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ORAL PRESENTATION

Genetic tests with prognostic relevance in hepatology**OP1. IL-28B POLYMORPHISM IS A PREDICTIVE FACTOR FOR SUSTAINED VIROLOGIC RESPONSE, INSULIN RESISTANCE AND HEPATIC STEATOSIS IN CHRONIC HEPATITIS C INFECTION**

Corina Radu*, Mircea Dan Grigorescu*, Dana Crişan, Dana Damian, Paula Szanto, Alina Habic, Mircea Grigorescu

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Background. Sustained virologic response (SVR) in patients with chronic hepatitis C (CHC) depends on several factors. One of the most investigated was single nucleotide polymorphism (SNP) of IL-28B gene (rs12979860) important even in the new era of the triple therapy. **Objectives.** The aim of the study was to evaluate the role of IL-28B polymorphism on SVR, and the association of these polymorphisms with insulin resistance (IR) and hepatic steatosis in naive patients with CHC treated with peginterferon plus ribavirin (Peg IFN and RBV). **Methods.** 103 non-diabetic CHC patients with liver biopsy proven CHC genotype 1 were studied. The SNPs rs12979860 (IL-28B) were investigated by RT-PCR. Insulin resistance (HOMA-IR) stages of fibrosis and degrees of steatosis were also evaluated. SVR and rate of relapse were assessed for each polymorphism of IL-28B. **Results.** According to IL-28B polymorphisms SVR was obtained as follows: 89.6% for genotype CC, 55.7% for genotype CT and 23.0% for genotype TT. The rates of relapse were 10.3%, 44.3%, 76.9% for before mentioned genotypes. IR was lower in CC genotype (1.81±0.88) compare to CT(3.7±2.75) and TT genotypes(4.2±2.78), p<0.0001. T allele carriers had a higher frequency of IR irrespective of stages of fibrosis. Viral load at baseline was higher in CC genotypes then in CT or TT genotypes. Cholesterol levels in IL-28B CC genotype were higher (265.2±57.6 mg%) than in genotypes CT(187.1±43.5mg%) or TT (210±57.4 mg%), p<0.005, and degree of steatosis was lower in patients with CC genotype (p=0.015). In

multivariate analysis IL-28B CC genotypes and stages of fibrosis were independent predictors of SVR. **Conclusions.** Apart from the predictive role of SVR in patients with CHC treated with PegIFN plus RBV double therapy, IL-28B CC genotype was associated with the degree of IR and hepatic steatosis. In our study, IR does not undermine the advantage of IL-28B polymorphism.

* Equal contribution to this study.

OP2. COULD INTERFERON-GAMMA-INDUCTIBLE PROTEIN 10 (IP-10) LEVEL BE A SUBSTITUTE FOR IL-28B OR ARE THEY ADDITIVE METHODS IN ORDER TO PREDICT HEPATITIS C TREATMENT RESPONSE?

Dana Crişan*, Mircea Dan Grigorescu*, Corina Radu, Alina Habic, Adriana Cavaşi, Mircea Grigorescu

*first two authors equally contributed to this study

Background: The serum levels of IP-10 and single nucleotide polymorphisms (SNPs) of IL28B (rs12979860) are two factors that predict sustained virologic response (SVR) in patients with chronic hepatitis C (CHC) treated with pegylated interferon and ribavirin.

Objectives: The study was undertaken in order to evaluate the role of each of the above mentioned predictors and if the combination could improve their predictive value.

Patients and method: One hundred and two patients with liver biopsy proven CHC genotype 1 were studied. The levels of IP-10 were assessed by ELISA method and the SNPs rs12979860 (IL28B) were investigated by RT-PCR. Insulin resistance (HOMA-IR), stages of fibrosis, degrees of steatosis and SVR were assessed for each group.

Results: For IP-10, a cut-off value of ≤ 392 pg/ml was obtained in order to discriminate between responders and non-responders. SVR was obtained in 63/102(61.8 %) patients with IP-10<392pg/ml vs.

39/102(38.2%) in patients with IP-10 levels >392 pg/ml. The AUROC was 0.768 with a sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) of 86.6%, 66.1%, 75.6%, respectively 80.4%. According to IL28B polymorphism, we found a SVR of 89.6% for genotype CC, 55.7% for genotype CT and 23.0% for genotype TT with an AUROC of 0.721 with a sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) of 41.27%, 92.31%, 89.76%, respectively 49.3%. The combination of IP-10 and IL28B gives an AUROC of 0.830 with a sensitivity, specificity, PPV and NPV of 85.7%, 69.21%, 81.8%, and 75.0%, respectively.

Conclusion: The combination of IP-10 levels with IL28B genotypes improves the predictive value for hepatitis C treatment response.

OP3. RECIPIENT IL28B GENE POLYMORPHISM AND SUSTAINED VIRAL RESPONSE IN ROMANIAN PATIENTS WITH RECURRENT HEPATITIS C FOLLOWING LIVER TRANSPLANTATION

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Introduction: In patients with recurrent HCV infection after liver transplantation (LT), analyses of single nucleotide polymorphisms of IL28B in recipient and donor tissues proved to allow prediction of sustained virologic response (SVR) to PEG-Interferon and ribavirin therapy. **Aim:** To investigate IL28B polymorphism in LT recipients with recurrent hepatitis C and its association with SVR after antiviral therapy. **Methods:** Thirty eight LT recipient DNA samples were screened for rs12980275 single nucleotide polymorphism near the IL28B gene in a pilot study. **Results:** There were analyzed 17 females and 21 males with a mean age of 50.8±6.7 years at

beginning of antiviral therapy and a mean time since LT of 15.1±10.9 months. Distribution of recipients IL28B genotypes were: C/C -4 patients (10.5%), C/T -19 patients (50%), T/T -15 patients (39.5%). Donors IL28B genotypes were available in 16 recipients: C/C -5 patients (31.2%), C/T -9 patients (56.2%), T/T -2 patients (12.6%). Early virologic response (EVR) was obtained in 75% of patients, but SVR in only 34.6%. Both EVR and SVR were not associated with recipients IL28B genotype non-T/T (p=0.18 and p=0.97). Aminotransferases were significantly higher in genotype T/T patients compared to C/T and C/C patients: AST =286.7±87.4 vs. 129±15.4IU/L (p=0.01) and ALT=325.5±84.4 vs. 131.5±22.1IU/L (p=0.006). Although not statistically significant, baseline viral load, necroinflammation score ≥2 and fibrosis stage ≥2 were higher in genotype T/T patients. After antiviral therapy fibrosis stage advanced compared to pretreatment (p=0.0002), but for patients with SVR fibrosis stage remained stationary despite recipient IL28B T/T genotype (p=0.42). Aminotransferases decreased significantly after antiviral therapy in all patients (p=0.03). **Conclusions:** Recipient IL28B genotype is not sufficient to predict EVR or SVR. LT recipients with T/T genotype seem to have a more severe recurrent hepatitis C. Antiviral therapy decreases inflammation and delays fibrosis progression in patients with recurrent hepatitis C independent of IL28B genotype.

OP4. THE PNPLA3 POLYMORPHISM IN CHRONIC HEPATITIS C IS ASSOCIATED WITH INSULIN RESISTANCE, STEATOSIS AND FIBROSIS

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Background. The adiponutrin (patatin-like phospholipase-3) polymorphism is involved in non-alcoholic liver disease, being an independent predictive factor for steatosis. The role of PNPLA3 polymorphisms in chronic hepatitis C (CHC) is

an interesting subject of study. **Objectives.** The aim of this study was to evaluate the role of PNPLA3 polymorphisms on histological features of chronic hepatitis C, the association with insulin resistance (IR) and the influence on virological response in patients treated with double therapy: peginterferon (PegIFN) plus ribavirin (RBV). **Methods.** One hundred and two non-diabetic CHC patients with biopsy proven CHC, genotype 1 were studied. PNPLA3 (rs738409) single nucleotide polymorphisms (SNPs) were evaluated by RT-PCR. Insulin resistance (HOMA-IR), degrees of steatosis and stages of fibrosis were assessed histologically. Parameters of metabolic syndrome, including triglyceride levels were recorded. Sustained virological response (SVR) was also evaluated. **Results.** The distribution of SNPs for adiponutrin was as follows: CC:56/102 (54.9%). CG:37/102 (36.3%) and GG:9/102 (8.8%). A correlation between adiponutrin and HOMA-IR was found: 7.1 ± 2.9 for GG genotype. 3.7 ± 2.8 for CC genotype and 4.2 ± 2.9 for GC genotype ($p=0.021$). A correlation between GG polymorphisms with higher degree of steatosis (S2-3 vs S0-1) was found ($p < 0.0001$). Also, GG genotype was correlated with advanced fibrosis (F3-4 vs F0-2) $p=0.01$. We did not find a role of adiponutrin polymorphism on SVR in patients treated with Peg IFN plus RBV. **Conclusions.** The GG polymorphism of adiponutrin has a role in insulin resistance, steatosis and fibrosis in CHC.

OP5. PNPLA3 RS738409 POLYMORPHISM IS ASSOCIATED WITH INCREASED RISK OF NONALCOHOLIC FATTY LIVER DISEASE

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Aims: The aim of our study was to identify the possible involvement of genetic factors in the development of nonalcoholic fatty liver disease. **Material and methods:** The study was conducted by the Research Center of Gastroenterology and Hepatology Craiova, between November 2009 - June 2012 and included 138 subjects with non-alcoholic fatty liver

disease and 125 age and sex matched healthy controls, in whom we determined the PNPLA3 gene polymorphism rs738409. The genotyping assays were performed at Molecular and Cellular Biology Department, University of Medicine and Pharmacy from Craiova, using predesigned TaqMan SNP Genotyping Assays. **Results:** The genotype frequencies for PNPLA3 rs738409 polymorphism in the study group was [CC](59,42%)> [CG](32,41%)> [GG] (7,97%). The [CG] genotype carriers had a 1.7 times higher risk of developing hepatic steatosis, compared with the [CC] genotype ($p=0.046$). The PNPLA3 polymorphism was associated with an increased risk of hepatic steatosis in patients with BMI <30 kg/m², compared with the control population, when the risk allele [G] carriers were compared with the [C] allele carriers ($p=0.038$). By comparing the subgroup with steatosis without obesity with the subgroup with steatosis and BMI ≥ 30 kg/m², we have noticed that the [G] allele carriers compared to the [C] allele carriers in the dominant model, have a 2.5 times higher risk of developing hepatic steatosis ($p=0.025$). [G] risk allele was significantly associated with the risk of hepatic steatosis in patients without metabolic syndrome ($p=0,005$) and without insulin-resistance ($p=0,033$). **Conclusions:** The risk [G] allele carriers have a 3 times higher risk of developing hepatic steatosis in the absence of obesity, of insulin-resistance and of the metabolic syndrome.

OP6. QUANTITATIVE GENE EXPRESSION OF LIVER ENRICHED TRANSCRIPTION FACTORS FOR PREDICTION OF TUMOR RECURRENCE AFTER CURATIVE TREATMENT OF HEPATOCELLULAR CARCINOMA

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Background: The liver enriched transcription factors (LETFs) are critical in inducing and maintaining hepatic phenotype during liver organogenesis and their expression level in HCC could have prognostic implications. The **aim** of our work was to investigate the expression profile of liver enriched transcription factors FoxA2, HNF6 (ONECUT1), C/Ebp-alpha and HNF1-beta in hepatocellular carcinoma specimens from liver resections or liver explants after liver transplantations, in comparison to non-tumoral liver tissue from the same patients. **Methods:** The study group included 22 patients, 12 with liver resection and 10 with liver transplantation for HCC with a mean follow-up after treatment of 20 months. Gene expression has been quantified by qRT-PCR, using beta-actin as reference gene. A statistical model for prediction of tumor recurrence has been developed by logistic regression using quantitative RT-PCR data. **Results:** In 14 patients (63.6%) a higher than 5-fold change in relative gene expression has been detected. A significant up-regulation of the studied liver enriched transcription factors has been found in 4 patients (18.1%). A significant down regulation has been identified in 11 patients (50%) out of which HNF6 down regulation was detected in 4 patients (18.1%) and HNF1beta down regulation in 8 patients (36.3%). Based on qRT-PCR data a statistical model to predict recurrence after curative treatment has been generated. The significant variables in the model were HNF6 and FoxA2 expression. The model has a C-statistic of 0.98 suggesting an excellent clinical utility. A cut-off level of 0.67 of the prognostic score had a 80% sensitivity and a 94.1% specificity in predicting recurrence of HCC after curative treatment. **Conclusions:** A significant change in LETF gene expression has been identified in 63.6% of patients curatively treated for hepatocellular carcinoma. A prognostic score using HNF6 and FoxA2 quantitative expression could be proposed for prospective validation.

ORAL PRESENTATION

ERCP from indications to complications

OP7. CHOLANGIOCARCINOMA IN ERCP - A SINGLE EXPLORER'S EXPERIENCE

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Introduction: Cholangiocarcinoma is a form of cancer including mutated epithelial cells (or cells showing characteristics of epithelial differentiation) that originate in the bile ducts. **Aim:** To identify the frequency of cholangiocarcinomas in clinical practice. **Material and method:** Retrospective study, including therapeutic ERCP's from 2011-2012 (334). Cholangiocarcinoma was identified in 72 cases. The patients were investigated biologically, by means of ultrasound and ERCP. **Results:** The 72 cases included 46 males (63.8%) and 26 females (36.1%). The average age of the group was 65.7±13.9 years, extreme ages being 19 and 87 years. In 45 cases (62.5 %) de novo, endoscopic retrograde sphincterotomy was performed. 59 patients (81.94 %) were stented, 58 with plastic stents (80.5%) and only one patient was metallicly stented (1.38%). Also, most stents had the dimension of 10 Fr/120 mm (16 cases-27.58 %), followed by 10 Fr/100 mm (10 cases-17.24 %), 10 Fr/70 mm (5 cases-8.62 %) and respectively 10 Fr/90 mm, 10 Fr/60mm and 11.5 Fr/100mm (in 3 cases each - 5.17 %). Post-interventional complications were observed in 3 cases (5.08%): 1 case of perforation and 2 cases of papillary bleeding. Abdominal ultrasound showed a dilatation of the main biliary tract in 24 patients - 33.8 % and dilated intrahepatic bile ducts in 52 cases - 72.2%. **Conclusions:** In the present study, cholangiocarcinoma was more frequent in male patients. A significant percentage of patients needed endoscopic stenting for therapeutic purpose. Ultrasound is a reliable imaging method that can be used as a first line to identify choledochal pathology.

OP8. THE EFFICACY OF ENDOSCOPIC THERAPY IN PAIN RELIEF IN PATIENTS WITH CHRONIC PANCREATITIS

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Introduction: Pain relief, the major symptom of chronic pancreatitis, is a therapeutic challenge. **Aim:** Our aim was to assess the efficacy of endoscopic treatment of pancreatic pain therapy. **Methods:** We performed a retrospective study including 169 patients between January 2006 and February 2013 (143 men, 26 women, ages between 15 and 82 years, average age at diagnosis - 48.15 years). The etiology was mainly toxic-metabolic, namely chronic alcohol consumption (52.07%). All patients had at imaging examinations at least one of the following criteria: main pancreatic duct dilatation ± stenosis, main biliary duct (MBD) stenosis, pancreatic pseudocyst. **Results:** Follow-up period was an average of 2.22 years/patient. Number of presentations was 546 (3/patient). We performed 244 ERCP, 128 patients required endoscopic treatment at first presentation, 7 patients in subsequent presentations. We performed 345 procedures (2.55 procedures/pat.): pancreatic sphincterotomy (90), pancreatic prosthesis (64), biliary sphincterotomy (59), prosthetic MBD (55), pancreatic stones extraction (44), MBD stones extraction (9), pancreatic fistula drainage (2), trans-papillary pseudocyst drainage (17), trans-gastric pseudocyst drainage (6). During follow-up, 25 patients required surgery, the indications were: severe forms with impossibility to exclude a pancreatic neoplasm (36%); MBD inflammatory stenosis (20%); giant stones in the Wirsung duct (20%); duodenal stenosis (12%); omentalis bursa abscess (1pac); pancreatic pseudocyst ruptured into the abdominal cavity (4%); external fistula (4%). Most patients had a favorable outcome. 4.7% of patients developed pancreatic cancer. At the end of follow-up data regarding pain relief could be obtained only in 2/3 of patients, the treatment response rate being 70.58% (72 patients). **Conclusions:** Notwithstanding the fact that not all patients could be evaluated at the end of follow-up, we consider the endoscopic treatment in the management of pancreatic pain to be efficient, surgery is reserved for severe cases, refractory to this treatment.

ORAL PRESENTATION

Antibiotics in Gastroenterology

OP9. EFFICACY OF SEQUENTIAL THERAPY AND CVADRUPLE THERAPY AS FIRST-LINE REGIMENS IN HELICOBACTER PYLORI ERADICATION

Ana-Maria Singeap, Anca Trifan, Camelia Cojocariu, Irina Girleanu, C. Sfarti, Carol Stanciu

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Background: H. pylori is an important pathological factor for gastritis, ulcer, gastric carcinoma and gastric MALT lymphoma. Eradication of infection depends on patient compliance and on bacteria's resistance to antibiotics. In regions with high resistance to clarithromycin, first treatment choices are sequential or cvadruple therapy. **Aim:** To evaluate the efficacy of sequential and cvadruple therapy as first-line regimens for H. Pylori eradication in patients with actual documented infection, previously untreated. **Patients and methods:** We studied the efficacy and tolerance of two eradication regimens, administered in two groups of patients with actual infection (proven by respiratory test, fecal antigen or biopsy): A - sequential therapy with PPI double dose + Amoxicillin 1gx2/day 5 days, followed by PPI double dose + Clarithromycin 0.5gx2/day + Metronidazol 0.5gx2/day 5 days; B - cvadruple therapy with PPI double dose + Tetracyclin 0.5gx4/day+ De-Nol 120mgx4/day + Metronidazol 0.25gx4/day, 10 days. We also analyzed the secondary effects by questioning the patients. **Results:** 48 patients were treated. In group A (26 patients), eradication was tested in 22 patients and was obtained in 18 patients (ITT 69%, PP 84%). In group B (22 patients), eradication was tested in 19 patients and was obtained in 18 patients (ITT 72%, PP 86%). Adverse events appeared in A - 15% cases, B- 18% cases, with no influence on finalizing the treatment. **Conclusions:** The efficacy of both eradication treatments proposed as first-line regimens is high. The eradication rate was superior to triple the-

rapy (70-80% in studies) but lower than similar regimens meta-analysis.

OP10. PREDICTING FACTORS FOR HELICOBACTER PYLORI ERADICATION FAILURE IN STANDARD TRIPLE THERAPY

Ana-Maria Singeap, Anca Trifan, Camelia Cojocariu, Irina Girleanu, Catalin Sfarti, Carol Stanciu

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Background: A higher H. pylori eradication rate is an actual objective, due to its important pathogenic role and justified by its variable antibiotic susceptibility. **Aim:** To evaluate the predicting factors of H. Pylori eradication failure using standard triple therapy. **Patients and methods:** We verified H. Pylori eradication by respiratory test, fecal antigen or biopsy in patients addressed to the Ambulatory of Center of Gastroenterology and Hepatology, who previously treated with standard triple therapy. We correlated the eradication failure with age, gender, indication of eradication (dyspepsia, gastritis, ulcer), side effects, compliance, previously antibiotics administrations. **Results:** 52 previously treated patients were tested. Actual infection was documented in 18 patients (failure rate 34.6%). In univariant analysis, we found a non-significant correlation with age, gender, indication of eradication, side effects; as factors influencing but also in a non-significant manner, we found: the provenience of the prescription (GP or specialist) and previous antibiotics administrations; non-compliance was significantly ($p=0.005$) correlated with eradication failure. **Conclusions:** The only factor significantly correlated with eradication failure was non-compliance; other influencing factors, but in a non-significant manner, were:

the provenience of the prescription and previous antibiotic administrations.

OP11. EMPIRIC TREATMENT FOR HELICOBACTER PYLORI ERADICATION FAILURE

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Aim: To assess the efficacy of a triple regimen consisting of rifaximin, bismuth subcitrate and furazolidone for patients with eradication failure after pantoprazole, chlarytromicine, amoxicilline (PCA) based regimen. **Material and methods:** 27 consecutive patients who underwent upper digestive endoscopy for dyspeptic symptoms, and who in their medical history were treated for H. pylori with PCA based therapy were included in our study. Positive H. pylori status was determined by modified Giemsa staining, before and 8 weeks after treatment. As H. pylori treatment they received choloidal subcitrate bismuth 240 mg b.i.d, for 14 days, rifaximine 400 mg b.i.d and furazolidone 200 mg b.i.d both for 10 days. **Results:** H. pylori was eradicated in 22 pts (81.48%). No withdrawals due to side effects or serious adverse effects were noticed. **Conclusion:** This combination is an alternative for eradication failure after standard therapy for H. pylori.

OP12. EFFECTS OF RIFAXIMIN ON INDOMETHACIN-INDUCED INTESTINAL DAMAGE IN GUINEA-PIGS

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Enterobacterial translocation into the gut mucosa is the first step required for activation of neutrophils and inducible nitric oxide synthase (iNOS), involved in the pathogenesis of indomethacin - induced intestinal lesions. Rifaximin may limit NSAID-associated intestinal damage by decreasing the bacterial load. We **aimed** to study the effect of rifaximin on indo-

methacin - induced intestinal damage in guinea-pigs. **Methods** Twenty-four guinea pigs, equally divided in four interventional groups (A-D), received indomethacin, given orally once daily (30mg/kg) for three consecutive days. In groups B, C, D different doses of rifaximin (50mg/kg, 100mg/kg and 200mg/kg) were given orally two hours before indometachin administration. Semi-quantitative grades were measured for gross findings, degenerative lesions, neutrophils and eosinophils infiltrates and iNOS imunopositivity. Statistical comparisons used Mann Whitney Test, with a Bonferroni correction for alpha ($p \leq 0.016$). **Results:** Statistical analysis of graded gross findings, microscopic degenerative lesions, endothelium damage and iNOS immunopositivity found no difference between A and B groups. Significant fewer gross findings ($U=3$, $p=0.015$), microscopic degenerative lesions ($U=2$, $p=0.008$) and lower grades for iNOS immunopositivity ($U=0$, $p=0.002$) were found in group C compared with group A. In group D, significant lower grades for iNOS immunopositivity were obtained ($U=0$, $p=0.002$) compared with group A and fewer degenerative lesions without reaching statistical significance ($U=4$, $p=0.026$). **Conclusion:** 100mg/kg of rifaximin proved efficient in preventing gut degenerative lesions induced by indomethacin in a guinea pig model, the iNOS activity being significantly decreased.

OP13. RIFAXIMIN AND RISK OF SPONTANEOUS BACTERIAL PERITONITIS IN PATIENTS WITH LIVER CIRRHOSIS

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Background: Rifaximin is used for the profilactic and curative treatment of hepatic encephalopathy in patients with liver cirrhosis. The **aim** of this study was to determine whether rifaximin is associated with decreasing the risk of spontaneous bacterial peritonitis (SBP) in cirrhotic patients with ascites. **Methods:** We included patients diagnosed with liver cirrhosis and ascites, admitted in the Center of Gastroenterology and Hepatology, Iasi, between January 2001-December 2012. Patients were stratified into 2 groups by the use of rifaximin. Patients were excluded if they

had received another antibiotic for SBP prophylaxis or had a history of SBP before rifaximin therapy. **Results:** A total of 280 patients were included, of whom 56 (20%) received rifaximin. The rifaximin and non-rifaximin groups were comparable with regard to age, gender, and cirrhosis etiology. The median follow-up time was 7.8 (3.0,-20.0) months. During this time period, 92% of patients on rifaximin remained SBP free compared with 65% of those not on rifaximin ($p=0.001$). After adjusting for Model of End-Stage Liver Disease score, Child-Pugh score, and ascitic fluid total protein, there was a 78% reduction in the rate of SBP in the rifaximin group (hazard ratio=0.22; 95% confidence interval, 0.12-0.78; $P=0.007$). **Conclusions:** Intestinal decontamination with rifaximin may prevent SBP in cirrhotic patients with ascites.

OP14. SYMPTOMATIC CLOSTRIDIUM DIFFICILE INFECTION IN HOSPITALISED PATIENTS WITH LIVER CIRRHOSIS

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The incidence of *Clostridium difficile* (CD) infection increased and higher rates of infection were evident in the gastro-hepatology department, particularly in patients with liver cirrhosis, often under antibiotherapy. **Aim** To evaluate the incidence of symptomatic CD infection in hospitalized patients with liver cirrhosis. **Method** 146 patients have been evaluated: 82 hospitalized with variceal bleed, 23 with hepatic encephalopathy and 41 cirrhotic patients with other complications. 96 (65.8%) patients were treated with antibiotics: 21.7% with hepatic encephalopathy, 21.9% from those hospitalized for other complication; all patients with variceal bleeding received antibiotic therapy. The most common antibiotic administered was Cefotaxim (53.1%); 20.8% were treated with Ciprinol, 18.8% Cefotaxim and Ciprinol association and 7.2% Augmentin. The CD A and B toxin were tested (immunochromatographic assay) in patients with high clinical suspicion for CD colitis. **Results** 36 patients (24.7%) were tested for CD toxin, most of them (58.3%) with variceal bleeding. CD infection was identified in 5 patients (3.2%), most frequently in patients undergoing antibiotic therapy (4.1% vs. 2%). No case of CD infection was confirmed in patients treated with quinolones; it was confirmed in

patients treated with Augmentin (60% of cases) or Cefotaxim. Although the clinical suspicion for CD colitis was more frequent in patients with variceal bleeding, no case was confirmed in those patients; the infection was confirmed in patients (4 cases from 5) treated with antibiotics for other infectious complications (pneumonia and spontaneous bacterial peritonitis). **Conclusion** Patients with liver cirrhosis have a significant risk for CD infection associated with antibiotic therapy. CD infection is more common in cirrhotic patients with other infectious complications and less common in patients with variceal bleeding or hepatic encephalopathy.

