factors that influence it.

Method: Patients hospitalized in palliative care center between August 1, 2015 and July 30, 2017 were assessed for mortality status through the official death notification system on September 2017. Demographic characteristics, comorbid conditions, nutritional conditions and pressure wounds and laboratory tests results were taken from all the patients at first hospitalisation.

Results: 343 patients were included in the study, 319 (93%) were eligible. The mean age of the patients (n = 140 women, 44%) was 71 \pm 15.7 (median age 73, min 19, max 99), the mean number of comorbidities was 2.3 \pm 1.04. At the end of follow-up, 82.4% of the patients died. The median follow-up period was 43 days (95% Confidence Interval (CI): 32.92 - 53.08) in the overall survival analysis. According to regression analysis, it is shown that statistically significant factors related to survival are malignancy (p = 0.017, Hazard ratio (HR): 1.74, 95% CI: 1.10-2.73), mean platelet volume (MPV) (95% CI: 1.03 - 1.07) and uric acid (p = 0.042, HR: 1.08, 95% CI: 1.00 - 1.17).

Conclusion: While the most effective comorbid disease is malignancy on survival in palliative care patients, the neutrophil / lymphocyte ratio, MPV and uric acid are most important laboratory parameters.

DISTRIBUTION OF A1C BY AGE IN DIABETIC PATIENTS

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Aim: In this study, we aimed to determine how A1c values are affected by age in each decade in diabetic patients who applied to our hospital.

Method: The type of diabetes, age, sex and A1c values were recorded retrospectively of 17973 (18-102) patients who applied to our unit for the last 5 years. Patients' ages were grouped according to decades as 18-29, 30-39, 40-49, 50-59, 60-69, 70-79,> 80 and the results were evaluated statistically.

Results: 498 (2,8%) Type 1 diabetic patients, 17,475 (97,2%) type 2 diabetic patients were included in this study. There was a statistically significant difference between the 9 groups (p <0,05) (Table-1) comparing the a1c levels in different decades in patients over 18 years of age. There was a significant difference between 3rd decade and 2nd,4th, 5th, 6th, 7th, 8th decades (p <0,05), but there was no significant difference between 3rd decade and 9th decade (p \geq 0.05). There was no significant difference between 4th decade and 8th and 9th decade, but there was a significant difference between 4th and others. There was no significant difference between 5th decade, 6th decade, 7th decade, 8th decade and 9th decade (p \geq 0.05). The results are shown in Table 1.

Conclusion: Our center works as refferal center. All of our diabetic patients are given diabetes education and nutrition education. Also appointment priority to elderly patients that leads the chance of close follow-up, leading to more strict controls on A1c goals.

Table-1. Mean AIC levels according to decades

		Ale	(%)
Age(years)	N (%)	Min-Max	Mean±SD
18-29 years (2.decade)	708(3,9)	5-16,9	6,77±2,32
30-39 years(3.decade)	1426(7,9)	5-17,2	7,01±2,19
40-49 years(4.decade)	3400(18,9)	5-17,8	7,51±2,18
50-59 years(5.decade)	5582(31,1)	5-16,9	7,67±2,09
60-69 years(6.decade)	4592(25,5)	5-17,9	7,59±1,95
70-79 years(7.decade)	1866(10,4)	5-17,0	7,48±1,83
80-89 years(8.decade)	384(2,1)	5-15,3	7,39±1,79
90-102 years(9.decade)	15(0,1)	5,4-11,6	7,01±1,78
18-102 years	17973	5,0-17,9	7,50±2,07

Alc, Glycosylated hemoglobin, SD; standard deviation, Min; Minimum, Max; Maximum.

PAPILLARY THYROID CARCINOMA IN PATIENT WITH PRIMARY HYPERPARATHYROIDISM

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Introduction: Primary hyperparathyroidism (PHPT) is present in up to 0,5% of the general population. Papillary thyroid carcinoma (PTC) constitutes more than 70% of thyroid malignancies. Coexistence of PHPT and PTC is a rare condition. We report a case of a 69 years old PHPT confirmed by 99mTc-MIBI scintigraphy, hypercalcemia and elevated serum parathyroid hormone. PTC was diagnosed postoperatively by histopathology.

Case Report: 69 years old male patient admitted to our clinic with an enlarged, painless nodular mass on the neck. At laboratory examination; he had elevated serum calcium 11,6 mg/dl (normal range:8,4-10,4), low serum phosphate 1,6 mg/dl (normal range 2,5-45) and elevated PTH:138 pg/ml (normal range 15-56). USG of the neck displayed multinoduler goiter with a 42*25 mm hypoechoic nodule near the lower pole of the right lobe and another 22*13 mm hypoechoic solid nodule at the superior of the left tyroid gland and 16*14 mm solid cystic nodule at the inferior of the left thyroid gland. The parathyroid 99mTc-MIBI scan demonstrated parathyroid adenoma at the right inferior and left superior pole of the tyhroid. US guided FNAB of the two nodules in left thyroid gland and right inferior nodules were benign The patient underwent total thyroidectomy and removal of right inferior and left superior parathyroid adenoma. Pathologic examination confirmed left superior parathyroid adenoma and follicular variant PTC.

Discussion: PTC with PHPT has been reported in 2.3-4.3% of patients undergoing surgery for PHPT. Therefore a comprehensive preoperative thyroid workup, including FNAB, should be performed in all patient with PHPT.

THYROID PAPILLARY CARCINOMA IN A TOXIC THYROID NODULE

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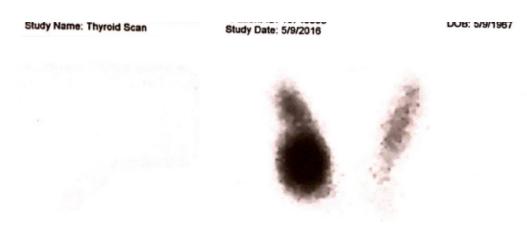
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Introduction: Papillary Thyroid cancer (PTC) is the most common malignant endocrine tumour worldwide. The prevalence of malignancy in toxic adenomas varies between 1 and 8% in different series (most, corresponding to <2.5%). We present a case of toxic adenoma with the diagnosis of papillary thyroid carcinoma.

Case Report: 50-year-old male patient was admitted with the complaints of sweating, palpitation, tremor, and weight loss for three months. Thyroid function tests revealed hyperthyroidism with elevated free triiodothyronine (FT3) of 6.27 pg/mL (normal: 2-4.4 pg/mL), free thyroxine (FT4) of 2.4 ng/dL (normal: 0.93-1.7 ng/dL), and suppressed thyroid-stimulating hormone (TSH) of <0.01 μIU/mL (normal: 0.27-4.20 μIU/mL). Thyroid peroxidase, thyroglobulin antibody and TSH receptor antibody levels were negative. Our ultrasonographic evaluation was consistent with a hypoechoic nodule of 20x12x18 mm in size in the right inferior thyoroid pole, having regular margins, dense millimetric microcalcifications the central area. Technetium 99m scan showed tracer activity in a right nodule with suppression of extranodular tissue (Figure1). He was initially treated with methimazole. Fine needle aspiration biopsy (FNAB) revealed that the thyroid nodule was benign. The patient underwent right thyroid lobectomy. Pathology report revealed classical variant of PTC.

Conclusion: The frequency of PTC is increasing due to the increased frequency of use of diagnostic methods of thyroid nodules. We present a case with a rare association of hot nodules and papillary thyroid carcinoma, with a benign cytology on FNAB. Diagnosis of hot nodules does not exclude the possibility of thyroid carcinoma. So, hyperfunctioning thyroid nodules warrants careful evaluation and appropriate therapy.



PHASE ALLOCATION AND EFFICIENT TECHNIQUE FOR EARLY REVEALING OF CHOLELITHASIS

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Taking into consideration the great importance of disorders of metabolism by Diabetes mellitus and Cholelithiasis, it is of great value the investigation of interrelations of their pathological processes.

The aim of our investigation was to establish peculiarities of phase data disorders of bile in patients with chronic acalculous cholecystitis combined with diabetes mellitus type II.Detailed clinical investigation was carried out with 15 patients with chronic acalculous cholecystitis combined with diabetes mellitus type 2 (1st main group), 10 patients with diabetes mellitus (2nd group), 10 patients with chronic acalculous cholecystitis (3rd group) and 10 almost healthy patients. Correlative square of phase allocation of laser picture of bile S=0,09. Correlative square of phase allocation of laser picture of bile with combined pathology was extremely decreased and is S=0,055. From achieved data of laser pictures of bile in patients of all groups and healthy people we could say that the most informative diagnostic value data for revealing gallstone disease were dispersion, asymmetry, excess, which characterized phase allocation. There defined further diapason changes statistic moments of 1-4 order of laser picture of bile between group of healthy people and investigated groups of patients: dispersion (increase in 1,5-2,1), asymmetry (increased in 3-16), excess (increased in 3-12). In conclusion, the most informative for early revealing of cholelithasis are dispersion, asymmetry, excess, which characterize phase allocation of laser picture of bile. There is proposed model of formation of phase allocation in pictures of bile layers like process of coordinate modulation of laser ionization by bile liquid-crystal formations.

APPEARANCE OF PRIMARY HYPERPARATHYROIDISM IN PATIENTS WITH THALASSEMIA-BETA FOLLOWING EFFICIENT CHELATION THERAPY: TWO CASE REPORTS

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Background: Thalassaemia-beta (TM) represents a group of recessively inherited haemoglobin disorders, characterised by reduced synthesis of b-globulin chain. The main stay of treatment is regular blood transfusion, leading to iron deposition in different endocrine glands. Iron deposition in parathyroid glands in turn, may cause hypocalcaemia and hypoparathyroidism. The appearance of hypercalcaemia and primary hyperparathyroidism (PH) after successful chelation therapy has not been previously reported in such patients.

Aim: To present two normocalcemic-TM cases who developed hypercalcemia and PH after chelation therapy.

Case Reports: The cases concern a 49- and a 47-year-old TM woman, who attended our department. Both women, before having efficient chelation, had normal calcium levels. During a long follow-up period, chelation was improved and ferritin levels were decreased, while calcium levels were progressively increased. In both women biochemical analysis revealed increased calcium levels with inappropriate increased parathyroid hormone (PTH) levels indicating the development of primary hyperparathyroidism (Table). In both cases bone density showed aggravation with time and neck ultrasound revealed parathyroid adenomas confirming the PH diagnosis. Nephrolithiasis was revealed in one case.

Conclusions: We report two TH clinical cases that developed PH after successful chelation therapy. These findings reinforce the importance of the regular follow-up of the TM patients for early detection and management of deranged calcium homeostasis, that can appear during successful chelation therapy.

ACC 188	8	1st patient	2 nd patient
Ferritine	Baseline	9220	7000
(µg/L)	Follow-up	858	299
LIC	Baseline	12,9	13
(mg Fe/g DW)	Follow-up	2,9	1
corrected serum Ca	Baseline	9,5	8
(mg/dl)	Follow-up	10,58	11
serum P	Baseline	3,6	2,3
(mg/dl)	Follow-up	3,1	1,7
PTH	Baseline	24,2	34
(pg/ml)	Follow-up	80,39	66,26

THYROID AUTOIMMUNITY IN THE TYPE 2 DIABETES MELLITUS

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Background: The association between type 2 diabetes mellitus (T2DM) and the presence of Thyroid autoimmunity (TAI) has been a issue of discussion. Although earlier reports refused any link between them, there is evidence to suggest an increased prevalence of TAI in patients with T2DM. The objective was to assess the prevalence of thyroid dysfunction among type 2 diabetic patients.

Methods: This is a retrospective study. One hundred and seventeen type 2 diabetes subjects (52 males and 65 females) and two hundred seventy seven controls (89 males and 188 females) were attended the outpatient clinic of the diabetes unit. All patients in the study were subjected to including glukoz, HbA1c, thyroid-stimulatinghormone (TSH), free triiodothyronine, free thyroxine, anti-thyroid-peroxidase (TPO), anti-thyroglobulin (anti- Tg). Autoimmunity were diagnosed when anti-TPO levels were greater than 9 IU/mL.

Results: The prevalence of anti-TPO antibodies was 16,2 % in type 2 diabetic patients. Anti-TPO was found $(21,38\pm76,2IU/mL)$ in the patients versus $(1,03\pm0,92IU/mL)$ in the controls (p<0,05). Anti-Tg was found $(17,85\pm116,98IU/mL)$ in patients versus $(2,25\pm13,48IU/mL)$ controls (p<0,05). A significant positive correlation was found between anti Tg and anti TPO anti thyroid antibodies (r=0,476;p=0,000) in diabetic patients.

Conclusion: Autoimmune thyroid disease common with type 2 diabetes than controls, and thus points to a role of autoimmunity in the pathogenesis of type 2 diabetes. Early detection of thyroid dysfunction in patients with type 2 diabetes mellitus should be performed routinely.

Keywords: TSH, anti-TPO, anti-Tg, T2 diabetes

Table: Biochemical characteristics of patients and controls

	Diabetics group	Control group	
	(n:117)	(n:277)	P
	Mean±s.d/n, %	Mean±s.d/n, %	
Age (years)	5,15±14,33	47,76±16,76	0,0001
Gender Female	65 (55,6%)	188 (67,9%)	0,02
Male	52 (44.4%)	89 (32,1%)	
TSH (IU/mL)	2,61±6,32	2,07±3,08	0,730
Free T3 (IU/mL)	3,34±0,62	3,31±0,54	0,722
Free T4 (IU/mL)	0,89±0,2	0,85±0,15	0,063
AntiTPO (IU/mL)	21,38±76,2	1,03±0,92	0,039
Anti Tg (IU/mL)	17,85±116,98	2,25±13,48	0,023
HbAIC (%)	8,46±2,32	5,54±0,39	0,0001
Glukoz (mg/dL)	170,35±79,71	95,44±16,61	0,0001

GASTRIC LIPOMA IN A 59-YEAR-OLD-MALE: CASE REPORT

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Background/Aim: Lipomas are benign soft tissue tumors, composed of mature lipocytes. Lipomas of the gastrointestinal tract are rare. They account for less than 1% of all gastric neoplasms. They are localized in the submucosa in 90% to 95% of cases and in the serosa in 5% to 10% of the cases. 75% of them affect the antrum. Gastric lipomas appear between the fifth and seventh decades of life, mainly in women. They usually are small and asymptomatic and are detected incidentally. Symptoms depend on the size and location of the tumor. Larger lesions can cause hemorrhage, abdominal pain, pyloric obstruction, and dyspepsia. Gastrointestinal bleeding is typically chronic and minimal and is able to cause anemia.

Case Report: A 59-year-old male was admitted to the emergency department with upper GI hemorrhage. He was initially resuscitated and stabilized. From the CT scan a gastric mass was found in the antrum with possible clinical differential diagnosis: ectopic pancreatic tissue, GIST and Brunner's gland adenoma. A partial gastrectomy was performed. On macroscopic examination, a well-defined homogeneous yellowish tumor measured 5x3cm, was found in the submucosa of the stomach. The histological examination showed that the tumor consisted of well-differentiated non-invasive mature adipose tissue. No atypia or mitotic figures were noticed. The diagnosis was gastric lipoma. The patient is well one year after the diagnosis.

Conclusion: Despite its rarity, gastric lipoma should be considered in the differential diagnosis for a submucosal mass both clinically and pathologically.

AMYLOIDOSIS DIAGNOSED IN BONE MARROW BIOPSY: A RARE CASE REPORT

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Background/Aim: Primary amyloidosis (PAL) is the most common form of systemic amyloidosis. It is due to an underlying plasma cell dyscrasia that produces an amyloidogenic light chain, which deposits as amyloid fibrils within the tissues. Amyloid involvement of the bone marrow is not commonly diagnosed before autopsy. The prognosis of PAL is poor, with a median survival of 1 to 2 years. Recently, more aggressive therapy using high-dose melphalan and autologous stem cell transplantation has improved the survival rates. Amyloidosis has to be differentiated from multiple myeloma and plasmatocytoma. The identification of a monoclonal population of plasma cells by using immunohistochemical techniques on bone marrow core biopsy specimens is sometimes difficult because of the low number of plasma cells present there.

Case report: A 77-year-old female patient was admitted to our hospital due to weight loss and weakness. She had a history of nephrotic syndrome. Bone marrow biopsy was performed. The histological and immunohistochemical examination revealed scattered mature polyclonal plasma cells (approximately 16-18%, positivity for kappa and lambda light chains). Amyloid deposits were identified in the blood vessel walls with the Congo Red histochemical stain. These findings were compatible with amyloidosis. The patient died due to respiratory infection some days later. Bone marrow biopsy is an unusual site for the diagnosis of amyloidosis.

Conclusion: In cases suspicious for plasma cell myeloma, histochemical stain for Congo Red should be performed in order to achieve the correct diagnosis and apply the appropriate treatment.

A NOVEL TREATMENT OF NON-MELANOMA SKIN CANCERS: GENOTYPING, IMMUNOTHERAPY AND MINIMALLY INVASIVE PROCEDURES AS AN ALTERNATIVE TO TRADITIONAL SURGICAL EXCISION

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Background: Non-melanoma skin cancers (NMSC) with basal cell carcinoma(BCC) and squamous cell carcinoma(SCC) being two main types feature high prevalence in the U.S. yearly. Exposure to ultraviolet radiation appears as a major risk factor. Many treatment modalities have been described to address the growing epidemic of NMSCs. Surgical excision (SE) consists a traditional treatment of skin cancer at a high-risk for recurrence. Nevertheless, it provokes considerable aesthetic impairment illustrating the need of alternatives with a focus on prevention, equally good prediction and quality of life.

Aim: The aim of this article is to stress the importance of how modern modalities affect patient quality assurance therapeutically and aesthetically in the process of skin cancer correction. From genetics and pharmaceutical agents to micrographic surgery (MMS) and doctor patient communication we investigate which are the optimal available options.

Methods: We reviewed literature and profiles of patients and acquired data from patients narratives.

Results: Topical 5-fluorouracil appears as the most promising treatment showing 90% histological cure. MMS should be considered the most precise method combining a decreased recurrence of cancer with a proper aesthetic result ameliorating patient's psychology and compliance. Compliance's important is critical given that patients with recurrent NMSC withdrew from treatment due to aesthetic discomfort. Genotyping may enhance preventive strategies and provide future research with a pool of clinical data.

Conclusion: The tripartite of novel pharmaceutical therapies, surgical precision and solid doctor patient communication appears as a promising NMSC treatment taking into accounts both cancer treatment and patient overall well-being.

MULTINUCLEATE CELL ANGIOHISTIOCYTOMA OF THE NOSE: A RARE CASE REPORT

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Background/Aim: Multinucleate cell angiohisticytoma is a rare, benign lesion of unknown etiology in which asymptomatic, reddish-brown, dome-shaped papules develop over weeks to months, commonly on the extremities and face. Some authors consider such lesions as alterations of the connective tissue, others as vein damages and some others as chronic inflammatory disease. In the english literature there are only a few references with similar cases. Clinically, these lesions may resemble Kaposi's sarcoma, acroangiodermatitis, granuloma annulare, lichen planus, or sarcoidosis. It is more commonly observed in women with a ratio 5:1. These lesions can progress, and may become disseminated. Previously documented therapies include laser and/or topical steroids, although no treatment has been shown to be superior.

Case report: A 50-year old male came to our hospital with a two-year history of a nose papule, which was excised. In our laboratory, we received a skin biopsy with maximum diameter 0.5cm. On its surface, a red color nodule was observed with maximum diameter 0.3cm. Histologically, the salient features were proliferation of capillaries and small venules in the dermis, in association with prominent connective tissue cells and larger angulated multinucleate cells. Immunohistochemical stain for HHV8 was negative. These findings were compatible with multinucleate cell angiohisticcytoma. Six months after the operation there was no local recurrence.

A RARE CASE OF UPPER EXTREMITY DIFFUSE LARGE B-CELL LYMPHOMA (DLBCL) MIMICKING SOFT TISSUE SARCOMA

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Background/Aim: Non Hodgkin Lymphoma (NHL) involving soft tissue is extremely rare. It may be primary or following a nodal NHL elsewhere. Cases involving soft tissue often mimic other entities like sarcoma. Treatment options remain the same for both nodal and extra nodal DLBCL with the first choice being chemoimmunotherapy. We present a case of 54-year-old patient with left upper extremity mass which was proven to be DLBCL instead of sarcoma.

Case report: A 54-year-old female was admitted to our hospital due to fever, weight loss and extensive swelling and pain in her left arm. Her past medical history included DLBCL which was diagnosed from axillary lymph node two years ago. The patient had received six cycles of chemotherapy and was well for two years. MRI revealed a 6 cm mass in her left arm. We received fragments from the mass with the possible clinical diagnosis of soft tissue sarcoma. Histological examination revealed diffuse infiltration of soft tissue by large lymphoid cells with hypochromatic nuclei with one or two prominent nucleoli and scant cytoplasm. There were a lot of mitotic figures. Immunohistochemically the neoplastic cells were positive for CD20 and CD79a and negative for CK AE1/AE3, CD30, CD15 and S-100 protein. Ki-67 was positive to approximate 40%. The findings were compatible with DL-BCL. The patient received six cycles chemotherapy with R-CHOP and is alive eight months after the diagnosis was made.

AGE AS A PROGNOSTIC FACTOR OF SURVIVAL IN LUNG CANCER

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Purpose: To investigate the clinical importance of being elderly in lung cancer.

Material and methods: The data of 110 patients with histologically confirmed lung cancer who were treated and followed up in our clinic were recorded from their medical charts.

Results: There were 100 (91%) male patients with a median age of 54 (35-88) years. The majority of patients had non-small cell lung cancer (84%) and metastatic stage (56%). The proportion of chemotherapy responders was lower in elderly patients (p=0.01) and also these patients were more anemic than younger patients (p=0.02). Majority of the deaths occured in the ederly patients (p=0.01). The median overall survival of elderly patients was significantly shorter than younger patients (37.8 v 57 weeks) (p=0.009). The 1-year survival rates in younger and elderly patients were 67.3% and 55%, respectively, Older age had also kept its significance (p=0.023) in multivariate analysis. Among the elderly patients, stage of the disease and serum LDH levels had significant impact on survival. Elderly patients diagnosed with small cell lung cancer had worse outcome than those with non-small cell lung cancer (p=0.009). In addition, elderly patients with elevated serum LDH levels survived shorter than those with normal values (p=0.042).

Conclusions: Older age is one of the major prognostic factors influencing the survival of lung cancer. Therefore, elderly patients should be interpreted differently in clinical practice.

PRIMARY DIFFUSE LARGE B-CELL LYMPHOMA (DLBCL) OF THE THYROID GLAND: A RARE CASE

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Background/Aim: Primary thyroid lymphoma is a rare neoplasm comprising 1-5% of all thyroid malignancies and 1-2,5% of all extra nodal lymphomas. DLBCL is the most frequent from lymphomas in the thyroid gland comprising approximately 70%. It typically affects older adults with a striking female predominance, and originates in the setting of autoimmune thyroiditis. Patients usually complained of the presence of a rapidly enlarging mass, dysphagia, cough, dyspnea and hoarseness. Early recognition is required for accurate diagnosis and appropriate treatment. Treatments of choice are chemotherapy with or without radiation therapy. The outcome of DLBCL is less favorable than other types of thyroid lymphomas.

Case report: A 81-year-old female patient was admitted to our hospital with dysphagia and hoarseness. A 3 cm-nodule was found in the right lobe of the thyroid gland. The right lobe and a small part of the left lobe were excised. Histological examination revealed diffuse infiltration from large sized cells with high nuclear/cytoplasmic ratio, scant cytoplasm and nuclei with 1-2 prominent nucleoli. Morphological changes of Hashimoto's thyroiditis were seen adjacent to the lymphoma. Immunohistochemically, the neoplastic cells were positive for CD20 and CD79a and negative for CK AE1/AE3, S100 protein, CD3, ALK, CD30. Ki-67 was positive to approximately 40%. The diagnosis was DLBCL. In the histological differential diagnosis must be included anaplastic large cell lymphoma, plasmablastic lymphoma, Hodgkin lymphoma and the undifferentiated carcinoma. The correct diagnosis requires complete immunohistochemical panel. The patient received six cycles R-CHOP chemotherapy. Two years later no relapse was observed both clinically and radiologically.

COMPOSITE CLASSICAL HODGKIN LYMPHOMA AND NON-HODGKIN MANTLE CELL LYMPHOMA IN A SINGLE LYMPH NODE: A RARE CASE REPORT

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Background/Aim: Composite lymphoma is a rare entity in which two or more distinct types of lymphomas occur in a single anatomical location. Although composite lymphoma has been increasingly identified especially during the last years, with the advent of molecular genetic techniques, in every day routine it can easily be misdiagnosed. Accurate diagnosis of composite lymphoma is critical in order to apply the appropriate treatment.

Case report: A 72-year-old male was admitted to our hospital due to enlarged cervical lymph node. Excision of a 3,5cm lymph node was performed. Histological examination revealed complete effacement of the lymph node architecture. There were Hodgkin and Reed-Sternberg cells which immunohistochemically were positive for CD15 and CD30 and negative for CD20, LCA, EBV-LMP, CD5, CD23, Cyclin-D1 and CD10. Diffuse infiltration from small lymphoid cells which were positive for CD20, CD5 and Cyclin-D1 and negative for CD15, CD30, CD3 and CD23 was also observed. The histological findings were compatible with composite lymphoma in the same lymph node, composed of classical Hodgkin lymphoma and non-Hodgkin mantle cell lymphoma. The patient received six cycles chemotherapy with R-CHOP. Four months later he died due to respiratory infection.