OP15. THE EFFICACY OF RIFAXIMIN AND PROBIOTICS IN PATIENTS WITH IRRITABLE BOWEL SYNDROME

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Background and aim: Altered gut microbiota plays an important role in the pathogenesis of IBS. The aim of our study was to evaluate the efficacy of Rifaximin and probiotics in patients with IBS. **Methods:** We included 85 patients with IBS: 46 (54.1%) patients (mean age 47.6 ± 12.6 years, female: male 2:1) were treated with Rifaximin for 2 weeks, and 39 (45.9%) patients (median age 48.6 ± 13.6 years, female: male 2.5:1) were treated with probiotics for 4 weeks. For each patient we calculated disease severity score before treatment and 4 weeks after treatment. The efficacy was defined as 50% reduction of disease severity score at 4 weeks after treatment compared with baseline. Quality of life was assessed using specific quality of life questionnaire for patients with irritable bowel (IBS QoL), both before treatment and at 4 weeks after treatment. **Results:** The severity score before treatment with Rifaximin was 293.2 ± 107.8 and after treatment was 161.5 ± 76.2 , and the difference was highly statistically significant ($p < 0.001$). The treatment with Rifaximin was effective in 26 (56.5%) patients. Quality of life score after treatment with Rifaximin was significantly higher than before treatment ($p < 0.001$). The severity score before treatment with Probiotics was 271 ± 99.7 and after treatment it was 150.2 ± 72.1 , and the difference was highly statistically significant ($p < 0.001$). The treatment with Rifaximin

ORAL PRESENTATION

Endoscopic methods for the early diagnosis of cancers of the pancreas and of the digestive tube.

was effective in 22 (56.4%) patients. Quality of life score after treatment with Rifaximin was significantly higher than before treatment ($p < 0.001$). **Conclusions** Treatment with Rifaximin and probiotics was effective in more than 50% of patients with IBS

OP16. ROLE OF WHITE LIGHT ENDOSCOPY, AUTOFLUORESCENCE ENDOSCOPY AND NARROW BAND IMAGING WITH MAGNIFICATION FOR PREMALIGNANT LESIONS AND EARLY GASTRIC CANCER DIAGNOSIS

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Introduction: Endoscopic diagnosis of early gastric cancer is based on subtle morphological changes such as elevate superficial lesions, flat or depressed and minimal changes color. For this reason, in recent years, new endoscopic techniques such as autofluorescence endoscopy (AFE) or narrow band imaging with magnification (NBI-ME) have been developed, using the interaction between light with a specific wavelength and tissues, to increase diagnostic accuracy of early lesions. **Methods:** The study included a total of 94 patients with minimum digestive pathology, without alarm signs, who were investigated for early gastric cancer and premalignant lesions involved in gastric carcinogenesis. In all patients examination consisted in white light endoscopy (WLE), followed by AFE and NBI-ME. **Results and discussion:** WLE had a sensitivity and a specificity of 72.73% and 80.33%, confirming somewhat limited diagnostic value. AFE has been proven to be a very sensitive diagnostic method (88.89%), detecting 15% more lesions than conventional endoscopy. In our study the percentage of false positive results was 40% among the total number of lesions and decreased to 5% after

examination by NBI-ME, thus increasing the specificity to 90.91%. In the overall analysis of the study group, tri-modal examination had very good sensitivity and specificity (94.74%, and 92% respectively), with 92.55% accuracy of premalignant and malignant lesions and a very good negative predictive value (98.57%). **Conclusions:** Trimodal imaging, including white light endoscopy, autofluorescence endoscopy, followed by NBI-ME to characterize lesions, could be considered a fast, safe and accurate method for diagnosis and surveillance of premalignant and malignant lesions of the digestive tract.

OP17. THE CONTRIBUTION OF NARROW BAND IMAGING IN THE DIAGNOSE OF GASTRIC PREMALIGNANT LESIONS

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Introduction: Narrow band imaging is a third generation new endoscopic investigation. This technique practically allows a better characterization of epithelial modifications (for instance, intestinal metaplasia, dysplasia), and of vascular irregularity. The main usage of this method is to identify zones with intestinal metaplasia, dysplasia or early cancer, in order to extract biopsies with specific location. **Material and method:** We examined 24 patients referred to the Gastroenterology Clinic for different digestive symptoms. We performed initially conventional endoscopy and we extracted random biopsies; after that, we used narrow band imaging and we extracted specifically located biopsies from

the lesions we had detected. The classification is the one elaborated by Pimentel Nunes in 2012. **Results:** We detected a number of 36 modified zones. The pit pattern for gastric atrophy is characterized by a lower density of the glandular orifices and a regular vascular design; intestinal metaplasia is characterized by the presence of glands of a tubular-villus type and blue ridges; dysplasia is characterized by modified vascular calibers, interglandular spaces, changed glandular diameters. Comparing the resulted data, we obtained a statistically significant difference for gastric atrophy ($p=0,00498$) as well as for intestinal metaplasia ($p=0,003$), achieving a sensibility and a specificity of 90%, respectively 88% for gastric atrophy and 92%, respectively 88% for intestinal metaplasia. We detected 1 single area with low degree dysplasia. **Conclusions:** Narrow band imaging significantly improves the detection of gastric premalignant lesions.

OP18. IMPORTANCE OF ENDOSCOPIC ULTRASONOGRAPHY-GUIDED FINE NEEDLE ASPIRATION (FNA) IN THE DIAGNOSIS OF NEOPLASTIC CYSTIC PANCREATIC LESIONS IN DAILY CLINICAL PRACTICE

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Purpose: Most cystic lesions of the pancreas are inflammatory, being represented by pseudocysts. Cystic non-inflammatory lesions of the pancreas represent 10-15% of cystic pancreatic lesions and are important due to their malignant potential. The correct diagnosis is difficult and EUS with FNA is a valuable tool for their discrimination. The aim of this study was to assess the value of EUS-FNA diagnosis in a high volume tertiary center. **Patients and methods:** This is a retrospective study of patients who underwent EUS±FNA (2009-2012). From 87, 78 were diagnosed as cystic neoplasms of the pancreas, based on echofeatures and analysis of intracystic liquid, the final diagnosis being established by histology/surgical specimen/follow-up. **Results:** There were 12 cases of

mucinous cystadenoma, located mainly in the body of the pancreas and confirmed on surgical specimen. 13 cases showed an EUS aspect of serous cystadenoma located in all parts of the pancreas, confirmed by CT and by surgery in 10 cases. Cystadenocarcinoma was diagnosed in 14 cases, confirmed by FNA in 11 patients, resectable in 4 cases. Main-duct IPMN was found in 8 cases, 7 with FNA positive for dysplasia of different grades or malignancy and confirmed by surgery. 31 cases were suggestive for branch-duct IPMN, 2 with intracystic mural nodules with false negative FNA for neoplasia, the rest were followed-up. The total accuracy was 88.4%. **Conclusion:** Endoscopic ultrasonography with fine-needle aspiration allows precise clarification in diagnosis of cystic pancreatic lesions, which may assist therapeutic decision-making.

OP19. ENDOSCOPIC ULTRASOUND-GUIDED CONFOCAL LASER ENDOMICROSCOPY FOR THE CHARACTERIZATION OF PANCREATIC CYSTIC TUMORS

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Confocal laser endomicroscopy (CLE) has emerged in recent years as a novel technique that enables in vivo microscopic analysis during ongoing endoscopy. The potential role of CLE has been explored in pathology of both upper and lower gastrointestinal tract, showing high accuracy for predicting the final histopathological diagnosis based on immediate evaluation of tissue and vascular patterns. Recently CLE has gone beyond the superficial luminal indications with the development of a new flexible miniprobe that can be passed through a FNA needle and advanced under EUS guidance into solid organs adjacent to the GI tract for real-time microscopic information. For the examination the CLE probe is preloaded in a 19G FNA needle after removing the stylet and locked in position at the tip of the needle. Imaging

is performed after the administration of the contrast agent (10% fluorescein, i.v.).

Pancreatic cystic lesions pose some challenges regarding the differentiation between benign from premalignant and malignant lesions with current examination techniques. The role of needle based CLE (nCLE) was consequently sought as an additional method that could offer information at the microscopic level for the characterization of pancreatic cysts. An initial clinical study proved the feasibility of the technique and established an imaging protocol. This was followed by a multicentre trial aiming to define interpretation criteria for the diagnosis of pancreatic cystic lesions. Descriptive criteria for pancreatic cysts during nCLE examination included epithelial structures (papillary projections, glandular structures, dark aggregates of cells) as well as other pancreatic and peri-pancreatic structures. The identification of epithelial villous structures was associated with pancreatic cystic neoplasms (mucinous cystic neoplasm, IPMN and adenocarcinoma) with a sensitivity of 59% and 100% specificity. nCLE proved a higher diagnosis accuracy compared to CEA levels and cytology (42% vs. 29% and 30%, respectively).

Studies available so far have shown that EUS-guided nCLE appears safe and technically feasible for the examination of pancreatic cystic lesions. However additional trials to confirm the data and look for more histologic correlations are necessary.

ORAL PRESENTATION

Liver elastography, biologic tests or liver biopsy for the staging of chronic hepatopathies – what should we chose in 2013?**OP20. HOW IS LIVER FIBROSIS EVALUATED IN CHRONIC B AND C HEPATITIS PATIENTS IN DAILY CLINICAL PRACTICE? – A ROMANIAN MULTICENTER STUDY**

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Aim: To assess the modality of liver fibrosis evaluation in chronic hepatitis B and C patients (especially regarding access to treatment) in daily clinical practice in Romania.

Methods: Our study included 1993 patients with chronic hepatitis B and C, evaluated in 8 Romanian centers in 2011 and 2012. We retrospectively analyzed the modality of liver fibrosis evaluation: invasive (liver biopsy-LB) or non-invasive (elastographic methods or serological tests).

Results: From 1993 patients evaluated in 2011 and 2012, LB was performed in 814 patients (40.8%).

The proportion of patients in which liver fibrosis was evaluated by means of LB was significantly higher in patients evaluated in 2011 as compared with those evaluated in 2012: 414/858 patients (48.2%) vs. 400/1135 patients (35.2%), $p < 0.0001$.

In patients with *chronic hepatitis C*, the proportion of patients in whom liver fibrosis was evaluated by means of LB was significantly higher in those evaluated in 2011 as compared with those evaluated in 2012: 236/486 patients (48.5%) vs. 201/657 patients (30.5%), $p < 0.0001$. The rest of patients were evaluated by means of non-invasive methods.

In patients with *chronic hepatitis B*, the proportion of patients in which liver fibrosis was evaluated by means of LB was similar in those evaluated in 2011 vs. 2012: 151/333 patients (45.3%) vs. 193/470 patients (41.1%), $p = 0.26$. The rest of patients were evaluated by means of non-invasive methods (24.4% in 2011 vs. 26.2% in 2012, $p = 0.62$) or the treatment was recommended considering the viral load level (higher than 2000 IU/ml) and the aminotransferases level (higher than 2 x upper limit of normal) (30.3% in 2011 vs. 32.7% in 2012, $p = 0.52$).

In chronic hepatitis C, considering only the non-invasive methods, in most cases Transient Elastography (FibroScan) was used - 61.4%, followed by biological tests such as FibroMax (15.3%) and FibroTest (23.3%).

Conclusion: The proportion of chronic hepatitis C patients evaluated by LB is decreasing, while in case of chronic hepatitis B patients it remains stable. For non-invasive assessment of HCV patients, Transient Elastography was the preferred test.

OP21. THE PREDICTIVE FACTORS FOR NON-INVASIVE EVALUATION OF NON ALCOHOLIC FATTY LIVER DISEASE (NAFLD)

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Among patients with nonalcoholic fatty liver disease (NAFLD), only those with nonalcoholic steatohepatitis (NASH) are at an increased risk for cirrhosis and end-stage liver disease. **Aim** To evaluate the utility of non-invasive parameters for differentiating NAFLD histological subtypes and for predicting significant fibrosis in NAFLD. **Methods.** 64 patients with histologically proven NAFLD were prospectively studied. All patients underwent clinical and biochemical evaluations, Acoustic Radiation Force Impulse elastography (ARFI) and 13C-methacetin breath test (MBT), a microsomal liver function test, modified with NASH. The biochemical parameters included lipid profile, glucose, liver tests and insulin. The Homeostatic Metabolic Assessment (HOMA)-index and the oxidative stress were also evaluated. ARFI elastography was performed to assess liver stiffness and MBT was performed to evaluate the cytochrome P450-dependent liver function. We correlated clinical and biochemical parameters, ARFI elastography measurements and MBT values with histological features (simple steatosis or steatohepatitis with inflammation and fibrosis). Factors associated with NASH diagnosis were identified using the Mann-Whitney U test and multivariate analysis. The overall validity was measured using the area under receiver operating characteristic curve, (AUROC) with 95% CI. **Results:** The multivariate analysis identified four independent predictive factors for the presence of NASH: increase in spleen longitudinal diameter (OR 1.07; 95% CI 1.01 - 1.13, p=0.028), high serum C-reactive protein (OR 1.62; 95% CI 1.16 - 2.26, p=0.004), increased ARFI measurements (OR 10.31; 95% CI 2.05 - 51.84 p<0.004), and low MBT values, cumulative recovery dose at 60 minutes, CUM 60, (OR 1.02 ; 95% CI 1.004 - 1.049 p=0.038). **Conclusion.** A predictive model that incorporates the biological parameters, ARFI measurements and MBT values may identify at-risk patients with NAFLD, avoiding the need of liver biopsy.

OP22. NON-INVASIVE PREDICTION OF LIVER INJURY IN NON-ALCOHOLIC FATTY LIVER DISEASE

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Background: Identification of non-invasive prognostic factors of liver steatosis and NASH are relevant for unraveling the mechanisms of this disease, as well as for clinical diagnosis of these patients. **Methods:** 78 patients with biopsy-proven non-alcoholic fatty liver disease (NAFLD), 50 with NASH (mean age 54±12 years), 28 patients with steatosis (mean age 47±10) and 10 controls without steatosis (mean age 50±11) were investigated. In all subjects serum concentrations of cholesterol, triglycerides, glycemia, HOMA, ALT, C reactive protein, ferritin, adiponectin, leptin, IL-10, IL-6 and TNF- α were measured. **Results:** BMI and waist-hip ratio were higher for patients with steatohepatitis compared to matched controls. Adiponectin levels were significantly different between the 3 subgroups (p=0.002), with higher levels in controls and lower levels in patients with NASH. The opposite trend was evident for leptin levels (p=0.02), with highest levels among NASH subjects (30.34±27.23 ng/ml) and the lowest levels in controls (5.6±6.01 ng/ml). The mean A/L ratio showed a significant difference between patients with NASH (0.3±0.6), simple steatosis (1.2±0.6) and controls (3.4±1.2) (p<0.0001). The A/L ratio was inversely related to the score of inflammation and fibrosis. TNF- α levels were higher for NASH subjects compared with controls (p<0.001). In multivariate analysis, HOMA-IR>3.5, A/L ratio < 1.5x10³ and TNF α >30 pg/ml were independently associated with NASH. In univariate analysis, five parameters were significantly associated with fibrosis: BMI, serum adiponectin, TNF α , IL-6 and ferritin. In multivariate analysis BMI, TNF α , IL-6 and ferritin were in-

dependent factors associated with fibrosis. **Conclusions:** There is a significant relation between NAFLD and serum adipokines and HOMA-IR. Additionally, serum adipokines are associated with grade of steatosis and stage of fibrosis. Adiponectin-to-leptin ratio is more strongly correlated with progression to NASH than leptin or adiponectin alone. Elevated IL-6 and ferritin identify NAFLD patients at risk for NASH and advanced fibrosis.

OP23. COMPARISON OF SIX SERUM TESTS, LIVER STIFFNESS AND HVPG IN THE PREDICTION OF CLINICAL DECOMPENSATION IN CHRONIC LIVER DISEASES

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Background and aims: The prognosis of chronic liver diseases (CLD) is determined by the presence of portal hypertension (PHT). The standard method for PHT diagnosis is hepatic venous pressure gradient (HVPG). Recently, non-invasive methods were proposed to evaluate patients with CLD. The aim of this study is to compare non-invasive tests with HVPG in terms of diagnosis of clinical significant portal hypertension (CSPHT), esophageal varices and for their ability to predict clinical decompensation. **Methods:** Two hundred thirty-eight patients underwent HVPG measurement along with serological tests (AST/ALT index, APRI, Lok, FIB-4, GUCI, Risk score) and liver stiffness (LS) measurement. A subgroup of 100 patients was followed-up for 2 years or until decompensation. **Results:** In the whole studied population, cirrhosis was found in 142 patients, from which 93 (65%) had EV and 103 (72%) had CSPH. At the time of inclusion, all cirrhotic patients were compensated. For CSPHT and esophageal varices the Lok score was the best serum test, AUROC=0.86 and 0.83, respectively. However, LS is the best non-invasive methods for these end-points (AU-

ROC=0.95 for CSPH and 0.90 for esophageal varices). During the follow-up, 41 patients suffered a clinical complication within a mean period of 491 ± 282 [8-730] days. FIB-4 is the best serological test which predicts clinical decompensation (AUROC=0.84). LS measurement predicts clinical decompensation with an AUROC=0.83. The worse performance had the AST/ALT index in predicting either clinical decompensation or PHT related complications. **Conclusion:** LS is the most efficient non-invasive method for the diagnosis and prognosis of CLD. The Lok and FIB-4 scores are good non-invasive alternatives for diagnosis and prediction of clinical decompensation, especially when there are confounding factors for LS measurement.

OP24. VALIDATION OF SPLEEN STIFFNESS MEASUREMENT AS NONINVASIVE MARKER FOR CLINICALLY SIGNIFICANT PORTAL HYPERTENSION AND LARGE ESOPHAGEAL VARICES IN CIRRHOTIC PATIENTS

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Background and Aims Identification of novel non-invasive methods for liver cirrhosis (LC) assessment is one of the recommendations of the Baveno V meeting. Spleen stiffness measurement (SSM) using FibroScan was recently proposed as an estimate of large esophageal varices (LEV) in cirrhotic patients. The aim of this study was to validate SSM as a noninvasive surrogate marker for LEV and clinically significant portal-hypertension (CSPH). **Methods** 37 consecutive LC patients (training set - mean age 55.08 years, 68.3% males) were included. All patients underwent HVPG measurement, endoscopy for esophageal varices evaluation, common laboratory tests, liver and spleen stiffness measurements - using the medium probe and the conventional calculation algorithm. The diagnostic performance of SSM was evaluated using the AUROC method. The best cutoff values of the 2 variables were used to estimate the presence of

LEV in an independent validation set of 118 cirrhotic patients (55.32 years, 61.8% males). The LEV estimation according to SSM values was compared against endoscopy evaluation using the interclass correlation coefficient. **Results** In the training set, SSM correlated well with LSM, HVPG, and with the presence of LEV and CSPH ($r=0.64-0.774$; $p<0.0001$) SSM mean values were significantly higher in patients with CSPH: 33.11 vs. 65.82kPa ($p<0.0001$). The same tendency was observed when LEVs were evaluated: 39.42 vs. 67.48kPa ($p<0.0001$). The AUROC for SSM predicting CSPH was 0.882 (Se=92.9%; Sp=84.2%). The AUROC for predicting LEV was 0.845 for SSM (Se=100%; Sp=68%). Interestingly, the cutoff value was the same (>42.7 kPa) in predicting both CSPH and LEV. In the validation set, using the above-mentioned SSM cutoff values, we predicted the presence of LEV with moderate accuracy [ICC only 0.402 ($p=0.003$)]. **Conclusion** SSM is a novel noninvasive parameter that correlates with the presence of CSPH and LEV in cirrhotic patients, but it is not reliable enough to be used alone for the assessment of LEV, so that endoscopy could be avoided.

OP25. EVALUATION OF LIVER STIFFNESS BY TRANSIENT ELASTOGRAPHY (FIBROSCAN) IN PATIENTS WITH TYPE 2 DIABETES

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Aim: to evaluate feasibility of determining liver stiffness by transient elastography (FibroScan) in patients with type 2 diabetes. We also did research on the presence of viral infection B and C in those patients. **Material and method:** we studied 369 patients with type 2 diabetes that came to a routinely checkup at the Antidiabetes Centre during March 2012-March 2013. We selected the first two patients from the third medical cabinet. All patients were screened for transaminases (ALT, AST), viral markers (HBsAg, anti HCV antibodies), abdominal ultrasound for liver steatosis and we assessed liver stiffness by transient elastography (FibroScan). We considered a reliable examination if the success rate was $\geq 60\%$ and if the IQR was $\leq 30\%$ (valid results). **Results:** Average age group: 59.2 ± 8.3 years. Gender distribution: 215

women (58.3%), 154 men (41.7%). Feasibility of FibroScan: we obtained valid results in 278 cases out of 369 (75.3%). Out of the 369 patients with diabetes, 12 patients (3.2%) were infected with B virus, 11 patients (3%) were infected with C virus and 1 patient had biviral infection B+C, resulting in a total rate of viral infection of 6.4% (24/369 cases). Out of the entire lot, 197 P (53.4%) had moderate and severe steatosis and therefore were diagnosed with NAFLD and 47/369 P (12.7%) had both steatosis and hepatocytolysis syndrome and were diagnosed with NASH. The 278 P who had valid FibroScan results were divided into 3 categories according to Wong criteria (1): <7.9 kPa (absence of severe fibrosis, FF3): 48 P (17.3%). **Conclusions:** 1. More than half of patients with type 2 diabetes had at least moderate liver steatosis and approximately 1/8 were diagnosed with NASH. 2. Approximately 17% of patients with diabetes seem to have severe fibrosis and need further liver evaluation.

References: (1) Wong VW, Vergniol J, Wong GL, et al. Diagnosis of fibrosis and cirrhosis using liver stiffness measurement in nonalcoholic fatty liver disease. *Hepatology* 2010; 51: 454-462.

OP26. THE FEASIBILITY OF SHEAR-WAVE ELASTOGRAPHIC METHODS FOR NON-INVASIVE ASSESSMENT OF LIVER FIBROSIS IN CHRONIC VIRAL HEPATITIS PATIENTS

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Aim: to assess the feasibility ("intend to diagnose") of the 3 shear waves elastographic methods (Transient Elastography-TE, Acoustic Radiation Force Impulse-ARFI and SuperSonic Shear Imaging-SSI) in chronic viral hepatitis patients. **Methods:** Our study included 172 patients with chronic viral hepatitis, in which liver stiffness (LS) was evaluated by means of TE (using the standard M-probe), ARFI and SSI. Reliable measurements were defined as: median value of 10 (TE, ARFI) LS measurements with a success rate $\geq 60\%$ and an interquartile range interval $< 30\%$, values expressed in kPa (TE) or m/s (ARFI). Reliable LS measurements by means of SSI were defined as

the median value of 5 LS measurements expressed in kPa. **Results:** The etiology of liver disease was: chronic hepatitis C – 99 patients (57.6%), chronic hepatitis B – 67 patients (38.9%), coinfection (B+C virus or B+D virus) – 6 patients (3.5%). Reliable LS measurements were obtained in a significantly higher percentage of patients by means of ARFI elastography as compared with TE and SSI: 92.5% vs. 79.1%, ($p=0.0007$) and 92.5% vs. 81.9%, ($p<0.0001$), respectively. The rate of reliable LS measurements was similar for TE and SSI: 79.1% vs. 81.9%, ($p=0.60$). **Conclusions:** The most feasible shear-waves ultrasound elastographic method for non-invasive assessment of liver fibrosis in chronic viral hepatitis patients was ARFI.

OP27. WHICH ARE THE CUT-OFF VALUES OF LIVER STIFFNESS MEASUREMENTS ASSESSED BY SUPERSONIC SHEAR IMAGING (SSI) FOR PREDICTING SIGNIFICANT FIBROSIS AND LIVER CIRRHOSIS?

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Aim: to identify the cut-off values of liver stiffness (LS) assessed by SSI for predicting significant fibrosis ($F\geq 2$) and liver cirrhosis ($F=4$), considering Transient Elastography (TE) as the reference method. **Methods:** 383 consecutive subjects were evaluated by means of TE and SSI. Reliable TE measurements were defined as: median value of 10LS measurements with a success rate $\geq 60\%$ and an interquartile range interval $< 30\%$, values expressed in kPa. Reliable LS measurements by means of SSI were defined as the median value of 5 LS measurements expressed in kPa. To discriminate between various stages of fibrosis by TE we used the liver stiffness (LS) cut-offs (kPa) proposed in the most recently published meta-analysis (1): F1-6, F2-7.2, F3-9.6 and F4-14.5. **Results:** Our subjects were: healthy volunteers-14.6%; patients with chronic hepatitis B -17.6%; with chronic hepatitis C – 25.8%; with coinfection (B+C or B+D) – 1.6%; with

non-viral chronic hepatopathies (most of them with non-alcoholic fatty liver disease)-29.2%; and with liver cirrhosis diagnosed by means of clinical, biological, ultrasound and/or endoscopic criteria-11.2%. The rate of reliable LS measurements was statistically similar for TE and SSI: 73.9% vs. 79.9%, $p=0.06$. Reliable LS measurements by both elastographic methods were obtained in 65.2% of patients. The distribution of liver fibrosis in this cohort of patients, using TE pre-specified cut-off values were: F0-40.8%, F1-14.8%, F2-19.2%, F3-12.8%, F4-12.4%. The best SSI cut-off value for predicting significant fibrosis was 7.8 kPa (AUROC=0.859 with 76.8% Se and 82.6% Sp), while the best SSI cut-off value for predicting liver cirrhosis was 11.5 kPa (AUROC=0.914 with 80.6% Se and 92.7% Sp). **Conclusions:** The best SSI cut-off values for predicting significant fibrosis and cirrhosis were 7.8 kPa and 11.5 kPa, respectively. **References** 1. Tsochatzis et al; J Hepatol. 2011;54:650-9

ORAL PRESENTATION

Diagnostic standards in the main pancreatic diseases**OP28. DIAGNOSTIC VALUE OF COMBINED QUANTITATIVE CONTRAST-ENHANCED HARMONIC ENDOSCOPIC ULTRASOUND AND ENDOSCOPIC ULTRASOUND ELASTOGRAPHY IN PANCREATIC FOCAL MASSES**

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Introduction: Real-time endoscopic ultrasound (EUS) elastography provides strain assessment of a pancreatic focal mass. Quantitative assessment of tumor vascular enhancement through contrast-enhanced harmonic EUS (CEH-EUS) with second generation contrast agents has been suggested as a useful diagnostic method. **Aims&Methods:** The aim of our study was to prospectively compare the diagnostic efficiency of quantitative assessment of tumor vascularization by time-intensity curve (TIC) analysis and quantitative data resulting from EUS elastography when used individually and sequentially. We prospectively included 52 patients with chronic pseudotumoral pancreatitis (n=22) and pancreatic cancer (n=30). We performed CEH-EUS with 2nd generation contrast agents (SonoVue, 2.4 ml) and analyzed the arterial and venous phases, and consecutively plotted the corresponding TICs for lesions and normal parenchyma. The two resulting series of individual intensities were compared for malignant patterns. EUS elastography was consecutively performed in all patients and post processing software analysis was used to compute hue histogram data from dynamic sequences. **Results:** For EUS elastography and CEH-EUS, the sensitivity/specificity/positive and negative predictive values were 86.6% / 36.3% / 76.9% / 23.1% and 86.6% / 72.7% / 81.2% / 80%, respectively. When the two methods were performed sequenti-

ally, we obtained significantly higher values – 93.3% / 81.8% / 87.5% / 90% compared to EUS elastography (p=0.0023) and CEH-EUS (p=0.038). Receiver operator characteristics (ROC) curve analysis showed the combined approach to be the most reliable, with an area under the curve (AUC) of 0.876 (standard error 0.0695, 95% CI 0.687 to 0.971) compared to 0.797 (SE 0.0838, 95% CI 0.594 to 0.928) for CEH-EUS and 0.615 (SE 0.0886, 95% CI 0.405 to 0.798) for EUS elastography. **Conclusion:** Using both EUS elastography and CEH-EUS seems to be the best option for the non-invasive investigation of pancreatic focal masses. Further large-scale multicenter studies are required to validate the diagnostic approach.

OP29. IMPORTANCE OF ENDOSCOPIC ULTRASONOGRAPHY-GUIDED FINE NEEDLE ASPIRATION (FNA) IN THE DIAGNOSIS OF NEOPLASTIC CYSTIC PANCREATIC LESIONS IN DAILY CLINICAL PRACTICE

**Anca Moldovan-Pop, Simona Vultur, Cristian Tefas, Toader Zaharie, Andrada Seicean,
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IRGH Cluj-Napoca

Purpose: Most cystic lesions of the pancreas are inflammatory being represented by pseudocysts. Cystic non-inflammatory lesions of the pancreas represent 10-15% of cystic pancreatic lesions and are important due to their malignant potential. The correct diagnosis is difficult and EUS with FNA is a valuable tool for their discrimination. The aim of this study was to assess the value of EUS-FNA diagnosis in a high volume tertiary center. **Patients and methods:** This is a retrospective study of patients who underwent EUS±FNA (2009-2012). From 87, 78 were diagnosed as cystic neoplasms of the pancreas, based on echofeatures and analysis of intracystic liquid, fi-

nal diagnosis being established by histology/surgical specimen/follow-up. **Results:** There were 12 cases of mucinous cystadenoma, located mainly in the body of the pancreas and confirmed on surgical specimen. 13 cases showed an EUS aspect of serous cystadenoma located in all parts of the pancreas, confirmed by CT and by surgery in 10 cases. Cystadenocarcinoma was diagnosed in 14 cases, confirmed by FNA in 11 patients, resectable in 4 cases. Main-duct IPMN was found in 8 cases, 7 with FNA positive for dysplasia of different grades or malignancy and confirmed by surgery. 31 cases were suggestive for branch-duct IPMN, 2 with intracystic mural nodules with false negative FNA for neoplasia, the rest were followed-up. The total accuracy was 88.4%. **Conclusion:** Endoscopic ultrasonography with fine-needle aspiration allows precise clarification in diagnosis of cystic pancreatic lesions, which may assist therapeutic decision-making.

OP30. NEEDLE-BASED CONFOCAL LASER ENDOMICROSCOPY EXAMINATION OF PANCREATIC MASSES

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Background: Confocal laser endomicroscopy enables in vivo histological examination during endoscopic procedures, with multiple applications for gastrointestinal lesions being already investigated. Recently a new CLE flexible miniprobe that can be passed through a 19-gauge needle and advanced under endoscopic ultrasound guidance from the GI

tract into neighboring solid organs was developed. Our **aim** was to evaluate the use of needle based confocal laser endomicroscopy (nCLE) in pancreatic solid masses in terms of feasibility and safety of the examinations, as well as describing confocal imaging criteria for pancreatic masses and also lymph nodes identified during EUS procedures. **Material and Methods:** Patients were included based on a clinical suspicion of pancreatic cancer and/or imaging studies showing a pancreatic mass. During the procedure the miniprobe was preloaded in a 19G FNA needle after removing the stylet, and advanced under EUS guidance into the lesions. CLE examination started after administration of the contrast agent (10% fluorescein, 2.5 ml i.v.). Data was stored digitally for post procedural analysis. EUS-FNA was performed from the same tumors for diagnosis confirmation. **Results:** We included 20 patients with pancreatic masses of both benign and malignant etiology. nCLE examination was technically successful in all cases and with no adverse events. Imaging findings included for normal pancreatic tissue dark lobular structures representing the pancreatic acini, while in pancreatic cancer CLE examination identified increased amounts of fluorescein and floating dark aggregates of malignant cells. It was difficult to ensure co-registration of cytopathology sections for correlating imaging elements. **Conclusions:** EUS-nCLE is technically feasible and safe for examination of solid pancreatic masses. Further studies are necessary to validate diagnostic criteria and establish the role of the procedure for the evaluation of pancreatic cancer patients.

OP31. KI 67 INDEX- ABSOLUTE PROGNOSTIC FACTOR?

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Despite their importance, prognostic factors in neuroendocrine tumors are not fully known, this paper's **aim** consisting in establishing prognostic va-

lue of Ki 67 index. **Materials and methods:** Retrospective study conducted between 2007-2012, which included 44 patients with neuroendocrine tumors diagnosed based on histopathological and immunohistochemical exam of the piece of tumor resection or liver biopsy in secondary determinations, in which we followed patients' characteristics, tumors' characteristics (Ki 67, cellular differentiation, metastases), the applied therapy and the survival rate. **Results:** We observed an increased incidence in women and the average age at diagnosis was 54 years. Ki-67 index value was <5% (G1) in 23 cases, between 5-20% (G2) in 13 and > 20% (G3) in 8 cases. Of all G1 tumors, 33.3% had secondary determinations, in stage G2-76.92%, G3 -71.42 respectively. The treatment was surgical (56.81%), endoscopic (4.5%), conservative (38.7%) or in combination with chemotherapy (45.45%). Survival rate at the end of the study according to the classification based on the ki 67 was 69% in G1 (with cytoreductive 11/13, with cytoreductive and chemotherapy 2/13), 61.53% in G2 (cytoreductive 1/9, and cytoreductive chemotherapy 2 / 9) and 42.85% in G3 (cytoreductive chemotherapy and 1/3, cytoreductive 1/3, chemotherapy 1/3). Exitus was recorded in 31% of G1 patients (cytoreductive 6/7, chemotherapy 1/7), 38.47% in G2 (chemotherapy 1/5, chemotherapy and cytoreductive 4/5), respectively 57.15% in G3 (chemotherapy 3/4, cytoreductive 1/4). Unfavorable prognostic factors in stage G1, G2 were female gender, age below 50 years, tumor size > 3 cm and location in the corporeo-caudal pancreas, while in G3 were only female gender and age over 50 years. **Conclusion:** The increased expression of Ki 67, along with female gender, age, tumor size and location are important in determining prognosis in patients with neuroendocrine tumors

ORAL PRESENTATION

Neuro-gastroenterology: functional digestive diseases.**OP32. CONFOCAL LASER ENDOMICROSCOPY PATTERNS IN THE ESOPHAGUS IN PATIENTS WITH NON-EROSIVE REFLUX DISEASE DIAGNOSED BY PH-IMPEDANCE****Ion Bancila, Razvan Iacob, Bogdan Cotruta, Cristian Gheorghe****Center for Gastroenterology and Hepatology, Clinical Institute Fundeni**

Introduction: more than 60% of patients with reflux symptoms have a normal white-light endoscopy examination (non-erosive reflux disease – “NERD”). At present, the inclusion of patients with reflux symptoms in a subgroup of NERD is made on the basis of ambulatory 24-hour esophageal pH-impedance monitoring (MII-pH). Confocal laser endomicroscopy (CLE) may be able to detect lesions predictive of NERD. **Objectives:** to analyze correlations between MII-pH data (acid exposure time, symptom indexes) and findings on CLE images in patients with symptomatic NERD. **Methods:** 15 patients with reflux symptoms suggestive of GERD were included in the study. Normal white-light endoscopy was performed to exclude esophagitis and complications of reflux disease, followed by CLE above the Z-line. All subjects underwent afterwards 24-hour MII-pH. Data from CLE (increased number and dilatation of intrapapillary capillary loops - IPCLs) and MII-pH were correlated. **Results:** 9 patients had acid esophageal exposure or positive symptom indexes (SI, SAP) for acid reflux (NERD with acid-reflux) (group 1), while 6 patients had positive symptom indexes for non-acid reflux (NERD with non-acid reflux) or no correlation of symptoms with reflux episodes (functional heartburn) (group 2). At CLE we noticed increased density of IPCLs and dilatation of IPCLs. Those two abnormalities correlated statistically with acid-reflux exposure or positive symptom indexes for acid reflux in comparison to patients in group 2 ($p=0.027$ and 0.015 for dilatation and increased number of IPCLs respectively in patients with positive DeMeester score

compared to patients with negative DeMeester score; $p=0.007$ for increased number of IPCLs in patients with positive SAP for acid-reflux; $p=0.019$ for dilatation of IPCLs and positive SI for acid-reflux). **Conclusions:** in patients with NERD caused by acid reflux subtle mucosal vascular changes can be identified by CLE. In patients with non-acid reflux or functional heartburn these changes appear in a statistically significantly lower percent. Future studies are needed to find more specific subtle endoscopic lesions to predict NERD.

OP33. FUNCTIONAL HEARTBURN: FUNCTIONAL CHARACTERIZATION**Teodora Surdea-Bлага¹, Dan L. Dumitrascu¹, Jean Paul Galmiche², Stanislas Bruley des Varannes²****¹ University of Medicine and Pharmacy “Iuliu Hatieganu”, Cluj-Napoca, Romania; ² Faculty of Medicine, Nantes, France**

Introduction: Heartburn is a highly reported symptom, and its association with a normal upper gastrointestinal endoscopy and normal 24-hour esophageal pH monitoring, with no symptoms-reflux association and lack of response to acid suppressive therapy, defines functional heartburn (FH). **Aim:** The aim of this study was to characterize functionally a group of patients with FH, and to determine the predictive value of initial characteristics. **Methods:** We selected all patients with FH from pH-impedance recordings realized in 3 years. We evaluated the esophageal manometry recordings, at the time of the diagnosis, and current symptoms using standardized questionnaires. **Results:** We identified 40 patients with FH. Two thirds of patients still had heartburn after almost 2 years. Two thirds of patients had manometric abnormalities, 52% having peristaltic defects. The rate of mixed refluxes was higher in patients with persistent heartburn (63%) as compared with patients without heartburn at final evaluation (50%, $p=0.03$).

Mean acid clearance time was higher in patients with peristaltic defects as compared with patients with normal peristaltic (60 ± 45 vs. 31 ± 19 s, $P = 0.03$). A high rate of mixed refluxes and/or a manometric abnormality were associated with persistent heartburn at final evaluation. **Conclusions:** Symptoms persist in 2/3 of patients with FH. A high rate of mixed refluxes and manometric abnormalities are frequent and associated with the persistence of heartburn.

OP34. CHARACTERIZATION OF THE MUSCULAR RESPONSE OF THE ANTERIOR ABDOMINAL WALL AND THE DIAPHRAGM TO INGESTION OF DIFFERENT CONCENTRATION OF LIPIDS.

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Healthy subjects exhibit normal responses of the abdominal wall (diaphragmatic relaxation and anterior abdominal wall contraction) as response to meal ingestion. Lipids have been shown to sensitize mechanoreceptors response, which will explain why lipid administration increases the perception of gastric distension. Ingestion of lipids induce a local response at gastric level (gastric accommodation) and a sensitive response (conscious sensations). These responses may be related to the concentration of lipids of the test drink. Our **aim** is to characterize the muscular response of the anterior abdominal wall and the diaphragm to ingestion of different concentration of lipids. In healthy subjects with no known disease, not taking any medication and had normal bowel habit we will characterize abdominal muscular response to ingestion of different concentration of lipids. Diaphragmatic EMG activity was measured via 6 intraesophageal electrodes mounted over a probe. Activity of the anterior abdominal wall at the right side was recorded from bipolar electrodes at three different sites: the upper rectus, external oblique, and internal oblique of the abdomen. Measurement of diaphragmatic position: The lower margin of the right liver

lobe was identified in the anterior axillary line by ultrasonography. Position of the liver margin in relation to the overlying skin was marked on the skin during the basal period and after the recovery phase, and the difference was measured. Lipid meal ingestion has induced increased muscular activity of the anterior abdominal wall while diaphragmatic activity suffered a progressive inhibition with cephalic displacement. This project will allow an objective assessment of the abdominal muscular response to ingestion of different concentration of lipids. This aspect will allow achieve improvements in the preparation of aliments with beneficial effect on the digestive function.

ORAL PRESENTATION

Management of cholestatic liver diseases

OP35. CHOLESTASIS INCIDENCE IN PATIENTS WITH AUTOIMMUNE HEPATITIS (AIH)

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Introduction. The cholestatic form of AIH is a term used for patients who present high serum levels for alkaline phosphatase and gamma glutamyl transpeptidase (GGT), without histological evidence of biliary damage. Cholestasis is often determined by the presence of overlap syndrome: AIH/PBC (primitive biliary cirrhosis) or AHI/PSC (primitive sclerosing cholangitis). **Material and methods.** We performed tests and researches involving 62 patients identified with AIH in our Medical Clinic between January 2008 and March 2013, the distribution on genders being 59 women and 3 men, with a mean age of 38 ± 6 years. In our protocol study we mentioned demographical and clinical data, cholestatic tests, virologic and immunological tests, liver biopsy with histological results, ERCP exams or MRI, as well as therapy response. In order to establish the diagnosis we used the scoring system of the International Group of Study AIH. Overlap syndrome AIH/PBC was defined by the presence of any two of the following criteria: biochemical cholestatic profile, AMA presence and specific histological damage of the biliary ducts; for definition of AIH/PSC were considered terms such as specific cholangiographic damage and cholestatic profile. **Outcome and discussion.** Cholestatic syndrome was reported in 16 patients (25.08%), meaning 13 women and 3 men. From those, in 7 cases an overlap syndrome AIH/PBC was observed, in 3 cases AIH/PSC and in 6 cases homeostatic form of AIH. Young ages and the absence of ANA (antinuclear antibodies) were correlated with a high incidence of overlap syndromes. **Conclusions.** Cholestatic syndrome is frequent in AIH, it could be determined by the association of PBC or PSC or it could be a specific manifestation of AIH.

OP36. AMA-NEGATIVE PRIMARY BILIARY CIRRHOSIS - CASE REPORT

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SCJUTg Mures, UMFTg Mures

Introduction: Autoimmune liver diseases are a complex group of conditions with hepatitis and/or cholestatic profile, where immunological injury causes progressive liver damage which results in the development of fibrosis and cirrhosis. The main autoimmune liver diseases are autoimmune hepatitis, primary biliary cirrhosis, primary sclerosing cholangitis and the overlap syndrome. **Methods:** So, here we have the case of a 66 years old woman, coming from rural area. She is hypertensive for 15 years and one month ago her family physician identified her with a hepatic cytolysis syndrome during routine analysis. She comes to us in order to run some more tests, accusing moderate physical fatigue. Worth mentioning is that we ran investigations on the patient related to physical fatigue, and besides cytolysis syndrome we have also found elevated values of alkaline phosphatase, gamma glutamyl transpeptidase in the absence of viral hepatitis markers, with negative antimithochondrial antibodies, positive antinuclear antibodies. Hepatoprotective and ursodeoxycholic acid treatment is initiated. The physical examination at admission shows an influenced general condition, normal weight, scleral jaundice, moderate hepatomegaly. Biological: mild thrombocytopenia, elevated alkaline phosphatase, cholesterol, transaminases, ESR's, with a slight hepatomegaly without ultrasound evidence of portal hypertension and with a suggestive histopathologic exam of a precirrhotic phase of chronic destructive nonsuppurative cholangitis. By applying combined treatment consisting of low doses of corticotherapy and ursodeoxycholic acid, the level of transaminases and the inflammatory evidence are decreasing. The patient remained asymptomatic with normal enzymes level. **Discussions and conclusions:** There are particular cases that cannot be considered authentic overlap syndromes. We can include here primary biliary cirrhosis AMA negative or "autoimmune cholangitis" that cannot be differentiated from classical CBP from clinical, serological or histological point of view. We came to the conclusion that this case is a form of autoimmune cholangitis with a predominating hepatitis component which responds very well to corticotherapy.

ORAL PRESENTATION

Colon cancer screening

OP37. COLONOSCOPY PERFORMED ON ASYMPTOMATIC SUBJECTS (SCREENING) – HOW FREQUENTLY DID WE FOUND PATHOLOGY IN CLINICAL PRACTICE?

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The **aim** of our study was to evaluate the frequency of neoplastic pathology (polyps or colorectal cancer) in asymptomatic subjects in whom we performed a screening colonoscopy. **Material and methods:** we included in our study colonoscopies performed in asymptomatic subjects in 2 endoscopy centers from Timișoara, in whom the indication was screening for colorectal cancer. We excluded colonoscopies performed in patients known with polyps and colorectal cancer. We studied the frequency of polyps, significant polyps (>1cm) and colorectal cancer globally and in different age groups. **Results:** between January 2008-December 2012, 1547 colonoscopies were performed in asymptomatic subjects in the 2 endoscopy centers, but only 94.8% (1458 cases) were total colonoscopies. The statistic analysis was performed only on the total colonoscopies. In the 1458 colonoscopies performed in asymptomatic subjects we found polyps in 27.7% cases (404/1458), more frequently in women vs. men (12.4% vs. 15.3%, $p=0.02$). Significant polyps were found in 4.6% (68/1458) cases and colorectal cancer in 1.4% cases. We found more frequently significant pathology in the age group 60-69 years old: 9.7% (141/1458) polyps, 2% (30/1458) significant polyps, 0.3% (4/1458) cancer. On the other hand, between 50-59 years, the number of polyps is higher (11.3%, $p=0.17$), but with a similar number of significant polyps and colorectal cancer (1.9% and 0.3%). There are no differences between the frequency of significant pathology in the age groups 50-54 years and 55-59 years: significant polyps 0.9% vs. 1% ($p=0.93$), colorectal cancer 0.1% vs. 0.2% ($p=0.82$). **Conclusion:** the significant pathology rate (significant polyps and cancer) in colonoscopy performed in asymptomatic subjects was 6% in our study group.

OP38. INCIDENCE OF COLONIC POLYPS IN YOUNG PATIENTS WITH IRRITABLE BOWEL SYNDROME

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Introduction: IBS comprises a group of functional disorders and exclusion of other organic conditions with similar presentation must be done to confirm this diagnosis. Detecting premalignant colonic lesions is an important strategy in prevention of colorectal cancer and surveillance colonoscopy is important. **Aim:** To study the incidence of colonic polyps in young patients diagnosed with IBS. **Material and methods:** A monocentric retrospective study was performed that included 856 patients diagnosed with IBS (62% male and 38% female) under 50 years old (age range 28-50), from January 2012 to April 2013. All patients had clinical symptomatic condition of IBS and underwent total colonoscopy. In all cases colonic polyps were verified by biopsy and endoscopically removed. Histopathology had not shown malignant changes. **Results:** -The overall incidence of colonic polyps was 24% in our study. There were 69% patients with a single polyp and 31% with multiple polyps (21 % with 2 polyps, 5% with 3 polyps, 3% with 4 polyps and 2% with 5 polyps). Anatomic distribution of polyps was: 34%-rectum, 47%-sigmoid, 7%-descending colon, 3%-transverse, 5%-ascending colon and 4%-cecum. The majority of polyps had rectosigmoidian localization. **Conclusions:** The prevalence of polyps in young patients with IBS in the study group was 24 %. The most common localization was the rectum and sigmoid, with a higher incidence in the decade 40-50 years.

ORAL PRESENTATION

Therapy in Chronic HBV infection

OP39. TREATMENT RESULTS WITH PEGINTERFERON ALFA-2A IN PATIENTS WITH HBV CHRONIC LIVER DISEASE

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Introduction: Currently there are two major groups of antiviral therapy in HBV chronic liver disease: PegInterferon alfa-2a and nucleoside/nucleotide agents. The **aim** of this study was to evaluate the response to treatment with PegInterferon alfa-2a of patients with HBV chronic liver disease. **Material and Methods:** We performed a retrospective study on a group of 277 patients with chronic HBV liver disease. Only patients treated for 48 weeks with PegInterferon alfa 2a and in which a viral load at least 6 months after the end of treatment was available were included in our study. We defined complete sustained viral response (complete SVR) as undetectable viral load at at least 6 months after the end of treatment and as a partial sustained viral response (partial SVR) a viral load less than 2000 IU/mL (10000 copies/ml) at 6 months or more after the end of treatment. Patients were assessed between 2008-2012 in the Department of Gastroenterology and Hepatology and in the Department of Infectious Diseases of the "Victor Babes" University of Medicine and Pharmacy Timisoara. **Results:** Of the 277 patients, 206 (74.4%) were HBeAg negative and the remaining 71 (25.6%) HBeAg positive. 17.4% (36/206) of Ag HBe negative patients had SVR, while 11.3% (8/71) of the Ag HBe positive patients had SVR ($p=0.2612$). Among HBeAg negative patients, 2.9% (6/206) had complete SVR and 14.5% (30/206) had partial SVR. In patients with positive HBeAg, complete SVR occurred in 1.4% (1/71) cases and partial SVR in 9.9% (7/71). **Conclusion:** Our study showed a low rate of SVR in patients with HBV chronic liver disease following PegInterferon treatment with statistically insignificant differences between those with HBeAg + and HBeAg-.

OP40. TREATMENT OF CHRONIC HEPATITIS DELTA VIRUS WITH PEG-INTERFERON

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Background: Chronic HDV infection often leads to a severe liver disease, rapidly progressing to liver cirrhosis and hepatocellular carcinoma. The only proven therapy until now is PegIFN. **Aim:** To assess the effectiveness of Peg IFN in chronic HDV infection in patients with chronic hepatitis or compensated cirrhosis and to evaluate the predictive factors of response to treatment. **Methods:** A prospective study which enrolled patients with chronic hepatitis or compensated cirrhosis VHD which successively presented in our clinic between 1 January 2011 and 31 December 2011. Diagnosis of chronic HDV infection was established in patients with HDV IgG antibodies and positive RNA-HDV. All patients were treated with Pegasys 180 mcg/week for 48 weeks. At baseline we determined in all patients complete blood count (CBC), liver function tests, HBV profile (HBs antigen quantitative HBe antigen, anti HBe antibodies, anti HBc antibodies, HBV DNA) and HDV RNA. In the patients without hepatic cytolysis we performed a liver biopsy or Fibromax (Fibrotest). At week 24 we performed CBC, liver function tests, quantitative HBs antigen and at 48 and 72 weeks liver tests, HDV RNA, HBV DNA, quantitative HBs antigen. All adverse events were recorded during treatment. Sustained virologic response (SVR) was defined as HDV RNA undetectable at week 48 and 72 and biochemical response as normal aminotransferases. **Results:** Of the 35 patients eligible for treatment, SVR was recorded in 37.14% and 54.2% had a biochemical response. SVR correlated with low levels of HDV RNA, low levels of HBs antigen at baseline and young age. Treatment was well tolerated, in 3 patients we decided to discontinue the therapy because of severe thrombocytopenia, infec-

tion or flare. **Conclusions:** In a representative group of patients Pegasys proves its effectiveness in treating chronic HDV infection. The quantitative determination of HBs antigen is inexpensive and can be useful in monitoring the treatment.

OP41. THE EFFICACY, COMPLIANCE, AND SIDE EFFECTS OF LONG TERM TREATMENT WITH ENTECAVIR IN NAÏVE AGHBE- NEGATIVE PATIENTS

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Background & Aims. Current therapies for HBV hepatitis do not eradicate HBV, so long-term treatment is usually required. Development of drug resistance is a major concern with long-term treatment. Even with successful therapy, patients remain at risk for reactivation of viral replication and require lifelong monitoring. Another concern is the lack of patient compliance to long-term therapy. The **aim** of our study was to evaluate the long-term efficacy and compliance to entecavir in nucleoside-naïve chronic hepatitis B patients. **Methods:** 112 patients with AgHBe negative hepatitis B naïve to nucleot(s)ide analogues under treatment with entecavir 0.5mg were followed in order to evaluate the treatment efficacy (DNA HBV undetectable), side effects, and compliance. **Results:** The period of follow up was between 48 weeks and 200 weeks (mean 155 ± 25). At week 48, 90% of patients had undetectable HBV DNA, 8% had a 2 log decrease of HBV DNA and 2% had a less than 2 log decrease. No side effects were found, and compliance was evaluated as 100%. At 96 weeks, 110 patients were evaluated: 95% of patients had undetectable HBV DNA, no side effects, 100% compliance. At 144 weeks, 100 patients were evaluated, all with undetectable HBV DNA, no side effects and 100% compliance. At 192 weeks, 60 patients were evaluated: 90% with undetectable HBV DNA, 10% had more than 1 log increase when compared with the

previous evaluation. All 6 patients stopped therapy or skipped more than 10 doses prior to evaluation. Three of them complained of unexpected side effect: polyneuropathy, sensitive neuropathy, blurred vision which disappeared after cessation of entecavir. Two patients developed hepatocellular carcinoma. **Conclusions:** Long-term entecavir for nucleoside-naïve AgHBe- negative patients resulted in high rates of virologic response, with minimal resistance. Compliance was good, but not 100%. Not previously reported side effects are possible and the physician should be aware of this possibility.