PRIMARY DIFFUSE LARGE B-CELL LYMPHOMA OF CENTRAL NERVOUS SYSTEM: A INTERESTING CASE REPORT

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Background/Aim: Primary diffuse large B-cell lymphoma of the central nervous system (PCNSDL-BCL) is a rare tumor of the brain, spinal cord and leptomeninges without evidence of prior or concurrent lymphoma elsewhere. It has been estimated to account for ≤1% of all lymphomas, 4-6% of all extranodal lymphomas and ~1-3% of primary CNS tumors. Most immunodeficient patients who developed PCNSDLBCL are HIV positive with an estimated risk 1.000 times more than that of immunocompetent individuals. However, there is an unexplained 10-fold increase among immunocompetent patients. The overall diagnosis, management and prognosis of PCNSL differ from those of other types of lymphomas. Prompt diagnosis and initiation of treatment are vital for improving the clinical outcome. PCNSL is responsive to radiation and high dose chemotherapy but remissions are frequently short lasting mainly because the blood brain-barrier limits the access of many drugs to the CNS.

Case report: A 66-year-old male was admitted to our hospital due to headache and nausea. MRI revealed a 1.8 cm mass in the frontal lobe. A biopsy was performed. Histological examination revealed diffuse proliferation of atypical middle to large sized lymphoid cells with irregular nuclear contours and prominent nucleoli. There were areas of perivascular growth and necrosis. Immunohistochemically the cells were positive for CD20, CD79, Bcl-2, MUM-1 and LCA. Ki-67 was positive to approximately 30%. These findings were compatible with DLBCL. The patient received six cycle R-CHOP chemotherapy and is in good condition, without recurrence both clinically and radiologically, 2 months after the operation was made.

LANGERHANS CELL HISTIOCYTOSIS PRESENTING IN AN ELDERLY PATIENT WITH GENERALIZED LYMPHADENOPATHY: AN INTERESTING CASE

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Background/Aim: Langerhans cell histiocytosis (LCH) is a rare disorder characterized by proliferation and accumulation of clonal dendritic cells. It has a wide range from fetus to the elderly and a peak incidence from 1-3 years. The annual incidence is 4,6/million. LCH has a wide spectrum of disease activity, ranging from single osteolytic lesion to rapidly fatal leukemia-like illness. Commonly involved systems are skin, bones, lymph nodes, central nervous system, ears, gums, and lungs. The treatment is based on the use of systemic steroids, with or without chemotherapy. Multifocal LCH has a variable prognosis. Rarely there are frankly malignant cells (Langerhans cell sarcoma) associated with aggressive clinical behavior. Only a few cases of LCH presenting with generalized lymphadenopathy have been reported.

Case report: A 72-year-old male patient was admitted to our hospital due to asymptomatic generalized lymphadenopathy. A possible diagnosis of non-Hodgkin lymphoma was made clinically. An inguinal 3cm lymph node was excised. CT scan revealed enlarged inguinal and axillary lymph nodes. Histological examination revealed infiltration of the lymph node from medium-sized cells with irregular nuclei. Immunohistochemically, the neoplastic cells were positive for S-100 protein and CD-1a and negative for CD20 and CD3. There were no mitotic figures or atypia. The diagnosis of LCH was made.

Conclusion: LCH should also be considered in the differential diagnosis of elderly patients with generalized lymphadenopathy, both clinically and histologically in order to achieve the correct diagnosis and apply the appropriate treatment.

DESMOID FIBROMATOSIS OF THE ABDOMINAL WALL: PRESENTATION OF A RARE CASE

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Background/Aim: Desmoid tumor (DT), also called aggressive fibromatosis, is a very rare entity with an estimated incidence of 2-5 cases per million. It constitutes approximately 3% of the soft tissue tumors and 0,03% of all the neoplasms. These tumors lack the capacity to metastasize but may behave in a locally aggressive fashion and have a high risk of local recurrence despite adequate surgical resection. They relapse in approximately 45% of the cases. The differential diagnosis mainly includes gastrointestinal stromal tumor, leiomyosarcoma, rhabdomyosarcoma and fibrosarcoma. They have been correlated with b-catenin gene mutation and display high morbidity and mortality.

Case report: A 41-year-old female was admitted to our hospital with acute abdominal pain. A CT scan showed a mass in the epigastric region of the abdominal wall. In our laboratory, we received a partial gastrectomy speciment, tale and part of the body of the pancreas and the speen. Among them a white-brown color solid tumor of maximum diameter 14cm was adhered. On the cross sections the tumor appeared to be desmoid, having white color and elastic composition. The tumor was characterized by uniformly spindle shaped cells with whirling arrangement inside a collagenous or myxoid stroma. No polymorphism or mitoses were observed. The tumor cells immunohistochemically were positive for b-catenin and were negative for SMA, CD117, CD34 and S-100 protein. These findings were compatible with desmoid fibromatosis. The patient is well both clinically and radiologically two months after the operation without having other treatment.

INTERNAL JUGULAR VEIN THROMBOSIS: A RARE VASCULAR ENTITY

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Introduction/Aim: Inner jugular vein (IJV) thrombosis is a rare vascular entity. It is usually secondary to intravenous drug abuse, central venous catheterization, deep head-neck infections or trauma. Associated malignancies are uncommon and not well documented in the etiology of IJV thrombosis. Herein, we present an interesting and rare case of a female patient with malignancy- associated IJV thrombosis.

Case description: A 60 -year old female patient, was admitted to our clinic due to headaches and left cervical inflammation with concomitant progressively worsening swelling for the last 10 days. Physical examination revealed low grade fever and left sided neck swelling along the anterior border of sternocleidomastoid muscle with no abnormality on otoscopic examination of the ear. Blood chemistry revealed mild anemia, hypergammaglobulinaemia, elevated inflammation markers and ddimers. Diagnosis of left IJV was established after ultrasound examination of the cervical area. Low molecular weight heparin twice daily was initiated along with ampicillin/sulbactam IV as well as analgesia, with poor clinical response though. The patient underwent a full body CT scan, where a mass was detected by the left sternocleidomastoid muscle in contact with the inner jugular vein forming a clot in it. She underwent fine needle aspiration of the cervical mass, the histological examination of which revealed a mesenchymal -type neoplasm. The patient was referred to an Oncology Unit and was discharged.

PSEUDOMYXOMA PERITONEI ORIGINATING FROM COLON

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Backround: Pseudomyxoma peritonei (PMP) is an uncommon malignancy with an estimated incidence of one to two per million per year.

Case Report: A 74-year-old man presented to the Emergency Department with a month history of gradual onset, constant, dull, diffused abdominal pain. No fever or other symptoms were mentioned. His general condition was poor. His abdomen was soft but distended and painful during the deep palpation, but without any signs of acute abdomen and with normal bowel sounds. Important signs, palpable masses located on the left sight of the abdomen and diffused dullness to the abdominal percussion. From the per rectum examination no rectal mass was found. The abdominal ultrasound showed severe ascites. The paracentesis showed 1600 WBCs (Lymphocytes 75%, Neutrophils 15% and Other cells 15%) and Serum Ascites Albumin Gradient < 1,1. The fluid cytology was compatible with pseudomyxoma peritonei. The CT staging revealed fat and omentum turbidity without indication of metastasis. The gastroscopy was without any findings. The colonoscopy revealed multiple large polyps (adenomas with dysplasia). Finally, the omental biopsies were compatible with low grade mucinus carcinoma peritonei. He received 2 cycles of OxMdG and 5 cycles OXALICAP.

Conclusions: Although PMP predominantly originates from appendix in men, it has also been reported originating from other organs such as colon and rectum, stomach, gallbladder, bile ducts, small intestine, urinary bladder, lung, breast, fallopian tube and pancreas. We present a case with a possible primary lesion in the colon.

CANNON BALL OPACITIES IN CHEST DUE TO PRIMARY LUNG CANCER

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Background/Aim: Cannon ball opacities in lungs are usual manifestation of secondary's arising due to extra-thoracic malignancy. We report a rare case of primary lung cancer with presentation of multiple pulmonary nodules.

Case report: A 82-year-old non-smoker female, presented with history of abdominal pain and constipation since the last 4 days before admission. General physical examination did not reveal any abnormal findings except of tachypnea. Chest X-ray and chest computed tomography (CT) showed multiple bilateral pulmonary nodules/cannon ball opacities. Sputum was positive for non-small-cell lung cancer. Cytology from bronchoalveolar lavage during fiberoptic bronchoscopy was not diagnostic. CT guided percutaneous fine needle aspiration cytology from one of the lung opacity also revealed poorly differentiated lung adenocarcinoma.

Conclusions: Radiological manifestation of cannon ball opacities from primary lung cancer as noted in this case is a rare occurrence. The mechanisms through which cancer spread to the lungs in our case could be through bloodstream and lymphatic system.

SWEET SYNDROME ASSOCIATED TO MYELODYSPLASTIC SYNDROME

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67-year-old man with psoriasis, type 2 diabetes (treated with metformin) and smoker of 15 cigarettes/day. He is admitted for intermittent chronic fever and deterioration of the general condition for 3 months, with polyarthritis of large joints and bicytopenia, without objectifying infectious origin and inconclusive bone marrow study. He presented skin lesions in areas of venous channeling, improving these lesions with systemic corticosteroids, after taking a biopsy. The examination revealed regular general condition, mucocutaneous pallor, afebrile, arterial hypotension and reappearance of erythematous-edematous skin lesions in areas of venipuncture, with a central necrotic area. The blood test showed Hb 7.3 g/dl, VCM 99 fl, leukocytes 16400/dl (85% neutrophils), platelets 60000/ dl, glucose 304 mg/dl, sodium 128 mmol/l and C-reactive protein 73 mg/dl, with negative blood and urine cultures and, viral and bacterial serologies, and negative autoimmunity study. Body- TC Scan was realized with bilateral patched alveolar infiltrates with normal bronchoscopy and echocardiography. The biopsy of the skin lesions was compatible with Sweet's syndrome, and the subsequent bone marrow biopsy was compatible with high-risk myelodysplastic syndrome (type AREB 2), clinically associating both syndromes. He started chemotherapy, and 3 months after discharge from hospitalization, he was admitted again due to septic shock secondary to pneumonia and leukemization of the MDS, with a fatal evolution until his death. Sweet's syndrome is a rare dermatological condition, and when it is associated with MDS, its prognosis may worsen until death.

CYSTIC HEPATIC METASTASES DUE TO GASTRIC SIGNET RING CELL CANCER: A CASE REPORT

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Background/Aim: Cystic hepatic metastases are included in the differential for new cystic liver lesions. The internal cystic component may represent necrosis as the tumor outgrows its hepatic blood supply, or it may represent a mucinous component, similar to the primary tumor. Typically, hepatic metastases arise from organs that have the opportunity of seeding the liver with metastases via the portal vein, including the gastrointestinal tract (stomach, small bowel, colon) and the pancreas.

Case report: A 84-year-old female, presented with symptoms of flatulence and loss of appetite the last four days before admission. The patients had a history of gastric cancer surgery due to signet ring cell adenocarcinoma 3 years ago (Billroth II). General physical examination did not reveal any abnormal findings. Abdominal U/S showed a centrally hypoechoic cystic lesion of the left liver lobe. Upper abdominal CT revealed a cystic lesion between III and IVa liver segments irregularly thickened with enhancing wall. CT guided percutaneous fine needle aspiration cytology from the cyst lesion revealed signet ring cells compatible with liver metastasis due to gastric cancer. Upper GI endoscopy revealed an ulcerative lesion in antrum compatible with advanced gastric cancer.

Conclusions: Histologically, gastric carcinoma demonstrates marked heterogeneity. Signet ring cell carcinoma represents a poorly cohesive carcinoma and tends to have lymphovascular invasion and lymph node metastasis.

MALIGNANT MELANOMA (STAGE IV) OF UNKNOWN PRIMARY SITE (MUP) IN A MAN PRESENTING WITH PAIN TO THE RT HYPOCHONDRIUM

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Backround: MUP accounts for approximately 5-10% of patients with metastatic melanoma.

Case Report: A 59-year-old man presented to the Emergency Department with a 3 week history of mild, dull pain localized to the Rt hypochondrium, dry cough and fever (39,2 °C). On clinical examination, a mass was palpated at the Rt hypochondrium. The haematological test showed an elevation of cholestatic enzymes (γ-GT:167, ALP:212). The abdominal ultrasound revealed a mass (15 cm) sub-hepatic. The abdominal CT confirmed the presence of heterogeneous mass (15x7 cm) which was in contact with the portal vein and the Rt adrenal gland. A metastatic hypodense lesion (0,8 cm) was found at the anterior surface of the Lt hepatic lobe as well as multiple metastatic lesions localized to the lungs bilaterally. The biopsy of the abdominal lesion showed intense, diffuse autoimmunity against antibodies Melan A, HMB45 and MITF but not against S-100 protein, findings strongly in favor of metastatic malignant melanoma. The patient underwent a thorough examination that included skin, all mucosal surfaces, opthalmological and ENT examination, upper and lower GI endoscopy and CT of the brain. The detailed medical history did not revealed a prior skin lesion. The patient received chemotherapy with poor results.

Conclusions: We present a relatively rare case of a man with stage IV MUP presenting with no specific general symptoms.

CONSTITUTIONAL SYNDROME IN SUB-SAHARAN PATIENTS

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43-year-old woman with 3 months generalized abdominal pain, with loss of 15 kg of weight in the last 2 months. In July she was in Morocco and says that since then he also associates evening fever. She has had 6 miscarriages and 2 dead fetuses. On physical examination, cardiac auscultation with tachyarrhythmic tones around 120 bpm, rest of the exploration without findings. Blood test was carried out to determine regenerative iron deficiency anemia, mild leukocytosis, TP 13.9 sec, hypercoagulability study and autoimmunity test were negative excepting anti-thyroglobulin AC 11.9 IU / mL, antiperoxidase Abs 10.1 IU / mL. Tumor markers negative. Serum Lúes, IgG-EBV positive, IgM-EBV negative, CMV IgM negative, IgG-HCV negative, not immunized HBV, HIV 1-2 negative; 3-Serial blood cultures were negative and bronchoalveolar lavage was performed with leukocytes 610000/ mL recovered fluid (Macrophages: 99%). Culture mycobacteria in negative BAL. BACILOSCOPY are not observed BAAR. INFECTIOUS IMMUNOLOGY Legionella; Psitacci; Coxiella; Mycoplasma pneumoniae were negative. Dynamic study was carried out by echocardiogram that showed cor pulmonale with moderate dysfunction right ventricle. Body-CT scan finded a soft tissue mass in the anterior mediastinum, which obliged us to rule out lymphoproliferative syndrome. Graves Basedow's disease was diagnosed and a mediastinal mass biopsy was performed in the anterior mediastinum, and lung biopsy. The anatomopathological study of the samples showed true thymic hyperplasia and pulmonary parenchyma without images of capillaritis.

Discussion: Among the autoimmune paraneoplastic syndromes that are related to thymoma, and thyroiditis, pure red series aplasia affects approximately 5-10%. Lifetime tracking recommended.

INCREASED CHOLECALCIFEROL / CALCIDIOL AND DECREASED CALCITRIOL CONCENTRATION IN THE SERUM OF PATIENTS WITH LUNG CANCER AND HASHIMOTO'S THYROIDITIS

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The role of vitamin D in immune regulation has long been established and its relationship with autoimmune diseases and cancer has been investigated.

In the present study, cholecalciferol, calcidiol, the commonly measured type of vitamin D, and calcitriol, the active form of the vitamin, were measured by HPLC and ELISA kit of IBL in patients with lung cancer and Hashimoto's thyroiditis.

Interestingly, statistically significant increase in the level of cholicalciferol and calcidiol, reaching the upper limit of the vitamin, was observed in patients with lung cancer (SCLC, SCC, adenocarcinoma) compared to the healthy population. On the contrary, no statistically significant difference was observed in patients with Hashimoto's thyroiditis although the patients could be separated in two subgroups, one exhibiting statistically significant increase and the other statistically significant decrease compared to control.

The measurement of calcitriol showed reduced mean concentration only in patients with SCLC and Hashimoto's thyroiditis (p<0.05). However, calcitriol deficient individuals were observed in all patient groups varying from 28.8% in adenocarcinoma to 62.5% in SCLC patients. Levels exceeding the upper limit of 60 pg/ml were observed in 12-14% of patients with SCC and adenocarcinoma.

The observation of increased cholecalciferol/calcidiol associated with reduced calcitriol concentrations in the same samples of patients indicates that the measurement of cholecalciferol/calcidiol levels fails to reveal the lack of active type of vitamin D observed in these patients. It also indicates a misfunction in vitamin D metabolism that deserves further investigation and has to be taken into account in supplement administration to these patients.

DIAGNOSIS OF LIVER INJURIES: DIFFUSE LARGE CELL B LYMPHOMA

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52-year-old patient with HCV with a failed treatment attempt, referred by hypercalcemia and constitutional syndrome, palpitations, increased water intake and polyuria, spasms of the abdominal muscles. Physical examination anodyne except arrhythmic at 80 bpm. Blood test with acute renal failure (creatinine 1.76 mg/dl, Urea 74 mg/dl), calcium 15.2 mg/dl, CRP 1.55 mg / dl, PTH-I 6.94 pg / ml, 25-OH- Vit.D 33 ng/ml and 1.25 Dihydroxyvitamin D 59 pg/ml, negative tumor markers. Systematic urine test with FG 52 ml/min/1.73 m2 and calciuria 17.21 mg/dl. Arterial blood with metabolic alkalosis. Abdominal ultrasound with a mass in right hepatic lobe, solid- hypoechoic with lobulated contours of 11.5x7x7 cm, suggesting a neoplastic. Lymphadenopathy in liver and peripancreatic hilum and splenomegaly with two solid hypoechoic lesions. Extended study by body- CT scan where hypovascular lesions are seen in liver that given the patient's background could correspond to multifocal hepatocarcinoma of atypical behavior with splenic metastasis. And RMN located an hepatic mass of 11 cm with two satellite nodules suggestive of cholangiocarcinoma with metastatic adenopathies in the hepatic hilum and retroperitoneal. The thick-needle biopsy shows a non-Hodgkin's lymphoma compatible with diffuse large-cell lymphoma (Burkitt's lymphoma). The Burkitt's lymphoma is the most frequent subtype. In the classification REAL and WHO definitively called diffuse large B cell lymphom. The average age of of presentation is 60 years, so that 25 to 35% of patients are elderly.

EPITHELIOID HEMANGIOENDOTHELIOMA OF THE LUNG - A CASE REPORT

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It is a rare bone and soft tissue vascular tumor with characteristics of angioma and angiosarcoma.It represents less than 1% of the vascular tumors. Its incidence is 1/1000000, most patients are women with mean age 36 yo. A 44yo previous health man was admitted for a recurrent L pleural effusion. He complained about persistent pain the past 5 months on the lower L hemithorax. He presented with edema of the R lower limb with venous u/s negative for thrombosis. He was initially treated as a lower tract infection and was prescribed antibiotics PO without any improvement.A CT pulmonary angiogram was performed without any filling defects except small subpleural and perifissular nodules on both lungs and large L pleural effusion. A chest tube was placed and pleural fluid analysis revealed, polymorphonuclear exudate which on a second analysis transformed to lymphocytic exudate with low pH, glucose and ADA levels. All stains, cultures and cytologic tests were negative. Upper and lower abdomen CT scans were normal and the edema was considered as idiopathic lymphedema by agiologist. A video assisted thoracoscopic surgery revealed pleural thickening and L hemidiaphragm elevation to the 5th intercostal space. From tissue biopsies he was diagnosed with epithelioid hemangioendothelioma with local metastasis to the skeletal muscle. Oncological assessment was asked and he was treated with concurrent radiotherapy and chemotherapy with bevacizumab and nab-paclitaxel. Epithelioid hemangioendothelioma is a rare vascular tumor which usually affects the lungs, the liver liver and the bones. Due to its heterogeneity its diagnosis is usually delayed, resulting in poor prognosis.

PULMONARY CARCINOID TUMORS AND RADIATION THERAPY

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Background: Pulmonary carcinoids used to be known as bronchial adenomas because they were believed to be benign, but they are now recognized as malignant because of their potential to metastasize. Surgery is the primary treatment and typical carcinoids do not require adjuvant radiotherapy or chemotherapy after curative resection.

Methods-Material: Review of the literature, and electronic databases.

Results: There are no prospective trials that address the use of adjuvant therapy for patients with bronchopulmonary carcinoiods. Twenty-five patients treated at the Memorial Sloan Kettering Cancer Center found no survival benefit from prosperative radiotherapy. The role of adjuvant radiotherapy is unsettled because of the retrospective nature of studies. However, adjuvant radiotherapy has been used in patients at high risk for locoregional recurrence. Palliative radiotherapy can be considered in patients with metastatic pulmonary carcinoids. Tumor-targeted irradiation with radioactive somatostatin analogs has been used, as second - or third - line therapy. The results are inconclusive, with occasional long-term survivors reported. Local control and symptomatic relief can be achieved in most patients with 40 to 50 Gy. The role of adjuvant radiotherapy is undefined. For patients with gross residual or unresectable disease, higher total dose may be justified as long as the dose to other critical structures does not exceed the tolerance of normal tissues.

Conclusion: Surgery is the primary treatment for pulmonary carcinoids. Adjuvant radiotherapy or systemic chemotherapy may be considered even for patients with early-stage disease because of the high incidence of regional and distant failure. Palliative irradiation should be considered for those with symptomatic disease.

REACTIVATION OF MALARIA IN A LEUKEMIA PATIENT

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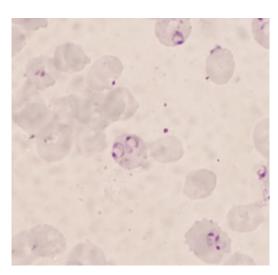
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Case Report: Reactivation of malaria in a leukemia patient. A 42-year-old woman who lives in Cameroon, admitted to hospital with fatigue, fever, trembling, sweating and abdominal pain. The patient was treated for malaria 4 months ago. She admitted to gastroenterology with fatigue, nausea and red eye after a month. Thrombocytopenia was detected and she was diagnosed with hepatotoxicity due to drugs. She was referred to hematology with suspected ITP. She was referred to emergency department of our hospital with abdominal pain, fever and nausea, from airport during the flight from Cameroon to Tunisia. Physical examination revealed jaundice, hepatomegaly. Other systems were normal.

Laboratory results were Hgb 10.5 gr/dL, WBC: 630 K/UL, platelet count: 27800 K/UL, LDH 3937 IU/L, ALT 24 U/L, creatinine 2.34 mg/dL. Thin and thick peripheral smears were normal for malaria but bone marrow aspiration and biopsy were performed for etiology of hemophagocytosis and pancytopenia. She was diagnosed with CD10 + B-ALL. We started the chemotherapy protocol. Concomittantly we analyzed the thin and thick blood smears during acute fever, trembling and sudden hemoglobin decline.

The inclusion bodies (P. falciparum and P. Vivax) were seen thick smears primaquine and Livether (artemether + lumefantrine) was started on the same day. The following day she was entubated due to respiratory distress and she died with cardiac arrest on the third day of treatment.

Conclusion: Physicians should be aware recrudescence of malaria on immunocompromised patients that treated for malaria in past.



AETIOLOGY AND OUTCOME OF UPPER EXTREMITY THROMBOSIS

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Background: Upper and lower extremities deep vein thrombosis (DVT) have different aetiologies.

Objectives: To study the epidemiology and outcome of upper extremity venous thrombosis in our institution.

Methods: We retrospectively examined the medical record of all patients with upper extremity venous thrombosis that were managed by our department from 2014 October to 2015 October. We examined the aetiology, treatment duration and treatment outcome of those patients.

Results: Out of the 18 patients, 13 (72%) had DVT, 5 (28%) had superficial venous thrombosis. Out of the 13 patients with DVT, 7 (54%) were due to intravascular catheter, 4 (31%) had malignancy, 1 (7.5%) had Lemierre's syndrome and 1 case (7.5%) was attributed to immobility from stroke and radial fracture. 8 patients had repeat imaging after DVT treatment, 5 (70%) of them had complete resolution of the DVT within 3 months. 1 patient had complete resolution of DVT shown on venogram performed for other purpose 2 years after DVT treatment. 1 patient had interval DVT improvement shown on repeat imaging 6 months later.

Conclusions: Secondary upper extremity DVTs are mainly contributed by intravascular catheter or malignancy. 3 months of anti-coagulation is generally adequate.

MULTICENTRIC CASTELMAN'S DISEASE AND SARCOMA KAPOSI IN AN IMMUNOCOMPETENT, HIV (-) PATIENT WITH HERPESVIRUS-8 AND EBSTEIN-BARR VIRUS CO-INFECTION

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Background/Aim: Sarcoma Kaposi (SK) and MulticentricCastelman's Disease (MSD) have rarely been reported in immunocompetent, HIV(-) patients. Human herpes-8 (HHV-8) virus plays an important role to the pathogenesis of these entities. Herein, we report a case of an immunocompetent patient, who was diagnosed with SK and MCD, HHV8(+).

Case Report: A 68-year's old man, with a medical history of hypertension, with good performance status, presented in the emergency department complaining of fatigue, low-grade fever for two weeks, and loss of 15 kilos of body weight during the last three months. From the clinical examination, subcutaneous nodules of different sizes were apparent on the lower extremities; small cervical, axillary and inguinal lymph nodes, splenomegaly and skin paleness were present. Laboratory tests revealed pancytopenia, elevated erythrocyte sedimentation rate and hypalbuminemia. Computed tomography of the chest and abdomen revealed multiple lymph nodes of >1cm diameter and hepatosplenomegaly. Histologic specimens were obtained from two different locations. The biopsy results were: SK and HHV-8(+) MCD, from the inguinal node and SK and HHV-8(+) and EBV(+) MCD from the axillary lymph node. After these results, the patient was referred to the hematology and oncology department, where he received liposomal doxorubicin and rituximab with complete response of MCD and partial response of SK.