ORAL PRESENTATION

EUS – current performances

OP42. THE RESULTS OF EUS FNA BY THE “FANNING” TECHNIQUE IN SOLID PANCREATIC TUMORS, LOCALLY ADVANCED OR METASTATIC

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Background. Endoscopic ultrasound with fine needle aspiration (EUS FNA) is currently the elective method for the pathological diagnosis of the solid pancreatic masses. **Material and Methods.** A retrospective study of the EUS FNA cases between February 2011 and February 2013 in a single center. We included solid pancreatic tumors, either locally advanced or with distant metastases, which are not amenable to percutaneous biopsy. EUS FNA was done with the stylet present, in a single pass, using the fanning technique, mainly with 22G or 25G. Tumor consistency was assessed through elastography in all cases. The material was put on slides, fixed in alcohol and Hematoxilin-Eosine stained. When large fragments were seen, these were fixed in formaldehyde, then included in paraffine, cut and Hematoxilin-Eosine stained. **Results.** 46 patients were included (28 men, 60.9%), with a mean age of 58.6 (range 29 – 83). Diabetes was present in 10 patients (21.7%), one patient had a first degree relative with pancreatic cancer. 13 patients (28.3%) had elevated CA 19-9 serum levels. 18 patients (39.1%) had distant metastases. 19 lesions were located in the head of the pancreas (41.3%) 27 in the body and tail (58.7%). The mean lesion size was 37.7mm (interval 13-70mm). In 20 cases a 22G needle was used (43.5%), 25G needle in 25 cases (54.3%), one patient with 19G needle. There were no EUS FNA related incidents. There were 3 cases without atypical cells, in 43 cases there were atypical cells (93.5%) of which 5 cases of neuroendocrine tumors (10.9%). The rest were adenocarcinomas. **Conclusions.** The single passage fanning technique yields positive diagnosis in more than 90% cases.

OP43. ROLE OF EUS IN THE CHARACTERIZATION OF PORTAL HYPERTENSION SYNDROME IN PATIENTS WITH LIVER CIRRHOSIS (COMPARATIVE STUDY WITH CT)

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Clinical guidelines recommend screening for esophageal varices in cirrhotic patients with upper gastrointestinal endoscopy (EDS), but this method allows only diagnosis of varices that protrude into the lumen and may not appreciate the elements of hemodynamics. **Aim:** to evaluate the utility of three methods (EDS, EUS and CT) in detecting vascular changes associated with portal hypertension and their correlation with complications (UGIB, death). **Material and method:** 15 patients with cirrhosis underwent EDS, EUS and CT. We noted the presence of esophageal/fornix varices and the degree (all three methods), then the presence of periesophageal and perigastric collaterals (by EUS and CT) and their hemodynamic parameters (EUS). Patients were characterized in terms of clinical, paraclinic (CHILD) parameters and evolution (UGIB or death) over a period of 6 months. **Results:** EUS is more useful than EDS in detecting fundic varices (4 patients at EDS, 7 patients at EUS), but has the same accuracy as CT; In addition, EUS can detect perforating veins easier than CT and can detect the direction of blood flow through the varices and its speed. EUS and CT have similar accuracy in detection of perigastric and periesophageal varices and in their grading by vessel diameter. Five patients developed UGIB. Blood velocity in the esophageal varices was positively correlated with the risk of UGIB (average velocity of 12.4 cm/sec in those with UGIB vs. 7.2 cm/sec in those without UGIB, $p < 0.01$). **Conclusions:** EUS and CT are more useful than EDS in detecting fundic varices, and have similar accuracy in the assessment of perigastric and periesophageal venous collaterals. Although it is an invasive method, EUS can provide important hemodynamic data in assessing the risk of UGIB (a higher velocity of blood flow in esophageal varices correlate with an increased frequency of UGIB).

OP44. DIAGNOSTIC YIELD OF STAGING OF EUS FOR CHOLANGIOCARCINOMA

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Aim: Cholangiocarcinomas are rare and polymorphous, often without a clear CT or MRI diagnosis, endoscopic ultrasound (EUS) being able to provide additional information. This study assessed the performance of endoscopic ultrasound in the local staging of cholangiocarcinomas. **Methods:** Data were collected retrospectively. We included patients with cholangiocarcinomas who underwent EUS, with a postoperative histopathologic confirmation and staging. Tumor (T) staging for EUS and histopathologic staging were compared. **Results:** From 2010 to 2012, a total of 54 patients with jaundice of an unknown cause and a EUS suspicion of cholangiocarcinoma were enrolled in the study. 23 underwent surgery, curative or palliative, with postoperative histopathologic confirmation and staging. EUS-FNA was performed in 8 cases. For T staging by histopathology, there were 4 T1 (17%), 3 T2 (13%), 13 T3 (57%) and 3 T4 (13%) tumors. The accuracy of EUS T staging was 91.3%. The sensitivity and specificity of EUS were 71.4% and 100% respectively for T1-T2 tumors, 100% and 80% for T3 tumors, 100% and 100% for T4 tumors. **Conclusions:** EUS has a very high accuracy in cholangiocarcinoma staging, complications being very rare.

OP45. IS ENDOSCOPIC ULTRASONOGRAPHIC CHARACTERIZATION SUFFICIENT FOR THE DIAGNOSIS OF GASTRIC AND ESOPHAGEAL SUBMUCOSAL LESIONS?

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Submucosal lesions in the gastrointestinal tract should be distinguished from extraluminal compressions. EUS gives information about the origin of lesion, morphology and size, but obtaining tissue samples

by FNA allows final diagnosis and optimal management. The **aim** of this study is to show the performances of the EUS for morphological characterization of submucosal tumors compared with histopathologic results. **Material and method** The study retrospectively included patients with suspected submucosal lesions between March 15th (March) 2011 to March 15th (March) 2013 (68 patients). The patients without a submucosal tumor in EUS were excluded from the study (22 patients with extraluminal compression or polyps). The final diagnosis was made by histopathology and immunohistochemistry, the tissue sample was obtained either by FNA or from surgical specimen. EUS characterized each lesion by layer of origin, size, borders and presumptive diagnosis. **Results** Of the 46 patients (52.2% men, mean age 60.8 years) 29 had a histopathologic result. The 14 patients diagnosed with GIST had equal gender distribution, age between 54 and 80 years, most with gastric localization (85.7%). 14.2% (2 patients) had less than 2cm, 35.7% between 2 and 3 cm (5 patients), and 50% had more than 3cm size (7 patients). EUS morphology considered a patient as esophageal leiomyoma, but the histology was positive for GIST. Biopsy was negative in 4 cases diagnosed as GISTs and detected: normal tissue, lymph node, Brunner glands' hamartoma and schwannoma. The sensitivity of EUS morphology for the diagnosis of submucosal tumors was 92.8%, the specificity was 73.3% and the accuracy was 82.7%. **Conclusions** EUS is an accurate method to diagnose the type of submucosal lesion and tissue sample by FNA should be obtained whenever possible. If the lesion is more than 3cm diameter we can proceed to surgical resection for gastric location.

ORAL PRESENTATION

**Clinical ultrasound in digestive emergencies.
Technique, conduct, performance, limitations.****OP46. SENSITIVITY OF THE
ABDOMINAL ULTRASOUND IN THE
DETECTION OF COMMON BILE DUCT
LITHIASIS IN ERCP**

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Introduction: Common bile duct lithiasis is defined as the presence of gallstones within the common bile duct. **Aim:** Evaluation of the accuracy of abdominal ultrasound in prediction of the common bile duct lithiasis. **Material and method:** Retrospective study, including the therapeutic ERCP's performed between 2010-2012 (569), of which lithiasis was detected in 275 (48.33%) cases - 101 males and 174 females. The patients were investigated by means of abdominal ultrasound, biologically and ERCP. **Results:** The average age was 62.1 ± 13.3 , with prevalence of the female gender (63%). The abdominal ultrasound detected common bile duct dilatation in 65.8% of the cases; 69.8% of the cases presented stones in the dilated common bile ducts. Elevated liver enzymes (AST, ALT) were determined in 82.9% of the cases and jaundice in 73.8% of cases. The correlation between the elevated liver enzymes and the common bile duct dilatation is considerable, with a Pearson coefficient of 0.701. The correlation between jaundice and common bile duct dilatation is also significant, with a coefficient of 0.973. Likewise, there is a correlation between the elevated liver enzymes and jaundice with a coefficient of 0.713. The elevated liver enzymes vs. common bile duct dilatation in the prediction of common bile duct lithiasis in ERCP is considerably more significant ($p=0.019$); also, the icteric syndrome vs. elevated liver enzymes is more important ($p=0.04$). The dilated common bile duct vs. common bile duct lithiasis in the prediction of common bile duct lithiasis has

a considerable value with a $p < 0.0001$. **Conclusions:** The elevated liver enzymes have a highly superior prediction in the detection of common bile duct lithiasis in ERCP, followed by the icteric syndrome. The common bile duct dilatation, visualized by abdominal ultrasound, has predictions in the evaluation of common bile duct lithiasis. The abdominal ultrasound has a sensitivity of 65% in the detection of common bile duct lithiasis in dilated common bile ducts and a low sensitivity (13%) in detecting the lithiasis in normal sized common bile ducts.

**OP47. THE ROLE OF THE ABDOMINAL
ULTRASOUND IMAGING IN THE
EVALUATION OF ACUTE VIRAL
HEPATITIS**

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Background: In diagnosing and monitoring of acute viral hepatitis, the main role is held by the viral markers and the biochemical samples of hepatic affection. In the majority of severe forms of acute viral hepatitis, with hepatoprive syndrome, abdominal ultrasound imaging reveals characteristic aspects, suggestive for prolonged or severe evolution of hepatitis. **Material and methods:** We studied 246 cases of acute viral hepatitis hospitalized in the Clinic of Infectious Diseases Oradea in 2012, in whom an abdominal ultrasonography was performed, either to explain the prolonged evolution, either to emphasize the presence of complications, of which 142 patients with hepatitis A (57.7%), 21 with hepatitis B (8.7%), 9 with hepatitis C (3.6%), and 74 patients with EBV or CMV hepatitis (30%). **Results and discussions:** In the majority of patients with acute viral hepatitis (cases with prolonged or severe evolution), the following peculiar aspects, besides hepato-splenomegaly, stood

out on echography: thickening of the gallbladder's walls (198 cases – 80.5%), enlarged gallbladder with tendency to hydrops, and walls with edema (167 cases – 67.9%), perivesical edema (126 cases – 51.2%), catarrhal pancreatitis reaction (108 cases – 43.9%), aspects of choledochitis or pericholedochitis (89 cases – 36.1%). In hepatitis B, all the cases presented one or more of the mentioned echographic modifications (100% of cases), in hepatitis A, 124 cases (87.3%), in hepatitis C (66.6%) and in herpetic hepatitis 45 cases (60.8%). **Conclusions:** In acute viral hepatitis, the ultrasound imaging emphasis peculiar aspects (the vesicle hydrops, the biliary parietal edema, the catarrhal pancreatitis reaction, choledochitis or perivisceritis), all of them representing indicators of severe or prolonged evolution, which allows a suitable and early therapeutic approach. The aspect is more striking in acute viral hepatitis B and A. **Bibliography:** 1. Sudhamshu K.C. Ultrasound findings in acute viral hepatitis. Kathmandu University Med J, 2006, Vol. 4, No. 4, Issue 16, 415-418. 2. Tchelepi H., Ralls P.W., Radin R., Grant E., Sonography of Diffuse Liver Disease. J Ultrasound Med, 2002, 21:1023–1032. 3. Kurtz A.B., Rubin C.S., Cooper H.S., Nisenbaum H.L., Cole-Beuglet C., Medoff J., Goldberg B.B. Ultrasound findings in hepatitis. Radiology. 1980; 136(3):717-23.

OP48. THE USEFULNESS OF ABDOMINAL ULTRASOUND FOR THE EVALUATION OF PATIENTS WITH ACUTE PANCREATITIS

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Aim: to assess the usefulness of abdominal ultrasound for the evaluation of patients with acute pancreatitis (AP). **Methods:** Our retrospective study included 819 hospitalized patients with AP. The etiology of AP was: biliary – 46.6%, alcoholic – 31.9% and non-alcoholic/non-biliary – 21.5% of cases.

According to the Atlanta criteria, 60.5% of patients had mild and 38.5% severe AP. Ultrasound examination was performed in emergency at admission and in follow-up at 2-3 days. **Results:** The pancreas was visible by ultrasound in 71.4% of all patients at admission, in a significantly higher number of cases in mild AP as compared with severe AP: 79.6% vs. 58.5%, $p < 0.0001$. In patients with biliary etiology, the ultrasound examination performed in emergency established the etiology in 86.8% of cases. An enlarged, hyperechoic, bursa omentalis (described at any moment during hospitalization) was observed in a significantly higher number of patients with severe AP vs. mild AP: 14.2% vs. 5.6%, $p < 0.0001$. **Conclusion:** Abdominal ultrasound examination was a useful method for the emergency evaluation of patients with AP, the pancreas being visible in 71.4% of patients and biliary etiology being established in 86.8% of cases. The large hyperechoic bursa omentalis is a useful ultrasound sign for prediction of severe outcome of AP.

OP49. MAJOR BLEEDING AFTER PERCUTANEOUS ULTRASOUND GUIDED LIVER INTERVENTIONS. ROLE OF US AND CEUS IN THE EMERGENCY DIAGNOSIS.

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Background. Bleeding after percutaneous echo-guided interventions in the liver is a rare event, occurring in 1-2 percent of cases. Ultrasound is a very good method to diagnose this complication and to assess its severity. CEUS is a well accepted method to characterize focal liver lesions with potential role in demonstrating an active abdominal bleeding. **Aim.** To assess the diagnostic accuracy of US and CEUS in major bleeding after percutaneous interventions. **Material and methods.** Between 2008 and 2013 we have performed 1800 liver biopsies (910 for chronic hepatopathies and 890 for liver tumors), 585 percutaneous ablative treatments (185 RFA sessions and 400 PEI sessions) and 215 drainage procedures (80

liver abscess treatments and 140 percutaneous biliary drainages). For PEI a platelet count (PLT) over 60.000 and an INR below 1.4 was accepted. For liver biopsy, RFA and drainages all the patients had a PLT over 80.000/mm³ and an INR below 1.3. After the intervention the patients were followed-up for 24 hours (clinically, lab tests and ultrasound). In cases with significant bleeding (hypotension, decreased Hb level >3 g%,) and US signs of bleeding (intrahepatic ± intraperitoneal fluid collections) a CEUS examination was performed. **Results:** The total rate of bleeding for liver biopsy, PEI, RFA, and drainage procedures was 0.66%, 0.25%, 1.62% and 0.46% respectively. Among them 0.22%, 0%, 0.54%, 0% and 0% respectively had a significant bleeding, which required blood transfusion (3 patients) or open surgery (2 patients). The rate of significant bleeding was higher for liver biopsy performed for diffuse hepatopathies than for liver tumors (0.33% vs. 0.11%, $p < 0.05$). The US signs in case of major bleeding (5 patients) were: intrahepatic haematoma (2 patients, 12-15 cm in maximal diameter), intrahepatic haematoma (16-18 cm) plus large intraperitoneal fluid collection (2 patients) or large intraperitoneal fluid collection (1 patient). CEUS was performed in 4 patients and was able to better delineate the intrahepatic hematoma (4 patients) and to demonstrate the active bleeding (1 patient). **Conclusions:** Significant bleeding after percutaneous echoguided interventions in the liver is a rare event occurring in less than 2% of cases. Ultrasound is the method of choice to certify the bleeding and to assess its severity. CEUS is superior to US in assessing the size and shape of intrahepatic hematoma and the character of bleeding (active or inactive).

ORAL PRESENTATION

Hepatocellular carcinoma - from diagnosis to transplantation**OP50. DIFFERENCES BETWEEN RECOMMENDED AND PERFORMED TREATMENT IN PATIENTS WITH HEPATOCELLULAR CARCINOMA**

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Aim: to evaluate the differences between recommended and performed treatment in patients diagnosed with hepatocellular carcinoma (HCC) in our Department. **Methods:** Between January 2007- December 2011, 258 patients were diagnosed in our Department with HCC by specific imaging techniques (CEUS, CT, RMN). The patients were classified according to Barcelona Clinic Liver Cancer (BCLC) staging system. We analyzed the differences between recommended and performed treatment in patients diagnosed with hepatocellular carcinoma (HCC) according to the BCLC stage. **Results:** According to BCLC staging system the patients were classified as: stage 0- 2 patients (0.8%), stage A-64 patients (25.9%), stage B-36 patients (14.6%), stage C-87 patients (35.2%) and stage D-58 patients (23.5%). In the 2 patients diagnosed with stage 0 HCC, PEIT was recommended and performed in both patients. In stage A HCC patients the following differences between recommended and performed treatments were observed: PEIT – 14.2% vs. 14.2% ($p=1$), RFA- 4.6% vs. 4.6% ($p=1$), surgical resection – 14.2% vs. 9.5% ($p=0.58$), TACE – 4.6% vs. 3.1% ($p=0.98$), palliative treatment: 0% vs. 6.2%. In stage B HCC patients the following differences between recommended and performed treatments were observed: PEIT – 13.9% vs. 13.9% ($p=1$), surgical resection: 2.8% vs. 0%, RFA- 2.8% vs. 2.8% ($p=1$), TACE: 11.1% vs. 11.1% ($p=1$), Sorafenib: 58.3% vs. 5.6% ($p<0.0001$), palliative treatment: 11.1% vs. 66.6% ($p<0.0001$). In stage

C HCC patients the following differences between recommended and performed treatments were observed: Sorafenib: 43.7% vs. 4.6% ($p<0.0001$), palliative treatment: 56.3% vs. 95.4% ($p<0.0001$). In all stage D patients, palliative treatment was recommended and performed. **Conclusions:** We observed in our cohort of patients an important difference between the number of patients in whom Sorafenib was recommended and those who received the treatment (only 10.1% received the treatment).

OP51. DEBDOX - A NEW APPROACH IN PATIENTS WITH INOPERABLE HCC

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Hepatocellular carcinoma (HCC) is an increasingly common tumor with a poor prognosis and limited systemic treatment options; approximately 80% of patients die within a year of diagnosis. In men, it is the fifth most common cancer worldwide and the third leading cause of cancer-related death. TACE is the standard of care for nonsurgical patients presenting with large or multinodular noninvasive tumors isolated to the liver and with preserved liver function. Overall survival at 3 years remained low (<30%) for intermediate HCC patients. The DC Bead is a novel drug delivery embolization system, comprising biocompatible, nonresorbable hydrogel beads capable of being loaded with anthracyclin derivatives such as doxorubicin. Advantage: lower systemic exposure to Doxo when compare to IV or IAH injection, higher degree of tumor necrosis than IV or IAH injection of Doxo, significantly longer drug releasing than in conventional TACE (cTACE with Lipiodol). Precision V: randomized controlled trial, 212 patients intermediate HCC included, doxorubicin loaded DC Bead vs. conventional TACE. **Results:** the drug-eluting bead group showed higher rates of complete response, objective response, and disease control compared with

the cTACE group (27% vs. 22%, 52% vs. 44%, and 63% vs. 52%, respectively). Patients with Child-Pugh B, ECOG 1, bilobar disease, and recurrent disease showed a significant increase in objective response ($P = 0.038$) compared to cTACE. DC Bead was associated with improved tolerability, with a significant reduction in serious liver toxicity ($P < 0.001$) and a significantly lower rate of doxorubicin-related side effects ($P = 0.0001$). TACE with DC Bead and doxorubicin is safe and effective in the treatment of HCC and offers a benefit to patients with more advanced disease.

OP52. ENHANCED ERYTHROCYTE MEMBRANE EXPOSURE OF PHOSPHATIDYLSERINE FOLLOWING SORAFENIB TREATMENT: AN IN VIVO AND IN VITRO STUDY

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Sorafenib (Nexavar), a polytyrosine kinase inhibitor, stimulates apoptosis and is thus widely used for chemotherapy in hepatocellular carcinoma (HCC). Hematological side effects of Nexavar chemotherapy include anemia. Erythrocytes may undergo apoptosis-like suicidal death or eryptosis, which is characterized by cell shrinkage and phosphatidylserine-exposure at the cell surface. Signaling leading to eryptosis include increase in cytosolic Ca^{2+} activity ($[Ca^{2+}]_i$), formation of ceramide, ATP-depletion and oxidative stress. The present study explored, whether sorafenib triggers eryptosis in vitro and in vivo. **Methods:** $[Ca^{2+}]_i$ was estimated from Fluo3-fluorescence, cell volume from forward scatter, phosphatidylserine-exposure from annexin-V-binding, hemolysis from hemoglobin release, ceramide with antibody binding-dependent fluorescence, cytosolic ATP with a luciferin-luciferase-based assay, and oxidative stress from 2',7' dichlorodihydrofluorescein diacetate (DCFDA) fluorescence. **Results:** A 48 h exposure of erythrocytes to sorafenib ($\geq 0.5 \mu M$) significantly increased Fluo 3 fluorescence, decreased forward scatter, increased annexin-V-binding and triggered slight hemolysis ($\geq 5 \mu M$), but did not significantly modify ceramide

abundance and cytosolic ATP. Sorafenib treatment significantly enhanced DCFDA-fluorescence and the reducing agents N-acetyl-L-cysteine and tiron significantly blunted sorafenib-induced phosphatidylserine exposure. Nexavar chemotherapy in HCC patients significantly enhanced the number of phosphatidylserine-exposing erythrocytes. **Conclusions:** The present observations disclose novel effects of sorafenib, i.e. stimulation of suicidal erythrocyte death or eryptosis, which may contribute to the pathogenesis of anemia in Nexavar-based chemotherapy.

OP53. HEPATOCELLULAR CARCINOMA INCIDENCE IN A POPULATION OF NORTHEASTERN ROMANIA – PRELIMINARY DATA

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Background: There is a large geographic variation in incidence levels and time trends of hepatocellular carcinoma (HCC). Chronic hepatitis and liver cirrhosis (LC) are major risk factors for HCC. The proportion and characteristics of cases with LC are not well documented. Our aim was to record demographic, viral and tumor characteristics of HCC in patients diagnosed in northeastern Romania, with and without LC. **Methods:** The study included 3386 patients with chronic hepatitis of different etiologies, hospitalized in the Institute of Gastroenterology and Hepatology Iasi, from March 2011 to March 2013, evaluated by clinical examination, biological markers, transabdominal ultrasound, contrast enhanced CT, MRI and/or CEUS. **Results:** 678 patients were included (413 men, 265 women) with a mean age of 60.9 +/- 12.9. HBV infection was present in 279 cases – 41.15% (97 associated VHD infection), HCV infection was found in 252 cases – 37.16%, other causes in 147 cases – 21.68%. 42% of patients had tumors greater than 5cm at diagnosis and 57% were diagnosed after presenting with symptoms. **Conclusions:** Approxima-

tely 80% of HCCs are associated with a known risk factor, mainly hepatitis B and cirrhosis which is a true precancerous state, whatever its cause. The large number of patients detected via symptoms and with large tumors reinforces the need for vigilance in screening.

OP54. DONOR OUTCOMES IN RIGHT LOBE ADULT LIVING DONOR LIVER TRANSPLANTATION: A SINGLE CENTER EXPERIENCE IN ROMANIA

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Background: Living donor liver transplantation (LDLT) is a successful procedure with patient survival rates that are equivalent to those with deceased donor liver transplantation. Due to the cadaveric organ shortage, LDLT is a constantly growing part of orthotopic LT performed in our center. Living donors represents a large pool of organs and seem to be the only immediately alternative. The risk for the donor is balanced by the great benefit to the recipient, as well as the donor's psychological benefit. **Aim:** The risks and complications of living liver donation are not clearly known and continue to be widely debated. The aim of our study is to describe a single center experience over a 9-year period. **Patients and methods:** We reviewed all LDLT performed on our center between February 2003 and October 2012. Basic demographic details were collected and various pre and post-operative parameters were obtained. **Results:** There were 53 living liver donation procedures, all with right lobe liver graft; 39 had a right hepatectomy (RH: without the middle hepatic vein) – 73.5 % and 14 had an extended right hepatectomy (ERH: segments 5-8 plus the middle hepatic vein). The mean age at the time of surgery 32.7 years old, 56.81% of whom were women, 79.54% of the donors were genetically- and emotionally - related to the recipients. 66.67% of

donors were married and 73.91% live in urban area. All donors had pre-operative imaging to define vascular and biliary anatomy and liver biopsy. The complications were graded with the Clavien classification system. Of the whole complications, 51.6% were Clavien class I, 31.01% were Clavien class 2, 17.39% were Clavien class 3 and there were no Clavien class 4 or 5. Donor survival rate was 100% in our center with mean 9 days hospitalization rate in post-operative period. Volumetry was retrospectively performed at 1 month, 6 months and 1 year after operation, at 1 month the regeneration ratio were 65.5% and at 6 months 87.9%. At 1 year after liver donation all the donors have returned to their normal daily activities. **Conclusion:** Although living liver donation was associated with moderate morbidity, the majority of the complications are Clavien 1 or 2. Overall, living liver donation is a safety modality in liver transplant.

OP55. CONTRAST ENHANCED VERSUS CONVENTIONAL ULTRASOUND GUIDED BIOPSY OF INTERMEDIATE OR ADVANCED HEPATOCELLULAR CARCINOMA (HCC) IN CIRRHOTIC PATIENTS.

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Background: Although the diagnosis of HCC is based on EASL –AASLD criteria there are several circumstances (i.e low AFP levels in patients with BCLC class B or C or inconclusive imaging results) where pathological evaluation is recommended. The sensitivity of US guided PB with large needles in the diagnosis of HCC varies between 86 and 90%. The causes for inconclusive results are: a) lack of clearly US visualization of the tumors; b) large tumors with necrotic areas; c) inapparent HCC on US with a portal vein thrombosis (PVT). **Aim:** The aim of our prospective study was to evaluate the sensitivity of CEUS guided (CEUS- PB) versus US guided biopsy (US- PB) in cirrhotic patients with liver masses. **Subjects**

and methods: 80 patients with cirrhosis and hepatic tumors (BCLC class B and C) were referred for liver biopsy. CEUS –PB and US-PB were performed 45 and 35 patients. The 2 groups were matched to have similar liver function and tumor characteristics (Child Pugh class, frequency of large, poor visualized and inapparent lesions with PVT). The lesions in the CEUS –PB group were larger than those in US-LB group (mean diameter 7.7 cm vs. 6,5 cm)($P<0.05$). Biopsy was performed with an 18G Bard needle coupled on Biopsy Gun. CEUS guidance was used in arterial phase, the needle being guided in the enhancing areas. **Results:** 8 patients (5 from PB CEUS group and 3 from US-PB) had other pathological results than HCC (cholangiocarcinoma, melanoma and NET metastasis) and were excluded. The overall sensitivity for the diagnosis of HCC was higher in group with CEUS – PB (95%; 38/40) than in US –PB group (75%; 24/32)($P<0.05$). The sensitivity was also significantly higher for large, less US visualized and inapparent tumors with PVT. The patients with inconclusive pathological results after US- PB were biopsied than with CEUS guidance, in all cases the final diagnosis could be established. No major complications occurred in both groups. **Conclusions:** 10% of advanced hepatic tumors detected on a cirrhotic liver are not HCC which emphasize the need of PB in such cases. CEUS guided biopsy is a very powerful diagnostic technique in patients with intermediate or advanced HCC. It significantly improves the sensitivity of the procedure especially in patients with large tumors or those poorly visualized on conventional ultrasound.

ORAL PRESENTATION

Emergencies in digestive endoscopy

OP56. ETIOLOGY OF UPPER GASTROINTESTINAL BLEEDING AND SHORT-TERM PROGNOSIS IN PATIENTS WITH HEPATIC CIRRHOSIS

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The **aim** of the study was to determine the causes of upper gastrointestinal bleeding in patients with hepatic cirrhosis and their short-term prognosis. **Material and method.** The study included 112 patients with liver cirrhosis. They were referred to the emergency unit IRGH Cluj-Napoca for upper gastrointestinal bleeding, during November 2012-March 2013. Emergency UGE was performed in all patients and they were followed prospectively for 30 days. We analyzed the causes of gastrointestinal bleeding in these patients and the occurrence of recurrent bleeding or death. **Results.** The patients had a mean age of 57.91 years (range 20-83 years) with a prevalence of male patients (69.64%). Mean time to UGE was 4 hours and 9 minutes. The mean period of hospitalization was 9.29 days. Most patients had variceal upper gastrointestinal bleeding (74.11%). Other causes were: ulcer 13.39%; gastritis/duodenitis 3.57%; Mallory-Weiss syndrome 2.68%; esophagitis 1.79%; gastric cancer 1.79%; Dieulafoy lesions 0.89%; angiodysplasia 0.89%. In one patient we could not determine the cause of bleeding. Death occurred in 19.64% cases. Mortality rate was higher for variceal bleeding compared to nonvariceal bleeding (21.69% vs. 13.79%, $p=0.357$). Recurrent bleeding occurred in 15 patients (13.39%), variceal bleeding was higher than nonvariceal bleeding (15.66%, respectively 6.90%, $p=0.233$). Deaths have occurred in a higher proportion of patients who had recurrent bleeding (40%) compared with those who did not have recurrent bleeding (16.49%) ($p=0.03$). **Conclusions.** The majority of patients with liver cirrhosis had bleeding from varices (74.11%). Ulcer and gastritis/duodenitis were the most frequent causes of nonvariceal bleeding. Death

occurred in 19.64% of patients, more frequently in variceal bleeding. Recurrent bleeding has been relatively frequent (13.39%). Mortality rate was high in patients with recurrent bleeding (40%).

OP57. PREDICTIVE FACTORS FOR REBLEEDING AND MORTALITY IN NON-VARICEAL UPPER DIGESTIVE BLEEDING

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Aim: To assess the predictive factors for rebleeding and mortality in patients with non-variceal upper digestive bleeding (UDB). **Material and methods:** We have performed a retrospective study including 1842 patients with non-variceal UDB (644 women and 1198 men), mean age 61 ± 15 years admitted in the Department of Gastroenterology and Hepatology, Emergency County Hospital Timisoara during 2003-2012. We have analyzed the variables that might influence the rebleeding and mortality rate of these patients: demographic characteristics, pre-endoscopic aspects of severity-haemorrhagic shock (tachycardia, hypotension), consumption of NSAIDs or anticoagulants, severity of anemia, Forrest classification (for the 1293 patients with UDB of ulcerous etiology), as well as Rockall, Baylor (pre-endoscopic, endoscopic and total) and Cedar-Sinai scores used for stratifying the risk in patients with UDB. For the statistical analysis we have used the method of multivariate regression. **Results:** Of the 1842 patients, a number of 151 have rebleed (8.2%), and 115 died (6.2%). The rebleeding rate was not influenced by the consumption of NSAIDs/anticoagulants ($p > 0.05$). The presence of active bleeding during endoscopy was significantly correlated with the risk of rebleeding, and it was noticed in 73/151 patients that have rebleed (48.3%)

vs. 231/1407 patients without rebleeding (16.4%) ($p < 0.0001$). The independent variables that presented a statistically significant correlation with the death of the patients were the following: Aspirin consumption ($p = 0.03$), tachycardia ($p = 0.01$), rebleeding ($p = 0.04$), hypotension ($p < 0.0001$). The consumption of other AINS, anticoagulants, the level of haemoglobin and the age didn't influence the survival ($p > 0.05$). By comparing the three risk scores, the Rockall score proved to be statistically significant more useful regarding the prediction of mortality ($p = 0.004$). For the subgroup of patients with UDB of ulcerous etiology, the presence of active bleeding/signs of recent bleeding at endoscopy (Forrest classification I and II) was significantly correlated with the risk of death: active bleeding was noticed in 64% of the patients who died (48/75 patients) vs. 51.7% of patients who survived (630/1218 patients) ($p = 0.03$). **Conclusions:** The factors that were significantly correlated with death in patients with non-variceal UDB were by the Aspirin consumption, the presence of haemorrhagic shock and rebleeding. The Rockall score proved to be the most reliable in predicting mortality. The presence of active bleeding at endoscopy was correlated with an increased risk of rebleeding and death.

OP58. HDS NONVARICEALA ASOCIATA CU CONSUMUL DE ANTICOAGULANTE ORALE - PARTICULARITATI CLINICE SI ENDOSCOPICE.

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Obiective. Studiul frecventei cazurilor de HDS asociate cu ACG si caracterizarea clinico-endoscopica a acestor pacienti prin comparatie cu cazurile de HDS fara ACG.

Pacienti si metoda. S-au comparat doua loturi de pacienti cu HDS nonvariceala: (1) un lot de 35 pacienti cu tratament ACG si (2) un lot de 128 pacienti fara tratament ACG, din punct de vedere demografic, clinic, paraclinic, al modificarilor endoscopice si al evolutiei.

Rezultate. Varsta media a fost mai mare in lotul 1

($68,4 \pm 9,5$ ani vs $42,6 \pm 14,5$ ani). Nu au existat diferente intre loturi in ceea ce priveste distributia pe sexe, parametri hemodinamici la internare, rata de resangereare, second-look endoscopic, frecventa interventiilor chirurgicale sau mortalitate. In lotul 1, valoarea Hb la internare a fost mai mica, ($8,6$ g/dL vs $9,5$ g/dL), necesarul de transfuzii mai mare (in medie $1,3$ unitati de MER vs $0,7$) si durata de spitalizare mai mare (in medie $6,3$ zile vs $4,5$ zile). Doar 11 pacienti (31.4%) erau protejati gastric cu IPP iar 29 (82%) nu isi monitorizaseră INR-ul in ultimile 3 luni. La 3 luni de la externare s-au inregistrat inca 2 decese (total 4). Cea mai frecventa cauza de sangerare a fost ulcerul gastro-duodenal (35% lotul 1 vs 58% lotul 2, $p < 0.01$); nu s-a putut identifica sursa de sangerare la 30% din pacientii lotului 1 fata de 6% din pacientii lotului 2 ($p < 0.01$).

Concluzii. HDS nonvariceala asociata cu ACG orale are o incidenta crescuta. Persoanele afectate sunt mai in varsta, au anemie mai severa la internare, necesar de transfuzii si spitalizare mai mare, dar mortalitatea pe perioada spitalizarii nu este mai mare. Este necesar ca pacientii cu ACG la risc de HDS sa se protejeze cu IPP si cu testare periodica a INR.

OP59. THE EFFICIENCY OF ENDOSCOPIC HEMOSTASIS IN ICU-RELATED UGIB

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Aim To evaluate the efficiency of hemostatic maneuvers in critically ill patients requiring mechanical ventilation. **Methods** We evaluated the relationship between the type of hemostatic maneuver and the rebleeding rate. By "rebleeding" we understand an upper GI bleeding in the same location that occurs within the next 7 days after a successful hemostatic procedure. Between the 1st of Feb 2011 and the 1st of Feb 2013 we had 125 upper GI bleedings in the ICU. Of these, 57 were from duodenal ulcers, 36 were gastric ulcers, 13 were vascular lesions and 19 were lesions of the anastomotic structures. The hemostatic methods used were injection of adrenaline solution 1/10000, absolute alcohol and thermic coagulation. Our study

included only patients who received PPI's for stress-induced ulcer and those patients with an efficient initial hemostasis. **Results** The rebleeding rate after adrenaline injection for Forrest 1-2 duodenal ulcers was 12% (7), for Forrest 1-2 gastric ulcers was 13.8% (5), for vascular lesions was 61% (8) and for anastomotic structure lesions was 63% (12). The rebleeding rate after adrenaline and alcohol injection for Forrest 1-2 duodenal ulcers was 10.5% (6), for Forrest 1-2 gastric ulcers was 8.3% (3), for vascular lesions it was 46% (6) and for anastomotic structure lesions it was 52.6% (10). The rebleeding rate after using all 3 mentioned methods for Forrest 1-2 duodenal ulcers was 5.2% (3), for Forrest 1-2 gastric ulcers it was 5.5% (2), for vascular lesions it was 30.3% (4) and for anastomotic structure lesions it was 31% (6). **Conclusions** The "classic" hemostatic methods are ineffective when dealing with ICU-related UGIB, partially because the associated pathology is more severe than in patients presenting primarily for UGIB.

ORAL PRESENTATION

Therapy in HCV Chronic infection

OP60. A WEEK-8 MODEL PREDICTING EARLY VIROLOGIC RESPONSE (EVR) AND FUTILITY OF BOCEPREVIR (BOC), PEGINTERFERON (PEG) AND RIBAVIRIN (RBV) REGIMEN

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Background: A number of randomized clinical trials (RCTs) examining the efficacy and safety of triple therapy in genotype-1 HCV-infected patients have been published. **Aim:** To determine the efficacy of BOC, PEG and RBV regimen in genotype-1 treatment-experienced HCV-infected patients with advanced fibrosis in real-life setting. **Method:** 149 treatment experienced patients (79.9% relapsers) with bridging fibrosis (59.7% F3) or cirrhosis (40.3% F4), mean age 53.6 years, male 52.3%, registered in the Romanian NPP Database were included into the study and followed prospectively. **Results:** More than 1 log drop in viral load at week 4 was present in 69.2% and more than 2log drop in 33.8% of patients; the rate of undetectable HCV RNA at week 8 was 67.4%, at week 12 was 85.6% and at week 24 was 86.1%. Higher weight ($p=0.004$), a <1 log drop in viral load after the lead-in phase ($p=0.008$), a <2 log drop in viral load after 4 weeks of BOC ($p<0.0001$) and a higher hemoglobin level at week 8 of antiviral therapy ($p=0.01$) were predictive factors associated with lack of EVR. Independent predictive factors for lack of EVR are: level of hemoglobin at week 8 and HCV RNA decrease with <1 log at week 4. Based on these variables a logistic regression model was created. C-statistic for this model is 0.80, with a sensitivity of 85.7% and specificity of 71.4% for a cut-off value of 0.1066. **Conclusion:** Triple therapy with BOC,

PEG and RBV in this cohort of real-life genotype-1 HCV-infected patients with bridging fibrosis/cirrhosis showed robust EVR rates comparable to those reported in RCTs. A week 8 model predicting lack of EVR was created, with good clinical utility. Based on this model, stopping rule at week 8 of therapy can be developed and validated in a large prospective cohort.

OP61. THE PREDICTIVE ROLE OF INTERFERON GAMMA INDUCTIBLE PROTEIN-10 FOR VIROLOGICAL RESPONSE IN CHRONIC HEPATITIS C

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Background. Multiple factors contribute to virologic response in chronic hepatitis C (CHC). One of them is interferon-gamma inducible protein-10 (IP-10). Its level reflects the status of interferon-stimulated genes (ISGs) which in turn is associated with virologic response to antiviral therapy. **Objectives.** The aim of the study was to evaluate the role of serum IP-10 levels on sustained virologic response (SVR) and the association of this parameter with insulin resistance (IR), fibrosis and activity. **Methods.** One hundred seventy two non-diabetic CHC patients with biopsy proven CHC, genotype 1 were studied. Serum levels of IP-10 were assessed by ELISA method. Insulin resistance (HOMA-IR), stages of fibrosis and degrees of activity were evaluated histologically and by FibroTest and ActiTest (Biopredictive). Area under receiving operating characteristic curve (AUROC), sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV) of IP-10 were assessed. **Results.** We obtained a cut-off value of 392pg/ml to discriminate between responders and nonresponders. SVR was obtained in 94/172 patients (54.65%) with IP-10 < 392 pg/ml and in 78/172 patients (45.3%) with IP-10 >392 pg/ml ($p<0.0001$). AUROC for SVR was 0.865, with 91.8% sensitivity, 71.4% specificity, 79.5% PPV and 87.0% NPV. IP-10 < 392 pg/ml was associated with

less fibrosis ($p < 0.0001$) and also by FibroTest. An association between IP-10 levels and histologic activity ($p = 0.004$) and ActiTest ($p < 0.005$) was found. In responder patients with lower IP-10 levels, HOMA-IR was lower than in nonresponders ($p = 0.022$). In multivariate analysis IP-10 levels and fibrosis stage were independent predictors for SVR. **Conclusions.** The assessment of serum IP-10 level is a predictive factor for SVR and correlates with fibrosis, activity and IR.

* equal contribution to this study

OP62. DIABETES MELLITUS, THERAPEUTIC RESPONSE AND CHRONIC HEPATITIS C

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Aim: assessing the evolution and therapeutic response of diabetics infected with hepatic C virus as compared to nondiabetics. **Material and method:** we studied 69 patients with diabetes mellitus (DM) and C virus chronic hepatitis (CHC) (group A) and 72 CHC nondiabetic age-matched patients (group B) who underwent antiviral treatment (pegylated interferon α and ribavirine). We studied the viral load, the severity of liver fibrosis according to the Metavir score by liver biopsy and/or transient elastography (FibroScan), the early virologic response (EVR) and the sustained virologic response (SVR). **Results and discussions:** in group A, 24 patients had T1DM and 45 patients – T2DM, the mean age was 49. The mean age in group B was 44. Severe fibrosis (F3-F4) was found in 48 of group A patients (69.5%) and in 15 from group B patients (20.8%) ($p < 0.05$). The early virologic response was found in 48 patients in group A (69.56%) and in 57 patients from group B (79.16%) (NS). SVR was found in 39 from group A patients (56.5%) and in 42 from group B patients (58.3%) (NS). 30 diabetic patients needed OAD/insulin doses adjustment during treatment. There were 30 diabetic patients and 16 non-diabetic patients who received statines for associated dislipidemia and/or cardiac diseases. In both diabetic and non-diabetic patients treated with statines the SVR was higher (60% vs. 62.5%) but without statistical significance. **Conclusions:** even though severe fibrosis is significantly more

frequent in diabetics, the EVR and SVR did not seem to be influenced. Almost half of diabetic patients needed OAD/insulin doses adjustment during treatment. Statines seem to improve SVR in both diabetic and non-diabetic patients with chronic hepatitis C.

OP63. ANEMIA AND ITS EVOLUTION IN HCV PATIENTS TREATED BY TRIPLE THERAPY

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Background: Triple therapy (PegIFN, Ribavirin and a protease inhibitor- Boceprevir or Telaprevir) are the new schemes of treatment recently approved in Europe and USA for the patients with chronic hepatitis C genotype 1. Phase III studies have shown that triple therapy can cause higher degrees of anemia when compared with treatment with peginterferon and ribavirin alone. **Patients and method:** We followed 56 patients with advanced stages of fibrosis (F3 and F4 Metavir) treated with Telaprevir (40) or Boceprevir (16) added to peginterferon and ribavirin until 48 weeks (F3 patients, naïves or relapsers to previous biotherapy received only 24 weeks of therapy when treated with Telaprevir). Anemia was classified as mild (10.5-11.9 g/dl), moderate (8.5-10.5 g/dl) and severe (< 8.5 g/dl). Patients with symptomatic anemia or with significant drop of haemoglobin level were treated by reduction of ribavirin dose, administration of erythrocyte growth factors or by red blood cell transfusions. **Results:** Our group had a mean age of 53.5 years (31-70), F/M 34/22, 50% were with F3 and 50% with F4, 4 patients were treatment naïve, 75% relapsers and 17.85% nonresponders to previous treatment. Mean haemoglobin level was 14.1 ± 1.9 g/dl. Anemia developed in 75% of patients. Lowest haemoglobin level was 10 ± 1.2 g/dl in telaprevir group and 10.3 ± 1.4 g/dl in boceprevir patients. Hemoglobin nadir was reached in weeks 10-12 of therapy. Anemia required ribavirine dose reduction in 30.35%, erythropoietin in 25% and erythrocyte transfusions in 12.5%. In 2 cases treatment was stopped due to severe anemia. **Conclusions:** Triple therapy with protease inhibitors can result in clinically significant anemia, requiring frequent monitoring and adjustment of treatment. Anemia is one of factors making that patients receiving triple therapy should be monitored in experienced tertiary centers.

ORAL PRESENTATION

Genetics in gastrointestinal diseases

OP64. CLINICAL, MORPHOLOGICAL AND IMMUNE-GENETIC CORRELATIONS IN CELIAC DISEASE IN CHILDREN

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Introduction: It has been postulated that IgA anti tissue-transglutaminase (tTG) or anti-endomysium antibodies (EMA) can be false negative in young children. IgA- and IgG-antibodies against deaminated, synthetic gliadin peptides (DGP) were described as valuable diagnostic parameters in pediatric celiac disease (CD). **Aim:** To assess the correlations between different forms of celiac disease, immunological, morphological parameters and haplotypes. **Methods:** The study included 2 groups. The first lot was made of 30 children diagnosed with CD by screening. The second lot was composed by 30 control subjects matched for age and gender. The diagnosis was based on combined IgA/IgG DGP/tTG assay besides intestinal biopsy. We assessed the HLA DQ2 and DQ8 using PCR technique to all celiac patients and in control lot. **Results:** From 30 celiac patients, 18 patients presented atypical form of disease, 4 patients presented silent form of disease, and only 8 associated the classical form of disease. Alleles distribution in group of celiac patients was: 28 were positive for HLA DQ2 and from them 7 patients associated haplotype HLA DQ2 homozygous and 21 associated haplotype HLA DQ2 heterozygous. 2 cases presented HLA DQ8. In the control lot, 2 subjects from 30 associated haplotype HLA DQ2 heterozygous. The rest were negative for HLA DQ2 or DQ8. We tried to correlate the clinical forms of disease with IgA/IgG DGP/tTG antibodies serum level, severity of villous injury and haplotype. Bivariate and multivariate conditional logistic analysis were performed. We obtain a significant correlation between IgA/IgG DGP/tTG serum level and severity of villous injury ($r = 0.621092$). We also established a positive correlation only between subgroup Marsh IIIc and the severe classic form of celiac disease. The forms of disease and the haplotypes did not correlate. **Conclusions:** The polymorphism of CD presenting forms as well as the lack of concordance between clinical symptoms

and the type of intestinal injury, make the intestinal biopsy the gold standard for diagnosis when the clinical suspicion of gluten intolerance exists. The HLA polymorphism seems to have no impact on clinical forms of disease. The presence of molecules DQ2 or DQ8 is mandatory, but not sufficient for development of celiac disease. Due to its high negative predictive value, the assessment of haplotype must be used in clinical practice only at uncertain cases.

OP65. THE POLYMORPHISM OF CATIONIC TRYPSINOGEN GENE MUTATIONS IN CHRONIC PANCREATITIS WITH RECURRENCES

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Chronic pancreatitis (CP) is a polyetiologic disease and scientific progress in the last decades has demonstrated the role of PRSS1 gene mutations, which encodes the cationic trypsinogen in the development of this pathology. **Purpose:** Evaluation of the frequency of PRSS1 mutations in CP with relapses among the population of Republic of Moldova. **Materials and methods:** The study included 18 patients with recurrent CP (10 men and 8 women), 12 (66.7%) of them reported family history of CP, aged 27-55 years and the control group was represented by the 23 basically healthy persons. The argumentation of the diagnosis was based of CP anamnestic, clinical and laboratory data (CBC, urine α -amylase, biochemical analysis of blood: glucose, α -amylase, lipase, total protein, albumin, calcium, fecal elastase-1, abdominal ultrasound, abdominal CT). To determine PRSS1 gene polymorphism, venous blood was tested using the method of polymerase chain reaction (PCR) and appropriate primers. **Results:** In the group of patients with recurrent CP the presence of PRSS1 mutant alleles in 7 homozygotes was determined (38.9%) and in 9 heterozygotes (50%) vs. 1 homozygote (4.3%) and 10 heterozygotes (43.4%) in the control group. **Conclusion:** The high frequency of mutant alleles in the gene encoding cationic trypsinogen in patients with recurrent chronic pancreatitis vs. healthy individuals indicates the importance of this mutation in the

development of the disease and requires future study.

OP66. PARAOXONASE 1 ACTIVITIES AND GENOTYPES IN PATIENTS WITH ABDOMINAL OBESITY

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Study objective: The aim of the study was to investigate PON1 phenotypes and genotypes in patients with abdominal obesity from Transylvania. **Patients and methods:** The study groups consisted of 94 subjects with abdominal obesity and 45 controls with normal waist circumference, age and sex matched. Clinical parameters with possible influence on PON1 activities were measured for all individuals. Genotyping of Q192R and L55M polymorphisms in the PON1 gene coding region were performed by PCR-RFLP using specific primers and restriction enzymes. PON1 lactonase, paraoxonase and arylesterase activities were assayed by spectrophotometric methods. Analysis of PON1 genotypes and activities distribution in the obese and non-obese individuals was performed with MedCalc Software (Version 12.4.0.0). **Results** The study revealed that PON1 activities were not influenced by gender. Of all PON1 activities, only the paraoxonase activity was inversely correlated with age, being significantly reduced in patients with abdominal obesity compared to non-obese patients ($p = 0.009$). Abdominal circumference independently influenced only the variation in arylesterase activity ($R^2 = 6.5\%$, $p = 0.003$). Distribution of PON1 genotypes in the study groups was significantly different ($p = 0.007$) only for the Q192R genotypes, but not for the L55M genotypes. The 192QR genotype had the highest influence on paraoxonase activity ($R^2 = 40.6$; $p < 0.001$). The 55MM genotype had the greatest influence on arylesterase ($R^2 = 11.3\%$, $p < 0.001$) and lactonase activities ($R^2 = 7.4\%$, $p < 0.001$). **Conclusions** Q192R genotype distribution was significantly different in obese patients and the 192QR genotype influenced greatly the paraoxonase activity. The 55MM genotype had the most

important independent influence on the lactonase and arylesterase activities. Key words: paraoxonase, arylesterase, lactonase, activity, genotype, obesity

OP67. THE INCREASE IN SERUM CONCENTRATION OF 8-HYDROXY-2'-DEOXYGUANOSINE IN PATIENTS WITH PORPHYRIA CUTANEA TARDA

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Aims. Oxidative stress is a major mechanism of cellular damage and requires oxidation of lipids, proteins and nucleic acids, and though, resulting harmful compounds with mutagenic and carcinogenic effects. Hydroxy-deoxyguanosine (8 OHdG) is the most used indicator in quantifying the effect of the oxidative stress on DNA. The authors aimed to evaluate the difference between the causal role of genomic lesions in porphyria cutanea tarda (PCT) and role of 8OHdG accumulation as a consequence of this pathological process. We examined the levels of 8OHdG and the iron status in patients with PCT at different stages of evolution. **Methods.** We evaluated clinically and paraclinically: 47 adult men with PCT without associated viral infections (group A), 6 patients with hepatocellular carcinoma - HCC (group B), 30 healthy volunteers (group C). 8OHdG (ELISA method) were determined to provide information about genomic lesions with carcinogenic effects. Ferritin levels (immunoturbidimetric method) were measured for evaluating the total amount of iron in the body. **Results.** 8OHdG concentrations (pg/ml) were increased in patients with PCT, respectively, HCC versus control: 871 ± 114 compared to 207 ± 113 , $p < 0.001$, CI = 95% and 1327 ± 402 compared to 207 ± 113 , $p < 0.0000$, CI = 95%. A positive statistical significant correlation was calculated between 8OHdG and ferritin: $r = 0.632$. $p = 0.0083$, CI = 95% for PCT, $r = 0.906$, $p < 0.0001$, CI = 95% for HCC. In group C it was not documented this interdependence. These results sustain the idea that the iron overload identified in patients with PCT could influence liver inflammation, oxidative stress, mitochondrial dysfunction, hepcidin synthesis. **Conclusions.** DNA lesions induced by cellular redox imbalance are primary factors for HCC development in patients with PCT. Serum concentration of 8OHdG could be a useful marker in evaluation the risk of carcinogenesis.

ORAL PRESENTATION

Dilemmas and controversies in ulcerative colitis

OP68. INTEROBSERVER AGREEMENT IN INTERPRETING COLONIC MUCOSAL ASPECT IN ULCERATIVE COLITIS USING MAGNIFYING CHROMOENDOSCOPY

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Introduction: The risk of relapse in ulcerative colitis correlates with histological inflammatory activity. Recent studies have shown a good correlation between the aspect of colonic mucosa in ulcerative colitis patients examined using magnifying chromoendoscopy and microscopic inflammation. Applying this endoscopic method in current practice depends on achieving reproducible results between different observers. **Methods:** We determined the interobserver agreement in applying this method in 35 ulcerative colitis patients examined in both white light endoscopy and magnifying chromoendoscopy using indigo carmine. Mucosal aspect was graded as: normal, mild distortion, severe distortion, unanalyzable. **Results:** Working from a database of 200 images we selected for analysis the 40 highest quality images. Endoscopic activity scores using the Mayo classification were as follows: 12.9% - 0, 45.2% -1, 19.4% -2, 22.65 -3. Two endoscopists not involved in the selection process were asked to classify each chromoendoscopy image in one of the four categories described. Kappa interobserver agreement was 0.41 (moderate agreement). Only one image was considered unanalyzable by one of the experts. **Conclusions:** Magnifying chromoendoscopy represents a reproducible method of evaluating the severity of mucosal damage in ulcerative colitis patients.