Conclusion: SK and MCD are common malignancies found in the HIV(+) population, but extremely rare but described in the immunocompetent.

THINKING OUTSIDE THE BOX IN A BLEEDING PATIENT: A BIZARRE CASE OF ACQUIRED HEMOPHILIA- A CASE REPORT

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Background/Aim: Acquired hemophilia is a rare coagulation disorder, most frequently caused by autoantibodies against endogenous factor VIII. Most cases involve elderly people (60-70 years old), but there are also cases related to pregnancy. The cause of the disorder may be idiopathic (50% of cases), related to malignancy or autoimmune disorders. The disease presents with minor to severe bleeding, anemia and an isolated prolonged aPTT. We present a case of a 67-year old male with acquired hemophilia A.

Case presentation: Our patient was admitted to the surgical department due to extensive hematomas located to both lower limbs and left arm without previous trauma. At admission, he presented with severe anemia and isolated prolonged aPTT. The patient was receiving aspirin 100mg per day. Despite the appropriate daily blood transfusions, the hemoglobin level did not respond. Due to prolonged aPTT, we conducted a mixing study of his blood and the diagnosis of acquired hemophilia, attributed to the presence of factor VIII inhibitor, was confirmed. He was treated with prednisone, anti-inhibitor coagulant complex (FEIBA), cyclophosphamide and rituximab with a very slow response. He was discharged two months later with normalized coagulation studies and adequate levels of hemoglobin.

Conclusion: The initial approach of a patient with hematomas and concurrent treatment with antiplatelet drugs is to exclude active bleeding. However, a single test (aPTT) was overlooked. High index of clinical suspicion for acquired hemophilia should be considered in cases of isolated prolonged aPTT, bleeding and anemia.

POEMS SYNDROME IN A PATIENT WITH PLASMACYTOMA

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Background: POEMS (polyneuropathy, organomegaly, endocrinopathy, monoclonal gammopathy and skin changes) syndrome is a paraneoplasmatic syndrome due to underlying plasma cell neoplasm. Physicians seem to be unfamiliar with the diagnosis of this rare, chronic and disabling condition. We discuss a case of diagnosis of Poems syndrome presenting with polyneuropathy and lower limbs edema in a patient with underlying plasmacytoma.

Case report: A 56-year-old man presented to our hospital due to lower extremities paresthesia and weakness of six months duration. Clinical examination revealed areflexia of both lower and upper limps, as well as edema of the lower limbs and hypogonadism's symptoms. Remarkable laboratory findings were thrombocytosis, erythrocytosis and lambda light chain restricted monoclonal gammopathy, in serum immunofixation. Neurological assessment revealed the diagnosis of Chronic Inflammatory Demyelinating Polyneuropathy (CIDP). Bone marrow biopsy showed normal cellularity which excluded the diagnosis of multiple myeloma. A full body CT scan showed splenomegaly, axillary and inguinal lymphadenopathy and a lytic bone lesion of the right ilium and ischium. Histology examination of biopsy specimen from the lesion demonstrated a plasmacytoma.

Conclusion: Diagnosis of POEMS should be considered within the differential diagnosis in patients with polyneuropathy and biopsy of bone lesions can be useful for diagnosis of POEMS syndrome in difficult cases.

VARIABLE IMMUNODEFICIENCY MANIFESTED AS AUTOIMMUNE HEMOLYTIC ANEMIA - AN INTERESTING CASE

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Background/aim: Common variable immunodeficiency (CVI) is a primary immunodeficiency disorder characterized by low levels of most or all of the immunoglobulin classes, a reduction of B lymphocytes or plasma cells and clinically vulnerability to bacterial infections. VI is not a single disease but rather a collection of hypogammaglobulinemia syndromes resulting from many genetic defects. In the majority of cases, the diagnosis is not made until the third or fourth decade of life. The main complications of the disorder are considered to be the recurrent infections which can lead to permanent damage to organs involved, the autoimmune manifestations and the tendency to malignancies especially lymphomas. We present a patient diagnosed with autoimmune hemolytic anemia as a first manifestation CVI disorder.

Case Report: A 49-year-old male patient was admitted to our hospital because of anemia (Ht=15%). The laboratory tests showed findings compatible with the presence of autoimmune hemolysis (Coombs test+). Significant hepatosplenomegaly was noticed (20 cm and 17 cm respectively). The serum immunology tests were negative. A bone marrow biopsy and aspiration was performed which showed no infiltration from lymphocytes. The serum protein electrophoresis was abnormal (low gamma globulins levels). All serum immunoglobulins were low (IgG= 624, IgA=27.8, IgM= 33.6). The patient was initially treated with corticosteroids with no response. He consequently treated with rituximab with success.

Conclusion: The CVI is a rare hematologic disease which can manifest at first with autoimmune disorders such as autoimmune hemolytic anemia. The treatment with corticosteroids can be insufficient. Therefore, the administration of rituximab may be necessary.

AGRANULOCYTOSIS IN A PATIENT WITH UNDIAGNOSED T-LEUKEMIA, AGGREVATED BY LEFLUNOMIDE

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Background/Aim: Agranulocytosis is a rare condition with a reported incidence ranging from 1 to 5 cases per million yearly. Association with medications can be found in about 70% of cases, but only a very low percentage involves the use of leflunomide (ARAVA). Herein, we report a case of agranulocytosis in a patient, who received leflunomide for a rheumatologic disease under investigation but which eventually proved to be T-leukemia.

Case report: A 59year old woman, with a medical history of hypothyroidism and hypertension, presented in the emergency department, when agranulocytosis (WBC 174/ μ L) and severe neutropenia (Poly 1/ μ L) were detected in regularly ordered blood tests. The patient was recently investigated for a rheumatologic disease, and a low-grade leucopenia (WBC 4000/ μ L. During the past month, she had received leflunomide, for 10 days, ceased due to upper respiratory infection. 20 days later she presented with neutropenia. The clinical examination was normal throughout hospitalization. Extended laboratory and invasive exams have been performed, without significant findings. Bone marrow aspirate revealed no granular array cells. She received filgrastim (G-CSF) 48ui/day and broad-spectrum antibiotics, due to low grade fever. Since neutrophils were not increased, on the 7th day cholestyramine was added, to enhance the clearance of the metabolites of leflunomide. On day 8, neutrophils were 200/ μ L and on day 11 2.200/ μ L. Bone morrow aspirate finally revealed T-lymphocyte infiltration, compatible with LGL-T leukemia. She was referred to the hematology department.

Conclusions: Agrunolocytosis is a rare, drug-induced complication, rarely described for leflunomide, where use of cholestyramine may be helpful.

MEGALOBLASTIC ANEMIA WITH MASSIVE SPLENOMEGALY: COMPLETE RESPONSE AFTER B12 VITAMIN REPLACEMENT

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Introduction: The most common explanations for poor vitamin B12 status are a low dietary intake of the vitamin (i.e., a low intake of animal-source foods) and malabsorption. We report an atypical clinical observation of megaloblastic anemia (MA), which is especially interesting in that it illustrates the difficulty in approaching a case of massive splenomegaly.

Case description: A 42-year-old male presented to the internal medicine outpatient clinic with one month history of fatigue. His blood pressure was 110/80 mmHg and all vital findings were normal. Findings on lymph node examinations were unremarkable. Abdominal examination revealed 5 cm splenomegaly. Laboratory findings reavealed severe macrocytic anaemia (haemoglobin, 4,58 g/dL; MCV 112 fL) in addition to leucopenia(2930/mm3) and thrombocytopaenia(44000/mm3), haemolysis (total bilirubine 2,33 mg/dL, indirect bilirubine 1,35 mg/dl), increased LDH (2134 U/L) and reticulocyte count, decreased haptoglobin levels, negative direct coombs test and severe vitamin B12 deficiency (<50 pg/ml). Abdominal ultrasonography showed massive splenomegaly (213x72 mm). Bone marrow aspiration and biopsy showed no lymphoproliferative but megaloblastic changings. Following cobalamin replacement therapy, the patient reported increased well-being, including appetite and weight gain. In the follow-up laboratory examinations, leucocyte and platelet counts in addition to serum bilirubin and LDH levels normalised. At the end of 2 months, laboratory findings, including haemoglobin level were all within the normal range and radiologic findings showed decrease in spleen size.

Discussion: Systemic disorders, chronic myeloproliferative/ lymphoproliferative disorders often can cause massive splenomegaly. Splenomegaly with pancytopenia is an unusual association of MA as most of the literature suggest only severe anemia as predominant symptom of MA.

A CHALENGING CASE OF MULTIPLE MYELOMA RELATED HYPERCALCEMIA

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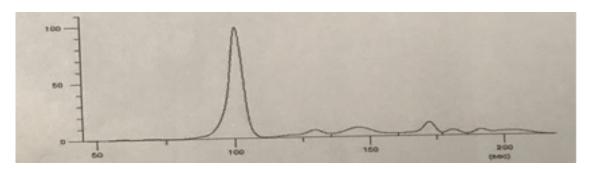
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Introduction: Although hyperparathyroidism is one of the most common cause of hypercalcemia, other causes should be thouroughly investigated in hypercalcemia. We here present an unexplained hypercalcemia which was attributed to multiple myeloma (MM) after a high suspicion and thourough investigation in this line.

Case: A 77-years old woman presented with dyspnea and palpitation. Her physical examination was normal (except bilateral mild edema). Her blood tests showed hemoglobin 9.06 gr/dL, MCV 78fL.urea 22 mg/dl, creatine 0.74 mg/L, calcium, 12.3 mg/dL, phosphorous 3.2mg/dL LDH 392 IU/g, total protein 5.3 g/dl, albumin 4 g/dL, PTH 14.7, pg/dL, 25-hydroxy vitamin D 3.7 ng/mL, and ESR 21mm/h. Unfortunately, PTH-related peptite couldn't be determined. Also, serum immunoglobulin's levels were low (IgA 17.3 mg/dl, IgG 471 mg/dl and IgM 23.5 mg/dl). Thoraco-abdominal CT scan, mammography, and endoscopic investigations were all normal. There were no lytic lesions in bone survey and her serum protein electropheresis showed no M-band, but still we ordered immunofixation electropheresis studies which showed a light chain secretion (Lambda light chain 6009 mg/L, Kappa light chain 18.7 mg/L) Serum free Lambda light chain 1.43 g/L, free kappa light chain 0.86 g/L Kappa/Lambda ratio 0.60). PET/CT showed increased uptake in the lower thoracic vertebra corpus and bone marrow biopsy revealed hypercellular bone marrow with 20-30% pleomorphic plasma cells. After treatment of MM, serum calcium level returned to normal.

Conclusion: In the absence of the typical signs of MM (such as elevated ESR, lytic lesions, etc.), this disease should be thouroughly investigated and excluded in un-explained hypercalcemia.



2 CASES OF LEMIERRE'S SYNDROME: DO WE ANTI-COAGULATE?

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Background: The role of anti-coagulation in Lemierre's syndrome is controversial. We present two cases of Lemierre's syndrome: one was anti-coagulated while the other was not.

Case1. 19-year-old gentleman presented with 1 week of fever and cough. Chest X-ray showed left sided pneumonia. Blood culture grew Fusobacterium necrophorium. He was intubated for respiratory failure. Computed tomography (CT) of neck, chest, abdomen and pelvis showed left sided consolidation with small developing lung abscess, large left pleural effusion, septic emboli in bilateral lungs, left internal jugular vein (IJV) thrombosis and bilateral mastoiditis. He was given 4 days of Enoxaparin. Repeat CT in 2 weeks showed interval recanalization of left IJV. With antibiotic and surgical decortication of lung, patient recovered well.

Case2. 70-year-old Indian lady was treated as asthma exacerbation. CT brain and cervical spine was done as she had a traumatic head injury following a fall. It showed marked swelling of the cervical prevertebral soft tissues with narrowing of the airway. Patient developed stridor and worsened dyspnoea that required intubation. Magnetic resonance imaging (MRI) of neck showed multiple neck abscess and left IJV thrombosis. She completed 3 months of anti-coagulation. Repeat CT 3 months later showed resolution of IJV thrombosis. With antibiotic and repeated surgical drainage, patient recovered well. Intra-operative culture grew Klebsiella pneumoniae.

In conclusion, Lemierre's syndrome have been treated successfully with or without anti-coagulation previously. Our cases shown the same finding. More prospective studies are required to provide definite answer.

UNUSUAL INR PROLONGATION DUE TO CHILI PEPPER CONSUMPTION

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Background/Aim: To report an INR prolongation aetiology, not described in the literature before.

Case Report: A 55-year-old triathlon athlete underwent preoperative testing for scheduled shoulder surgery. Surprisingly his INR was 1.57, aPTT 34 sec and the rest of his lab tests were within normal limits. No history of smoking, alcohol consumption or NSAID intake. He reported mild bleeding upon minor lacerations but no mucosal bleeding or bruising. He underwent a thorough investigation with liver function tests and imaging that were normal. He confessed consuming at least 15 chili peppers (Capsicum annuum sp) a day for energy purposes. As no other cause was identified, he was instructed to refrain from chili peppers. A repeat INR that was performed 15 days later was 1.05. He was allowed to undergo surgery and a normal INR was found again. Quick time prolongation was witnessed a new 2 weeks after returning to his regular diet which included chili peppers, again with a normal aPTT. To our knowledge, capsaicin does not affect lab tests for clotting times, even though it has a dose-dependent action on platelet aggregation, factor VIII:C and factor IX concentration.

Conclusion: Further investigation is warranted for capsaicin medicinal actions and INR should be considered especially in areas where spice rich diet is seen.

PATIENT WITH RECURRENT STROKE AND SPLENOMEGALY

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Background: splenic marginal zone lymphomas are related to secondary antiphospholipid syndrome. Case report: 57 years old patient, history of hypertension, hyperlipidaemia, gout. Presented to the A&E, February 2016, with right hemiparesis, dysarthria and diagnosed with stroke. Further management and control of risk factors were provided. Five months later (7/2016), he returned complaining of fatigue and weight loss. On investigation, anaemia, splenomegaly and mesenteric lymph nodes (smaller than 1cm) were found, no peripheral lymph nodes. Bone marrow and trephine biopsy were performed twice. The histology showed myelofibrosis. The patient presented again two months later (9/2016) with recurrent symptoms of stroke.

On investigation, his spleen was not enlarged and he had no anaemia. No treatment was administered since his last hospitalisation, apart from aspirin and clopidogrel. CT brain was with no findings but the MRI brain revealed stroke in the left pons. From investigation performed, high titres of antibodies against La, cardiolipin and β 2- glycoprotein consistent with antiphospholipid syndrome were found. After repeated analysis at two months, he was started on anticoagulants, with the possible diagnosis of antipospholipid syndrome. This could also explain the enlarged spleen and lymph nodes that disappeared with antiplatelets. On follow up, he developed splenomegaly, cervical lymph nodes, anaemia and pruritus. At this point, biopsy of the lymph nodes and splenectomy were performed. The histology showed splenic marginal zone B-cell lymphoma.

Conclusion: Rare causes of stroke, as secondary antiphospholipid syndrome, should be considered in patients with recurrent strokes and other manifestations of a systemic disease.

THROMBOTIC THROMBOPENIC PURPURA IN PREGNANCY: ONE RARE CASE OF FATAL INTRACEREBRAL HEMORRHAGE

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Thrombotic thrombopenic purpura (TTP) is a rare microangiopathitic hemolytic anemia, along with thrombocytopenia and neurological deficits, associated with several underlying conditions. It usually occurs in autoimmune diseases, with inhibition of ADAMTS13 by autoantibodies or during pregnancy irrelevantly to autoimmunity, congenitally or acquired. Here we report a rare case of TTP in a 37-year old pregnant woman, with a TTP-free previous pregnancy and no identifiable underlying trigger. She presented with thrombopenia, microangioathitic hemolytic anemia, schistocytes in the peripheral blood smear, elevated LDH and signs of low fetal pulse.

She was treated with emergency caesarian section, daily plasmapheresis and intravenous prednisolone, resulting in remission within 3 days. All serological tests, viral and immunological profile were negative. Brain, chest and abdomen imaging did not uncover malignancy or other disorder. With remission established, on day 9, the patient presented with acute headache, diplopia, hypertension and recurrence of thrombopenia, with brain imaging findings of Posterior Reversible Engephalopathy Syndrome, ending in intubation, due to rapid deterioration of conscious level (GCS:11). Simultaneously the TTP relapsed aggressively, advancing in brain hemorrhage shortly after intubation. Although plasmapheresis was resumed intensively twice daily and various immunosuppressants were used -high dose prednisolone, intravenous immunoglobulin, rituximab- the patient deteriorated massively, with hemopericardium, lung alveolar hemorrhage, uncontrollable intracerebral bleeding with brain death.

Despite all efforts, our patient died on day 17, underlying that TTP is a rapidly deteriorating serious disease, leading to early death if not drastically treated. With a high relapse risk upon minor trigger, long intensive therapy and monitoring remain crucial.

TINNITUS AS THE PRESENTING SYMPTOM OF ESSENTIAL THROMBOCYTHEMIA

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Background and purpose: Essential thrombocythemia (ET) is clonal myeloproliferative disorder (MPD), clinical picture is dominated by a predisposition to vascular occlusive events and hemorrhages. Clinical manifestations of ET in adult Jordanian patients are lacking.

Aim: To describe and find the early symptoms of ET in adult Jordanian patients Methods: A retrospective hospital-based study was conducted. All cases of ET diagnosed during the period January September 2002 October2017 at King Abdullah University Hospital were included in the study. The early symptom of the patient was extracted from the clinical note of the patients.

Results: 26 cases met the inclusion criteria for the diagnosis of ET, mean age 42 year (range 29-76), male/female ratio (43%/57%). Tinnitus as an early symptom of ET was found in 11 patients (42%), asymptomatic in 6 patients (23 %), three patients with headache (12%), three patients with cerebrovascular accident (12%), two patients with portal vein thrombosis (8%), and one patient with hematuria (4%).

Conclusion: Tinnitus was the early symptom of ET in the majority of our patients. Thrombotic manifestations were not common in our ET patients. We recommend that patients with tinnitus should check their platelet.

FATAL HEMOPHAGOCYTIC LYMPHOHISTIOCYTOSIS, PROBABLY SECONDARY TO LEISHMANIASIS, IN AN IMMUNOCOMPETENT ADULT

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Background/ Aim: Hemophagocytic lymphohistiocytosis (HLH) is a rare syndrome, attributed to genetic factors, inflammatory/rheumatologic diseases, infections, or other, rare conditions. HLH is associated with overactivation of macrophages and overproduction of inflammatory cytokines. Herein, we describe a rare case of an immunocompetent patient, diagnosed with HLH, who never responded to treatment.

Case Report: A 53 year's old man, with a medical history of smoking and stroke, presented in the ER with fever of 10 days. The patient had been recently hospitalized for fever that responded to doxycycline. The patient underwent a full clinical and laboratory work-up, in the context of FUO, with no diagnostic findings, apart from positive IgG antibodies and PCR for Leishmania in the blood and bone marrow respectively. Though, no Leishmania amastigotes were found in the bone marrow aspirate. The patient received amphotericin B without remission of the fever, while his blood tests revealed thrombocytopenia, anemia, high ferritin levels and hypertriglyceridemia. Ultrasound and computed tomography showed mild splenomegaly. Diagnostic criteria of hemophagocytic syndrome were fulfilled, without a specific cause found, apart from probable leishmaniasis. Genetic testing for idiopathic HLH was negative. The patient received a second cycle of amphotericin, with no satisfactory response. Finally, he received etoposide, cyclosporine and dexamethasone, according to 2004 HLH protocol, with partial response to the treatment. After a long hospitalization, several complications and hospital-acquired infections the patient passed away.

Conclusions: HLH is a rare, though difficult to diagnose and manage complication in several severe infections or inflammatory situations, needing prompt treatment.

ADULT ONSET CYCLIC NEUTROPENIA IN 71 YEARS OLD WOMAN

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Background -Aim: Cyclic neutropenia is a rare blood disorder characterized by recurrent episodes of low levels of neutrophils. Neutropenia occur every 21 days and may last 4 to 6 days. These patients are susceptible for recurrent infections, sometimes life threatening. In our case, we describe a case of cyclic neutopenia in an adult patient.

Case Report: A 71 years old woman was admitted to our Department with recurrent episodes of diarrhoea, apthous stomatitis, ulcers in perineum and fever for the past 6 months. She complained for sore throat and dysphagia. She had no family history of similar symptoms, she didn't take any blameworthy drugs. Medical history with recurrent infections of upper respiratory system.

Physical examination: BP 90/60 mmHg, T: 36,.8°C, HR: 98/min, RR: 24/min. Apthous ulcers in oral mucosa and perineum. General abdominal tenderness, rest of the physical examination (-). Laboratory tests Hct 28%, Hb 8,7, Neut 0,483 x10³/uL, BUN 128 mg/dl, creatinin 2.8 mg/dl, C3, C4 normal. From her previous report referred three other same neutropenic episodes in last 6 months. All bloodstream cultures were without pathogens, stool and urine culture (-). All body Ct scan (-). Colonoscopy: ulcers in ileocecal valve. Bone marrow study revealed increased number of large granular Lymphocytes and decreased neutrophil precursors. She was diagnosed with adult onset cyclic neutropenia and was treated with G-CSF and Pip/taz and linezolid iv, her condition improved.

Conclusions: Cyclic neutropenia usually presents in children but it must be considered in the differential diagnosis of neutropenia in adult patients where occurs spontaneously.

PRIMARY CENTRAL NERVOUS SYSTEM LYMPHOMA IN A PATIENT WITH A CLINICAL MANIFESTATION OF FACIAL NERVE PALSY: CASE REPORT

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Background/ Aim: Primary Central Nervous System Lymphoma (PCNL) is a rare form of Non-Hodgkin Lymphoma, at a rate of 2-3% of all brain tumors, in immunocompetent patients. It is well known the immunocompromised patients are at greater risk of developing lymphoma. Facial nerve paralysis should be thoroughly investigated as it is observed from this case report, having a wide range of causal etiologies.

Case report: We report the case of 65 -year-old Greek-Cypriot patient, with past medical history of Parkinson's disease, arterial hypertension, hyperlipidemia with first right facial nerve palsy and then bilateral, right ophtalmoplegia and right hearing reduction. Laboratory investigation and CT +MRI brain was without significant findings. Due to worsening clinical situation of the patient instead of giving acetylsalicylic acid and methylprednisolone we have made an MRI eye -socket and internal auditory meatus with of evidence of enhanced the nerves of bilateral internal auditory, trigeminal and occulomotor nerves. Cerebrospinal fluid examination (CSF) showed increased leukocytes with lymphocytic type WBC 630/µI with 95% Lympho, increased protein 540 mg/dI and hypoglycaemia CSF 3 dl/dl, and cytologist positive for malignancy. The flow cytometry showed clonality of lymphocytes. Then the patient received a high dose methotrexate regimen according Memorial protocol with no clinical response, week later patient died.

Conclusion: Primary Central Nervous System Lymphoma (PCNL) may appear with clinical heterogeneity and must be differentiated from vascular lesions, chronic granulomatous diseases and other neurological diseases.

AN ATYPICAL CASE OF THROMBOTIC THROMBOPENIC PURPURA

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Background: Thrombotic thrombopenic purpura is a disorder of the blood-coagulation system characterized by clotting in small blood vessels resulting in thrombopenia and is caused by reduced activity of ADAMTS13. Cancer patients are at high risk for hematologic complications such as TTP. We report a rare case of prostate cancer which presented as TTP and acute kidney injury.

Case Report: A 68 year old man was admitted because of oliguria, abdominal pain, nausea, low grade fever since three days and lower urinary tract symptoms since one year. Past medical history included hypertension, nephrolithiasis and gastrectomy. Clinical examination was unremarkable except for two small bruises on lower abdomen and on left leg. Laboratory examinations showed urea:189 mg/dl, creat:9,1 mg/dl, LDH:2437 U/L, platelet count 60.000/µL, Hb:12,7g/dl, fibrinogen 382 mg/dl , D-dimers 2,42 mg/l. Peripheral blood smear revealed schistocytosis and microangiopathic anemia consistent with a diagnosis of TTP. He was started on plasma exchange therapy, corticoids and dialysis. Renal function and hematologic parameters restored five days later. During investigation for secondary causes of TTP, a high PSA was found (108 ng/µl) and a prostate biopsy revealed an invasive adenocarcinoma. The patient was treated with bicalutamide and leuprorelin. Two months after admission, he was in good clinical condition, PSA levels were falling and no plasma exchange therapy was required.

Conclusions: Cancer patients can be complicated by hemostasis disorders and TTP is in the differential diagnosis. Early initiation of plasma exchange is mandatory in some cases for recovery.

CLINICAL CHARACTERISTICS AND TREATMENT OF ATRIAL FIBRILLATION IN PATIENTS WITH CORONARY ARTERY DISEASE

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Background: The population of patients with coexisting coronary artery disease (CAD) and non-valvular atrial fibrillation (NVAF)is increasing. In the era of novel oral anticoagulant (NOACs) there is a need for real world data on this subset of patients. Purpose To investigate the clinical characteristics and anticoagulation strategy in patients with CAD in routine clinical practice in a tertiary university hospital

Methods: We studied a population of 735 consecutive patients who were hospitalized to the cardiology department with any diagnosis and coexisting NVAF. History of CAD was defined as documented CAD, prior myocardial infarction, and/or history of coronary revascularization.