OP69. VITAMIN D LEVEL IN INFLAMMATORY BOWEL DISEASE PATIENTS IN NORTH-EASTERN ROMANIA

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Introduction: Reported data concerning vitamin D deficiency in patients with inflammatory bowel disease in Eastern European countries are insufficient. The **aim:** To determine the level of 25 OH vitamin D in IBD patients and its correlation with clinical and evolutive disease data. **Material and Methods:** Prospective study performed in The Institute of Gastroenterology and Hepatology Iasi during 15.04.2011-31.10.2012. We noted: clinical and paraclinical parameters of the disease, the extension of lesions based on Montreal endoscopic classification. Vitamin D level: appropriate > 30 ng / ml, insufficient 20-30 ng / ml, severe deficiency <20 ng / ml. **Results:** 143 patients with IBD (104 RCUH and 39 Crohn's disease (CHD)). Median age was 44.65 ± 14.06 years for UC patients and 39.28 ± 10.76 for CD patients. Forty-eight patients (46.15%) with UC, 16 patients with CD (41.02%) had insufficient levels of vitamin D; 22 patients (21.15%) with UC, 14 patients with CD (35.89 %) had severe vitamin D deficiency. The vitamin D level did not differ according to the type of IBD (23.65 ± 11.19 ng / ml vs. 19.89 ± 7.66 in CD vs. UC, p>0.05). No statistically significant differences were observed regarding the extent of lesions (CD-L1: 19.83 ± 7.59 ng / ml, CD-L2: 20.79 ± 8.22 ng / ml, CD-L3: 21.43 ± 11.57 ng / ml, CD- L4+L1: 20.78±9.87ng/ml, p>0.05 and UC-E1: 21.27 ± 6.68 ng / ml, UC-E2: 23.60 ± 6.52 ng / ml,UC-E3: 21.93 ± 8.42 ng / ml, p>0.05). Vitamin D concentration did not correlate to clinical activity indexes (partial Mayo score: r = 0.151; Crohn's disease activity index: r = 0.272) or inflammatory parameters (CRP: r = 0.006; ESR: r = 0.015). Newly diagnosed patients with IBD had a significantly lower level of the 25 OHD (21.9 ± 8.621 vs. 26.21 ± 11.67, p = 0.049, for UC patients, and 18.18 ± 5.912 vs. 25.66 ± 10.16, p = 0.011 for CD patients). **Conclusions:** Vitamin D deficiency is common in patients with IBD. Our results show that Vitamin D concentration is independent from disease extent or severity in IBD patients.

OP70. MUCOSAL HEALING IN PATIENTS WITH ULCERATIVE COLITIS ASSESSED BY CONFOCAL LASER ENDOMICROSCOPY

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Background & aim: The ultimate therapeutic goal in patients with ulcerative colitis (UC) is mucosal healing. Recently, confocal endomicroscopy (CLE) has emerged to allow in vivo histological evaluation during ongoing endoscopy. Considering that histologic remission should be part of sustained deep remission, we have conducted a pilot study to investigate the ability of CLE to differentiate between normal mucosa and residual inflammation. **Methods:** Rectal CLE has been performed using 5 ml 10% fluorescein iv and targeted biopsies have been analyzed by the pathologist. Inflammation activity was investigated by CLE assessing crypt architecture and interstitial and cryptal fluorescein leakage. The image processing was performed using ImageJ, a public domain Java software. Semiautomatic computer estimation of interstitial and cryptal fluorescein leakage (ICFL) has been performed on stacks of images, by evaluating mean luminosity of pixels corresponding to crypts and interstitium, on a scale ranging from 0-255. ICFL in patients with UC in histological remission has been compared to patients with active ulcerative colitis and to patients with irritable bowel syndrome undergoing screening colonoscopy for colorectal cancer, using Student's T Test. **Results:** A total of 184 CLE images have been analyzed. Only minor cryptal abnormalities have been noted in patients with ulcerative colitis in remission, whereas in patients with active ulcerative colitis a wide range of cryptal alterations have been registered, from crypt distortion to crypt destruction and crypt abscess. ICFL was 94 ± 21 for patients with ulcerative colitis in histologic remission, 106 ± 12.6 for IBS controls ($p=0.24$ -NS) and 178.6 ± 21.6 for patients with active UC ($p=0.0001$). **Conclusion:** CLE is potentially an emerging endoscopic technique for re-

al-time assessment of deep mucosal remission during ongoing endoscopic examination, in patients with UC. The semiautomatic quantification of interstitial and cryptal fluorescein leakage can be objectively used to diagnose in vivo deep mucosal remission in patients with UC.

ORAL PRESENTATION

From inflammation to dysplasia and cancer in gastroenterology

OP71. STANDARDIZED EVALUATION USING OLGA/OLGIM CLASSIFICATION IN PATIENTS WITH DYSPEPTIC SYNDROME ADDRESSED BY ENDOSCOPY

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Aim: Atrophic gastritis and intestinal metaplasia are associated with an increased risk for gastric cancer. The aim of the study was to determine the prevalence and predictive factors of high-risk atrophic gastritis and intestinal metaplasia using OLGA/OLGIM classification in patients with dyspeptic syndrome. **Methods:** A total of 87 consecutive patients with dyspeptic syndrome addressed for upper GI endoscopy examination were investigated using OLGA/OLGIM gastric biopsies protocol (two samples from the antrum, 1 sample from the gastric incisure, 2 fragments from the body). The association of high-risk OLGA/OLGIM stages (III or IV) with age groups, gender, social status, smoking status, IPP treatment, Helicobacter pylori infection history, family and personal cancer history, and gastric dysplasia have been evaluated. **Results:** Eighty-seven patients (42 male/45 female, mean age 57 yrs) have been enrolled. High-risk OLGA stages have been detected in 11 cases (12.6%). Among the 11 high-risk stages, 8 were down-staged to low-risk using OLGIM (3 high-risk cases, 3.4%). The two (2.4%) incidentally found cases of gastric neoplastic lesions were associated with high-risk OLGA stages ($p=0.014$), while only one of them was associated with high-risk OLGIM stages ($p=NS$). A strong association of the high-risk OLGA stages with a personal history of neoplasia ($p=0.013$) and age over 50yrs ($p=0.029$) was detected. **Conclusion:** OLGIM staging system is less sensitive as compared to OLGA staging system in identifying patients with high risk of gastric cancer. OLGA staging

system offers important information on the gastritis-associated cancer risk. For this reason, OLGA staging system should be used in the gastritis histology report, especially in patients over 50 yrs old or with a personal history of neoplasia.

OP72. PREVALENCE AND RISK FACTORS FOR BARRETT ESOPHAGUS (EB) IN INPATIENT POPULATION (ONGOING STUDY) FROM A TERTIARY CENTER (IRGH "O.FODOR" CLUJ-NAPOCA)

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Objectives: to study the prevalence and risk factors of EB in inpatient population referred for upper endoscopy evaluation. **Methods:** prospective study, including the patients undergoing upper endoscopy between 1.01.2013-1.05.2013 (ongoing study). The patients with upper bleeding were excluded. For each patient a specific chart, which included demographic information, body mass index, the presence of heartburn, the use of anti-inflammatory drugs, endoscopy appearance (the presence and length of EB islands, short EB < 2 cm, long EB > 2 cm, the presence of HP) and biopsy findings was completed. **Results:** 1490 patients were enrolled. From them 37 patients (2.4%) had an endoscopic aspect compatible with EB (1 long EB, 29 short EB, 7 islands). Only 31 (2.08%) of them were documented as intestinal metaplasia at biopsy. The mean age in EB patients was 52.5 years (vs. 49.3 in the patients without EB), with an male/female ratio of 1.38 compared with 0.92 in patients without EB. 21 patients with EB had heartburn (67.74%) vs. 25.2% in patients without ($p<0.05$). HP was found in 15 patients (43.38%) with EB compared with 30.51% in patients without EB ($p<0.05$). 10 patients (32.25%) with EB had hiatus hernia not different from 25.03% in patients without EB ($p=NS$).

Conclusion: In inpatient population the prevalence of EB is 2.08% which does not provide a favorable cost/efficiency reason to propose a population-based screening for this condition

prevent postoperative complications in very elderly patients.

OP73. GASTRIC CANCER IN ELDERLY PATIENTS

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The **aim** of this study was to determine the clinical-pathological characteristics and surgical results in elderly patients with gastric cancer. **Methods:** We reviewed 79 patients aged over 65 years (group 1) and 79 patients younger than 65 years (group 2) as controls, operated for gastric cancer. The male-to-female ratio was 2.07:1. There were evaluated regarding surgical and postoperative complications, the incidence of nodal metastasis, survival rate in both groups. Patients who survived were followed-up by endoscopy, abdominal ultrasonography or CT every 12 months for a period of 5 years. **Results:** There were significant differences between group 1 and group 2 with regard to the preoperative impairment of cardiac, respiratory, liver and renal function. Gastric cancer involving the lower third of the stomach, as well as histopathologic well-differentiated carcinomas were prevalent in the older group. The maximum dimension of the tumor in group 1 was greater than that in group 2, and lymph node metastases were more common in group 1. In 30 of elderly patients, tumor was in stage IV and palliative distal subtotal gastrectomy or gastro-jejunosomy was performed. The operative mortality in group 1 (8.8%) was significantly higher than that in group 2 (1.2%). Among the causes of operative mortality, anastomotic leakage was the most common in the both groups. With regard to the long-term results, although a significant difference in the cumulative 5-year survival rate was detected in stage I or II patients (39.2% in group 1, and 88.6% in group 2), there was no significant difference in survival in stage III or IV patients. **Conclusions:** 1. Age alone should not preclude gastric resection in elderly patients. 2. Diligent preoperative and postoperative care combined with rational surgical procedures are indispensable to

ORAL PRESENTATION

Gastritis – again in actuality**OP74. HELICOBACTER PYLORI INFECTION AND AGE IN AN ENDOSCOPIC POPULATION**

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Background and aims. In Romania, a prevalence of HP of 62% was reported in general population, in the years 1990. Seroepidemiology of HP infection suggested a cohort phenomenon, with HP prevalence increasing with age. In developing countries a higher HP prevalence was recorded in children and teenagers as compared to developed countries. The aims of our study were to appreciate the prevalence of HP in relation with age and with associated duodenal ulcer (DU), gastric ulcer (GU) and chronic gastritis (G), in a symptomatic, endoscopic population. **Methods:** Our retrospective study included symptomatic patients (pts) examined during a two year period in a department of gastroenterology (1011 pts) and in two pediatric departments (833 pts). The diagnosis was based on clinical grounds, doubled by endoscopy and biopsy. The histological method and/or the urease test were used to identify HP. **Results:** The overall positivity for HP was of 43.5% (25.6-54.5%). In young patients, HP was identified in 25.6% by the age of 10, and in 50.2% by the age of 17. In adults (18-60 yr) HP was identified in 42.8% to 52.9%. In patients older than 60 years, HP positivity was recorded in 36.5%. HP associated DU was recorded in 70.9%, GU in 36.8% and G in 39.7% of our patients. **Conclusion:** In our study population, HP prevalence has raised to 50% by the age of 17 years. In patients older than 60, HP prevalence had a declining trend. The highest prevalence of HP was recorded in duodenal ulcer patients in all ages.

Crohn's disease -modalities to optimize the diagnosis and treatment**OP75. IS THERE AN EAST-WEST GRADIENT IN THE INCIDENCE OF INFLAMMATORY BOWEL DISEASE IN EUROPE?**

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Background: Literature data show that the incidence of inflammatory bowel disease (IBD) is increasing in Eastern Europe, for reasons that remain unknown. **Aim:** The aim of this study was to investigate whether an East-West gradient in the incidence of IBD in Europe exists and to assess the current situation of IBD in the western region of our country. **Material and methods:** Starting with 2010, a prospective, population-based inception cohort of newly diagnosed IBD patients was elaborated in 31 European centers (14 Western and 8 Eastern European countries), covering a total background population of approximately 10.1 million people. Romania was represented by its western county Timis, which has 664.433 inhabitants. All the patients were entered in a web-based epidemiological database. **Results:** Overall, 1,515 patients aged 15 years or older were included during 2010, of whom 535 (35%) patients were diagnosed with Crohn's disease (CD), 813 (54%) with ulcerative colitis (UC) and 167 (11%) with IBD unclassified (IBDU). The median crude annual incidence rates per 100,000 in 2010 for CD were 6.5 (range 0-10.7) in Western European centers and 3.1 (range 0.4-11.5) in Eastern European centers, for UC 10.8 (range 2.9-31.5) and 4.1 (range 2.4-10.3), respectively, and for IBDU 1.9 (range 0-39.4) and 0 (range 0-1.2), respectively. The crude annual incidence rate per 100,000 in 2010 for IBD in Romania (Timis county) was 4.1 (1.7 for CD and 2.4 for UC), and in 2011 was 5.5 (2.1 for CD and 3.4 for UC), higher

than the one reported in 2004, when the incidence was 0.97/100,000 and 0.50/100,000 for UC and CD, respectively. Another study included 1085 patients diagnosed with IBD during 2004-2008 in the western part of Romania; the mean incidence in the studied 5 years was: 3.06/100.000 new cases per year for UC and 1.05/100.000 new cases per year for CD. **Conclusions:** The overall annual incidence rates in all Western European centers were roughly twice as high as rates in all Eastern European centers for CD and UC. Although the incidence of IBD in our country has increased over the past few years, Romania still presents one of the lowest incidences of IBD in European Union, lower compared with Western European Countries.

OP76. THE FREQUENCY OF INFECTIOUS COMPLICATIONS IN PATIENTS WITH INFLAMMATORY BOWEL DISEASES UNDER TREATMENT WITH ANTI TNF α BIOLOGICAL THERAPY

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Background and aim: Biological therapies have a proven efficacy in the induction and maintenance of remission in inflammatory bowel diseases (IBD). However, their use is associated with an increased risk for development of bacterial, parasitic, fungal or viral infections. The **aim** of our study was to evaluate the frequency of infectious complications in patients with IBD on treatment with anti TNF α agents. **Methods:** Patients with IBD (Crohn's disease or ulcerative colitis) under treatment with Infliximab or Adalimumab were prospectively followed. We noted: patient's demographic data, IBD type, location, severity, type of anti TNF treatment and associated treatments, their duration, and also the type and severity of infectious complications that appeared during the observati-

on period, their clinical evolution and management. **Results:** 74 patients with IBD (61 Crohn's disease and 13 patients with ulcerative colitis) were included in our study, 35 men and 39 women, with mean age of 31.28 \pm 11.17. From them, 56.75% were treated with Infliximab or Adalimumab (mono therapy) and 43.24% with combination therapy (anti TNF and Azathioprine), mean duration of treatment being of 28.57 \pm 12.73 months (equal with the follow up period). 12.16% from the patients included in our study developed infectious complications (9 patients): two cases of pulmonary tuberculosis (one lobar form and one miliary), 3 patients with infectious colitis with C difficile, two patients with Herpes Zoster infection, one patient with oral herpes simplex, another patient with septic arthritis (elbow) and one patient with bronchopneumonia (postsurgical). In our patients, combination therapy was not a risk factor for development of infectious complications. **Conclusions:** Infectious complications during biologic therapy are relatively rare. The diversity of clinical presentation mandates a heightened attention, necessary for a quick diagnostic, a prompt therapeutic intervention being especially important due to the potential of severity which any infection has in this group of immunocompromised patients.

OP77. RDW AS A NOVEL MARKER OF DISEASE ACTIVITY IN CROHN'S DISEASE: TESTING A HYPOTHESIS IN AN IBD TERTIARY CARE CENTER IN ROMANIA

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Background One of the earliest signs of iron deficiency is the development of anisocytosis, demonstrated by the increase of red cell distribution width (RDW). Recently, it was postulated that RDW could be an additional marker of disease activity in IBD. Our objective was to test this hypothesis in a tertiary

care center setting, concentrating on Crohn's disease where Clarke et al. found a statistic significance for RDW as an activity marker. **Material and methods** We conducted a retrospective study in which we included 150 patients with Crohn's disease (CD), regardless of activity status, and 40 patients with irritable bowel syndrome (IBS), given the fact that IBS' and CD activity flares' symptoms overlap. We evaluated the association between RDW values and different severities of CD, RDW values in active vs. inactive CD and its values in CD cohort vs. IBS cohort. **Results** RDW was significantly higher in CD cohort than in IBS cohort. Its value did not differ significantly corresponding to severity index. It was only significant as a marker of severe activity, but could not make a difference between remission, mild and moderate activity flares. We observed that RDW does not correlate significantly with any of CD symptoms. Interestingly, we found that RDW correlates with extraintestinal complications of CD without a clear explanation of the phenomenon. **Conclusions** RDW is not sensitive, nor specific enough to independently diagnose activity flares of CD. It can be an additional marker in differentiating CD activity flares from superimposed functional disorders (IBS). We could not explain the relationship between RDW variability in patients with extraintestinal complications of CD.

ORAL PRESENTATION

The role of endoscopic capsule and of enteroscopy in obscure digestive hemorrhage**OP78. BLEEDING DIEULAFOY'S LIKE LESIONS OF THE GUT IDENTIFIED BY CAPSULE ENDOSCOPY**

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Dieulafoy's like lesion (DL-like) represent a cause of obscure gastrointestinal bleeding (OGIB), enteroscopy being the main diagnostic and therapeutic procedure. Frequently, more than one enteroscopy is needed to identify the bleeding vessel. In our practice videocapsule endoscopy (VCE) identified and guided therapy in four cases of DLs-like; three of them were localized on the small bowel. We report for the first time a diagnosis of colonic DL-like done by colon capsule endoscopy. Two patients presented severe cardiovascular disorders, being hemodynamically unstable during VCE examination. Based on VCE findings, only one invasive therapeutic procedure per patient was necessary to achieve hemostasis. VCE and enteroscopy may be regarded as complementary procedures in patients with gut DLs-like

OP79. THE ROLE OF CAPSULE ENDOSCOPY IN THE THERAPEUTIC MANAGEMENT OF PATIENTS WITH SUSPECTED SMALL BOWEL LESIONS, IN A TERTIARY ROMANIAN GASTROENTEROLOGY CENTER.

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Background. Capsule endoscopy (VCE) has a good diagnostic accuracy for small bowel lesions but

the high cost makes it still inaccessible to many Romanian tertiary gastroenterology centers. **Aim.** There have been investigated: indication, lesions detections rate, type of lesions, location of lesion, the utility of VCE in the therapeutic patient's management. In the study there have been included 76 consecutive patients examined with VCE in our tertiary gastroenterology center. **Results.** The most frequent indications were iron deficient anemia (35.5%) and obscure gastrointestinal bleeding (35.5%). Lesions detection rate was 76%. The majority of lesions detected were multiple during the same exploration (75%). Complete small bowel examination was achieved in 95% of cases. The capsule retention rate was 1.3% (in one patient with known small bowel Crohn's Disease). The most frequently encountered type of lesions were: angiodysplasia (22.4%), small bowel ulcerations (22.4%), small bowel tumors (15.5%). In 24% of cases VCE has detected active small bowel bleeding indicating therapeutic enteroscopy. Patient's management was changed in 41% of cases after the capsule endoscopy study, and in up to 53.4% if VCE has actually detected small bowel lesions. The therapeutic management was changed in 100% of cases when small bowel tumors or active bleeding were detected, in 75% of cases when angiodysplasias were found and only in 38.4% of cases when small bowel ulcers were detected by the capsule study. **Conclusion.** Capsule endoscopy has a good therapeutic impact, it should be adequately reimbursed in the national public healthcare system in case of valid indication and should be available to tertiary gastroenterology Centers in Romania.

OP80. SPIRAL ENTEROSCOPY: ROLE IN THE MID GASTROINTESTINAL BLEEDING

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Introduction: Spiral Enteroscopy (SE) is a new technique for examining the small bowel which is pleated by a special overtube that slides an enteroscope. **Aims and methods:** The aim was to evaluate the diagnostic and therapeutic yield of spiral enteroscopy. We prospectively recorded our experience of the first 42 cases of SE in Romania. The mean age of patients was 53 years (range 18 – 72 years). All procedures were performed by the same team. Eight procedures were carried out under conscious sedation and the rest of them were under general anesthesia. The most common indication was suspected midgut bleeding (n = 21); other indications were Crohn's disease (n = 8), small-bowel polyposis in the setting of Peutz-Jeghers syndrome (n = 3), familial adenomatous polyposis (n=2), tumors (8). All patients were previously assessed using entero-CT, which detected only the benign and malignant tumors. **Results:** SE advancement was successful in all patients. The average depth of insertion was 250 cm past the ligament of Treitz. The procedure was stopped when a diagnosis was reached (the lesion indicated by entero-CT or other significant lesions). Complete enteroscopy (anterograde and retrograde) was performed in 8 patients with occult GI bleeding. SE detected relevant small bowel pathology in 37 of 42 (87.5%) patients. The mean duration of the procedures was 32 ± 8 minutes (insertion and withdrawal, the therapeutic time not included). Therapeutic procedures, such as argon plasma coagulation, polypectomy, hemostatic clip, were very satisfying due to the stability of the overtube. The complications were minor: edema/erythema at the ligament of Treitz and the esophagus, and no major complications were observed. **Conclusion:** Our experience shows that SE is safe, easy to perform and allows all the standard endoscopic treatments. Also, SE can achieve deep small-bowel intubation in a relatively short time and in patients carefully selected.

ORAL PRESENTATION

Contrast enhanced ultrasound in non-hepatic digestive diseases.**OP81. CONTRAST ENHANCED ULTRASOUND IN THE PATHOLOGY OF THE PANCREAS - A MONOCENTRIC EXPERIENCE**

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Introduction: Contrast enhanced ultrasound (CEUS) has gained an important place in the characterization of pancreatic lesions thus leading to great improvements in its diagnostic capabilities. **Aim:** to summarize the entire spectrum of pancreas pathology assessed by CEUS in one gastroenterology center with large experience in ultrasound. **Method:** a retrospective study was performed on CEUS examinations performed for pancreatic pathology in the Department of Gastroenterology Timisoara between Jun 2009-Jan 2013. We evaluated de novo pancreatic masses, the structure of the pancreas in acute pancreatitis and assessed the results according to the typical pattern presented in EFSUMB 2012 guidelines. **Results:** 167 examinations were included in the study group. We split the group into 3 subgroups: A: with de novo pancreatic masses, B: acute pancreatitis mild and severe with/without necrosis, C: other pathology. The rate of a conclusive diagnosis was 82%. In inconclusive examinations, we performed a second imaging method. 108 examinations were performed for pancreatic masses. 83 (76.8%) of them revealed a conclusive diagnosis. The spectrum of the pancreas pathology met in the pancreatic masses was: 65% malignant lesions, 12% pancreatic cysts, 10.4% pseudocysts, 6% chronic pseudotumoral pancreatitis, 6% others. In subgroup B-51 cases were evaluated; 47 (92.1%) of them were conclusive. The examinations showed in 46.8% acute pancreatitis with necrosis, 46.8 % revealed a normal pancreas, 6.38% others. The other 8 (4.8%) cases were investigated for other pancreatic pathologies. **Conclusion:** in the studied group

CEUS was conclusive in 82% of cases and therefore it should be used as a first line investigation in pancreatic pathology.

OP82. INTRACAVITARY APPLICATION OF SONOVUE IN HEPATIC AND PERIHEPATIC FLUID LESIONS. PRELIMINARY RESULTS IN 20 PATIENTS

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Aim of the study: to assess the role of intracavitary application of ultrasound contrast agents (ICAC) in intra and perihepatic fluid lesions in terms of lesion delineation, establishing a possible communication to the biliary system and certifying a complication. **Patients and methods.** We have enrolled 20 patients-16 with intrahepatic lesions-10 abscesses (3-7 cm in size), 3 biliary cysts (5-7 cm), 3 fluid collections after hydatid cyst surgery (6-8 cm in size) and 4 with perihepatic fluid collections (3-10 cm in size) after surgery (3 laparoscopic colecystectomies for biliary stones and 1 segmental liver resection for hepatic tumor). In 12 cases the fluid has reaccumulated after a first aspiration and lavage. Two drops of SonoVue were mixed with 50 ml saline and then injected through a catheter (8 cases) or 18G needles (7 cases) in the fluid lesions. **Results.** The ICAC results in a better delineation of the cavity in complex fluid lesions (2 multilocular abscesses). It also demonstrated the communication of the collection to the biliary system in 14 patients (the remaining 6 - the 3 simple liver cysts and 3 liver abscesses did not communicate with the biliary tree) and could also appreciate the size of the biliary fistula. In all patients with perihepatic collection a large fistula to the biliary system was demonstrated and all patients were treated by endoscopic sphincterotomy. In 1 patient the ICAC depicted the dislodgment of the catheter from the abscess with intraperitoneal leaka-

ge. **Conclusions.** ICAC through a catheter or needle is a very useful technique to depict the anatomy of hepatic and perihepatic complex fluid collections and to monitor the drainage. It can also easily demonstrate the presence and size of a communication to the biliary system with important therapeutic consequences.

OP83. THE INCREMENTAL ROLE OF THE CONTRAST ENHANCED ENDOSCOPIC ULTRASOUND IN GUIDING FINE NEEDLE ASPIRATION FOR PANCREATIC MASSES

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The global accuracy of fine needle aspiration endoscopic ultrasound (EUS-FNA) for pancreatic adenocarcinoma is about 85%. The contrast agents during EUS may highlight the vessels and the necrotic parts of the pancreatic masses, but their incremental role in diagnosis is not known. **Aim:** To evaluate whether the guidance of FNA during harmonic contrast-enhanced pancreatic endoscopic ultrasound (CEH-EUS) would increase the diagnostic accuracy of EUS-FNA in the same pancreatic masses. **Methods:** In each of the 54 prospectively examined patients with pancreatic masses on CT scan, EUS-FNA was performed using a 22 G needle, followed by CEH-EUS using SonoVue. A second cluster of EUS-FNA was performed on contrast image, avoiding vessels and the regions inside the mass considered as necrosis. The final diagnosis was based on the results of EUS-FNA and surgery, or 6 months of follow-up in benign lesions. The pairs of samples obtained during conventional EUS-FNA and CEH-EUS-FNA, were assessed blindly by two pathologists. Perfusion analysis of the contrast image was performed by post-processing of the raw data. **Results:** The final diagnosis was adenocarcinoma (n=40), chronic pancreatitis (n=6), pancreatic metastasis (n=3) or another (n=5). The contrast hypoenhanced homogenous aspect was seen in 92.5% of pancreatic adenocarcinoma, while necrotic area in-

side mass was seen in 10% of the patients. No complications appeared during procedures. Macroscopically, the cell blocks obtained during CEH-EUS-FNA were significantly larger than those obtained in the conventional EUS-FNA guided group ($p < 0.01$). Microscopically, the diagnostic accuracy increased with 10%. The combination of the quantitative assessment of the contrast image with pathologic results significantly improved the diagnostic accuracy. **Conclusions:** Although necrotic regions inside pancreatic mass were seen less frequently, CEH-EUS allows for a better orientation of the needle inside the pancreatic lesion and increases the yield of diagnostic, especially in combination with the quantitative CEH-EUS analysis.

ORAL PRESENTATION

Varia

OP 84. INTERNET MAY INFLUENCE PATIENT-DOCTOR RELATION IN GASTROENTEROLOGY OUTPATIENT

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In a society that increasingly relies on the internet for most information, it's normal that when a person experiences some symptoms, they will search online sources. We studied the impact of the internet information on patient's behavior towards presentation to a gastroenterology outpatient clinic. **Aim:** To determine if the internet influences the patient-doctor relationship and in what manner. **Methods:** All new presented patients to the gastroenterology office were given a questionnaire regarding internet access availability, if they searched for information online and how this modified their behavior. We evaluated the impact of internet on diagnosis understanding and which are the most used sources. **Results:** From a sample of 198 patients (50.4% F, 49.6% M), 72.44%, mean age of 39.71 ± 13.29 had internet connection. 65.49% with internet access with mean age of 38.48 ± 11.81 declared that they searched the internet for information relating to their symptoms. Only 7.74%, mean age of 43.2 ± 13.27 followed a treatment suggested by the internet prior to doctor's diagnosis. Subjects considered that the information found on the internet was of relative help with understanding the diagnosis (59.13%), though some found the information very helpful (18.27%) or little or no help at all (18.27%). The majority used: Google (26.88%), various medical websites (16.12%) and Wikipedia (3.22%). **Conclusions:** The majority of patients have internet access and an increasing proportion of them are searching their symptoms online. A considerable number of patients haven't followed any treatment. Information is provided mostly by Google, medical profile websites and Wikipedia. The research revealed that the information found was relatively helpful in understanding the diagnosis.

OP85. ARTIFICIAL NEURONAL NETWORKS IN DIAGNOSIS AND PROGNOSIS OF LIVER CIRRHOSIS

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Background and aims: The prognosis in cirrhosis is determined by the presence of portal hypertension (PHT) that is best evaluated by hepatic venous pressure gradient (HVPG). Recently, non-invasive methods were proposed to evaluate PHT. The **aim** of this study was to create a new model using artificial neural networks (ANNs) and to compare-it with other non-invasive tests and HVPG for diagnosis of clinical significant portal hypertension (CSPHT) (HVPG>10 mmHg) and esophageal varices (EV). **Methods:** Ninety cirrhotic patients were included to create and validate the ANNs: 55 patients in the ANNs training group and 35 patients for validation of this model. The ANNs training have been performed using MATALB (The MathWorks Inc., USA) software. Only variables correlated with HVPG were included in the ANN (age, albumin, platelets count, bilirubin, prothrombin index and liver stiffness (LS)). Two ANNs were created: one for predicting CSPH and one for presence of EV. All patients underwent HVPG measurement, serological tests (AST/ALT index, APRI, Lok, FIB-4, GUCI, Risk score) and LS measurement. All patients from the validation group were followed-up for 2 year or until decompensation. **Results:** The ANN was able to predict CSPH with Se=96%, Sp=60%, PPV=85%, NPV=85% and AUROC=0.78 (p=0.01). These performances were inferior only to LS and Lok score. For EV presence, ANN

had better results, Se=95%, Sp=66%, PPV=79%, NPV=90% and AUROC=0.80 (p=0.002), inferior only to the Lok score. During the follow-up, 21 patients (60%) experienced at least one clinical complication within a mean period of 403 ± 314 [11-730]. The ANNs performance to predict clinical decompensation was modest, AUROC=0.69 (p=0.059). LS (AUROC=0.81) was the best test in decompensation prediction and, among serum test only AST/ALT index, Lok and FIB-4 scores reached statistical significance. **Conclusion:** ANNs may be useful in diagnosis of CSPH or EV but the prognostic relevance is modest.

OP86. THE EFFICACY OF ALBUMIN INFUSION IN PATIENTS WITH CIRRHOSIS AND INFECTIONS OTHER THAN SBP

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Background and Aims: Bacterial infections are some of the most frequent complications in cirrhosis with increased risk of developing sepsis, organ failure and result in high mortality rates. The development of renal failure in patients with cirrhosis and infections is frequent and results in a poor prognosis. The aim of this prospective study is to evaluate if plasma volume expansion with albumin associated with antibiotic therapy can prevent the development of renal failure and increase survival rates in cirrhotic patients with bacterial infections other than SBP. **Methods** 112 consecutive patients admitted (2011-2012) with cirrhosis and infections (SIRS, pneumonia, cellulitis, UTI) were randomly assigned to receive Human Albumin 20% 1.5g/kg the first day and 1g/kg in the third day of inclusion. All patients received antibiotic therapy following hospital protocols according to the cause of infection. The endpoints were in-hospital and three-month survival. **Results:** 46 of 56 patients (83%) with cirrhosis and infection who received albumin and antibiotic as compared to 35 of 56 patients (62%) of those who received antibiotherapy alone did not develop renal failure during hospitalization. In-hospital and three-month mortality rates were significantly lower in the group treated with albumin and antibiotic versus antibiotherapy alone 16%

vs. 36% and 12% vs. 32%; p=0.01. **Conclusions:** Albumin infusion associated with antibiotic therapy in the setting of cirrhosis and infection represent a promising treatment that can prevent the occurrence of renal failure and can lower mortality in patients with bacterial infections unrelated with SBP. However it is likely that the beneficial effects of albumin are also linked to its non-oncotic properties, including binding capacity, and effects on capillary integrity. These effects represent main fields of future research.

OP87. CAN FAECAL CALPROTECTIN PREDICT SPONTANEOUS BACTERIAL PERITONITIS IN CIRRHOSIS?

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Introduction: Spontaneous bacterial peritonitis can be precipitated by bacterial translocation through the inflamed colonic mucosa. The presence of faecal calprotectin is directly proportional with the migration of neutrophils, and can be considered a marker of intestinal inflammation. **Aims:** The aim of the study was to determine the role of semi quantitative dosage of calprotectin in the screening of patients with spontaneous bacterial peritonitis. **Methodology:** 57 patients with hepatic cirrhosis (23 patients had SBP and 29 patients had ascites without any prove of infection on diagnostic paracentesis) and 43 healthy subjects (the control group), were included in a prospective study. We excluded patients with inflammatory bowel disease and other conditions that might determine an abnormal level of faecal calprotectin. Cirrhosis complications (vascular decompensation/ascites) with spontaneous bacterial peritonitis were diagnosed using diagnostic paracentesis and cultures of the ascitic fluid. Stool samples were taken for the semi quantitative determination of the faecal calprotectin. **Results:** The faecal calprotectin level was higher in the cirrhotic patients compared to the control group (45 patients- 78.9 % vs. 7 patients- 16.2 % ; p<0.,0001). Also a high level of calprotectin was correlated with the presence of spontaneous bacterial peritonitis (82.6% in patients with SBP vs. 55.17 % in patients with ascites without SBP (p=0.0362). **Conclusion:** Faecal calprotectin could serve as a screening

tool in patients with cirrhosis complicated with spontaneous bacterial peritonitis.

OP88. RELATIONSHIP BETWEEN LIVER FIBROSIS AND ADIPOCYTOKINES IN PATIENTS WITH DIABETES MELLITUS AND CHRONIC HEPATITIS C

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Chronic hepatitis C (CHC) can contribute to a wide range of metabolic disorders: hepatic steatosis, insulin resistance, impaired glucose tolerance, type 2 diabetes and abnormalities of lipid metabolism. Adipocytokines may influence the inflammatory response and insulin sensitivity leading to the development of metabolic abnormalities in CHC, but also in regulating fibrogenesis and angiogenesis. The **objective** of this study was to evaluate the role of adipocytokines and GGT's in the progression of hepatic fibrosis, assessed through non-invasive tests in patients with type 2 diabetes and HCV. **Methods:** In this cross-sectional and observational study, we included 253 patients hospitalized in Paulescu Institute, Bucharest, to which were followed the anthropometric indexes (weight, height, waist circumference, BMI (body mass index). Track biochemical parameters were fasting plasma glucose, glycosylated hemoglobin, lipid profile (cholesterol, triglycerides, HDL-cholesterol), liver profile (ALT, AST, GGT, bilirubin, albumin, total protein), blood counts, cytokines (adiponectin, IL-6, leptin, resistin and TNF- α). Hepatic fibrosis was non-invasively assessed using: Forns fibrosis index, APRI score and FIB-4 score. Insulin resistance was determined using Homeostasis model assessment (HOMA-IR). **Results:** The average age of the evaluated patients was 51.3 ± 8.7 years, women representing 53.5% (n = 136) of total. The prevalence of hepatic fibrosis (59.7%) was higher in those who had HOMA-IR > 2. Mean serum leptin concentration (17.425 ng / ml), TNF- α (13.6 pg / ml), resistin (17.3 ng / ml) and IL-6 (14.8 pg ml) was higher in patients who presented Forns index > 6.9. Forns in-

dex was positively correlated with BMI (r = 0.24, p = 0.001), leptin (r = 0.43, p = 0.001), TNF- α (r = 0.62 p = 0.001), IL-6 (r = 0.54, p = 0.001), resistin (r = 0.39, p = 0.001), HbA1c (r = 0.35, p = 0.001), GGT (r = 0.65, p = 0.001), HOMA-IR (r = 0.48, p = 0.001) and SBP (r = 0.38, p = 0.01) and negatively with HDL-C (r = -0.41, p = 0.001) and adiponectin (r = -0.46, p = 0.001). Like Forns index, APRI score and FIB-4 score statistically showed similar correlations with these parameters. Multiple regression models controlled by GGT showed that resistin (R (2) = 0.43, p = 0.84), IL-6 (R (2) = 0.39, p = 0.135) were associated with HOMA-IR. Serum levels of GGT's was significantly correlated with Forns index (r = 0.65, p = 0.001), APRI score (r = 0.55, p = 0.001), FIB-4 score (r = 0.52, p = 0.001), TNF- α (r = 0.51, p = 0.001), IL-6 (r = 0.43, p = 0.05), HbA1c (r = 0.37, p = 0.001) and HOMA -IR (r = 0.46, p = 0.001). **Conclusions:** Insulin resistance may increase the progression of hepatic fibrosis through an inflammatory mechanism in which the adipocytokines play an important role. In these patients a closer monitoring regarding the progression of fibrosis is required.

OP89. CONTRAST-ENHANCED ULTRASOUND (CEUS) FOR THE EVALUATION OF FOCAL LIVER LESIONS – A PROSPECTIVE MULTICENTER STUDY ON ITS USEFULNESS IN CLINICAL PRACTICE

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Aim: to assess the value of CEUS to differentiate between malignant and benign lesions and for diagnosing different types of FLL. **Material and methods:** CEUS examinations performed in 8 university centers (14th individual departments) were prospectively collected between 1st February 2011 – 1st June 2012. The inclusion criteria were: age > 18 years, patients diagnosed with 1-3 de novo FLL at standard ultrasound examination, the presence of a reference method (CT, MRI or biopsy), the presence of informed consent for CEUS study. The exclusion criteria were: patients with contraindication for CEUS study (acute myocardial infarction, class III/IV heart failure, pregnant women), patients diagnosed with simple cysts at standard ultrasound and patients with known FLL, for example after percutaneous treatment. FLL lesions were characterized at CEUS according to the European Federation of Societies for Ultrasound in Medicine and Biology (EFSUMB) guidelines. For statistical analysis, indeterminate FLL at CEUS were rated as false classifications. **Results:** We included 536 cases which fulfilled the inclusion criteria in the final analysis, 344 malignant lesions (64.2%) and 192 benign lesions (35.8%). The reference method was: CT/MRI – 379 cases (70.7%), histopathologic exam-150 cases (27.9%) and aspiration of liver abscesses- 7 cases (1.4%). CEUS was conclusive in 89.3% and non-conclusive in 10.7% of cases. To differentiate between malignant and benign FLL, CEUS had 85.7% Se, 85.9% Sp, 91.6% PPV, 77.1% NPV and 85.8% accuracy. CEUS accuracy for diagnosing different types

of FLL was: hemangioma- 86%, focal nodular hyperplasia-87.8%, regenerative nodules-86.9%, fatty liver alterations-87.3%, hepatocellular carcinoma-79.8%, metastasis-83.7%, cholangiocarcinoma-83.9%. **Conclusions:** CEUS is very useful in clinical practice for the characterization of FLL detected at standard ultrasonography, and the results of this study are in concordance with previous multicentre studies: DE-GUM (German) and STIC (French).

OP90. THE ROLE OF ABDOMINAL ULTRASONOGRAPHY IN ETIOLOGY AND MANAGEMENT OF PORTAL VEIN THROMBOSIS

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Aim The aim of this study was the identification of portal vein thrombosis patients by abdominal ultrasound, contrast enhanced US, comparison with CT/MRI, establishing the etiology and treatment. **Methods** The study included 32 patients with portal vein thrombosis, between January 2012-March 2013 from Clinical Emergency Hospital Bucharest, gastroenterology department. They were initially examined by abdominal ultrasound (Simens S2000) and contrast enhanced US, Sono Vue 2.5 ml. Also, CT or MRI abdominal scan was done, tumor markers (AFP, CA 19.9), bacteriological exam of ascites fluid, serological determination of protein C, S, antithrombin III, factor V Leyden mutation, MTFR, JAK 2 mutation were performed when required. **Results** Out of 32 patients, 12 (37%) had cirrhosis and hepatocellular carcinoma with portal vein invasion, revealed by neovascularization and wash-out areas inside the thrombus at CEUS exam. 8 patients (25%) had liver cirrhosis Child C stage without carcinoma or hypercoagulative status. The mechanism of PVT is an imbalance between pro and anticoagulants in liver cirrhosis, resistance to thrombomodulin (activator of protein C). 3(9%) patients had liver cirrhosis and SBP and took advantage after antibiotic and anticoagulant treatment with complete repermeabilization of PV at

3 months. The rest of 9 patients (28%) had non-cirrhotic PVT: 3 with chronic pancreatitis, 1 with portal vein malformation, 5 with digestive carcinomas (cholangiocarcinoma, pancreatic/gastric/colonic cancer). CT and MRI scans confirmed in 31 cases out of 32 (96.8%) the ultrasound diagnosis. In only one case of PVT and liver cirrhosis we observed a discordance between ultrasound and CT. The ultrasound established the diagnosis of malignant PVT by neovascularization within the thrombus, while the CT scan result was only of cirrhosis with PVT without hepatocellular carcinoma. The value of AFP more than 800 U/ml confirmed the ultrasound diagnosis. **Conclusions** Treatment of PVT is established depending on the etiology: patients with hepatocellular carcinoma and cirrhosis are stage C/D-BCLC classification and they received only Sorafenib or supportive treatment. Patients with liver cirrhosis, without hepatocellular carcinoma and cirrhosis with SBP can receive anticoagulant treatment between 3 and 6 months. Non-cirrhotic patients with PVT should be treated depending on etiology, most patients with gastric/pancreatic/colonic cancer or cholangiocarcinoma are stage IV, receiving only pain palliation treatment. Abdominal ultrasound and CEUS are extremely useful methods in the diagnosis of portal vein thrombosis and identifying malignant thrombosis. The sensitivity and specificity of CEUS in our study, for portal vein thrombosis diagnosis is comparable with CT or MRI abdominal scans.

OP91. PLACEMENT OF PEG/PEG-J IN PATIENTS WITH ADVANCED PARKINSON'S DISEASE TREATED WITH DUODOPA

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Introduction. Continuous administration of Duodopa by intestinal way is one of the latest therapeutic resources in patients with advanced Parkinson's disease. For this purpose, it is necessary to perform an endoscopic percutaneous gastrostomy in which a jejunal catheter is inserted. **Material and method.** We studied 23 patients with advanced Parkinson's disease

who required this therapy. Particularities of the patients were: dyskinesias or severe muscle dystonias which were controlled pre-procedurally and imposed to perform the maneuver under general anesthesia; the neurological dysfunction which raised delicate issues in achieving anesthesia; the low body mass index which increases the risk of intra- and post-procedural complications; the dysfunction of digestive tube which raises issues in placement of the catheter by Treitz angle. We performed intravenous general TCI anesthesia (target controlled infusion) with propofol, supplemented with local anesthesia with lidocaine 1%. The technique of the gastrostomy is the "pull-through", and through the gastrostomy tube was mounted a pigtail jejunal catheter by Seldinger technique. **Results.** The endoscopic placement of PEG/PEG-J was performed in 22 of the 23 patients. To only one the procedure was assisted by laparoscopy because of the inability to transilluminate the abdominal wall. We recorded only one complication, pneumoperitoneum that required laparoscopic drainage of the peritoneal cavity. **Conclusions:** Placement of the PEG/PEG-J in patients with Parkinson's disease is a safe maneuver when performed by a trained multidisciplinary team.

OP92. A RARE CAUSE OF CHRONIC DIARRHEA IN IRRITABLE BOWEL SYNDROME PATIENTS: MICROSCOPIC COLITIS

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Clinical presentation in microscopic colitis (MC) may be similar to that of diarrhea-predominant irritable bowel syndrome (IBS-D). A proper diagnosis followed by a specific treatment may improve the outcome. **Aim:** To evaluate the prevalence of MC in patients with an initial diagnosis of IBS-D, to analyze demographic and clinical features of MC patients and to assess the efficacy of specific treatment. **Material**

and methods: We retrospectively analyzed patients diagnosed with microscopic colitis during a three-year period. Diagnosis was established on histological exams of the samples obtained during colonoscopy in patients previously thought to have IBS-D. We evaluated clinical manifestations, period of time until a certain diagnosis, the association of MC with autoimmune diseases or with prior medication and the efficacy of treatment with budesonide or mesalazine. **Results:** From the 247 patients considered to have IBS-D, 15 patients (6.07%) had actually MC (13 lymphocytic colitis and 2 collagenous colitis). MC was associated with nonsteroidal antiinflammatory drugs (3 patients), Lansoprazole (2 patients) and autoimmune diseases (6 patients). Watery, non-bloody diarrhea was present in all patients. Other frequent complaints were nocturnal diarrhea (11 patients), abdominal pain (8 patients), abdominal bloating and flatulence (8 patients) and slight weight loss (6 patients). The diagnostic samples were obtained from the right colon in 6 cases and from the rectosigmoid or transverse colon in 9 patients. Treatment was initially symptomatic in all patients, but there were 5 patients that required mesalazine and/or Budesonide, with favorable outcome. **Conclusions:** In our opinion, the patients thought to have IBS-D should be evaluated for microscopic colitis. Symptomatology is almost superimposable, but a few distinct features could be noticed. The proper and early diagnosis and the specific treatment may lead to a significant clinical improvement in some difficult cases of the so-called "irritable bowel syndrome".

OP 93. CLINICAL IMPLICATIONS OF MARSH-OBERHUBER CLASSIFICATION OF CELIAC DISEASE: CAN WE PREDICT MUCOSAL DAMAGE?

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**Center for Gastroenterology and Hepatology
Fundeni**

Background: Celiac disease is an autoimmune

disorder that implies the small bowel mucosa and is relieved by gluten-free diet. Clinical presentation is variable, ranging from asymptomatic patients to diarrhea, malabsorption and severe hypoproteinemia. Diagnostic is based on small bowel biopsies with intraepithelial lymphocytes and anti-tissue transglutaminase antibodies. Our objective was to evaluate the predictiveness of mucosal damage based on clinical presentation. **Material and Methods:** We included 95 consecutive newly diagnosed patients in our clinic. Biopsies were interpreted with Marsh-Oberhuber classification, and all patients were tested for the presence of antiTTG Ab. We assessed the correlation between the most important clinical and biological markers of malabsorption, and the Marsh-Oberhuber defined mucosal damage. **Results:** Mucosal damage indeed correlates with both clinical symptoms and biological changes. Marsh 3c practically significantly correlates with all 6 clinical markers taken into discussion and also with laboratory tests. There were not enough Marsh 1, Marsh 2 and Marsh 4 patients to correctly evaluate the associations. AntiTTG Ab. were positive in 84.21% (80/95) patients. **Conclusions:** We can predict mucosal damage using clinical and laboratory tests as surrogates, at least for Marsh 3c stage as our study demonstrates. It is necessary that our hypothesis to be demonstrated in larger cohort studies, that can assess all 6 stages of Marsh-Oberhuber classification. AntiTTG remains the most sensitive and specific laboratory marker for the presence of celiac disease.

Reference: Juha Taavela et al., Degree of Damage to the Small Bowel and Serum Antibody Titers Correlate With Clinical Presentation of Patients With Celiac Disease, *Clinical Gastroenterology And Hepatology* 2013;11:166-171



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Referințe: 1. IASL Practice Guidelines: Management of chronic hepatitis B virus infection - Journal of Hepatology 2012; vol. 57(1):67-82; 2. Asocierea Etenavirului Produsului Pegasys® disponibil la http://www.ema.europa.eu/files/index.jsp?cat=pages/medicines/human/medicines/000084/sumar_med_000084.pdf&id=9C225146058001124

Pegasys 90/135/180 micrograme soluție injectabilă în seringă preumplută. Fiecare seringă cu 0,5 ml soluție conține peginterferon alfa-2a* 90/135/180 micrograme. **Indicații terapeutice:** **Hepatitis B cronică:** Pegasys este indicat pentru tratamentul hepatitei B cronice (HBC) cu antigen e (AgtHBe) pozitiv sau AgtHBe negativ, la pacienți adulți cu boală hepatică compensată și cu dovada replicării virale, valori ALT crescute și cu inflamație hepatică documentată histologic și/sau clinică. **Hepatitis C cronică, Pacienți adulți:** Pegasys este indicat pentru tratamentul hepatitei C cronice (HCC) la pacienți adulți care prezintă acid ribonucleic și virusul hepatitei C (ARN-VHC) în ser. Sunt excluși pacienții cu ciroză compensată și/sau infecții concomitente cu HIV, stadii clinice. Modul optim de stabilizare a Pegasys la pacienții cu hepatită C cronică este în asociere cu ribavirină. **Autocentrul și copilul cu vârsta de 5 ani sau peste:** Pegasys este indicat în asociere cu ribavirină pentru tratamentul auto-centrului și copilul cu vârsta de 5 ani și peste cu hepatită C cronică, care nu au mai fost tratați anterior și care prezintă ARN-VHC în ser. **Doze:** **Hepatitis B cronică - pacienți adulți:** Durata recomandată de Pegasys și durata tratamentului, atât pentru hepatita B cronică cu AgtHBe pozitiv, cât și pentru cea cu AgtHBe negativ este de 180 micrograme o dată pe săptămână timp de 48 de săptămâni, administrată subcutanat, la nivelul abdomenului sau coapsei. **Hepatitis C cronică - pacienți adulți care nu au mai fost tratați anterior:** Doza recomandată de Pegasys este de 180 micrograme o dată pe săptămână administrată subcutanat, la nivelul abdomenului sau coapsei, în asociere cu ribavirină administrată oral sau în monoterapie. Doza de ribavirină trebuie administrată în timpul mesei. **Hepatitis C cronică - pacienți adulți tratați anterior:** Doza recomandată de Pegasys în asociere cu ribavirină este de 180 mcg, o dată pe săptămână, administrată subcutanat. La pacienții cu greutatea <75 kg și <75 kg, trebuie administrate niveluri de 1000 mg și, respectiv 1200 mg de ribavirină, indiferent de greutatea virală. Pacienții care prezintă virus detectabil la săptămâna 12 trebuie să înceapă tratamentul. Durata totală recomandată a tratamentului este de 48 de săptămâni. Dacă sunt luati în considerare pentru tratamentul pacienților infectați cu genotipul 1 de virus hepatitic, care nu au început tratamentul anterior cu peginterferon și ribavirină, durata totală recomandată a tratamentului este de 72 de săptămâni. **Pacienți adulți afectați concomitent cu HIV-VHC:** Doza recomandată de Pegasys, în monoterapie sau în asociere cu ribavirină, este de 180 micrograme o dată pe săptămână, administrată subcutanat, timp de 48 de săptămâni. La pacienții infectați cu VHC genotip 1 cu greutatea <75 kg și <75 kg, trebuie administrate niveluri de 1000 mg și, respectiv 1200 mg. Pacienții infectați cu alte genotipuri decât genotipul 1 trebuie să se administreze niveluri de 800 mg ribavirină. Durata tratamentului nu este de 48 de săptămâni nu a fost studiată deocultă. Copii și adolescenți: Pegasys este contraindicat la nou-născuți și copii cu vârsta până la 3 ani, din cauza conținutului alcool benilic. La copii și adolescenți, se recomandă să se utilizeze Pegasys seringă preumplută. Pacienții care încep tratamentul înainte de împlinirea a 18 ani trebuie să monitorizeze datele pediatrice până la finalizarea tratamentului. Pegasys nu trebuie utilizat la copii cu o supratrat corporală (BSA) mai mică de 0,71 deoarece nu sunt date disponibile pentru acest subgrup de pacienți. **Mod de administrare:** Pegasys este administrat subcutanat în abdomen sau în coapse. **Contraindicații:** Hiperensensibilitate la substanța activă, interferon alfa sau la oricare dintre excipienți. **Hepatitis autoimună:** Distruicție hepatică severă sau ciroză hepatică decompensată. **Antecedente de boală cardiacă severă, incluzând boală cardiacă instabilă sau recentă în ultimele 6 luni.** Pacienții infectați concomitent cu HIV-VHC, cu ciroză și scor Child-Pugh 3b, cu excepția cazului în care hiperbilirubinemia indicată este cauzată de medicamente cum sunt antitumorale și iodine. **Asocierii cu lubrifianti:** La copii și adolescenți cu afecțiuni psihice severe, în prezent sau în antecedente, în special depresie severă, idee suicidară sau tentativă de suicid. **Atenționări și precauții speciale pentru utilizare:** Sistem nervos central (SNC) și lubrifianti psihice: Toți pacienții trebuie atenți monitorizați pentru orice semne și simptome de buburăni psihice. Dacă apar simptome ale lubrifianti psihice, gravitatea potențială a acestor reacții adverse trebuie evaluată în vederea reducerii dozei medicamentului și întreruperii sau întreruperii temporare a acestuia. Dacă simptomele psihice persistă sau se agravează sau se înrăutățesc, este recomandată întreruperea tratamentului și monitorizarea pacientului, cu intervenție psihiatrică, dacă este cazul. **Creșterea și dezvoltarea fetei și adolescenții:** În timpul tratamentului cu durata de până la 48 săptămâni, la pacienți cu vârsta cuprinsă între 5 și 17 ani, au fost observate frecvent scăderea în greutate și întârzierea creșterii. **Reacții adverse:** **Hepatitis C cronică:** Frecvența și severitatea reacțiilor adverse nu au fost raportate cu Pegasys sunt similare cu cele raportate cu interferon alfa-2a. Cele mai frecvent raportate reacții adverse cu Pegasys 180 micrograme au fost, în general, de severitate ușoară până la moderată și nu au necesitat modificarea dozei sau întreruperea tratamentului. **Hepatitis B cronică:** În studiile clinice cu tratament de 48 de săptămâni și perioadă de urmărire de 24 de săptămâni, profilul de siguranță pentru Pegasys în hepatita B cronică a fost similar cu cel observat în hepatita C cronică. Cu excepția febrei, frecvența majorității reacțiilor adverse raportate a fost echivală sau mai mică la pacienții cu HBC decât la pacienții cu HCC, cărora li s-a administrat Pegasys în monoterapie, comparativ cu pacienții infectați cu VHC care au urmat tratamentul cu Pegasys în monoterapie. **Precauții speciale pentru păstrare:** A se păstra la frigider (2°C-8°C). A nu se congela. A se ține departe de lumină. **DAPP:** Roche Registration Limited, Marea Britanie. **Numărul autorizației de punere pe piață:** E1/02/221/091-017. **Data primei autorizații:** 20 Iunie 2002. **Data ultimei reevaluări a autorizației:** 20 Iunie 2007. **Data ultimei revizuirii a textului:** Martie 2013. **Acest medicament se eliberează pe bază de prescripție medicală. Înainte de prescriere vă rugăm să consultați Rezumatul Caracteristicilor Produsului.**