Results: Atotal of 336(45%) had CAD. These patients had higher CHA2DS2-VAScscore[CAD4.8(±1.6) vs noCAD3.8(±2.0),p<0.001], HAS-BLED score[CAD2.9(±1.0)vs noCAD2.4(±1.1),p<0.001]. Comorbidities such as diabetes mellitus [CAD n=151 vs noCAD n=108 p<0.001], heart failure [CAD n=206 vs noCAD n=126, p<0.001], chronic kidney disease [CAD n=75 vs noCAD n=40,p<0.001] and dyslipidemia [CAD n=222 vs noCAD n=128, p<0.001] were found to be more frequent in patients with CAD. Patients with CAD had also more often a history of stroke/transient ischaemic attack[CAD n=69 vs noCAD n=59, p=0.033]. Patients with CAD were less likely to be cardioverted pharmaceutically[CAD n=108 vs noCAD n=167, p=0.009]. Single(SAPT) and dual antiplatelet treatment (DAPT) was more commonly used in patients with CAD[SAPT CAD n=57 vs noCAD n=19,p<0.001, DAPT CAD n=26 vsnoCAD n=16, p<0.001]. Patients with CAD who received oral anticoagulation at discharge, were less often received NOACs [NOAC n=121 vs vitamin K antagonist n=115,p<0.001].

Conclusions: Comorbidities and cardiovascular risk factors are more frequent present in patients with CAD and NVAF.Pharmaceutical cardioversion is less often utilised in these patients in the real world.

GLUCAGON-LIKE PEPTIDE 1 RECEPTOR AGONISTS AND PROTECTION AGAINST STROKE: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background: Glucagon-like peptide 1 receptor (GLP-1R) agonists, a novel class of antidiabetic agents, have been reported to exert neuroprotective effects in experimental stroke models, especially if treatment starts before stroke.

Objective: To assess available data regarding the risk of stroke in diabetic individuals treated with GLP-1R agonists.

Methods: We conducted a meta-analysis of randomized, placebo-controlled trials (RCTs) involving GLP-1R agonists with cardiovascular outcomes and/or safety as primary endpoints. Results Four eligible multicenter (n=32,895) prospective double-blinded RCTs (ELIXA, LEADER, SUSTAIN, EXCEL) were published up to November 2017. The analysis showed a non-significant trend towards a reduction of the risk of stroke in patients taking GLP-1R agonists compared with placebo (odds ratio, OR 0.88, 95%CI: 0.76-1.03, p=0.109; Q-value =3.57, p=0.31; I2= 15.95%). After excluding ELIXA trial, which included patients at high cardiovascular risk with a recent myocardial infarction, the net benefit was significant (OR 0.85, 95%CI:0.74-0.99, p=0.04; Q-value = 2.145, p=0.342; I2 = 6.76%).

Conclusions: Available data from RCTs dedicated to cardiovascular safety at least partially support the promising findings from previous experimental studies indicating protective effects of treatment with GLP-1R against stroke. Nonetheless, the issue of neuroprotection of these agents needs to be investigated in future clinical studies focusing on stroke.

DESCRIPTION OF BRASH SYNDROME: BRADYCARDIA-RENAL FAILURE- AV NODE BLOCKADE-SHOCK-HYPERKALEMIA

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Aim: BRASH syndrome refers to the constellation of bradycardia, renal impairment, av nodal blockade, shock and hyperkalemia. Patients may be presented quite often with this clinical picture and laboratory findings and may seem difficult to treat, unless someone promptly recognizes the interconnection between the mechanisms that make up this vicious cycle. We illustrate the case of a 68 year old man that was presented in the emergency department of our hospital with BRASH syndrome and we analyze the pathophysiology behind it.

Case Report: Our patient was presented with excessive diaphoresis, dyspnea due to bronchospasm and hyperglycemia. He was treated with carvedilol, bisoprolol and telmisartan for arterial hypertension, oxygen therapy and nebulizers for obstructive pulmonary disease, glargine insulin for diabetes type 2 and atorvastatin for dylsipidemia. His medications also included alfuzosin for benign prostatic hyperplasia and valproic acid, amisulpride and venlafaxine for bipolar disorder. We emphasize the synergistic actions of hyperkalemia and av nodal blockade to cause bradycardia that is disproportionate for the levels of potassium. The acute renal impairment caused by bradycardia resulted in reduced clearance of valproic acid, amisulpride and venlafaxine which led to profound hyponatremia (Na 112 mEq/L). Telmisartan may further deteriorate kidney perfusion which in turn worsens hyperkalemia and the vicious cycle continues.

To conlude, it should be noted that polypharmacy and comorbidities of patients that are presented with BRASH may further complicate the case and thus the early recognition of BRASH as a pattern may facilitate diagnosis and treatment.

DIMENSIONAL CHANGES IN THE LEFT VENTRICLE DUE TO THE EFFECT OF HYPERTENSION IN PATIENTS WITH STABLE ANGINA

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Ischemic Heart Disease combined with Hypertension is known world wide to be the main cause of mortality. Disorders of Left ventricular geometry and it's function are highly prevalent in this vulnerable population. Although routine screening by Echocardiography is critically volume dependent and prone to underestimation in LV ejection fraction.

To determine the effect of hypertension on the Functional state of the left ventricle in patients with stable angina as a predictor of mortality. The study involved 84 patients hospitalized in the Chernivtsi Regional Cardiology Clinic. The LV functional status of the patients were evaluated without using drugs and then underwent Bicycle Ergometry according to the modified Bruce protocol. The echocardiographic examination was done and the results were analysed in groups; Group I-patients with stable angina, Class III hypertension, Group II-patients with stable angina, hypertension and heart failure, Group III-patients with stable angina without hypertension. Left ventricular mass index was significantly higher in patients with hypertension at hospital admission and during diagnostic stress test. LV internal dimension in systole was also higher in patients from group II-8.8% compared with group I.LV internal dimension in diastole was high in all groups and the maximum-12.0% (p<0.05) in patients from group I.A significant decrease in LV ejection fraction was noted in patients with hypertension at all stages of the study with a decline in group I of 20.3% (p<0.05) in group II of 28.4% (p<0.05).

In conclusion, patients with stable angina associated with hypertension were found to have a greater reduction in left ventricular systolic function which points to an increased risk of mortality.

CARDIOVASCULAR RISK FACTORS IN PATIENTS DIAGNOSED WITH TAKO-TSUBO SYNDROME

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Background And Purpose: Takotsubo syndrome (TTS) was first described in Japan in 1990 by Sato and Mayo Clinic criteria were proposed in 2004 and modified in 2008 facilitating the diagnosis of TTS. The aim of this study is to describe clinical features of patients diagnosed with TTS.

Methods: A restrospective observational study of patients admitted to Intensive Care Unit (ICU) of our hospital meeting the criteria for TTS was performed between March 1st 2007 and February 28 th 2017.

Results: A total of 1602 patients with diagnosis of acute MI were registered but only 30 patients fulfilled inclussion criteria for TTS. The prevalence of TTS was 1.87% with a mean age of 59.73 ± 10.9 years. TTS was more frequent in women (83.3%). Cardiovascular risk factors were hypertension (56.6%), dyslipidemia (30%), diabetes (20%) and smoking (13.3%). Anxiety or depressive disorders were only found in 2 patients (6.6%).

Conclusions: Clinical features were similar to the International Registry except anxiety or depressive disorders.

Table 1. Characteristics of the Patients	
Median age (2 DS)-yr	59,73 ± 10,9
Female sex – no. (%)	83,3%
Cardiovascular risk factors – no. (%)	
- Hypertension	56,6%
- <u>Dyslipidemia</u>	30%
- Diabetes	20%
- Smoking	13.3%
- Anxiety or depressive disorders	6,6%

THE INCIDENCE OF CARDIOVASCULAR RISK FACTORS AMONG ELECTIVE CORONARY ANGIOPLASTY PATIENTS

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Background: Cardiovascular diseases are Nr.1 cause of death in Latvia. Since 1990, percutaneous coronary intervention (PCI) has been available in Latvia. ~200-400 stents are placed per million of population per year, which is equivalent to Finland, Spain and Portugal.

Aim: Determine most common cardiovascular risk factors among elective PCI patients in Latvia and compare to those of Europe.

Methods: A prospective research was held: questionnaires developed and 188 patients interviewed. Obtained data was analyzed with Microsoft excel. Results: 188 patients (aged 39 - 87) mean age 67,1.63% of patients are males. 49,5% had previously had myocardial infarction; 57,9 % had undergone PCI before and 6 patients (3,2%) - coronary artery bypass grafting. Most common cardiovascular risk factors were found to be patients' age (males over 45 and females over 55 years) - 96%, elevated body mass index (BMI) - 80% (38% of had BMI >30), arterial hypertension - 71% (poorly controlled - 39%), abdominal obesity - 65%, insufficient physical activity (56%) and high stress levels (51%).

Conclusion: 63% already have two (age and gender), thus it is especially important to reduce the adjustable risk factors. In comparison with EUROASPIRE IV data, the incidence of BMI >30 is equal in both Latvia and Europe (38%), more patients smoke in Latvia - 20% (16% on average in Europe), blood pressure is better controlled in Latvia - 39% poorly controlled (52% in Europe). Three most common risk factors in Europe were abdominal obesity (58%), poorly controlled arterial blood pressure (42%) and diabetes (40%).

TELEMEDICAL APPLICATIONS IN HYPERTENSION MANAGEMENT

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Over the last years there have been a few attempts to utilize telemonitoring and e-health systems to achieve better surveillance of chronic patients. Some of these are considered quite successful, but the expensive specialized systems used limit their field of use.

For this study, we decided to focus on commercially available applications for smartphones and tablets. We reviewed 100 applications from the iOS app-store and google play-store. Of these we narrowed down to 18 applications through a primary reviewing process, to those which could work as diaries for daily blood pressure data collection. We conducted a systematic review of the functionality of each application and an ease-of-use trial with 20 participants to determine which of these applications could find use in a clinical/ambulatory setting for long term self surveillance of patients primarily affected by hypertension. We identified 4 as being suitable for clinical/ambulatory use. SmartBP and Blood Pressure (BP) Watch proved most suitable for generalized record-keeping, Health2Sync showed great utility for hypertensive diabetics.

Finally Laborom, aside from having the core functions required, was able to keep records of history and past lab results and transmitting them to a physician on demand. We hope that our study can provide active physicians with an option for easier monitoring of the patients condition and keeping track of trends especially in their BP values. As we are aware, the applications we suggest may become obsolete, therefore we strive to at least establish a basic guideline for short term monitoring in the clinical setting.

ACUTE DIGITAL ISCHEMIA IN A 30-YEAR OLD MAN: A CASE REPORT

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Background: A 30-year old man presented with painful bluish discoloration of the toes and palpable pedal pulses.

Case Report: A 30-year-old Caucasian male presented at the emergency department of our hospital, with cyanosis and acute pain on the second, third and fourth toe of his right foot. Physical examination revealed fixed toe cyanosis and palpable pedal pulses, but with an insidiously weak right femoral pulse. Urgent angiography revealed a severe stenosis of the right common iliac artery and a mild stenosis of the left one. Aspirin and statin were started and a bilateral common iliac angioplasty was performed. The patient was discharged two days later.

Conclusion: Blue toe syndrome, described by Karmody in 1976, presents with a painful bluish discoloration of the toes, without vasospasm and with skin lesions related to the occluded artery. Differential diagnosis includes Raynaud's syndrome, Buerger's disease, arterial thrombosis, arterial embolism due to aneurysms or acquired hypercoagulative disorders or cardiac arrhythmias and trauma. The blue toe syndrome can be misdiagnosed on initial presentation, due to the often palpable pedal pulses which can mislead the physician to a non-vascular pathology diagnosis. Our case is a good example of the presentation of the blue toe syndrome in young adults.



RARE ANATOMY OF CORONARY ARTERIES: COMBINATION OF TWO CORONARY ANOMALIES CASE REPORT

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Background: Coronary artery anomalies (ACAs) are a diverse group of congenital disorders whose manifestations and pathophysiological mechanisms are highly variable. Most variations are benign; however, some may lead to angina, myocardial ischemia, syncope or sudden cardiac arrest.

Case Report: In a series of 1358 coronarographies we reported two cases of ACAs (0.15%). Our documented cases concern two different coronary anomalies. At first, we present a case of a 67yo patient with medical history of hypertension and dyslipidemia, who presented to the ER with episodic syncope. He underwent a cardiac catheterization that showed an anomalous right coronary artery (RCA) arising from the left coronary sinus. A C/T coronary angiography was performed which revealed the RCA's malignant coursing between the pulmonary artery and the aorta. Finally an invasive electrophysiologic study showed sick sinus syndrome. The patient with a permanent pacemaker implantation and b-blocker administration remains asymptomatic in the annual follow up. The second case is about a 75 yo patient with medical history of hypertension, diabetes and smoking, who proceeded to the ER with inferior STEMI. The coronarography incidentally revealed an anomalous left coronary artery (LCA) originating from the right sinus of Valsalva (separate ostium), an anatomical variation of no clinical importance. The patient had a PCI in the culprit lesion of RCA. Due to contrast-induced acute kidney failure, we avoided performing a C/T coronarography.

AN UNEXPECTED CAUSE OF ACUTE CHEST PAIN IN AN ADULT MAN: A CASE OF EPIPERICARDIAL FAT NECROSIS (EPFN)

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Background: EPFN is a rare self-limiting cause of an acute chest pain in an otherwise healthy individual. It occurs within the mediastinum outside the pericardium. Typically manifesting as severe acute chest pain, EPFN can be mistaken for a serious disorder, such as pulmonary embolism, myocardial infarction or acute aortic syndrome.

Case Report: We report a case of a 52yo man who proceeded to the ER, due to acute chest pain. The ECG showed no ischemia and the troponine was negative. The D-dimers were slightly elevated 500 (reference concentration<250). Upon auscultation pericardial friction rub was audible. In the echocardiography there were no pathological findings and no pericardial fluid. The patient was admitted to the Cardiology Department and was treated with ibuprofen. Due to the persistence of the pain two days after admission a chest C/T was performed, in order to exclude a possible acute aortic syndrome and pulmonary embolism. The C/T scan showed a well defined ovoid lesion of fat attenuation, surrounded by the increased attenuation of the anterior mediastinal paracardiac fat adjacent to the pericardium. The pericardium was minimally thickened. The symptom of the patient gradually recessed. He received anti-inflammatory treatment for 15 days. The inflammatory infiltrates revealed gradual resolution in the C/T scans we performed to follow-up the lesion (10 days and 1 month).

FREQUENCY AND CHARACTERISTICS OF ANEMIC SYNDROME IN PATIENTS WITH CHRONIC HEART FAILURE

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It is known that decreasing of hemoglobin (Hb) level below 12 g/dL is accompanied by progression of chronic heart failure (CHF) of ischemic origin.

Aim of our study was to find out frequency and origin of anemic syndrome (AS) in patients with CHF. We analyzed 2056 case records of hospitalized patients with CHF of ischemic origin. AS was diagnosed in case of Hb below 130 g/dL in males and below 120 g/dL in females (WHO, 2003).

Among all examined patients AS was found in 69,21% (1423 cases), which corresponds to the literature data. Among male patients AS was diagnosed in 1147 cases (76,22%), in females in 276 cases (49,19%). We found out that in patients after 45 years anemia is more frequent in males than in females. Only in rare cases anemia was documented as a separate diagnosis (2,81% in case of mild anemia, 50% in case of moderate anemia, 65,8% in case of severe AS). Hyperchromic anemia (MCH>33 pg) was diagnosed in 23 patients (1,62%), hypochromic anemia (MCH<27 pg) in 128 patients (8,99%); in most cases AS was of normochromic character (1272 patients, 89,39%). Mild macrocytosis (MCV 95-108) was found occasionally (19 cases, 1,34%), microcytosis (MCV<80) in 163 cases (11,45%), normocytosis in 1241 patients (87,21%).

Therefore, AS is comorbid to CHF in 69,21% of patients, predominantly in males. In most patients with CHF concomitant anemia is normochromic and normocytic, which requires further investigation of its etiology for an adequate correction of hemoglobin level.

ePP134 - WITHDRAWN

EPIDEMIOLOGICAL STUDY OF MYOCARDIAL INFARCTION (MI) IN THE ISLAND COMPLEX OF DODECANESE IN SOUTH-EASTERN AEGEAN-GREECE

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Background: Despite the decline in incidence and mortality of MI, only few studies have examined the apparent differences in its prevalence among geographical separate population groups, and whether known regional disparities in MI care have narrowed over time. Aim Determination of the incidence of MI in an isolated area of the Dodecanese islands, along with the contribution of the newly-established catheterization laboratory to the reduction in mortality rates.

Methods: A six-year retrospective study was conducted of all cases with MI. The prevalence of MI was compared to global statistics. The mortality rates during the period 03/2014-03/2017, with an active catheterization laboratory, were compared to those in 02/2011-02/2014. Information was obtained from the patients' medical files.

Results: 781 patients with MI [387 STEMI (49.5%), 394 NSTEMI (50.5%)] undertook a coronarography in 03/2014-03/2017. The in-hospital mortality was reduced in comparison with the period 02/2011-02/2014 (6.1% vs 8.1%). The STEMIs were 52% anterior and 36% inferior. Men and women had a 3.4 years deviation in the median age of MI occurrence. The annual prevalence of MI was 1.2/1000 (1.5/1000 in Rhodes, 0.75/1000 in smaller islands).

Conclusion: Lifestyle in the islands of Dodecanese contributes to lower prevalence of MI. Women seem to experience their first MI on average only 3.4 years later than men. The establishment of the catheterization laboratory resulted to 20% relative reduction of in-hospital mortality. In half of the MIs LAD was the culprit vessel.

TELMISARTAN IN PATIENTS WITH CHRONIC HEART FAILURE AND DIABETES MELLITUS TYPE 2

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Background:-Despite modern achievements in diagnosis and treatment of patients with chronic heart failure (CHF) and diabetes mellitus type 2 (DM), their incidence and unfavorable outcomes have been increased recently. The research aimed at the investigation of the possible clinical effectiveness of telmisartan in patients with CHF and comorbid DM.

Methods:-75 patients with CHF and DM were under investigation. They were randomized into 2 groups according to the prescribed treatment: I group - 40 patients who received statins, metformin and enalapril; II group - 35 patients for whom substitution of ACE inhibitor by telmisartan in daily dose of 40 mg was conducted. Clinical effectiveness of the prescribed treatment was estimated in 3 months by level of blood pressure (BP), fasting glucose (FG) and blood lipid spectrum (total cholesterol (TC), triacylglycerols (TG), HDL-cholesterol (HDL-C), LDL-cholesterol (LDL-C).

Results:-Comparison of BP in patients of both groups revealed no statistical difference. Valid decreasing of FG level for 33% was detected in I group $(5,8\pm0,11 \text{ comparing with } 8,6\pm0,23 \text{ mmol/L}, p<0,001)$. In II group lower level of FG $(4,6\pm0,18 \text{ comparing with } 8,5\pm0,82 \text{ mmol/L}, p<0,001)$ was observed. Patients of II group were also characterized by more pronounced changes in blood lipid spectrum, such as decreasing of TC in 1,89 times (p<0,001), TG - by 12,5% (p<0,05), LDL-C - approximately twice (p<0,001), increasing of HDL-C in 2,66 times (p<0,001).

Conclusion:-So, advisability of telmisartan prescription in treatment of patients with CHF and DM opens new perspectives for its application in this category of patients.

THE ROLE OF LNCRNAS TO THE GENESIS OF ATHEROSCLEROSIS

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Introduction: The association of factors such as hypertension, hypercholesterolemia and illnesses such as diabetes mellitus with atherosclerosis is a common place in the literature. However, new studies demonstrate the contribution of long non-coding RNAs to atherosclerosis through the effect on epithelial, vascular smooth muscle cells and macrophages. Goal of the study: In this study we aim to collect and analyze results that correlate the effect of lncRNAs with atherosclerotic disease. Materials-

Method: A bibliographic retrospect was made on authoritative databases (Pubmed). Keywords (atherosclerosis, IncRNAs, ECs, VSMCs, vascular function) were put into search algorithms. Recent and earlier experimental studies that have been made on experimental animals and humans were selected for our study.

Results: It appears that IncRNAs are involved in vessel function, regulation of metabolism, inflammation and immunity. In particular, cytoplasmic IncRNAs can increase or decrease the transcription and translation of mRNAs, while nuclear IncRNAs can affect gene expression. Indeed, after bioinformatic analysis, it is suggested that IncRNAs increase cell proliferation and reduce apoptosis, factors that significantly lead to the appearance of atherosclerosis. Some examples of important IncRNAs are ANRIL and MALAT1

Discussion: It is necessary for further study to be done, in order to investigate the effect of IncRNAs on the occurrence of atherosclerosis at the level of basic and translational research. Particular mention should be made of the use of IncRNAs as biomarkers or therapeutic targets.

FREQUENCY AND CHARACTERISTICS OF ANEMIC SYNDROME IN PATIENTS WITH CHRONIC HEART FAILURE

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Anemia of any etiology aggravates clinical manifestation of coronary artery disease (CAD), Our investigation aimed at the analysis of the peculiarities of the clinical course of CAD in patients with comorbid anemia of different degree of severity. 72 patients were randomized into 2 groups: an experimental group 40 patients with CAD (stable angina of physical exertion) with comorbid anemia (hemoglobin less than 13 g/dl in males and less than 12 g/dl in females) and B control group 32 patients with CAD without anemia. Frequency of angina attacks was significantly higher and its duration was significantly longer in the patients of experimental group (p<0,05). All patients of experimental group (100%) used nitroglycerin to reduce pain during angina attack. In control group only 12 patients (37,5%) used short-acting nitrates for angina attack treatment, those who took them needed significantly less daily dose than patients of the experimental group (p<0,05). Patients of group A had complaints and objective findings conditioned by comorbid anemia such as tachycardia, skin dryness, dizziness, which aggravated the course of CAD itself. Comorbid anemia resulted in prolongation of patients hospital treatment due to CAD and increasing of frequency of their hospitalization (p<0,05). So, anemia of any origin aggravates the clinical course of CAD as it leads to the increased frequency of the angina attacks, increased need for nitrates during the attack, such patients are hospitalized more frequently due to exacerbation of the main disease and duration of their hospital treatment is longer.

CLINICAL AND EPIDEMIOLOGICAL CHARACTERISTICS OF PATIENTS WITH HYPERTENSIVE CRISIS TREATED AT THE EMERGENCY DEPARTMENT OF A HIGH COMPLEXITY INSTITUTION, MEDELLIN, COLOMBIA, 2014-2015

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Laura Isabel Jaramillo-Jaramillo, Luis Felipe Alvarez-Hernandez, Andres Eduardo Marin-Castro,
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Objective: To determine the clinical and epidemiological characteristics of patients with hypertensive crisis treated in the emergency department of an institution of high complexity between 2014 and 2015.

Methods: A cross-sectional study involving patients older than 18 years who attended to the emergency department during the study period, diagnosed with any hypertensive disorder according to ICD-10; a sampling was not carried out. The analysis was performed using the vr.24 SPSS program, for quantitative variables with normal distribution, mean and standard deviation were calculated; for qualitative variables absolute and relative frequencies were estimated.

Results: A total of 156 patients were included, with a mean age of 63.2 ± 10.1 years, 73.7% were women and only 45.5% had a history of hypertension control. On admission, the most reported symptoms were headache 47.9%, dizziness 31.3%, paroxysmal dyspnea at night 18.8% and precordial pain 13.5%. 22.4% had hipertensive emergency and 77.6% presented hypertensive urgency. 61.5% were admitted and managed mainly with ACE inhibitors in 25%. The ischemic stroke was the main target organ compromise, in 31.4% and 4 patients died in total 11.4%.

Conclusion: hypertensive urgency occurred more frequently in the study population, but emergencies had worse outcomes. In general, most patients received an appropriate management.

CAROTID ENDARTERECTOMY IN PATIENTS OLDER THAN 70 YEARS

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Methods: 627 patients, who underwent CEA between 01 Sept 2015 and 30 March 2017, were included in prospective study. 187 (29,8%) were patients older than 70 years. Number of operations in study group was 227. The average age of all patients was $66,6 \pm 10,8$ years, the average age of the patients older than 70 years was $76,7 \pm 3,5$ years. Total amount was 356 males and among patients of study group was 82. Total symptomatic operations was 344 (54,9%), and in patients older than 70 years - 94 (50,3%). In acute phase of stroke performed 252 (30,2%) operations, and in study group - 72 (38,5%). In research assessed defeat of the contralateral CA and operational criteria as secondary endpoints. The primary endpoint are stroke, myocardial infarction, or death during the per procedural period or ipsilateral stroke thereafter.

Results: According to ultrasonography in 88 patients detected a hemodynamically significant lesion contralateral ICA, 40 of them were operated on after 1-2 months on the second stage. Four patients have occlusion of the contralateral ICA. Average time of ICA occlusion was 12.9 ± 3.8 minutes. Average time of occlusion of all operations was 12.5 ± 3.9 minutes (p>0.95). The primary endpoint in the group of patients older than 70 years was 0.5%. All patients showed improvement in neurologic status, regression of neurological symptoms, as well as improving the general condition of patients.

Conclusion: CEA in patients older than 70 years is an effective procedure since prevents the risk of recurrent and primary stroke.

INCREASED SALT INTAKE- A RISK FACTOR FOR HYPERTENSION

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Its widely said "Give neither counsel nor salt till you are asked for it". Salt is integral to most of food items but, more than a required level hampers the functional integrity of the organisms. With new criteria of hypertension, many more peoples are included under Hypertension Stage I.

Understanding importance of salt management in hypertension progression, is vital. According to FDA, normal intake should be less than 2300mg per day, to avoid hypertension and related complications. The modern trend of processed foods makes average intake of sodium much more higher. This has increased the number of people in the hypertensive stage. To determine the effect of salt intake in increasing the blood pressure on normal healthy people. The study involved 75 healthy students from Chernivtsi University hostel between age group 20-26. The blood pressure before the study was evaluated. 3 groups were made by common diet with different amount of salt intake. Group I-intake of diet with 2gm added salt, Group II-intake of diet with 4gm added salt, Group III-intake of diet with 8gm added salt. This particular diet was given to students for 2weeks. There was an average rise of blood pressure by 2-3mmHg(p<0.05) in systolic for Group II compared to Group I and a 5-10mmHg(p<0.05) rise of systolic blood pressure for Group III. Diastolic blood pressure was also increased within expected range of systolic pressure.

In conclusion, students with increased salt intake had significant increase of blood pressure. 5% of the students had increased susceptibility to complications of hypertension. However, this effect is amplified in patients with heart failure.

A PATIENT WITH WEIL'S DISEASE, HEMOPTYSIS AND ARDS: A CASE REPORT

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Background/Aim: Weil's disease is the severe form of leptospirosis whereas hemoptysis and/or Acute Respiratory Distress Syndrome (ARDS) are rare manifestations. A few case reports have been published mentioning the high mortality and the frequent necessity for mechanical ventilation. A case of a patient with Weil's disease, massive hemoptysis and ARDS is described.

Case Report: A 35-year old farmer presented with fever and dyspnea the last five days. He mentioned massive hemoptysis (>200 ml) a few hours before admission. His medical history included malaria successfully treated two years ago. Clinical examination revealed jaundice, bilateral rales on lungs' auscultation, respiratory rate >30 breaths/minute, cyanosis and high temperature (38.5oC). Thoracic x-ray revealed bilateral pulmonary infiltrates while blood gas analysis showed pO2=41mmHg, pCO2=30mmHg, sO2=82%, pH=7.54, HCO3=25.7mmol/Lt, pO2/FiO2=195. Laboratory investigation showed WBC=20.200/µL, ESR=120/1h, Ht=31.1%, Hb=9.8gr/dL, PLTs=130.000, urea=55mg/dL, creatinine=1.6mg/dL, AST=47IU/L, ALT=58IU/L, bilirubin total/direct=7.8/3.9mg/dL, y-GT=219IU/L and CRP=30mg/dL (<0.7). Abdominal ultrasound depicted increased liver's size whereas cardiac ultrasound small pericardial effusion. A diagnosis of Weil's disease with ARDS was considered and empirical treatment was started (ampicillin/sulbactam 3grx3, azithromycin 500mgx1, metronidazole 500mgx3) with addition of methylprednisolone 40mgx3. There was complete resolution of fever, x-ray's findings and hemoptysis after 4 days of treatment. IgM antibodies against leptospira were positive. The patient was discharged one week later. Laboratory investigation showed WBC=10.100/ µL, ESR=50/1h, Ht=33.9%, PLTs=430.000, bilirubin total/direct=2.4/1.05mg/dL and CRP=4.1mg/dL (<0.7). Renal function was normal.

A RARE CASE OF LISTERIOSIS IN A YOUNG PATIENT PRESENTING WITH INCOMPLETE MISCARRIAGE

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Introduction/Aim: Listeria monocytogenes (LM) is an important bacterial pathogen affecting especially neonates, immunosuppressed patients, older adults and pregnant women. It usually causes mild maternal illness, but can be devastating to the fetus. Herein we report a case of a young patient with an incomplete miscarriage and listerial infection. Listeriosis- though a rare entity- should always be considered in the differential diagnosis of fever in pregnant women, who may present with symptoms of miscarriage. Although women with comorbidities, such as diabetes, steroid use, or HIV are at higher risk of listerial infection, most cases occur in healthy pregnant women.

Case description: A 21-year old Caucasian woman, with a history of one previously successful pregnancy, presented firstly to the Emergency Department and was finally admitted to our Obstetrics-Gynecology Department, due to fever up to 40° C since 2 days with concomitant acute upper abdomen pain for the last 2 hours. She reported she was 13 weeks pregnant and an occasional smoker. Blood chemistry revealed mild anemia (Hb=10,9 g/dl), leukocytosis (WBC=18300/µl) and elevated inflammation markers (CRP=232,57 mg/l, max 5mg/l). She was immediately taken into OR, as an incomplete miscarriage was suspected, where an abrasion was performed. The patient was initially started on cefoxitin IV and a vaginal tampon was placed for hemostasis combined with ergometrine maleate po. Listeria monocytogenes was isolated from the amniotic fluid cultures. The patient was started on combined antibiotic treatment with ampicillin/sulbactam and gentamycin IV, showed significant clinical response and exited the hospital three weeks after.

SEVERE SEPSIS AFTER DOG BITE

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Backround/Aim: We present a case of Capnocytophaga canimorsus bacteremia in an immunocompetent middle aged woman.

Case Report: A 48 year old woman was admitted with a 2-day history of fever (38°C) and ischemia of her nose and digits of upper and lower extremities. She reported a dog bite at her right hand 10 days ago. She had a history of hypothyroidism. On examination she was awake but disoriented and had hypotension (qSOFA=2). Laboratory test results revealed severe leucocytosis, thrombocytopenia, acute kidney and liver injury, and CRP=450mg/L. Haemodynamic instability was treated with intravenous fluids and hydrocortisone. Blood, urine and pus from the bite spot specimens were obtained for culture and empirical treatment with ceftriaxone, gentamicin and daptomycin was initiated immediately. During the second day septic myocardiopathy developed with elevation of troponin levels and reduction of ejection fraction (40%). She received ceftriaxone and daptomycin for 21 days and gentamicin for seven days. Capnocytophaga canimorsus was found in blood culture using MALDI/TOF. In the following days patient was fully recovered. She was discharged with low molecular weight heparin for residual ischemia of the lower limbs after three weeks of hospitalization.



"RAMSAY-HUNT SYNDROME (RHS) WITH DELAYED CRANIAL NEUROPATHY" - CASE REPORT

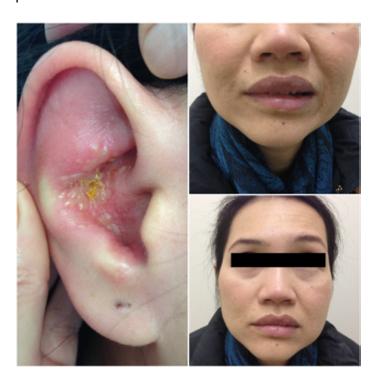
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Backround: RHS is a rare complication of herpes-zoster due to reactivation of latent varicella-zoster-virus infection in the geniculate ganglion. Incidence ranges from 0,3-18%, increasing with aging and immunosuppression.

Aim: RHS in a young immunocompetent patient, with delayed presentation of cranial neuropathy and without hearing loss.

Case Report: A healthy 38-year-old female presented with ear pain and 5-day low-grade fever. On examination there was redness, swelling and pain of right cartilaginous auricle excluding the lobule, few pustular lesions and crusts on concha. Oral cavity and ear canal were normal and cranial nerves examination was unremarkable. Patient was admitted and treated empirically with ciprofloxacin plus clindamycin as auricular chondritis. Next day valacyclovir 1000mg/bid was added as possible herpetic co-infection. She remained afebrile with remission of auricle inflammation and discharged after 3 days, on oral antimicrobials. 3-days later, patient reported diminished sense of taste, facial asymmetry and mouth drooping. Examination showed right eye's incomplete closure, absence of right forehead wrinkling and diminished right nasolabial fold (peripheral facial palsy). RHS was diagnosed and prednisone started on 60mg/day and valacyclovir raised tid for a total of 10 days. Diagnosis was established by 4-fold raising of IgG-VZV, furthermore, patient's husband showed up with chicken-pox.



FEVER OF UNKNOWN ORIGIN (FUO): WITHOUT SPLEEN AND WITHOUT DIAGNOSIS

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A 30-year-old patient with no personal history of interest except for a febrile episode of three months of evolution in the previous year with spontaneous resolution and without finding etiology. It enters again due to fever of two weeks of evolution of up to 39°C with myalgia and associated headache. No other symptoms or epidemiological risk. Analytical performed including blood count shows only mild lymphopenia and thrombocytopenia, with smear of normal peripheral blood. Coagulation, iron study, LDH, renal function, thyroid profile, hepatic, proteinogram, autoimmunity, tumor markers, multiple serologies, blood cultures (after more than 21 days) and urine cultures: negative. Chest x-ray, abdominal ultrasound, echocardiogram, gastroscopy: normal. Complete CT with nonspecific intraabdominal adenopathies and mild hepato-homogeneous splenomegaly. Biopsies of esophagus, duodenum and liver are taken with negative results and only doubtful positivity for Helicobacter Pylori in the stomach. Antibiotics are not administered due to good general condition and to avoid masking results. Given the multiple diagnostic doubts, PET-CT with splenic uptake and intra-abdominal lymphadenopathies highly suggestive of lymphoproliferative process is requested. Bone marrow study negative. When the fever persisted and in the absence of other data, it was decided to perform a splenectomy and intra-abdominal adenopathy biopsy, which nevertheless turned out to be negative for malignancy.

Conclusions: After this result, we proposed whether surgery was the only alternative without being able to forget the usefulness of PET, which, despite contributing significantly to the diagnosis of FUO, could give false positives like this, since the febrile symptoms subsided spontaneously and progressively.

PERSISTENT BACILLUS CEREUS BACTEREMIA IN AN IMMUNOCOMPETENT PATIENT: A CHALLENGING ENEMY

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Introduction/Aim: Bacillus cereus is an aerobic to facultative anaerobic, Gram-variable bacilli found readily in soil and near fresh and marine water beds. Until identified as a clinically significant pathogen, it was often thought to be a contaminant of blood cultures. Most clinically significant cases of bacteremia are usually associated with an immunocompromised host or the presence of foreign bodies. It is increasingly becoming a causative agent for both localized and systemic infections. Herein, we present an interesting case of persistent B. cereus bacteremia in an immunocompetent patient, in order to emphasize the importance of recognizing B. cereus as a potentially serious human pathogen even in an immunocompetent host with need of early combination therapy.

Case description: An 85-year old Caucasian woman, with a history of chronic renal failure, was admitted to our clinic due to fever, progressively worsening of generalized oedema, oliguria and hypotension. B. cereus was isolated from 3 blood cultures and empiric antibiotic treatment (ciprofloxacin and vancomycin) was initiated. Hemodialysis was performed once daily initially and then every other day. A week later, the central venous catheter was changed due to persistent bacteremia, and clindamycin was added. Transthoracic and transesophageal echocardiogram were performed, excluding endocarditis and a full body CT scan did not confirm an abcess. A 99mTc LeukoScan showed pericardial positive uptake. Due to persistent bacteremia 20 days later, the antibiotic treatment was changed to a gentamycin/meropenem/vancomycin combination IV-initiated. 3 days later, the blood cultures were negative and the patient showed significant clinical response.

A RARE CASE OF SPONDYLODISCITIS CAUSED BY PROTEUS MIRABILIS

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Infectious spondylodiscitis commonly results from local or haematogenous infections by micro organism, with Staphylococcus being the most common cause of infective organism accounting for more than half of non-tuberculosis cases. Other bacterial pathogens include the Enterobacteriaceae group; of which the more common ones are Escherichia Coli and Proteus. This micro organisms are more commonly found in the urinary or gastrointestional track, and are usually associated with old age, the immunosupressed and diabetes. Patients present with back pain and fever, typically worsening at night. Our patient is an 84 year old male fom a nursing home, with poorpremorbids was recently admitted for 2 day history of fever associated with shortness of breath, chesty cough. He was febrile and tachpneic while in ED, and was drowzy. On examination, he was noted to have bilateral lower zone crepitations. The labs revealed raised inflammatory markers of total white cell 21, C-reactive protein 52. Chest x-ray showed bilateral consolidative changes.

Subsequently, blood cultures were positive for proteus mirabilis bacteremia and was started on IV Tazocin. He was recently hospitalized for proteus bacteremia secondary to a urinary track infection. CT scan had features suggestive of spondylodiscitis, and pyelonephritis. His antibiotics were eventually de escalated to IV Cefatriaxone and oralised to PO Ciprofloxacin, completing 14 days of antibiotics.

CASE REPORT OF SECONDARY HAEMOPHAGOCYTIC SYNDROME DUE TO MILIARY TUBERCULOSIS

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Introduction: Haemophagocytic syndrome (HS) is an uncommon hematologic disorder characterized by severe hyperinflammation, caused by uncontrolled proliferation of T-lymphocytes and macrophages that secrete severe amounts of inflammatory cytokines. In rare cases, infectious agents, such as M.tuberculosis can trigger secondary HS.

Purpose: Prompt and targeted treatment of the underlying condition is effective for the resolution of secondary HS.

Case Report: A 42 years old male, with free medical history, was admitted because of prolonged fever, dyspnea, generalised lymphadenopathy. Labor: Severe neutropenia, anemia, thrombocytopenia. Low fibrinogen levels, highly elevated ferritin levels. Testing for HIV, HBV, HCV, malaria, leishmaniasis:negative. Thorax radiography, HRCT: diffuse miliary opacities in lung parenchyma. Imaging and laboratory testing negative for extrapulmonary disease.

Results: Diagnosis of HS was made after fulfillment of five criteria including haemophagocytosis proved in bone marrow biopsy. After obtaining samples of sputum and gastric fluid, an initial empiric treatment with Isoniazid (H), Rifampicin(R), Pirazinamide (Z), Ethambutol (E) was administered, in combination with low-dose i.v steroids. Gradually clinical and laboratory improvement was noted with resolution of the HS after one week of treatment. M.tuberculosis was isolated only in gastric fluid. The molecular and compatible testing proved no resistance to antimycobacterial agents. The duration of treatment was set for 9 months (initially 2 months HRZE, following from 7 months HR).

Conclusions: Secondary HS is a rare clinical entity with irreversible tissue complications and poor prognosis. A targeted and aggressive therapy of the underlying condition may result in a gradual resolution of the syndrome without implementation of the internationally accepted therapy.

BACTEREMIA CAUSED BY GRAM NEGATIVE BACTERIA IN PATIENTS IN AN INTENSIVE CARE UNIT

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Aim: The aim of the study was to analyze bloodstream infections caused by Gram negative bacteria that were isolated in patients in the I.C.U during a period of one year.

Material and Method: All the epidemiologic and clinical characteristics of inpatients in the I.C.U were studied, as well as the antimicrobial susceptibility testing of all of the GNB isolated.

Results: 234 inpatients in the I.C.U were studied. 37 episodes of bacteremia caused by GNB in 23 patients (9.8%) were recorded.12 of them (55%) being Acinetobacter baumanii strains, 4 (18%) Klebsiella pneumoniae strains, 2 (9%) Pseudomonas aeruginosa strains and 4 (18%) other kinds of strains. Totally, 37 GNB were isolated and 13 of them were A.baumanii strains (92% of them were resistant to Carbapenems, while 8% were resistant to Colistin), 8 were K.pneumoniae strains (50% were resistant to Carbapenems, 13% of them were resistant to Colistin, and 38% of them were resistant to Tigecycline), 5 were P.Aeruginosa strains (40% of them were resistant to Carbapenems, and all of them were susceptible to Colistin)

Conclusion: Bacteremia caused by Gram negative bacteria is an aggravating factor in patients in a critical condition. A significant proportion of the isolated strains were multi-drug resistant. A.baumanii was the most dominant of the pathogens isolated during the study. Even though Colistin is more effective against the majority of them, strains resistant to it have started to emerge.

SEVERE INFECTION CAUSED BY STREPTOCOCCI OF THE VIRIDANS GROUP IN A TERTIARY HOSPITAL

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Aim: To record severe infection caused by streptococci viridans in a tertiary hospital.

Material and Method: During the last 8 years ,26017 samples of blood and various other biological fluids were cultured and estimated for the presence of streptococci. When gram positive, catalase negative cocci resembling the form of streptococci were isolated, a biochemical identification was conducted.

Results: The species of 328 isolated strains of streptococci were: 1) 102 Streptococci of the Mitis group (S.mitis, S.gordonii, S.oralis, S.sanguis, S.parasanguis) 2)87 strains of streptococci of the anginosus or S.milleri group (S. anginosus, S. contellatus, S. intermedius) 3) 63 strains of streptococci of the Salivarius group (S. Salivarius, S. thermophiles, S. vestibularis) 4) 42 strains of the Bovis group (S. bovis, S. equines, S. alactolyticus) 5)34 strains of the Mutans group (S.mutans, S.rattus, S. cricetus, S. downei, S. sobrinus, S. macacae). All of the isolated strains were susceptible to antimicrobial drugs and the MIC of penicillin was <=0.12μgr/ml (Sensitive), exept for one strain of S.sanguis and another strain of S.equinus .For these two strains the MIC of penicillin was 0.25 - 2 (Intermediate).

Conclusion: The most frequently isolated streptococci of the viridans group were those of the Mitis group, followed by those of the Anginosus group, the Salivarius group, the Bovis group and finally those of the Mutans group. In Greece they are still susceptible to antibiotics which should be administared in accordance with the results of the antimicrobial susceptibility testing.

A CASE REPORT OF BRUCELLOSIS IN A HEALTH CARE PROFESSIONAL

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Background/Aim: Brucellosis is a zoonotic disease that can be transmitted through contact with infected animals (sheep/goats/cattle/pigs), by eating undercooked meat or consuming unpasteurized/raw dairy products. Also, infection can occur by inhalation (breathing in the bacteria that causes brucellosis),but this risk is generally greater for people in microbiological laboratories.

Case Report: A 43-year-old woman assistant microbiologist presented to our Hospital with a 3-day history of fever, anorexia, malaise and headache. Her blood test revealed mild pancytopenia, abnormal LFTs, increased CRP and LDH and the patient was initially given symptomatic treatment for a common flu infection. Within 5 days there was a remission of her clinical condition. The follow-up blood tests, after 15 days, were normal, except for a persistent mild leucocytopenia. Further blood tests were performed (HbsAg/ anti-HCV/ anti-HIV/ Monotest/ Widal/ anti-toxo/ ANA/ anti-DNA/anti-ENA) and Mantoux but all were found normal. Chest X-rays and abdominal ultrasound were also normal. Serological tests for CMV and EBV revealed previous exposure to the viruses but no active infection. Due to the patient's previous exposure to samples contaminated with B.melitensis in the laboratory, Brucellosis was suspected.

Consequently, the Rose-Bengal plate test (RBPT) was performed using antigen of B.melitensis, which revealed the presence of high level of antibodies (>100IU/ml). The diagnosis was further strengthened by a positive Wright test (1/320). Rifampicine p.o. once a day combined with doxycycline p.o. twice a day were eventually initiated for a duration of 6 weeks and the patient was finaly cured.

MENINGOCOCCAL SEPTIC SHOCK WITH VARIOUS COMPLICATIONS IN A 70-YEAR-OLD IMMUNOCOMPETENT WOMAN

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Background: N. meningitidis can exist as nasopharyngeal carriage or as pathogen that mainly causes meningitis and septicemia. However, it can also cause other infections like pneumonia and arthritis, which is frequently large-joint, oligoarticular and asymmetric. It's found in approximately 7% of meningococcal infections and is either septic arthritis or immune-mediated, presenting 3 days to 2 weeks after disease onset, when the patient's otherwise improving. A short NSAID course is mostly efficacious for immunoallergic type, but few may need long-term corticosteroid treatment.

Case report: The patient was presented with fever, chest pain, purpura and subscleral hemorrhage. She was upset but oriented. Vital signs: 98 bpm, 26 breaths/min, blood pressure: not measurable. She had no photophobia or neurologic-meningeal signs. Blood gas analysis revealed hypoxemia with metabolic acidosis and chest radiograph showed bilateral bronchopneumonic infiltrates and 6th left rib fracture, which was attributed to a fall at home due to hypotension. Aggressive hydration and vancomycin with ceftriaxone were initiated. After crystalloids' failure to raise blood pressure nore-pinephrine was added and afterwards hydrocortisone (50mg x4). Blood tests showed acute kidney injury and DIC(ISTH score:5). Due to hemorrhagic lesions and the unresponsiveness to vasopressors brain and adrenal (for Waterhouse-Friderichsen syndrome exclusion) CT was performed, which revealed subarachnoid hemorrhage. FFP was administered, resulting to non-extension of purpura and hemorrhage absorption. After the 2ndday developed bilateral pleural effusions created from hydration and renal failure and ischemic hepatitis. Both resolved. Blood cultures revealed penicillinsensitive N.meningitidis (MIC:0,0094). The 4thday she presented new fever along with polyarthritis. She was discharged with lornoxicam and fever resolved after 1 week. She continued treatment for 1 month, until CRP-ESR returned to normal.

Conclusions: Clinicians should be aware of these complications because fever and inflammatory markers' rebound can lead to unnecessary initiation of nosocomial antibiotics.

77 YEAR OLD MALE WITH FEVER, JAUNDICE, THROMBOCYTOPENIA AND BILATERAL PULMONARY INFILTRATES

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Background/Aim: We present a rare cause of severe ARDS. Case report A 77 year old male patient was admitted in our hospital with a five day history of fever(T38.3oC), jaundice(Tbil 9.3 mg/dl), acute kidney injury (Creatinine2.4 mg/dl),and thrombocytopenia(PLT26,000/µL). He was started on empirical antibiotic treatment while a thorough diagnostic work-up was undertaken (that included blood and urine cultures, blood smear examination and serological tests for autoimmune and infectious causes). Leptospira IgM antibodies were positive and a diagnosis of Leptospirosis was confirmed. A CT chest showed bilateral pulmonary infiltrates consistent with hemmorhagic alveolitis. Despite appropriate treatment patient continued to deteriorate as he developed respiratory failure he was intubated and was transferred to our ICU. On arrival in ICU he was tachycardic, hypotensive requiring vasopressors at a high dose(0.9mcg/kg/min), under mechanical oxygenation with very poor oxygegenation (po2 63mmHg,fi02 75%,Pa02/Fi02=84). He was treated with iv ceftriaxone, iv fluids and was put in prone position. Patient's condition gradually improved in terms of oxygenation (reduction in FI02 %), hemodynamic status (reduction in the dose of vasopressors) and after 48h he was turned back in the supine position Patient continued to improve sedation was stopped and 5 days post his admission he was extubated. By that point his bilirubin, creatinine, WBC and platelet count had normalized.

The patient was discharged back to the general medicine ward being hemodynamically stable and with good oxygenation. Conclusion Leptospirosis is a rare cause of ARDS. Clinicians should be aware of this rare but life-threatening complication of Leptospirosis.

RIFAMPICIN AS A CAUSE OF SEVERE HEMOLYTIC ANEMIA IN A PATIENT WITH LOCALIZED BRUCELLOSIS

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Background: Since its introduction, rifampicin has been widely used in the treatment of tuberculosis, nasopharyngeal carriage of Neisseria meningitidis and Haemophilus influenzae, and to a lesser degree, in various antibiotic combinations for bacterial infections. Acute hemolysis as an adverse reaction to rifampicin is a rarely encountered complication. We present a patient with acute hemolysis due to rifampicin administration for localized brucellosis.

Case report: A 58-year-old woman with a history of localized brucellosis was admitted to our department due to high grade fever accompanied by abdominal and lumbar pain and laboratory evidence of acute hemolysis. She had been treated with doxycycline and ciprofloxacin for three months but she reported aggravated pain of the left hip despite treatment. Pelvic MRI revealed myositis of the left gluteus minimus muscle and six days before admission, rifampicin was added to her medication. Blood cultures were negative, and serology for malaria, mycoplasma, viral and other acute bacterial infections was unrevealed. ANA test was negative. Chest and abdominal CT scans, bone marrow biopsy and flow cytometry were performed and had no evidence of lymphoproliferative disorders. Direct antiglobulin test (Coombs) was strongly positive (++++) for IgG and C3d, and haptoglobins were undetectable. The diagnosis of hemolytic anemia due to rifampicin was established. After drug withdrawal, the patient was treated with intravenous immune globulin together with prednisolone that was gradually tapered and stopped. After 14 days of hospitalization the patient was discharged, with no evidence of relapse in a follow-up period of 1 year.

PULMONARY TUBERCULOSIS REACTIVATION: WHAT ABOUT ALTITUDE?

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Background: High altitudes are linked to decreased rates of pulmonary tuberculosis (PTB) infection, disease and mortality. However, its relevance as a trigger for PTB reactivation in immunocompetent patients is not documented.

Case Report: A 28-year-old healthy Nepalese female was referred to emergency with sudden left pleuritic back pain with shortness of breath, two weeks after arriving in Lisbon, having flown from Kathmandu and undergone a change in altitude of 1400 metres. She also had evening low-grade fever and fatigue since she arrived. Her mother-in-law had died of tuberculosis two years before. Chest radiography and CT scan showed a left upper lobe consolidation. Laboratory analysis were unremarkable, except for ESR of 79 mm/sec. HIV serology, blood cultures and urinary antigen testing were negative. Bronchial secretions' cultures became positive for Mycobacterium tuberculosis complex. The patient was started on anti-tuberculous treatment and made a steady recovery.

Conclusions: The diagnosis of TB in the immunocompetent host requires high level of suspicion and persistence, mainly when it is manifested insidiously and with few laboratory and clinical signs. Epidemiologic history in these cases is very important. Altitude is a known influencing factor on pulmonary tuberculosis disease and it's reasonable to think it may influence reactivation.

SUCCESSFUL OUTCOME OF PERSISTENT BACTEREMIA DUE TO PSEUDOMONAS AERUGINOSA AFTER TREATMENT WITH CEFTOLOZANE-TAZOBACTAM. A CASE REPORT

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Background/Aim: Complicated urinary tract infections (cUTIs) due to Ps. aeruginosa, remain a major challenge in everyday clinical practice. Ceftolozane/tazobactam is a novel antibiotic with strong antipseudomonal activity. Hereby, we report a case of cUTI with persistent bacteremia due to Ps. aeruginosa with a favourable outcome after ceftolozane/tazobactam administration.

Case: A 65 year-old woman with a history of multiple sclerosis on methylprednisolone pulses was admitted to our department due to high fever accompanied by persistent flank pain in the right costovertebral angle, positive Giordano sign, leukocytosis and pyuria. After blood and urine cultures were obtained, ceftazidime/teicoplanin were initiated for cUTI, due to recent hospitalization, previous bladder catheterization and antibiotic use. CT urography revealed right ureteral dilation, though in subsequent ureteroscopy no stone or obstruction was found. After the procedure, fever up to 40oC with rigors occurred, and new blood cultures grew Ps. aeruginosa. Bacteremia persisted despite multiple courses of antibiotic regimens according to antibiogram, including ceftazidime, ciprofloxacin, meropenem and amikacin. Multiple CT scans did not reveal localized infection sites and a TOE echocardiogram was negative for endocarditis. Ceftalozane/tazobactam was initiated and the patient became afebrile 2 days later, while multiple surveillance blood cultures had been sterile. After a 14-days course she was discharged and in the 3-months' follow up period she remained afebrile without relapse.

Conclusions: Ceftolozane/Tazobactam has a potent antipseudomonal activity with excellent renal penetration and excretion, characteristics that make this novel antibiotic a promising weapon in the clinical practice.

ACUTE HAV INFECTION INCIDENCE IN HIV POSITIVE MSM DURING A HAV OUTBREAK

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Backround: Hepatitis A virus (HAV) is considered a sexually transmitted infection (STI) through oral/ anal sex. Acute hepatitis A outbreaks have been reported in men who have sex with men (MSM) in EU countries in 2017, including Greece.

Aim: A review of acute hepatitis A infection incidence to the HIV(+) patients treated by the G.GENNIMATAS Athens General Hospital Infectious Diseases Ward, analysis of demographics, clinical manifestations and laboratory findings of the sample.

Methods: Single-center, retrospective study of 11 HIV(+) patients diagnosed with acute HAV-infection during January-October 2017. Diagnosis was made with presence of clinical symptoms, positive serum IgM anti-HAV and hepatic enzymes elevation.

Results: A total of 11 HIV(+) patients were diagnosed with acute HAV-infection, 7 of which were admitted for treatment. All were of male gender with a mean age of 39, with no intravenous drug use history (IDU) and 9 were MSM. The registered cases peak occurred from July until October. Apart from 1 patient, whose HIV-diagnosis was made following HAV-infection, all were on antiretroviral treatment. Jaundice was the most common presenting symptom, followed by fever and malaise. No B or C hepatitis co-infection was reported. Past syphilis infection was present in 4 cases. In all patients sgot, sgpt, alp and γ -gt levels were elevated. In 3 cases INR prolongation was prominent.

Conclusions: The rise of HAV-infection cases among MSM was in accordance with the rest of the EU considering the HIV(+) population. Serology status should be monitored and HAV vaccination is of imperative importance to prevent transmission.

INFECTIVE ENDOCARDITIS CASE AFTER CORONER ANGIOGRAPHY

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Purpose: In this case, we present a male infective endocarditis patient who came outpatient clinic with fever, weight loss and weakness.

Case: 58 years old male patient came over our outpatient clinic with fever and weight loss for 1 month. He had coronary angiography 6 months ago and he had 2 stents in his background. Physical examination; arterial tension:110/80 mmHg(brachial), pulse:112/m(ritmic), fever:38.4°C .There was bilaterale crepitance in basal lungs and tachycardia,4/6 S3 Gallop murmur in all centers of heart with auscultation. Spleen was palpable 2 cm. We palped mobile lymph nodes, the biggest one is 1,5 cm in neck and axiller area. In laboratory tests, creatinine:0.6 mg/dl , AST:16 U/L, ALT:22 U/L , LDH:130 leukocyte:5.94 x103/uL Hemoglobin:8.85 gr/dl, PLT:184.000/uL, CRP:9.92 , sedimentation:74 mm/h, blood cultures were taken. Before he came our clinic, he had pet results which only had spleen involvement .We also couldn't find any pathology with echocardiography. After eco, transesophageal echocardiography was tried. As a result, aortic valve had 3 cusps, there was one 1.2x0.6 cm vegetation in NCC, and another 0.9x0.5 cm vegetation in LCC. Streptococcus gordonii was isolated in multiple blood culture. Antibiotheraphy with ceftriaxone 1x2 gr i.v. gentamicin 160 mg i.v. and rifampin 300 mg 1x2 oral were started. The patient was operated by cardiovascular surgery because of the vegatation was bigger than 1 cm.

Conclusion: Difficulties of diagnosis in this patient were; not to have artifical heart disease, to have angiography background interventionally, to have general symptoms like fever and weight loss. Infective endocarditis is an important clinical problem which needs quick diagnosis and powerful antibiotic treatment.

VISCERAL LEISHMANIASIS: A CASE REPORT

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Aim/Background: Leishmaniasis is caused by a protozoa parasite from the leishmania species. In Greece, 94% of the reported cases consist of visceral leishmaniasis (otherwise called kala-azar), a potentially fatal form of the disease, if left untreated. We hereby report a case of visceral leishmaniasis, having occurred in the regional unit of Thessaloniki, in autumn 2017.

Case report: A 48 year old woman, with no past medical history, was admitted to our hospital with high fever (up to 40o C), night sweats, and rigors, having lasted for 15 days. Spleen and liver enlargement was noted during the physical examination. Splenomegaly (18,5cm) and hepatomegaly (19,1cm) were verified using ultrasound scan. Laboratory findings included pancytopenia (WBC=2890/mm3, Hb=8.9g/dl, Ht=27.2%, PLT=113.000/μL), elevated inflammation markers and increased IgG. The serologic tests for parasite antibodies were negative but visceral leishmaniasis was confirmed by the remarkably positive PCR test in blood sample. The patient was treated with liposomal amphotericin B, according to guidelines, resulting in complete recovery.

Conclusion: A thorough investigation for leishmaniasis should be performed in such patients, presenting with fever, sweats, hepatosplenomegaly, and pancytopenia, so that correct diagnosis and treatment are provided.

A RARE CASE OF AN AFEBRILE PATIENT WITH PANCYTOPENIA AND HEPATOSPLENOMEGALY: A DIAGNOSTIC CHALLENGE

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Introduction/Aim: Leishmaniasis is a vector-borne zoonosis with variable clinical presentations. Visceral, cutaneous and mucocutaneous types can emerge, depending on the Leishmania species and immune responses of the host. Atypical presentation of visceral leishmaniasis (VL) in immunocompromised patients is always a diagnostic challenge. We present an interesting case of VL in an afebrile patient with rheumatoid arthritis presenting with hepatosplenomegaly and pancytopenia.

Case description: A 73-year old Caucasian man, with a history of rheumatoid arthritis under medication with methotrexate (10mg per week) and adalimumab (once in 25 days) for the last 3 years, was admitted to our clinic due to progressive worsening of fatigue, weight loss and abdominal tension for the last 5 months. He was recently diagnosed as an outpatient patient with pancytopenia. He was afebrile and physical examination was unremarkable apart from hepatosplenomegaly. Blood chemistry revealed pancytopenia, hypergammaglobulinaemia and elevated inflammation markers. During the first day of hospitalization the patient had two febrile waves up to 38,8°C. The blood and urine cultures did not isolate any pathogen. The patient's tests for HIV, HBV and HCV were negative. No signs of portal hypertension were found, while liver transient elastography revealed no signs of cirrhosis. A bone marrow biopsy was performed with several intracellular and extracellular Leishmania parasites visualized directly in Giemsa-stained bone-marrow aspirate. Anti-K39 antibody was positive and the title of anti-Leishmania antibodies was 1/3.200.The patient was started on liposomal amphotericin B for five days. One month after his discharge, he is asymptomatic with normal blood count.

EMPHYSEMATOUS PYELONEPHRITIS, PNEUMONIA AND BACTERAEMIA IN A PATIENT WITH CHRONIC RENAL FAILURE UNDERGOING HAEMODIALYSIS

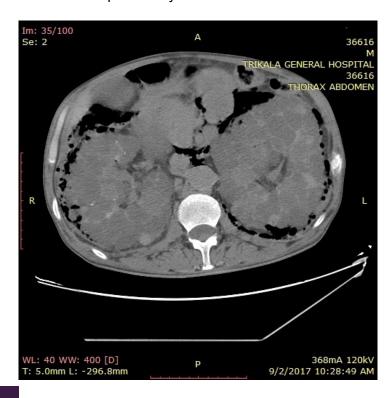
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Background/Aim: Emphysematous pyelonephritis (EPN) is a severe infection of the renal parenchyma that causes gas accumulation in the tissues. EPN most often occurs in persons with Diabetes Melitus and can be fatal if not recognized and treated immediately and promptly.

Case Report: A 55-year-old male with chronic renal failure undergoing dialysis presented with general weakness, andominal pain and hemoptysis. The clinical findings and chest X Rays were compatible with a lower respiratory tract infection, while the blood tests revealed elevated infammatory markers (CRP: 32.4) and blood glucose (717mg/dl). The patient was admitted and urgent renal replacement therapy alongside with broad spectrum antibiotics (imipenem, amikacin, linezolid) were immidiately iniciated. Blood and urine samples were collected. Due to the patient's dramatic deterioration, a lung and abdominal CT scan was decided during his second day of admission. The CT scan reveal bilateral lung infiltates and presence of parenchymal gas in both kidnes with extension to paranephric and perinephric space. Blood cultures turned positive for multi-resistant K.pneumoniae.

Consequently, the patient was diagnosed with bilateral emphysematous pyelonephritis and was immediately transferred to the Nephrology Department of the University Hospital of Larisa where he underwent nephrectomy and entered the ICU but eventually died a few days later.



NEUROLOGICAL COMPLICATIONS OF INFECTIVE ENDOCARDITIS THREE WEEKS AFTER ONSET OF TREATMENT

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Background: Neurological complications are common in patients with infective endocarditis and include acute encephalopathy, purulent or aseptic meningitis, meningoencephalitis, cardioembolic stroke, cerebral hemorrhage (due to stroke or ruptured mycotic aneurysm), cerebral abscess and epileptic seizures. These complications usually occur before or early after the onset of antimicrobial therapy.

Case Report: A 46-year-old male presented to the emergency department complaining of sudden onset of gait imbalance, dizziness and vomiting. These symptoms had been preceded by low-grade pyrexia which had lasted for less than 24 hours and had resolved spontaneously. Three weeks previously, he had been diagnosed with S. viridans endocarditis involving the mitral valve and treated with intravenous penicillin for two weeks followed by intramuscular ceftriaxone which he was still receiving at the time of presentation. On clinical examination dysdiadochokinesia was found, sign of cerebellar dysfunction. Computed Tomography of the head revealed no pathological findings. An MRI of the brain showed appearances typical of septic infarct in the left cerebellar hemisphere. A repeated transesophageal echocardiogram showed no vegetation. The patient was admitted to the hospital and treated with a combination of intravenous penicillin and gentamycin. His neurological status improved rapidly and he was discharged after two weeks with instructions for continuous follow up of both cardiac and neurological status.

Conclusion: Neurological complications of infective endocarditis can occur late, even when appropriate antimicrobial treatment is well underway. As they can be potentially life threatening, they should always be suspected and thoroughly investigated. A careful neurological follow up of the patient is necessary.

LEISHMANIASIS: AN INSIDIOUS DISEASE WITH MULTIPLE MANIFESTATIONS

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Background/Aim: Leishmaniasis is endemic in the Mediterranean basin (L.Infantum). The parasite resides in macrophage and most infections remain asymptomatic. Herein we present two cases of visceral leishmaniasis with divergent clinical pictures, treated in our department.

Case report1: A 40-year-old male manifested anemia (Ht: 29.7%) in routine blood tests. The patient presented afebrile, with palpable splenomegaly, diffuse gamma hyperglobulinemia and positive bone marrow smear for Leishmania. He was successfully treated with liposomal amphotericin at a dose of 21mg/kg, with successful recovery of the patient.

Case report2: An 80-year-old female was hospitalized due to high grade fever and weight loss for the past 15days. She had a 16-month history of anemia, a 4-month history of thrombocytopenia, diabetes and pulmonary TB infection two years ago.

Clinical examination: unremarkable.

Laboratory exams: Ht:24.7%, WBC: $6.800/\mu$ L, PLT: $65.000/\mu$ L, abdominal U/S: normal findings, diffuse gamma hyperglobulinemia, antibodies and PCR in blood specimen positive for Leishmania. She received a total dose of 45 mg/kg liposomal amphotericin, with no clinical improvement and the progression was fatal for the patient.

Conclusions: Leishmaniasis may present with a spectrum of clinical manifestations ranging from asymptomatic to lethal systemic illness. These cases are representative of that spectrum. Both had an insidious onset. Notably the second case had no splenomegaly until later stage. Recent TB infection highlights the importance of cell-mediated immune response as determinant of progression from subclinical to overt disease for both infections.

UTILITY OF NEUTROPHIL-LYMPHOCYTE RATIO, PLATELET-LYMPHOCYTE RATIO AND MEAN PLATELET VOLUME AS COST-EFFECTIVE DIAGNOSTIC AND PROGNOSTIC MARKERS IN PATIENTS WITH DIABETES WHO DEVELOP TUBERCULOSIS

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Objective: To study the potential role of NLR, PLR and MPV as diagnostic and prognostic markers in patients with diabetes who develop tuberculosis.

Secondary objectives: The sensitivity and prognostic utility of these 3 markers in comparison with the more established markers like CRP and ESR. Also as there is no clear marker available for predicting diabetics who are predisposed and at risk of developing TB

Methodology of Investigation: A combined Retrospective + prospective study on NLR, PLR and MPV in 3 groups 1) Healthy controls,2) Type 2 diabetes patient with TB 3) Type 2 diabetes patient without TB 70 cases were taken in each group and 70 controls were taken and data obtained were analysed

Result and Discussion: In our study, we found that NLR and PLR were highly significant with a P value of 0.001 as compared to the CRP with P value 0.001. According to Stevenson et al. 15% of TB burden in India was attributed to diabetes. Diabetics is a major cause of conversion of latent to active TB, reactivation of old TB. MPV was not statistically significant to be used as a marker

Conclusion: Large number of Diabetic population who are at risk of developing TB can be easily identified and the prognosis can be monitored at Primary Health Care Centre with just a peripheral smear from which NLR and PLR can be calculated and need not depend on costly investigation like CRP. This will reduce the financial burden of the patient.

CAUSES OF BLOOD STREAM INFECTION IN PATIENTS HOSPITALIZED IN THE FIRST DEPARTMENT OF INTERNAL MEDICINE OF TRIKALA HOSPITAL DURING A THREE YEAR PERIOD

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Background: A study of the causes of blood stream infections (BSIs) in patients hospitalized in the First Department of Internal Medicine in our hospital, during the period 2015-2017.

Aim: The determination of the microbal strain prevalence and antibiotic resistance.

Materials and Methods: We reviewed data of 583 blood cultures from patients hospitalized in our department during a 3-year period. Results: From a total of 583 blood cultures, 88 samples were positive (15%), 22 of them were contaminated and therefore ruled out. In the remaining 66 cases of true bacteraemia the following pathogens were isolated: E.coli 26% (16), Klebiella spp. 21%, Enterococcus spp. 14% (9) ans S.aureus 13% (8). The remaining strains were mainly enterobacteriaceae. BSIs were distinguished in community onset-CO (80%) (blood cultures taken at the first two days of admission) and hospital BSIs (20%) (cultures taken after 2 days). CO BSIs were distinuished even further in CO-Community Acquired (CO-CA)(41% of total cases) and Health Care Associated (CO-HCA) (39%) (history of recent admission in hospital/rehabilitation centers or patient undergoing dialysis). The most common pathogen in CO-CA BSIs was E.coli (50%) (predominantly UTIs). CO-HCA BSIs were caused mainly by Klebsiella spp. (30%) -in more than half of the cases the pathogen was carbapenem resistant- and S.aureus (25%)-mostly in patients under dialysis. In hospital BSIs Enterococcus spp. was isolated in 33%.

Conclusion: The burden of HCA BSIs significant and often realted to multi-drug resistant (MDR) pathogens. Surveilance, prevention of spreading in-hospital MDR microbal strains and rational use of antibiotics are mandatory.

A CASE REPORT OF PERITONEAL TUBERCULOSIS IN A PREVIOUSLY HEALTHY 27-YEAR-OLD-MAN

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Background/Aim: Tuberculosis of the peritoneum accounts less than 5% of all extrapulmonary tuberculosis cases and about 1-2% of all forms of tuberculosis. The diagnosis of peritoneal tuberculosis can be extremely difficult because of its non-specific clinical manifestations that often mimic a variety of other abdominal diseases.

Case Report: A 27-year-old-man from Bangladesh without previous medical history presented at the emergency department with malaise, fever, shivering, nausea, vomiting and abdominal distension for about 15 days as well as weakness and weight loss. He has been living in Greece permanently for the last 7 years. The clinical examination revealed an underweighted febrile patient with hypotension, tachycardia and abdominal tenderness while the blood exams showed elevated total cell count and CRP without any other abnormal findings. CT scan displayed ascites and mesenteric thickening with lymphadenitis. The ascitic fluid examination showed a total cell count of 1600/µl, consisting predominantly of lymphocytes (>75%) and SAAG<1,1g/L. Staining for acid fast bacilli, fluid culture, PCR and cytologic examination where negative. Referring to the complete work up, blood cultures and blood tests for hepatitis/HIV/CMV/EBV,Brucella and Salmonella species where all negative. Gastroscopy and colonoscopy proved totally normal. Subsequentlly, a diagnostic laparoscopy was perfomed, the histology was compatible with tuberculosis and the culture was positive for mycobacterium tuberculosis sensitive to antitubercular drugs. The patient underwent antitubercular treatment resulting in improvement.

Conclusions: Peritoneal tuberculosis is a rare extrapulmonary tuberculosis manifestation especially in patients without predisposing factors. It is often misdiagnosed while the early diagnosis and effective therapy increases survival rates.

XDR ACINETOBACTER BAUMANNII MENINGITIS IN A PATIENT WITH NO HISTORY OF HEAD TRAUMA OR NEUROSURGICAL INTERVENTION

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Background: Literature concerning multi-drug resistant Acinetobacter baumannii meningitis remains limited, all cases referring to neurosurgical patients.

Aim: Presentation of a unique case of health-care associated XDR Acinetobacter baumannii meningitis in a patient with cancer but no history of neurosurgical operation or head trauma.

Case Report: A 69 years old male patient, with SCLC stage IV, diagnosed 2 months earlier, presents with confusion and irritability of a few hours duration. Due to metastatic brain lesions he had previously received whole-brain radiotherapy besides chemotherapy. Patient was afebrile, without focal neurological deficits or nuchal rigidity, GCS 10/15.

Significant laboratory findings: thrombocytopenia, leucocytosis and hyponatremia. Brain CT revealed 3 cerebellar metastases with oedema. Patient was treated with mannitol and high-dose dexamethasone. Until lumbar puncture (LP) could be safely performed, ceftriaxone and ampicillin was empirically initiated. LP performed on day 3 revealed elevated neutrophils and protein. Microscopy: Gram-negative bacteria. Culture was positive for Acinetobacter baumannii, and treatment was modified to meropenem, colistimethate sodium and gentamicin until antibiogram was available. However, antibiogram finally revealed an XDR isolate with MICs: meropenem >16, colistimethate >6, Tigecycline >265, amikacin=8. Patient died the same day, before targeted therapeutical action could be taken.

Conclusion: Extreme resistance (practically panresistance) of this isolate limited treatment options to intrathecal amikacin, with the danger of chemical meningitis due to the excipients of the regimen, or to iv amikacin in extremely high dosage. Generally, XDR Acinetobacter baumannii meningitis has limited therapeutic choices, including intrathecal administration of polymyxins, gentamicin or even tigecyclin (very few case reports).

DISEASE BY LIGHT CHAIN DEPOSIT

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A 64-year-old woman was admitted in Internal Medicine Unit for a month of evolution of vomiting, weight loss, dark urine and transaminase elevation in laboratory tests. Physical examination was normal excepting subcutaneous jaundice. The blood test revealed INR 1.43, total protein 5.7 g/dl (albumin 2.1 g/dl), total bilirubin 2.4 mg/dl (direct bilirubin 1.3), GOT 221 UI/L, GPT 127 UI/L, GGT 2349 UI/L, alkaline phosphatase 1434 UI/L, total cholesterol 361 mg/dl and proteinogram with lambda light chains in serum 95.5 (without monoclonal peak). The hepatic autoimmunity, hepatotropic virus serology, and ceruloplasmin was normal. Urine with microalbumin/creatinine ratio 2472 mg/g. Abdominal ultrasound, abdominal MRI, and MR cholangiography with one uncomplicated right renal cyst. Gastroscopy with small hiatus hernia. With a possible diagnosis of amyloidosis was performed a biopsy of abdominal fat was performed with an ultrasound guided hepatic needle, and bone marrow biopsy, compatible with monoclonal deposit of lambda light chains. The patient presented a renal and hepatic insufficiency with edema, ascites and increased jaundice and finally died 41 days after admission due to multiorgan failure.

This case is interesting because of the exceptionality of the deposition of lambda light chains in the liver, and probably also in the kidney, and cholestasis as part of the clinical presentation of the disease.

A STUDY OF THE ISOLATION INCIDENCE OF MICROORGANISMS IN CULTURES OF CENTRAL INTRAVASCULAR CATHETER TIPS AND THEIR ANTIMICROBIAL RESISTANCE

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Aim: The aim of the study was to investigate the incidence of isolation of pathogenic agents on cultures of central intravascular catheter tips in the General Hospital of Ioannina during a five year period (2012- 2016).

Material and Method: The material of the study was 712 catheter tips from inpatients from 2012 until 2016. The Microscansystem was employed for the identification and antimicrobial susceptibility testing of the pathogenic agents isolated.

Results: A microorganism was detected in 250 out of 712 samples (35.1%). The most frequent microorganisms that were isolated were: Staphylococcus epidermidis (32.8%), Acinetobacter Baumanii (1.4%), Pseudomonas aeruginosa (9.6%), Klebsiella pneumoniae (8.8%), Enterococcus faecalis (4.8%), Proteus mirabilis (2.8%). The resistance to drugs can be seen on the table below:

Conclusion: The most common microorganism isolated was Staphylococcus epidermidis, a fact that raises the question of whether that was a pathogenic agent of infection or just a contamination of the sample with the microbial flora of the skin .In addition, strains of Acinetobacter.spp and Klebsiella.spp resistant to antibiotics were isolated at a high rate, since most of them were isolated in patients of the I.C.U who are usually colonized by multi-drug resistant strains.

	Acinetobacter Baumannii	P. aeruginosa	Klebsiella pneumoniae
Amikacin	81%	8%	14%
Ciprofloxacin	+	496	86%
Aztreonam		42%	86%
Gentamicin	86%	12%	5%
Imipenem	92%	21%	86%
Meropenem	64%	2196	
Ceftazidime	100%	25%	86%
Netilmicin	86%	21%	91%
Cefoxitin			91%
Piperacillin/Tazobact.		496	
Colistin	096		
	1	1	

A COMPARATIVE STUDY OF ANTIMICROBIAL RESISTANCE OF VARIOUS STRAINS OF COAGULASE NEGATIVE STAPHYLOCOCCI AS WELL AS STAPHYLOCOCCUS AUREUS

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Aim: The aim of the study was to investigate the resistance of various species of Co.N Staphylococci isolated in the microbiology laboratory of a tertiary hospital and the comparative study of the antimicrobial resistance among these species and Staphylococcus aureus strains.

Material and Method: The material of the study was 567 strains of the most frequent species of Co.N Staphylococci and 311 strains of Staphylococcus aureus strains isolated in samples of inpatients and outpatients who were evaluated in the Microbiology laboratory from 2012 until 2016. The samples in which they were isolated were mainly samples of blood, wound and central intravascular catheter tips. The samples were inoculated on the appropriate agar plates according to the type of the sample. The Vitek 2 system (Biomerieux) was employed for the identification and antimicrobial susceptibility testing of the staphylococci.

Results: The antimicrobial resistance of the strains of staphylococci can be seen on the table below:

Conclusion: The study revealed that MRSA strains of Staphylococcus aureus were more sensitive to the remaining antibiotics in comparison to CoN staphylococci. With regard to the strains of CoN staphylococci it can be seen that while Staphylococcus epidermidis strains were more frequently isolated, staphylococcus haemolyticus strains had a higher resistance against most antibiotics. Even though the presence of CoN staphylococci in samples does not entail infection but usually just colonization, the high rates of resistance to antibiotics lay an imperative necessity of prescribing antimicrobial agents rationally.

	Staphylococcus epidermidis	Staphylococcus haemolyticus	Staphylococcus hominis	Staphylococcus aureus
	425 strains	91 strains	51 strains	311 strains
Cefoxitin	26%	14%	26%	67%
Ciprofloxacin	49%	87%	15%	8%
Clindamycin	54%	73%	61%	19%
Erythromycin	70%	93%	80%	23%
Gentamicin	43%	64%	12%	5%
Penicillin-G	96%	93%	92%	85%
Rifampicin	5%	2%	6%	3%
Teicoplanin	0%	0%	0%	0%
Tetracycline	14%	38%	31%	23%
Vancomycin	0%	1%	0%	0%

A RECORD OF THE INCIDENCE OF CLOSTRIDIUM DIFFICILE ISOLATION IN LOOSE STOOL OF PATIENTS DURING A 7-YEAR PERIOD (2000-2016)

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Aim: To record the incidence of isolation of C.difficile in samples of loose stool of inpatients in a tertiary hospital during a 7-year period.

Material and Method: During the study, 8770 samples of loose stool were tested. ELISA and Immunochromatography were the methods employed for the detection of toxin A and the simultaneous detection of toxins A and B. Strains of the bacterium that were negative to toxin A and positive to toxins A&B were considered A-B+

Results: 735 strains of C.difficile were isolated (735/8770, 8.3%) during the 7-year study. 641 out of these strains (87%) were isolated in samples of inpatients and 94(13%) in patients who were not hospitalized. The results can be seen on the table below: 68 were isolated in patients in the gastrointestinal department, 37 in patients in the renal department, 63 in patients in the remaining pathology departments, 52 in patients in the surgical department and 12 in patients in the I.C.U.

Conclusion: The isolation incidence of C.difficile in patiens suffering from diarrhea was high (\sim 8.5%), especially in hospitalized patients (87%). However, there was a rerlatively high isolation rate in patients who were not hospitalized(13%). The majority of the strains were isolated in patients in the pathology departments. The incidence of infection caused by C.difficile makes the awareness of the clinicians and the laboratory doctors necessary so as to combat and timely prevent the spread of C.difficile.

YEAR	NUMBER OF SAMPLES	NUMBER OF STRAINS	% PERCENTAGE
2009	812	64	7.7%
2010	981	88	8.9%
2011	1068	96	9%
2012	1449	97	6.7%
2013	1286	141	10.9%
2014	1550	139	8.9%
2015	1521	110	7.2%

PSEUDOMONAS PUTIDA: A CASE OF COMMUNITY ACQUIRED DRUG RESISTANT BACTEREMIA

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Background: Pseudomonas putida is a gram-negative rod belonging to rRNA group I of the genus Pseudomonas. Cases of Pseudomonas putida bacteremia, often associated with trauma hospitalization or immunosuppresion, have rarely been reported. Here we present a rare case of septic bacteremia caused by a community acquired P. putida, resistant to carbapenemases.

Case Report: A 57 year old female Caucasian gardener, presented to the emergency department with a history of persistent fever up to 40°C, accompanied with shiver, nausea and vomiting, colic pain located in the right lumbar region. After clinical laboratory and imaging control an acute focal pyelonephrits on bilateral nephrolithiasis was diagnosed. Medical history and laboratory results revealed presence of hepatitis B under no antiviral therapy. The patient showed inadequate response to the initial empirical treatment with meropenem. Repeated blood cultures obtained upon hospital admission revealed the presence of P. putida carbapenemases resistant due to VIM mechanism susceptible only to amikacin, colistin and fosfomycin. P. putida is a common ingredient of soil fertilizers also used in our patient's workplace.

Conclusion: After being treated with proper antibiotic treatment, our patient remained afebrile, in a good clinical status with all inflammatory markers in remission and she was discharged.

BARTONELLA HENSELAE PRESENTING AS FEVER OF UNKNOWN ORIGIN WITH SPLENIC INVOLVEMENT IN AN IMMUNOCOMPETENT ADULT MALE

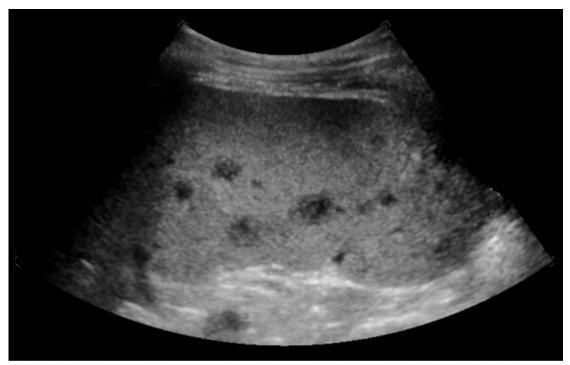
<u>Dafni Korela</u>, Stamatis Karakonstantis, Sofia Pitsigavdaki, Despina Galani, Melina Kavousanaki, Evgenia Emmanouilidou, Evangelos Thalassinos, Georgios Papazoglou, Kalliopi Milaki, Emmanouil Tzagarakis, Charalampos Lydakis

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Background: Isolated splenic cat scratch disease is rare, especially in adults. The presentation (prolonged fever, night sweats, weight loss) may be confused with lymphoma.

Case Report: A 64-year-old male presented with fever up to 38°C for one month, night sweats and weight loss. Physical examination was unremarkable apart from one palpable left axillary lymph node and palpable spleen. He reported being bitten on the left hand by a kitten 2 months ago. Laboratory tests were non-specific (CRP: 6.35mg/dl and ESR: 50mm/hr). The abdominal ultrasonography and CT scan revealed splenomegaly (15.5cm) and multiple hypoechoic/hypodense splenic lesions. The chest CT was normal. Serologic testing was negative for HIV, Syphilis, Toxoplasma, EBV, CMV, and Brucella. Urine and blood cultures were negative. A tuberculin skin test was nonreactive. Echocardiography did not show any evidence of endocarditis. Bone marrow aspiration revealed a hypercellular bone marrow, with no evidence of malignancy. Serology for B. Henselae came positive (IgM 1:160 and IgG 1:512). The patient received rifampicin for 14 days and azithromycin for 5 days.At 6 weeks follow-up IgM were negative. Eight months later he remained asymptomatic.

Conclusions: A careful medical history and a high index of suspicion are important to recognize isolated Bartonella splenic involvement.



Abdominal ultrasound demonstrating splenomegaly with multiple hypoechoic lesions.

PATIENT WITH FEBRILE SYNDROME AND REACTIVE ARTHRITIS AFTER INTRAVESICAL ADMINISTRATION OF BACILLUS CALMETTE GUERIN (BCG) AND ANTI-CYCLIC CITRULLINATED PEPTIDE ANTIBODIES DEVELOPMENT

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Aim: Detection of anti-cyclic citrullinated peptide (anti-CCP) has recently been reported in patients with active pulmonary tuberculosis (TBC). Whether patients with intravesicular BCG immunotherapy develop anti-CCP, needs evaluation.

Case report: A 50-year-old, male, was admitted because of episodes of fever up to 39 C and urine discomfort. One week ago he had intravesicular administration of BCG for bladder cancer. On examination patient had arthritis of left knee and at the second day of left ankle.

Differential diagnosis: Urinary-acute prostatitis infection, BCG infection after intravesical infusions. Laboratory evaluation, CT scans and knee aspiration did not confirm active TBC infection. Patient was treated with levofloxacin and because of persistence of fever, 300 mg isoniazide and 8 mg methylprednisone were added. Anti -CCP found positive, but patient had improvement and became asymptomatic, with resolution of arthritis.

Conclusions: anti-CCP antibodies have been considered very specific for rheumatoid arthritis (RA). However, studies have shown that these antibodies can be falsely positive in infectious diseases like TB, HIV, etc. Reactive arthritis following BCG immunotherapy is well described. Thus, a patient could be misdiagnosed as having early RA based on polyarthritis and anti-CCP positivity. The percentage of these patients develop anti-CCP needs further evaluation.

POSTERIOR REVERSIBLE ENCEPHALOPATHY SYNDROME AS A COMPLICATION OF BACTERIAL MENINGITIS

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Posterior reversible encephalopathy syndrome (PRES) is a clinico-radiological syndrome that manifests with headache, seizures, altered mental consciousness and visual disturbances, and is characterized by white matter vasogenic edema affecting predominantly the posterior occipital and parietal lobes of the brain. This clinical syndrome is increasingly recognized due to improvement and availability of brain imaging, specifically magnetic resonance imaging (MRI). The syndrome should be promptly recognized, since it is reversible and treatable. Delayed diagnosis and treatment of PRES may lead to death or irreversible neurological deficit. The severity of the clinical symptoms varies widely, i.e. the visual disturbances can range from blurred vision, visual hallucinations, visual neglect, homonymous hemianopsia to cortical blindness, while altered consciousness may vary from mild confusion or agitation progressing even to coma. Other symptoms include nausea, vomiting and brainstem deficits. Seizures and status epilepticus are quite often the presenting manifestation. PRES is a syndrome of heterogeneous etiologies and is associated with clinical conditions such as preeclampsia, eclampsia, autoimmune disease, cancer chemotherapy, transplatation including bone marrow or stem cell transplatation, hypertension, and finally, infection/sepsis/shock.

We hereby report the case of an otherwise healthy adult female, presenting with fever, headache and generalized arthralgia, masking Neisseria meningitidis serotype B meningitis, later complicated by posterior reversible encephalopathy syndrome. Meningococcal meningitis is a well established potential fatal infection characterized by fever, headache, petechial rash, and vomiting in the majority of cases. Increased clinical suspicion and prompt diagnosis is crucial to ensure favorable outcomes.

ATYPICAL INFECTIOUS MONONUCLEOSIS SYNDROME CAUSED BY PRIMARY CMV INFECTION ALONG WITH REACTIVATION OF LATENT EBV INFECTION

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Background/Aim: Cytomegalovirus(CMV) and Epstein-Barr-Virus(EBV) belong to the herpes-virus group. They cause infectious-mononucleosis-syndrome. After the infection, they remain latent in lymphocytes. They rarely show resurgence in conditions of cellular immunosuppression. Rare cases of co-infection with CMV and EBV - mainly in children - are reported in literature. Additionally, their antigens may show cross-reactions with all herpes-viruses' antigens. The aim of this report is the demonstration of a rare case of atypical mononucleosis syndrome caused by primary-CMV-infection along with reactivation of latent-EBV-infection.

Case Report: A 56-year-old woman has been experiencing a feeling of tiredness and fatigue for months and was finally referred to the General Hospital of Trikala due to elevated transaminases (serum values three times higher than the upper-normal-limit) and splenomegaly(confirmed by ultrasound). Blood-tests, also, showed mild lymphocytocis-anemia-thrombocytopenia, hypergammaglobulinemia and high-LDH-levels. Hepatitis-serologic-testing was negative for HBV/HCVinfection(HBsAg/anti-HBs/anti-core/anti-HCV) and positive for old-HAV-infection. She underwent imaging testing (chest/abdomen computed-tomography) which confirmed splenomegaly, without revealing co-existing lymphadenopathy. Further testing (Mantoux/Monospot/HIV-test/Widal/Wright/ anti-Brucella/anti-Leismania/anti-Toxoplasma/ANA/SLA/anti-LKM-1,2,3/copper-serum-levels/seruloplasmin-levels/alpha-1-antitrypsin-serum-levels) was negative. The initial high anti-CMV-IgM and anti-CMV-IgG titers and following antibody-seroconversion were compatible with primary-CMV-infection. On the other hand, high EBV-IgM-VCA/EBV-IgG-VCA titers were found and seroconversion followed. Heterophile-Antibody-Test(Monospot) was negative. IgG-EBNA-titers were increased, as well. Since 90-95% of the population is infected by EBV until adulthood, the syndrome was-primarilyattributed to acute-CMV-infection along with reactivation of latent-EBV-infection, as a result of transient cellular immunosuppression.

Conclusions: In medicine, a successful diagnostic approach requires both detailed clinical examination and laboratory investigation - which sometimes includes special serological testing - but mainly, therapist's ability to co-assess and interpret the collected data.

MICROBIAL INFECTIONS AND ATHEROSCLEROSIS: INVESTIGATING A NOVEL RISK FACTOR?

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Introduction: Atherosclerosis has been evinced epidemiologically as a major cause of morbidity and mortality. Even if current literature focuses on the metabolic background of the disease, the role of the pathogens and the immune background of endothelial damage appear interesting.

Purpose: The purpose of this study is to discuss the latest scientific results that evaluate the effect of some pathogens on the appearance of atherosclerotic plaque.

Materials And Methods: We reviewed literature through Pubmed and Cochrane. Key-words as atherosclerosis, infection, pathogens and endothelial instability were used. Retrospective and epidemiological studies hosted in high impact factor journals were the main sources of data.

Results: Pathogens contribute to the endothelial damage both in a direct and an indirect way. In the first case endothelial cells get infected, whereas in the second case secretion of inflammatory cytokines destabilizes the endothelium spreading away from the area of infection. Bacterial and viral strains are involved in atheromatosis and can be classified as common pathogens and pathogens of periodontal disease.

Discussion: The immunological background of the atherosclerotic disease is offered for further research, and it is essential that a high sensitivity technique of isolating pathogens from atherosclerotic plaques be defined. The conditions needed for the creation of atherosclerotic plaques in humans are not reflected accurately while using genetically modified mice, which makes it necessary that new studies based on human be conducted. The issue is raised through the anti-vaccination movement which has yet to reveal another aspect of the pathogenesis of infections.

TREATMENT OF BLOOD CULTURE-NEGATIVE ENDOCARDITIS ON AN ARTIFICIAL METALLIC VALVE

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Background: Treatment of blood culture negative endocarditis on a prosthetic metallic valve.

Case report: Female patient 49 yo was admitted in the internal medicine ward due to daily fever for the previous 20 days. She had been prescribed clarithromycin and cephuroxim. Personal medical history: 1) familial hypercholesterolemia (homozygous) treated with loperamide 2) triple CABG (2014), 3) aortic valve replacement by a metallic valve treated with acenocoumarol. Blood tests on the day of admission: WBC 10.000, ESR 86, CRP 58, Hgb 8gr/dL, Probable diagnosis on admittance: endocarditis due to her medical history. The transthoracic ultrasound did not reveal any pathology, the oesophageal ultrasound revealed abscess on the artificial valve. The brain, thorax and abdomen CT revealed hepatosplenomegaly, pleural effusion.

Histopathology: negative.

Blood cultures: negative. After trying various antimicrobial combinations, she was administered imipenem and daptomycin for 6 months. The patient's fever dropped to normal, CRP and ESR returned to normal and there was a significant clinical improvement. She was tested regularly with oesophageal ultrasound she was diagnosed with a pseudoaneurysm of the mitral-aortic intervalvular fibrossa and was advised to be examined by a cardiac surgeon. She was examined by six cardiac surgeons and all of them consider the pseudoneurysm as inoperable.

Conclusion: Treatment of blood culture negative endocarditis is very difficult because of the lack of sufficient evidence in bibliography. Six months of antimicrobial treatment seem like a safe period in inoperable cases of cardio surgery.

THE EFFECTIVENESS OF EBOLA CONTROL MEASURES IN WEST AFRICA

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The Ebola virus outbreak in West Africa in 2013 reached an alarming diffusion rate starting from Guinea and in a few months, it was spread in several countries of the African continent. Ebola virus is transmitted to people as a result of direct contact with body fluids containing virus of an infected patient. Typical Ebola symptoms include fever, weakness, cramping, nausea, diarrhea, abdominal pain, cramping, nausea and vomiting for 5-7 days. Currently, several therapeutic agents and novel vaccines for Ebola virus have been developed and are now undergoing evaluation. There are no approved vaccines or antiviral therapeutics for Ebola virus currently available for human use although many have already been tested. However, ring vaccination is predicted to offer a moderately beneficial supplement to ongoing non-pharmaceutical Ebola control efforts. Moreover, activated protein C, a recombinant inhibitor of factor VIIa/ tissue factor may be considered in future clinical experimental plans for severe Ebola infections in patients which are not responsive to standard care regimens.

Last but not least, additional treatment beds on the number of Ebola cases led to a substantial decline in EVD transmission during 2014-2015. Ebola poses a threat not only to West Africa but also to the international community. The most effective approach would be both limiting the international spread of Ebola and to control the disease at its source.

IMPACT OF NEONATAL EARLY-ONSET SEPSIS CALCULATOR ON ANTIBIOTIC USE IN NEWBORNS WITH SUSPECTED INFECTION

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Objective: A recently described neonatal early-onset sepsis (EOS) calculator has the potential to reduce newborn antibiotic exposure based on five risk factors. The objective was to compare actual antibiotic use to the stratification based on the sepsis calculator in newborns with suspected EOS and to investigate differences in EOS risk between newborns that received early (<12 h) versus late antibiotics (≥12 h of life).

Materials and methods: Retrospective review of infants born ≥ 34 weeks gestation who received antibiotics within 72 hours after birth. The EOS risk score per 1000 live births was calculated and each newborn was retrospectively assigned to the recommended category by the Kaiser Permanente neonatal EOS calculator. Statistical analysis was performed using IMB SPSS Statistics 22 software.

Results: The EOS calculator recommended not to start antibiotic therapy in 156 (77%) out of 205 infants. Antibiotic treatment was started early in 60 (29%) and late in 145 (71%) newborns. 13 (6%) positive blood cultures were identified. Newborns that received early antibiotics had higher maternal EOS score (median 1.39, IQR: 0.39-2.12) compared to newborns in the late treatment group (median 0.03, IQR: 0.02-0.04). Clinical condition deteriorated in the late treatment group, including one newborn with low risk score, but afterwards proven purulent meningitis.

Conclusion: Antibiotic use in newborns could be significantly reduced by more than 77%, leading to less need for laboratory monitoring and more accurate antibiotic targeting. Newborns with initial low sepsis risk score clinically deteriorated beyond 12 h of life. Continuous good clinical observation is crucial.

MALIGNANT EXTERNAL OTITIS IN PEDIATRIC AND ADULT PATIENTS

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Background: Malignant External Otitis (MEO) is a necrotizing infection of external auditory canal and temporal bone, leading to skull base osteomyelitis. Pseudomonas aeruginosa is the most common causative organism, in more than 90% of patients. Despite the antibiotic treatment the survival rate is 50%.

Objectives / Aim: To describe similarities and differences of MEO in pediatric and adult patients.

Methods: A retrospective systematic review was conducted of articles, by using search terms such as [(malignant external otitis) AND children AND adult], on medical literature data base (PubMed).

Results: In adult population MEO tends to affect the elderly as well as patients with comorbidity such as diabetes mellitus, cardiovascular disease, chronic renal failure, autoimmune disease, hematological disease or cancer. Typically, includes otalgia persisting for longer than one months, chronic otorrhea, headache and cranial involvement. HbA1c levels, inflammatory markers and imaging findings influence the prognosis of disease. MEO is reported in almost few cases of non-diabetic pediatric patients who are immunocompromised due to malignancy, malnutrition and hematological -severe anemia or granulocytopenia- and immunodeficiency disorders such as IgA deficiency and HIV. The clinical presentation contains fever, otalgia, otorrhea, fatigue and facial palsy nerve. Inflammatory indexes and imaging findings determine the prognosis of disease.

Conclusions: Pediatric patients are frequently immunodeficient and have a far better prediction, with practically no mortality. However, adult patients are usually elderly diabetics, with severe mortality rate. Ciprofloxacin and other antipseudomonal agents are the imperative antibiotic treatment. The prognosis of disease has statistically significant impact of cranial nerve involvement.

ASSOCIATION BETWEEN ROUTINE BIOCHEMICAL TESTS AND OUTCOME IN PATIENTS WITH SEPSIS

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Background: Sepsis is a medical emergency associated with high rates of mortality and morbidity. In this study, we sought to investigate the association between biochemical markers and outcome of patients with sepsis.

Methods: We reviewed the files of all consecutive patients admitted to the 1st Department of Internal Medicine, from January 2015 to December 2016. Demographics, duration of hospitalization, survival, site of infection, type of the pathogen species, biochemical analysis, qSOFA and SOFA score at the ED and within 24h after hospital admission were recorded. The primary outcome was survival at discharge, while length of hospital stay was defined as the secondary outcome.

Results: The study population consisted of 90 patients (40 men and 50 women) with a mean age of 79±11.7 years and mean length of stay was 8.7±5.4 days. There was a statistically significant association between baseline and 24h SOFA score variation with survival (p=0.001). Although, no statistically significant association was observed between the biochemical data or SOFA score with length of stay.

Conclusion: In this study, biochemical markers were not associated with survival or length of stay. However, the number of survivors indicates the proper timing and effectiveness of targeted therapeutic interventions in our Institution.

ANGIOEDEMA AND INFECTIOUS MONONUCLEOSIS: A RARE CASE REPORT

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Background/Aim: "Angioedema" is the swelling of deep-dermis, subcutaneous or submucosal tissue due to vascular leakage. Acute episodes often involve the lips, eyes, face and-occasionally-other parts including the respiratory/gastrointestinal mucosa. Laryngeal-swelling can be life-threatening. -Histamine-mediated/Histaminergic angioedema (responsive to antihistamine/cortisone). 1.Angioedema-associated-with-urticaria (with/without urticarial rash) 2.Idiopathic -Bradykinin-mediated/Non-histaminergic angioedema(resistant to antihistamine/cortisone). 1.Hereditary:Functional / Quantitative C1-esterase-inhibitor (C1-INH) deficiency. 2.Acquired: Production of anti-C1-INH / Overconsumption of C1-INH in autoimmune/lymphoproliferative diseases respectively. 3.ACE(angiotensin-converting-enzyme)-inhibitor-induced angioedema. 4.Idiopathic

The aim of this report is the demonstration of a rare case of angioedema in a teenager with infectious mononucleosis.

Case Report: A 14-year-old-female patient, without individual/family history of angioedema, referred to the emergency department because she was experiencing fever, vomiting and diarrhea for 24 hours, weakness and anorexia for 5 days. Clinical examination revealed cervical lymphadenopathy. Blood tests showed lymphocytosis, elevated LDH and transaminases. Mild splenomegaly was diagnosed by abdominal-ultrasound. On-2nd-day-of-hospitalization, she acutely exhibited angioedema of the eyelids, face, lips and tongue, without urticaria, non-related-to-drugs and antihistamine-resistant. Further testing (immunological-control/thyroid-function/hepatitis-tests/HIV-test/anti-CMV/Widal/Wright/anti-Brucella/anti-Leismania/ASTO/Mantoux/cardiac-ultrasound/stool-urine-blood-cultures/serum&24-hour-urine protein) was normal. Chest/Abdomen-computed-tomography(CT) did not reveal mesothoracic/abdominal lymphadenopathy. On-5th-day-of-hospitalization, cortisone was administered. On-6th-day the fever retreated. The edema subsided two days later. Heterophile-Antibody-Test(Monospot) and EBV-IgM-VCA-titers were elevated, while C1-INH-levels were marginally low. A month later, EBV-antibody-seroconversion occurred, while C1-INH and C4-fragment levels were normal.

Conclusions: EBV is a lymphotropic virus, implicated in activation of hereditary-angioedema and appearance of lymphoproliferative/autoimmune diseases. However, there is no reference to its association with acquired-angioedema. In contrast, few cases implying correlation with histaminergic-angioedema and acute/chronic urticaria are described. In medicine, a rare diagnosis should, also, be based on bibliographical confirmation(evidence-based) rather than on spontaneous conclusions.

OCULAR COMPLICATIONS OF AIDS

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Introduction: Although in the asymptomatic vectors of the virus ocular disorders are rare, in patients with AIDS the incidence rates range from 75-95%.

Clinical Manifestations: The most common and major ocular manifestations of AIDS are: • Noninfectious AIDS retinopathy (HIV microangiopathy): The most common manifestation. It is characterized mainly by cotton wool spots and, less frequently, by intraretinal haemorrhages, microaneurysms, telangiectasia, vasculitis, retinal vascular occlusion. It is generally asymptomatic and does not require treatment. • CMV retinitis: The most common opportunistic eye infection. It is characterized by a slowly progressive necrotic retinitis. It is treated with systemic or intravitreal injections of ganciclovir, foscarnet or sidofovir. • Progressive Outer Retinal Necrosis and Acute Retinal Necrosis: These are necrotizing retinitis, mainly due to HZV and more rarely HSV, with poor response to treatment and poor prognosis. Less frequent or minor manifestations include: • Adnexal complications: Conjunctivitis, dry eye, blepharitis, molluscum contagiosum of eyelids, HZV or HSV infection, orbital cellulitis, chronic microsporidial keratitis. • Anterior uveitis (from CMV, syphilis, tuberculosis, toxoplasma). • Neoplasms: Kaposi's sarcoma of eyelids, orbital or intraocular (mainly choroidal) lymphoma. • Opportunistic infections: Bacterial or fungal keratitis, cryptococcal choroiditis, toxoplasmic chorioretinopathy, Pneumocystis carinii choroiditis, Candida endophthalmitis. • Neuroophthalmological manifestations: Cranial nerve and/or extraocular muscle palsies, retrobulbar optic neuritis (from syphilis, cryptococcus or HZV). • Toxic optic neuropathy: from pharmaceutical therapy, mainly didanosine and ethambutol.

Conclusion: Ophthalmic manifestations in people with AIDS are frequent and sometimes intense. Prophylactic examination by the ophthalmologist even with the most insignificant discomfort is necessary.

EFFICACY AND SAFETY OF RADIATION THERAPY IN PATIENTS WITH GRAVES' OPHTHALMOPATHY: A CASE SERIES REPORT

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Background/Aim: Graves' ophthalmopathy (GO) is the most common extrathyroidal manifestation of Graves' disease. It is characterized by inflammation of orbital and periorbital tissue. Treatment of GO is very challenging, and the outcome is often unsatisfactory. Orbital radiotherapy (RT) has been used for over 60 years in the treatment of GO with variable efficacy. The purpose of this study was to review our practice of RT in GO and compare to published results.

Case report: We examined the clinical outcomes and tolerability of radiation therapy in a series of patients (subjects) with severe Graves' ophthalmopathy between 2015 and 2017. Nine patients were included (66% female; median age 58 years), all euthyroid. Clinical evaluation of patients was performed using the modified NOSPECS score. Before treatment all patients had exophthalmos, whereas 7 (78%) had diplopia and 4 (44%) had decreased visual acuity. 7 (78%) patients were smokers and continued smoking during treatment against medical advice. A total dose of 20 Gy was delivered to each eye with Linear Accelerator in ten fractions, using 3D conformal technique and VMAT. All patients received IV methylprednisolone during RT. Of 9 patients, with a mean follow up of 7.5 months, all responded to RT. Exophthalmos and diplopia improved in 77% and 22%, respectively. No improvement of sight loss was noticed. Minor side effects were reported. Two patients scored grade 1 palpebral and periorbital erythema, two patients had mild conjunctivitis requiring care with eye drops and one had lacrimation. These findings suggest improvement in parameters proptosis mostly.

INTERVENTION OF THE INTERNAL MEDICINE- PALLIATIVE CARE SUPPORT TEAM IN THE ALS MULTIDISCIPLINARY OUTPATIENT SERVICE

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Introduction: The Palliative Care Support Team has participated in the Amyotrophic Lateral Sclerosis multidisciplinary outpatient service since it started in 2014. It is a service where in the course of a single consultation the patients and families are seen by the different specialist doctors involved in treatment of this illness. When the progress of the illness makes it difficult for the patients to be transferred to the Hospital, the service offers home care, thus maintaining the continuity of the treatment and the contact with all the doctors involved.

Objectives: Describe service provided in the treatment of this patients.

Equipment And Methods: It is a retrospective descriptive study based on the histories of the patients diagnosed with Amyotrophic Lateral Sclerosis who have been treated from October 2014 to October 2016.

Results: 15 patients diagnosed have been treated, 8 needed home care, 23 home care visits have been made. The care plan was approached in a progressive way, and the team also organized the record of two Advanced Directive Documents. Five of the patients died in this period, with the unit intervention in patients' last few days.

Conclusions: The participation in the multidisciplinary outpatient service allows the team to follow the progression of the illness in each patient, with trust relationship between doctors, patients and families, considering the patient's wishes concerning the care planning and checking them throughout the process. It is thus easier to provide a high quality service when the patients require home care.

ACTIVITY OF A PALLIATIVE CARE SUPPORT TEAM IN ITS NINE YEARS OF WORK

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Introduction: The Palliative Care Support Team at the Puerto Real University Hospital was founded in January 2007 to provide home care to terminally ill oncology patients. We provide service in a geographically dispersed area with more than 300,000 inhabitants. Was formed initially by a part-time internal medicine doctor and a full-time nurse but due to its increasing demand since 2014 it comprises of two full-time internal medicine doctors and two full-time nurses.

Objectives: Compare the activity of the team in 2007 with 2015.

Equipment And Methods: Retrospective descriptive study is made based on the documents of the patients included in the Palliative Care Program in 2007 and in 2015. All patients have been reviewed.

Results: In 2007 a total of 132 patients were treated, while in 2005 they were 418. In 2015 639 home visits were made, far from the 74 visits made in 2007. In 2015 56% of the patients died in their homes compared with 47% of them died in their homes in 2007. In 2007 the average stay was 33.8 days and in 2015 is went up to 87.7 days.

Conclusions: The activity of the Team has increased since it started in 2007, this rise of the average stay in Palliative Care programs stands out due to an earlier referral which allows better care planning. The higher home care visits, can explain the fact that in the first years the patients died mostly at the hospital, a tendency that has been recently inverted.

DYNAMICS OF PHYSICAL DEVELOPMENT OF CHILDREN ON BREASTFEEDING AND ON ARTIFICIAL FEEDING

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Objective: To compare the level of physical development in children on free-feeding who are breastfed and on artificial feeding, based on comparing of the main anthropometric parameters.

Materials and methods: The materials was 141 child development charts from outpatient clinics in Zaporozhye. The subjects were divided into groups - the boys group (70 persons) included 19 on artificial and 51 on breastfeeding; the girls group (71 persons) included 21 and 50 people respectively.

Results: The boys, who are on breastfeeding in the first half of the year outstrip the boys on artificial feeding on body weight; the differences are gradually leveled to the year (statistically significant 2,3,4,7 months (p<0.05)), in the girls group this trend is not determined; the difference in favor of breastfeeding, which is also leveled by the year (statistically significant 1,2,3,4 months (p<0,05)) is determined for the body length in the male group, the difference in the female group isn't significant, but repeats the tendency; breastfed boys show a tendency to a larger head circumference than boys on artificial feeding (4, 9 months are statistically significant (p<0,05)), in the girls group this trend is not determined.

Conclusions: 1. Boys who are breastfed ahead boys on artificial feeding by body weight; the differences are gradually leveling by the year. Girls don't repeat this trend. 2. In boys who are breastfed, the length of the body and the circumference of the head tend to increase more. Differences in girls depending on the type of feeding are not statistically reliable.

A CASE OF RHABDOMYOLYSIS DEVELOPING SECONDARY TO HYPOTHYROIDISM

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Introduction: The causes of rhabdomyolysis include trauma, exercise, muscle hypoxia, genetic defects, infections, changes in body temperature, metabolic and electrolyte disorders, drugs and toxins. Neuromuscular symptoms are present in 40% of patients with hypothyroidism at time of diagnosis. Hypothyroid patients may exhibit myopathy and mildly elevated creatine phosphokinase (CPK) levels. Alarming acute kidney injury (AKI) develops in between 13% and 50% of rhabdomyolysis patients. We describe a case of AKI diagnosed with primary hypothyroidism and with rhabdomyolysis determined with no additional precipitating factor.

Case: A 39-year-old male patient with no known history of chronic disease, drug use, exercise, injection or trauma presented to an external center due to muscle pain and nausea. Tests revealed CPK: 3372 U/L, lactate dehydrogenase(LDH): 572 U/L, creatinine 1.6 mg/dl and aspartate aminotransferase(AST): 65 U/L, and the patient was referred to our clinic. Abdominal ultrasonography(USG) at the external center was unremarkable. Tests performed by us revealed TSH: 334 mIU/L, free T3: 0.63 pg/ml. free T4:0.07 ng/dl, antithyroglobulin(TG): 224 IU/ml, and antithyroid peroxidase(TPO) 40 IU/ml. Thyroid USG was unremarkable. The patient was started on 100 mcg levothyroxine and hydration therapy. Follow-up after one month revealed TSH: 39.76 mIU/L, free T3:2.99 pg/ml, free T4:1.05 ng/dl, CPK: 294 U/L, LDH: 251 U/L, and AST:18 U/L.

Conclusion: Hypothyroid, a rare cause, should be considered in patients with rhabdomyolysis presenting to the emergency department and clinic with muscle weakness and muscle pain and with high muscle enzymes. Thyroid hormone replacement and conservative treatment are generally sufficient in such cases.

A VERY RARE CASE OF CARBAMAZEPINE-INDUCED TOXIC EPIDERMAL NECROLYSIS, THROMBOCYTOPENIA AND AMYLASE-LIPASE ELEVATION

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Introduction: Carbamazepine frequently gives rise to allergic skin reactions and urticaria, may rarely cause exfoliative dermatitis and Stevens-Johnson syndrome, and very rarely causes toxic epidermal necrolysis (TEN). We report a case of the rare combined side-effects of thrombocytopenia, TEN and amylase and lipase elevation.

Case: A 61-year-old man presented to the emergency department due to red eruptions on his entire body. He had been using carbamazepine for the previous two days. Physical examination revealed facial edema, diffuse atypical targetoid macular areas against a dark erythematous background tending to coalesce on the legs from the distal aspect to above the knee, the trunk and the back, and eroded areas on the back. Platelet count was 4000 /mm3, aspartate transaminase 192 U/L, alanine transaminase 114 U/L, gamma-glutamyl transferase 140 U/L, lactate dehydrogenase 714 U/L, creatinine kinase 421 U/L, amylase 251 U/L, and lipase >328 U/L. Intravenous immunoglobulin therapy was scheduled. Acetylcysteine therapy was also started. Corticosteroid therapy at 1 mg/kg was added. At follow-up, no involvement was observed in hairy skin, but areas of separation covering 31% of the total body area were observed. SCORTEN calculation on the third day of admission was 3, and mortality was assessed as 35%. Liver function tests and amylase-lipase values improved on the fourth day of admission, and the patient was follow-up on an outpatient basis.

Conclusion: Carbamazepine overdose-induced pancreatitis has previously been reported in a five-year old patient. We describe a rare case of comorbid TEN, thrombocytopenia and amylase-lipase elevation.



MALIGNANT NEOPLASM DURING SYSTEMIC SCLEROSIS

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Background/aim: As in many autoimmune diseases, patients with scleroderma have an increased risk of malignancy compared to the general population. We report four new cases.

Case reports:

Case 1: One year after a diagnosis of SSc, physical examination of a 48-year-old female, noted a mass of 5 cm erythematous and vascularized in the right shoulder. Histologic evaluation revealed an inflammatory malignant histocytofibroma.

Case 2: A 64-year-old female has a SSc diagnosed 8 years ago. she was admitted for cough and dyspnea. Thoracic CT showed an heterogeneous parenchymatous lesion. Transthoracic biopsy concluded to lung adenocarcinoma.

Case 3: A 57-year-old female presents a SSc. Initial Thoracic CT revealed a parietal mass with endothoracic development lysing the left fourth rib. A mass excision was performed and concluded to bone plasmacytoma. Ten years later, she consulted for thyroid goiter. Physical examination revealed a thyroid nodules. Total thyroidectomy was performed and the anatomopathological study was in favor of papillary carcinoma.

Case 4: A 78 years old man was diagnosed with systemic sclerosis since 2013. In February 2017, the patient was admitted for aggravation of the dyspnea with weight loss of 10kg. HRCT thorax showed a tissue mass in the anterior mediastinum of 52*81mm and parenchymatous nodule of 20mm. A biopsy of the nodule was performed and the microscopical examination showed a pulmonary adenocarcinoma

Conclusion: The implications of these observations is to encourage an active surveillance of scleroderma patients for early detection of cancer.

AN UNUSUAL CASE REPORT OF RHABDOMYOLYSIS

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Background/Aim: Rhabdomyolysis is a syndrome resulting from skeletal muscle injury that may cause the leakage of potentially toxic intracellular contents into plasma followed by multiple complications such as electrolyte abnormalities, hyperuricemia, hypoalbuminemia, acute kidney injury and renal failure or even disseminated intravascular coagulation.

Case Report: A 23-year-old-man without previous medical history presented at the emergency department with muscular pain and tenderness from about 48hours and dark urine during his last urination. The symptoms followed daily alcohol consumption (1 week of duration) and exertional activity(24hours before). The clinical examination revealed an afebrile, hemodynamically stable patient and the blood sample that was obtained a few minutes after his arrival showed an extremely high level of creatine kinase(CK) that could not be measured (maximum level measured in our laboratory is about 250.000IU/L), as well as high transaminase(SGOT>>SGPT) and LDH levels. During his hospitalization, the patient underwent excessive fluid resuscitation and urinary alkalization followed by a rapid clinical and laboratory improvement without the need of renal replacement therapy. Furthermore, other causes of rhabdomyolysis (such as infection, trauma, use of drugs/medication, electrolyte abnormalities, hyperglycemia, thyroid gland dysfunction) where excluded. Results for genetic factors tests are still pending.

Conclusions: Although rhabdomyolysis is considered to be a common medical condition, this case report appears interesting as it concerns an extremely high level of CK (not previously mentioned bibliographically)in a healthy adult that was rapidly treated without causing renal failure.

PIPERACILLIN-TAZOBACTAM INDUCED ACUTE GENERALISED EXANTHEMATOUS PUSTULOSIS (A. G. E. P.)

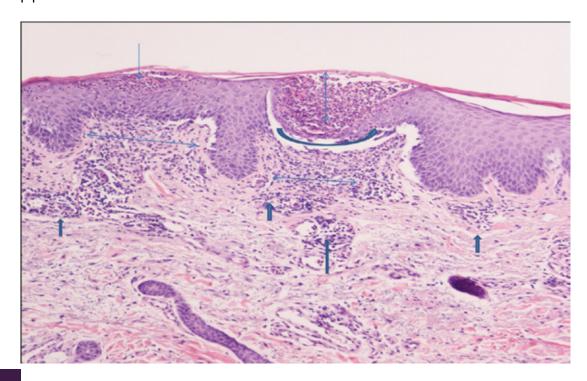
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Background: Acute Generalised Exanthematous Pustulosis is a rare, cutaneous adverse reaction, clinically characterized by small, sterile pustules on an erythematous base. An acute onset has been described with a wide distribution throughout the body surface apart from palms, feet and mucosa. Fever, neutrophilia or eosonophilia may coexist. The average self-limitation time is 5 days after the causative factor has been discharged. We describe a rare AGEP case due to piperacillintazobactam, a widely used b-lactam antimicrobial drug.

Case Report: An 83-year-old woman was admitted to our clinic from a nursing home because of fever. Fever was attributed to both urinary tract infection (permanent bladder catheter) and soft tissue infection. She was treated empirically with piperacillin-tazobactam. Four days after she developed a drug eruption with the AGEP features. We immediately discontinued piperacillin-tazobactam and performed direct Coombs test (positive), quantitative serum immunoglobulins test (very high IgE levels) and skin biopsy (typical histopathologic image of AGEP with subcorneal pustule, intraepidermal pustule, subepethelial vesiculation, oedematous dermal papillae, perivascular inflammatory infiltration). We treated the eruption with local corticosteroids and after one week of drug discontinuation the patient demonstrated full recovery.

Conclusion: AGEP should be included in the differential diagnosis of a drug eruption, when using piperacillin-tazobactam.



RHABDOMYOLYSIS AND ACUTE KIDNEY INJURY INDUCED BY TREATMENT WITH LIPID-LOWERING DRUGS: A CASE REPORT

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Background: Rhabdomyolysis is a syndrome characterized by muscle necrosis and release of intracellular muscle constituents into the circulation. Its main manifestations are muscle weakness, myalgias and dark urine, while the laboratory tests reveal elevated serum muscle enzymes. There are many causes of rhabdomyolysis, that can be categorized into traumatic (including muscle trauma) and non-traumatic (including toxins and drugs). It is a severe condition which every clinician should be aware of in order to proceed to early diagnosis and management.

Case report: A 77-year old male presented to the ER complaining of myalgias and impaired mobility of the lower extremities for the past two days. His past medical history was significant for coronary heart disease (PTCA forty five days ago CABG four years ago) and diabetes mellitus. Clinical examination revealed reduced muscle strength of the lower extremities with normal sensation. Laboratory tests revealed an increase of serum CPK (31.350 IU/L ,with 190 IU/L as the upper limit), as well as increased levels of transaminases and impaired renal function. The syndrome was attributed to the initiation of treatment with high doses of simvastatin-ezetimibe due to recent PTCA (10mg of ezetimibe- 40mg of simvastatin twice daily). The drug was discontinued and the patient underwent hemodialysis due to the constant deterioration of kidney function and acute pulmonary oedema.

Conclusion: Lipid-lowering drugs are very widely prescribed medications. It is important to remember that close monitoring of these patients is essential in order to ensure safety and avoid serious side effects.

PAINFUL OPHTHALMOPLEGIA, A DIAGNOSTIC CHALLENGE

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83-year-old male who attended with intense retrociliary pain in the right eye, blurred vision and diplopia, after capsulotomy the week before. Ischemic heart disease with 3-vessel disease, with double bypass in 2003 and subsequent coronary angiography in December 2016 with CD dilatation with a direct stent. Physical examination reactive mydriatic pupils, proptosis and bilateral conjunctival chemosis and right palpebral edema, limitation for ocular mobility in all planes, especially the external rectus of the OD. IOP was observed to be 20 mmHg with subsequent increase to 28 mmHg.

A study was performed with leukocytes of 9600 cels / dL, neutrophilia 92.4%, red series and normal platelets. Fibrinogen: 451 mg/dl. In the biochemical study creatinine 1.25 mg/dl., Total bilirubin 2.52 mg/dl (direct 0.83 mg / dl), normal rest. Negative onconeuronales. Normal CSF Mantoux: negative. The microbiological study was negative, negative serologies, and PCR for negative Mycobacteria. Negative fungal study. PCR for meningitis and negative encephalitis. Differential diagnosis was performed cranial MRI and MRI angiography of the Willis polygon that identifies cerebral atrophy and leukoaraiosis; Asymmetry due to thickening of the right cavernous sinus, with increased flow in the vascular sequence, NMR orbitals are extended with acute ischemic infarcts with signs of mild hemorrhagic transformation. CT scan of the paranasal sinuses showing bilateral exophthalmos and discrete thickening of the medial muscle in both orbits. Corticosteroid treatment with prednisone 90 mg daily for 7 days and subsequent dose reduction at a rate of 10 mg every 15 days, with improvement.

MULTIPLE CRANIAL NEUROPATHY CAUSED BY EPSTEIN-BARR VIRUS (EBV): AN UNCOMMON INVOLVEMENT

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Background/Aim: Encountering a patient with cranial nerve paralysis could be not only very interesting but also very demanding concerning the differential diagnosis. Here, we present a case of polyneuritis cranialis caused by EBV.

Case presentation: A 80 year-old man admitted to the neurology department with complaints of low-pitched dysphonia, dysphagia and right sided facial asymmetry for 2 days. One week before the admission the patient experienced mild headache and drowsiness as well as fever up to 38C. The neurological examination revealed hoarse voice, right sided peripheral facial asymmetry, hypoesthesia on the right side of the face and decreased gag reflex. Laryngoscopy demonstrated right vocal cord paralysis. MRI of brain, neck computed tomography(CT) and thorax(CT) were normal. CSF analysis revealed lymphocytic pleocytosis. EBV-DNA was detected at the CSF by PCR (1.3 * 103 copies/ml). The patient was treated with intravenous acyclovir for 10 days as well as corticosteroids per-os for 15 days. One month after discharge the patient was significantly improved regarding not only the facial asymmetry but also the hoarseness and the swallowing. The laryngoscopic image was also improved.

Conclusion: Although multiple cranial neuropathy is a frequent problem encountered in neurological practice EBV it is very rarely involved. Here, we described a case of cranial polyneuropathy due to EBV virus. The diagnosis was verified by EBV DNA in the CSF. Therefore, it's valuable to take into consideration the EBV infection in the differential diagnosis of cranial nerve paralysis.

WHEN NEUROLOGY COMES ACROSS NEPHROLOGY: A CASE REPORT

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Background/Aim: It is generally accepted that several medical cases might be considerably complicated and multidimensional, requiring a spherical approach .The aim of this abstract is to present a case of Guillain-Barre syndrome complicated with renal involvement.

Case presentation: A 60 year-old woman, with no past history of renal or neurological disease admitted to our hospital due to seven days of progressive weakness of her extremities as well as paresthesia at her hands. Laboratory tests revealed proteinuria (2g/24h) and normal renal function. Although both the electrophysiological and the spinal fluid investigation were normal on admission, her weakness progressed rapidly (48h) to the point where she became bed-bound. The diagnosis of Guillain-Barre was verified with the repetition of electrophysiological and CSF studies. Immunoglobulin and intravenous corticosteroids were given for five days but with no improvement at all. Plasmapheresis was instituted and oral prednisolone was commenced tapered over six months. Immunological investigation, including antineutrophil cytoplasmic antibodies, and virological screenings were negative. After 3 months the patient was able to walk with normal renal function and no residual proteinuria.

Conclusion: Inflammatory neuropathies have been reported to occur in association with proteinuria. Their underlying immuno-pathogenic mechanisms remain unknown as well as a definite treatment regarding this type of cases. Here we pointed out the necessity for further research concerning not only the pathogenesis but also the treatment and the prognosis of acute inflammatory neuropathy complicated by renal disease, with many issues remaining unresolved.

OUT OF POCKET PAYMENTS IN GREECE & CHRONIC DISEASES: DIABETES MELLITUS CASE

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Background: Diabetes is the fourth leading death cause worldwide, with adult diabetic patients reaching 366 million in 2030. There are 60 million diabetic patients in the European Union and 1 million in Greece as a consequence of overweight, obesity, unhealthy nutrition etc. Instant result is the financing of health systems, from patients (out of pocket payments).

Aim: The evolution of private health expenditure in Greece, through diabetes mellitus.

Method: In the framework of the PhD Dissertation titled about Shadow Economy in health care sector in Greece (Department of Economics, Laboratory of Health Economics and Management, University of Piraeus), Greek and foreign literature was collected through the electronic databases PubMed, Google Scholar, Cochrane Library, Elsevier, CINAHL and Science Direct for the period 2010 - 2016, regarding private health expenditure through diabetes.

Results: Diabetes mellitus cost, ranges from 3% to 6% of total health expenditure (average annual per capita expenditure is 2.834 €). In Greece, with a 35.4% private health cost share, the average cost per patient is estimated at € 1,300 per year (31.1% annual medication, 44.8% required exams and 24.1% wage staff). Furthermore, the average annual cost would be over 3,000 € per year and triple the total financial burden of the disease.

Conclusions: Chronic diseases, such as diabetes mellitus, react on morbidity and health costs. Prevention is the only solution, through early diagnosis primarily from the health system and secondarily from the patients. Reconstruction of services through the contribution of Primary Health Care are the main point.

A DIFFICULT TO TREAT PNEUMONIA IN A GERIATRIC PATIENT REVEALED PULMONARY TUBERCULOSIS ON HIV INFECTION: SUSPECT THE INNOCENT

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Tuberculosis and HIV remain two of the most serious threats on public health worldwide while their combination makes them even more dangerous. TB is the most common infection associated with HIV, but also the leading cause of death among HIV-positive people. Immunodeficiency caused by HIV infection makes the diagnosis of TB even harder.

Case Report: 71yo non-smoker woman with a history of diabetes, arterial hypertension and a colon cancer resection 2 years ago. She admitted with dry cough, fever, fatigue and night sweats during the last 4 months. A month ago a CXR revealed fluid on the right costophrenic angle. she was treated with antibiotics without any improvement. A new CXR showed consolidation of the right lung and fluid accumulation. At first it was treated as a pneumonia with parapneumonic effusion with piperacillin/tazobactam and azithromycin. Because of the persisting symptoms a CT scan was performed: Consolidation of the right middle lobe with atelectasis and pleural effusion, small perilymphatic nodules in both lungs, enlarged mediastinal and hilar lymph nodes. Lab results: Positive sputum smear, negative Mantoux, HIV confirmed with ELISA, CD4: 333cells/ml, FNB negative for cancer, positive sputum cultures for M. Tuberculosis. A 4-drug(HREZ) anti-TB treatment was given for 6 months with total recovery.

Conclusion: The coexistence of HIV/TB may present with atypical clinical and radiological signs. There should always be a suspicion of these 2 diseases regardless of age, sex and social status. It is also essential that prior to the initiation of anti-TB treatment virological testing is performed.

PULMONARY AMYLOIDOSIS

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74-year-old patiente with COPD is admitted to Neumology Unit for hemoptysis, he was diagnosticated of lung amyloidosis (amiloide AA) in December of 2016, without evidence of systemic amyloidosis, biopsy bone marrow was negative. In 2017 the patient was admitted in Internal Medicine Department with a constitutional syndrome, 20 kg weight loss in three months. Chest- TC Scan was realized finding a big mass in right upper lobe of right lung, with another cavitations of new appearance. A biopsy of this mass was red congo stain positive. Bone biopsy and cardiac-RMI were also negative. During this admission the patient had syncopes with brain imaging studies and 24-hour heart rate monitoring were negatives. In sputum microbiological study was isolated Haemophilus influenzae and the Pneumococus Antigen in orine was positive. All mycobacterial cultives were negative. The patient received antibiotic treatment, endovenous corticoids and fluids for a week. The final diagnosis was pulmonary amyloidosis with lung infection of Pneumococus and Haemophilus influenzae.

PECULIARITIES OF PSYCHO-SOMATIC STATUS AND QUALITY OF LIFE IN PATIENTS WITH COPD

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Chronic Obstructive Pulmonary Disease (COPD) is a topical problem of pulmonology due to its high morbidity, mortality and impact on the patients' quality of life.

Aim: to analyze psycho-somatic status and quality of life (QL) of patients with COPD. 65 male patients with COPD were randomized into two groups according to the degree of disease severity: group A - 30 patients with COPD II (FEV1=58,8±2,11%), group B - 35 patients with COPD III (FEV1=41,3±3,62%). Control group comprised 24 healthy individuals of the same age and gender. Assessment of psycho-somatic status was based on the Test of Patient's Differential Self-assessment, which includes analysis of well-being (WB), activity (A) and mood (M). QL was determined by Mezzich J. E., Cohen M., Ruiperez N. questionnaire. In group A psycho-somatic status was lower compared to healthy individuals, WB decreased significantly (4,3±0,18 against 3,5±0,16, p<0,05). In group B all components of psycho-somatic status were lower than in patients of group A (WB - 2,1±0,09 against 4,3±0,18, A - 2,5±0,11 against 3,9±0,12, M - 2,0±0,22 against 3,8±0,07, p<0,05 in all cases) and compared to healthy individuals. Overall perception of QL in patients of group A was lower by 23%, and in patients of group B - by 42% correspondingly compared with control group (p<0,05 in both cases). Indices of WB, M and QL correlated directly with FEV1 (p<0,05). So, prolonged course of COPD is accompanied by changing of the psycho-somatic status and worsening of patients' QL, which directly correlates with COPD degree of severity.

AN AUDIT TO EXAMINE THE COMPLIANCE OF DOCUMENTING THE PROCESS OF OBTAINING AN INFORMED CONSENT

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Background: A consent form is a proof that a consent has been obtained. It does not obviate the need of documentation of the discussion about the procedure or treatment in the medical record. We felt that the documentation of the process of obtaining an informed consent is poor in our department.

Aim: To examine if the process of obtaining an informed consent is properly documented in the medical record

Method: We retrospectively examined the case notes of all patients admitted under the care of consultant general physician A and B in the Department of General Medicine, Tan Tock Seng Hospital, Singapore from July 2017-August 2017 to identify those who have had procedures performed on them during their admissions. Among those procedures, we examined the documentation of consent taking to see if procedure nature, indication, complication and alternative treatment were explained and documented in the case notes.

Result: Out of the 35 procedure we audited, only 23% had the procedure nature explanation, 37 % had the procedure indication explanation, 31% had the procedure complication explanation and 9% had the alternative treatment explanation documented.

Conclusion: The documentation of the process of obtaining an informed consent was poor. We relied mainly on a piece of consent form as a proof of obtaining an informed consent.

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