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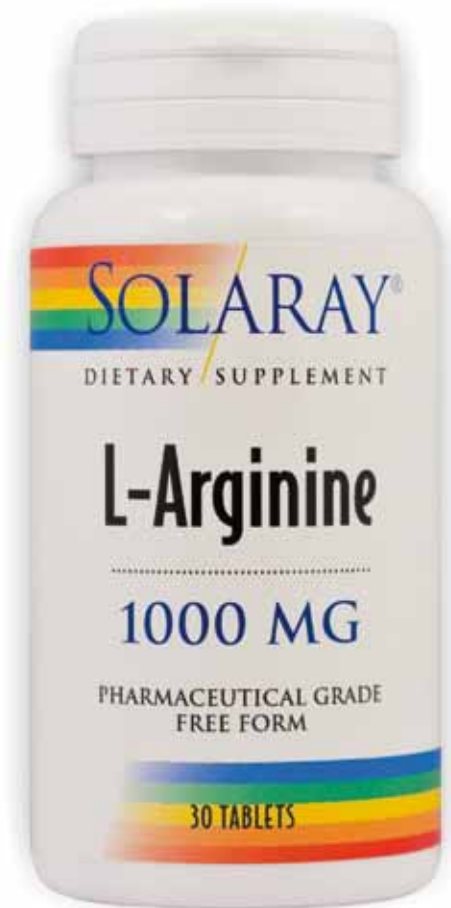
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POSTER PRESENTATIONS

Esophageal and gastric pathology

PP1. THE ETIOPATHOGENIC ROLE OF ALCOHOL CONSUMPTION IN A GROUP OF PATIENTS WITH ESOPHAGEAL CANCER

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Esophageal cancer represents the 8th most common cancer in the world and the 6th leading cause of death from cancer, being one of the 4 cancers with the most unfortunate prognosis along with liver, pancreatic and lung cancer. The etiology of esophageal carcinoma is a complex one, and it is related to esophageal mucosal exposure to various toxic or noxious stimuli, resulting in a sequence of the type dysplasia - carcinoma in situ - carcinoma. **Purpose:** To demonstrate the role of alcohol consumption on survival in patients with esophageal cancer. **Material and Methods:** The study included 143 patients diagnosed by endoscopy and confirmed by histopathology with esophageal cancer. Questionnaires regarding alcohol consumption were created. **Results:** More than 50% of patients with esophageal cancer admitted to have consumed alcohol. Alcohol consumption was noted for 60 patients with esophageal squamous cell carcinoma and 31 patients with adenocarcinoma. The comparative analysis of alcohol consumption in the two subgroups of patients revealed that more than 70% of patients with esophageal squamous cell carcinoma have consumed alcohol, compared to 46% of patients with esophageal adenocarcinoma who admitted the consumption of alcohol. Survival curves built according to alcohol consumption showed that in spite the fact that in the beginning of the study the baseline survival curve for patients who have not consumed alcohol drinkers was higher, towards the end of the study the two curves were superimposable. This shows the aggressive evolution of esophageal cancer regardless of persistence or waiver of certain vices ($p = 0.059$) **Conclusions:** The evaluation of survival for the entire

group showed that at the end of follow-up only 34 patients were still alive, the median survival time was 14 months, which proves the extremely aggressive nature of this malignancy.

PP2. ATYPICAL MANIFESTATIONS IN GASTROESOPHAGEAL REFLUX DISEASE

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Gastro-esophageal reflux disease (GERD) typically manifests as heartburn and regurgitation but it may also present with atypical or extra-esophageal symptoms: asthma, chronic cough, laryngitis, hoarseness, noncardiac chest pain and dental erosions. Diagnosis of atypical GERD is often a challenge especially when heartburn and regurgitation are absent. The **aim** of this study was to demonstrate the association between GERD and extra digestive manifestations and to evaluate the accuracy of the GERD's diagnosis proposed by specialists other than gastroenterologists. **Methods and materials:** A prospective study was conducted between November 2012- March 2013 at the Institute of Gastroenterology and Hepatology Iasi. It included patients referred by pneumology, otolaryngology, cardiology departments with suspected GERD. All patients were investigated by endoscopy and those without esophagitis were further investigated by 24-h impedance pHmetry. **Results:** The study included 24 patients, 12 males (50%) and 12 females (50%), the mean age 47 ± 14.46 years; 6 (25%) presented asthma, 17 (70.83%) hoarseness and 1 (4.16%)

noncardiac chest pain. All patients had typical symptoms (79.16% pyrosis and 83.33% regurgitation). 11 (45.83%) had esophagitis at the upper endoscopy, 4 (16.66%) underwent 24-h impedance pHmetry and 9 (37.51%) underwent therapeutic test with PPI. Diagnosis of GERD was established in all cases. **Conclusions:** GERD often manifests with atypical symptoms hence gastroenterological consult and investigations are highly beneficial for patients with asthma, dysphonia, chronic cough or pseudo angina.

PP3. IMPROVING OF THE BILIARY REFLUX IN PATIENTS WITH CHOLECISTECTOMY

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Introduction: duodeno – gastric biliary reflux and often duodeno-gastric-esophageal reflux is the most frequent reason for the patients to come in the digestive endoscopy department. **Material and method:** we studied 283 patients with cholecistectomy. They were examined by digestive endoscopy in Municipal Clinical Hospital Oradea and in the CF Clinical Hospital Oradea during 18 months. The reasons for presentation were: bloating, heartburn, bitter taste in the morning, superior abdominal pain. The patients received treatment with proton pump inhibitor and prokinetic drugs in 112 patients and prokinetic drugs and ursodeoxicolic acid in 171 patients. 3 months from the beginning of treatment clinical examination, and, in a part of patients, endoscopic examinations were performed. **Results:** after digestive endoscopy we found that 63.95% patients presented a big quantity of bilious liquid in the stomach and duodenum, 4.6% had bilious liquid in the esophagus. The most part of patients (158 patients) that underwent treatment with prokinetic drugs and ursodeoxicolic acid had a good clinical evolution, and a new endoscopy was not performed. In patients that received treatment with proton pump inhibitors and prokinetic drugs and in which clinical evolution was not better, another endoscopy was performed that proved persistent biliary reflux and thus treatment with ursodeoxicolic acid was started. **Conclusion:** Favorable results obtained after the treatment with prokinetic drugs and ursodeoxicolic acid encourages using this association from the beginning.

PP4. GASTRO-ESOPHAGEAL REFLUX IN PATIENTS WITH DUODENAL ULCERS

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Introduction: the appearance of gastroesophageal reflux in a large number of patients with endoscopically diagnosed duodenal ulcer is why I decided to review the cases examined in July 2010 - January 2013 Clinical CF Hospital. **Material and Methods:** We investigated 92 patients with endoscopically confirmed duodenal ulcer. They were examined clinically and endoscopically with antrum or corporeal biopsy sampling for detecting *Helicobacter pylori* infection. **Results:** We defined two clinical groups of patients, one with presence of *H. pylori* (69 patients) and the second, which found its absence (23 patients). Symptoms of reflux were present more frequently in patients with HP positive and in patients with large duodenal ulcers or complications during the examination (bleeding, stenosis). **Conclusions:** The prevalence of gastroesophageal reflux in duodenal ulcer is higher in patients with complicated ulcers or severe evolution in patients infected with *Helicobacter pylori*.

PP5. EPIDEMIOLOGY OF GASTROESOPHAGEAL REFLUX AND RELATIONSHIP WITH DIET IN ADULT URBAN POPULATION

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The **aim** of the study was to determine the presence of gastroesophageal reflux symptoms and the prevalence of gastroesophageal reflux disease (GERD)

in general urban population and to evaluate the type of diet associated with this pathology. **Material and method.** A randomized sample of subjects (n=300) from a general urban population from Iasi city, selected from the family doctors patient lists, was invited for interview in the doctor's office. Selected subjects were evaluated for recent symptoms using Gastrointestinal Symptom Rating Scale (GSRS), for the diagnosis of GERD using Montreal criteria and for their diet, using a food frequency questionnaire. **Results.** GERD was diagnosed in 31.1% of subjects and 26.4% presented relevant symptoms for gastroesophageal reflux in the last 7 days. Recent symptoms were more frequently present in obese and overweighted than normal weighted subjects (42.5% and 29.5% versus 10.5%, $p=0.001$), and GERD was present especially in overweight people (41.1%, $p=0.015$). Using median as cut-off point, the GERD subjects consume more frequently: processed meat, canned food, milk, animal fat, pulses, cereals or grain bread/pasta, vegetables with 5% carbohydrates, fruit compotes ($p<0.001$), poultry, fish, cheese, potatoes, corn powder, coffee, herb tea and alcoholic beverages ($p<0.05$). Between GERD and non-GERD subjects there were no significant differences in consumption of the following: red meat, eggs, vegetable oils, 10 % carbohydrates vegetables, fruits, white bread, sugar and sweets. **Conclusion.** Gastroesophageal reflux is highly prevalent in adult urban population and is possible associated with diet.

PP6. RELEVANCE OF THE STUDY REGARDING QUALITY OF LIFE IN GASTRO ESOPHAGEAL REFLUX DISEASE (GERD)

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Gastroesophageal reflux disease (GERD) is a common condition with negative impact on quality of life that is frequently underestimated, leading to an inadequate treatment. For this reason, the evaluation of the real impact this disease has on quality of life becomes an essential part of the disease management.

The **aim** of the study is the estimation of the influence of the specific symptoms of GERD on patient's physical and mental health, using SF 36 questionnaire. **Method:** The SF36 questionnaire has been given to all of the 75 patients included in the study, the scores for each of the analyzed parameters (physical and social functioning, bodily pain, vitality, mental health, emotional role and general health perception) being calculated. The influence of particular risk factors (obesity, smoking, diabetes and hiatus hernia), correlation between the severity of the disease and the influence on quality of life and the impact of co morbidities were analyzed. **Results:** Results showed, in many cases (29), a discrepancy between patient-reported symptoms and the severity of the disease revealed by endoscopic evaluation. The more frequent the symptoms, the greater the number of quality-of-life dimensions that were affected. Patients with weekly symptoms had impairment in four dimensions (physical functioning, bodily pain, general health and vitality), and those with daily symptoms had impairment in all eight dimensions. Risk factors and co morbidities significantly impinge upon the symptoms and the evolution of the disease. **Conclusions:** Health-related quality of life is becoming increasingly important as an outcome measure of treatment response, because neither questioning of symptoms alone, nor the assessment of objective data, as endoscopic evaluation, seem to adequately reflect patients' subjective well-being.

PP7. CLINICAL AND THERAPEUTIC PECULIARITIES IN ASSOCIATION BETWEEN GASTROESOPHAGEAL REFLUX DISEASE AND CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Interdependence between gastroesophageal reflux (GERD) and chronic obstructive pulmonary disease

(COPD) is a multidimensional concept, generating consequences with major impact on both diseases management. **Aim** The aim of the study is to identify the factors with major impact on both evolution and treatment of the two diseases. **Material and method** The study included 55 patients with GERD and different stages of COPD highlighted through clinical examination and spirometry. The GERD diagnosis was based on clinical evaluation and data obtained from fibrogastroduodenoscopy. **Results** 28 of all patients put on the first place the digestive problems, while 27 of them mentioned the respiratory problems on the first place. Endoscopy revealed: grade A and B esophagitis, Barrett's esophagus, erythema, erosions and ulcers of mucosa. Patients with mild and moderate pulmonary obstruction account for the majority. The most important risk factors were: smoking, obesity, alcohol use, medication, hiatus hernia. Frequently encountered co morbidities were: cardiovascular diseases, diabetes and rheumatismal diseases. Exacerbations of the digestive symptoms and significant lesions detected by endoscopy had been reported in the following situations: exacerbation of the respiratory disease, complex therapeutic scheme and multiple risk factors and co morbidities. **Conclusions** Results sustain the idea of a strong interdependence between the two diseases. The most important arguments are: worsening of gastroesophageal reflux in respiratory exacerbations and in case of complex treatment (high doses and drug combinations), increased frequency of respiratory symptoms in case of severe gastroesophageal reflux. Correct treatment of one of the diseases may improve the other condition and avoid hospitalization.

PP8. GASTROESOPHAGEAL REFLUX DISEASE IN RESPIRATORY DISORDERS

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Introduction: Comorbidities represent important features in many respiratory diseases. Gastroesopha-

geal reflux disease (GERD) is known to frequently coexist in patients with bronchial asthma. However, GERD represents one of the important causes for chronic cough through several mechanisms including micro aspiration, and could be involved in various respiratory disorders. The **aim** of this study was to comparatively assess the co-existence of GERD symptoms in frequently diagnosed lung diseases. **Methods:** The study included 105 patients consecutively admitted and diagnosed with respiratory disorders at the Clinic of Pulmonary Diseases Iasi between January and February 2013. GERD symptoms were evaluated using GERD-Q questionnaire which included symptoms such as heartburn, regurgitation, stomach pain, nausea. A GERD-Q score greater or equal to 8 was considered compatible with GERD. **Results:** The study included 57 men and 48 women. Mean age was 61.8±12.6 years. GERD was present in 40.9% of the patients with pulmonary disorders (43 of 105 patients): 18 of 40 patients with asthma (45%), 15 of 36 patients with COPD (41.6%), 1 of 6 patients with lung cancer, 4 of 5 patients with bronchiectasis, 2 of 6 patients with tuberculosis, 2 of 7 patients with pneumonia and 1 of 5 patients with tracheobronchitis. The higher median of GERD-Q score was shown in bronchiectasis (GERD-Q score=11), followed by asthma, COPD (GERD-Q score=7) and lung cancer (GERD-Q score=6.5). The overall prevalence of GERD was higher in women (45.8%) than in men (36.8%). **Conclusion:** GERD is common in patients admitted with respiratory diseases, being more frequently associated in asthma, COPD and bronchiectasis and more severe in bronchiectasis.

PP9. GASTRO-DUODENAL ULCERATIVE LESIONS IN PATIENTS WITH LIVER CIRRHOSIS

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Introduction: Portal vein hypertension (PVH) predisposes gastrointestinal mucosa to an increase sensibility to a variety of noxious factors, associating a large picture of its alteration, which compromise the endogen protection mechanisms, but also the recove-

ring and reparation mechanisms. The most frequent complications of PVH are represented by esophageal varices, gastric varices and portal hypertension gastropathy. **Aim:** the correlation between the presence of esophageal varices and gastric ulcerative lesions. **Materials and methods:** The study group included 60 patients with liver cirrhosis of different etiology and esophageal varices, hospitalized in the Emergency County Hospital Oradea, in the period 2 January-4 March 2013. Patients were assessed by endoscopy. **Results:** During the mentioned period, 21.66% of patients were diagnosed with liver cirrhosis and esophageal varices, from the 277 patients assessed in the endoscopic department. 60 patients were diagnosed with gr. I, II, and III esophageal varices; 18 of those, 30%, were women; 31.66% were presenting gr. I esophageal varices, 36.66% gr. II esophageal varices, and 21.66% gr. III varices. The total number of patients with gastric ulcerative lesions were 21, representing 35% from total cirrhotic patients; the lesions were located in the body of stomach, antrum, pylorus, duodenum; 47.61% of the lesions were detected in women. From all patients with gastric lesions, 66.66%, 14 patients, also had gr. I esophageal varices; 14.28% gr. II varices, and 19.04% gr. III varices. **Conclusion:** The severity of esophageal varices is not correlated with a higher frequency of gastro-duodenal ulcerative lesions; in the study group the most frequent ulcerative lesions were registered in patients with gr. I esophageal varices. One of the most important factors who cause ulcerative lesions is portal hypertension gastropathy with the alteration of gastric mucosa barrier.

PP10. THE INCIDENCE OF GASTRO-DUODENAL MUCOSAL DAMAGE IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Pathology of the gastrointestinal tract, especially the gastro-duodenal area is one of the most com-

mon pathologies associated with chronic obstructive pulmonary disease (COPD). **Purpose:** To assess the incidence of gastro-duodenal mucosal damage in COPD. **Materials and methods:** 52 patients with COPD with medium and severe exacerbation were investigated, with SpO₂ 85-93% and treated with glucocorticosteroids, of which men predominated (80.8%), mean age 59.4±31 years. The diagnosis of COPD was established according to GOLD recommendations. Fibrogastroduodenoscopy with biopsy and histological examination was performed in all patients. The severity, size and location of gastro-duodenal mucosal changes were assessed. **Results:** The study showed the presence of different intensity pain in the upper abdomen in 92.3% of patients, nausea in 34.6%, belching in 8.4%, heartburn in 42.3%. We found changes in the gastro-duodenal mucosa in all patients with COPD. Mixed gastritis (16 patients, 30.8%), superficial (5 patients-9.6%) and atrophic gastritis (7-13.5%) were determined. In 24 patients (46.2%) ulcer defects were detected: in 15 (28.8%) – gastric ulcer, in 7 (13.5%), duodenal ulcer, in 2 (38%) – acute gastro-duodenal erosions. A low index of H. pylori infection was found in patients with COPD. **Conclusion:** Gastro-duodenal mucosal damage in patients with COPD is present in 100% of cases and develops as the result of prolonged hypoxemia and also after the administration of glucocorticosteroids.

PP11. ETIOLOGIC CONDITIONS ASSOCIATED WITH HEMORRHAGIC-EROSIVE GASTRITIS COMPLICATED WITH UPPER GASTROINTESTINAL BLEEDING

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Background: Hemorrhagic- erosive gastritis occurs in a variety of etiologic conditions and rarely may be complicated by upper gastrointestinal bleeding (UGIB). **Objectives:** The study of etiologic factors in a group of patients evaluated by endoscopy for an

episode of upper gastrointestinal bleeding in a period of 24 months. **Material and methods:** 86 patients were included in the study, examined by endoscopy for an UGIB episode secondary to hemorrhagic-erosive gastritis lesions in 2nd Internal Medicine Clinic of Emergency County Hospital Craiova, within 24 months, mean age 58 years. We noted in each patient: anamnesis, focusing on the consumption of ethanol, NSAIDs, severe surgical conditions, ingestion of caustic substances, clinical, biological (complete CBC, glucose, creatinine, AST, ALT, prothrombin time, anti *Helicobacter pylori* antibodies) and endoscopic criteria. **Results and discussions:** Of the 86 patients who experienced an episode of UGIB, 54 (62.79%) had chronic alcohol abuse, 23 (26.74%) use of aspirin and other NSAIDs, 2 patients (2%) ingestion of corrosive substances, 1 patient (1%) ingestion of caustic substances and 6 patients (6.9%) severe surgical conditions. A percentage of 28 of patients with ethanol etiology and 43 of those who had consumed NSAIDs had anti *Helicobacter pylori* antibodies. **Conclusions:** -The most common causes of hemorrhagic- erosive gastritis complicated by an episode of UGIB were: excessive consumption of ethanol and NSAIDs and they showed a high prevalence of *Helicobacter pylori* infection.

POSTER PRESENTATIONS**Small bowel and colon****PP12. CLINICAL EFFICACY OF SINGLE-BALLOON ENTEROSCOPY PRECEDED BY VIDEO CAPSULE ENDOSCOPY IN A TERTIARY DIAGNOSTIC CENTER**

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Introduction: video capsule endoscopy (VCE) and balloon enteroscopy represent the main methods for the investigation of small bowel pathology. At present the optimum management of patients with small bowel pathology implies the use of VCE for lesion identification followed by enteroscopy for tissue sampling and/or therapy. **Objectives:** the evaluation of clinical efficiency of sequential examination with VCE and single balloon enteroscopy in a tertiary diagnostic center. **Methods:** we analyzed the cases of 10 patients with small bowel pathology examined initially by VCE and subsequently by enteroscopy. **Results:** 10 patients were analyzed (7 men), mean age 54.3 years (range 27-70 y). The main indication was bleeding/anemia of unknown origin (5 patients). VCE identified lesions in 8 cases (diagnostic yield 80%) (4 angiodysplasias; 1 case of ulcerations in a Crohn patient under biologic therapy; 1 case of unspecified ulcerations; 1 case of mucosal atrophy in a non-responsive celiac patient; 1 case of proximal jejunal longitudinal fissures). In the 2 cases in which VCE did not identify lesions, the enteroscopy identified a metastatic melanoma of the small bowel and an angiodysplastic lesion (100% diagnostic yield for enteroscopy in VCE-negative patients). Out of the 8 patients with lesions identified at VCE, in 4 patients (50%) biopsies were taken, in 2 cases (25%) therapy was performed (hemostasis by argon-plasma coagulation) and in 2 cases the lesions described at VCE could not be identified. In 100% of the cases in which VCE had negative results, enteroscopy was beneficial for diagnosis and therapy. **Conclusions:** in

the case series we analyzed, enteroscopy preceded by VCE identified lesions in 80% of patients, tissue sampling and therapy were possible also in 80% of cases, making this approach very clinically efficient.

PP13. ROLE OF CAPSULE ENDOSCOPY PILLCAM COLON 2 IN PATIENTS WITH KNOWN OR SUSPECTED CROHN'S DISEASE: A CASE SERIES

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Almost 70–80% of patients with Crohn's disease and virtually all patients with ulcerative colitis have colorectal mucosa involvement. Only few studies address the use of colon capsule in IBD, all of them in ulcerative colitis. According to ESGE guideline on colon capsule endoscopy, there are insufficient data to support its use in the diagnostic work-up or in the surveillance of patients with suspected or known inflammatory bowel disease. Colon capsule endoscopy is an interesting option for patients unable or unwilling to undergo colonoscopy. We report our experience with second generation colon capsule Pillcam Colon 2 in detection of significant lesions - in six consecutive patients with known or suspected Crohn's which failed/refused to perform a colonoscopy. The majority of patients in our series had ileo-cecal involvement, and the use of the Pillcam colon 2 capsule allowed a throughout examination and evaluation of the mucosal lesions with high acceptability, the method being perceived as non invasive and harmless. No electrolyte disturbances or adverse effects related to bowel preparation or capsule use were recorded. The capsule findings had a great clinical impact as all patients are currently receiving therapy. Article realized with the support of ESGE given research grant 2010

PP14. A NEW REGIMEN OF BOWEL PREPARATION FOR PILLCAM 2 COLON CAPSULE ENDOSCOPY

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Introduction: The ESGE/Given Imaging Grant supports innovative, original research in Gastroenterology with substantial involvement of capsule endoscopy. Our project "Role of PillCam2 capsule in CRC screening in patients unable or unwilling to perform colonoscopy" won the award in 2010. We plan to assess the feasibility, accuracy, and safety of PillCam 2 in the detection of significant lesions in 100 patients at risk of colorectal cancer unwilling or unable of performing colonoscopy. **Aim:** Since the current cleansing protocols led to discordant preparation results and the sodium phosphate is not available in Romania we decided to compare two split dose regimens based on PEG or sodium picosulphate, in the evening before and in the morning of the investigation, on colon cleansing levels and on rate of capsule excretion and to choose the best option for the study. The first 20 patients were prospectively enrolled using two products: Fortrans (macrogol 4000, Ibsen, France) and Pico Prep (sodium picosulphate, Ferring, Germany). The patients used Fortrans or PicoPrep as boosters also. A low-residue diet starting 48 hours before investigation and four senna tablets were also used. We assessed the CCE excretion rate and colon cleansing. **Results:** Twenty patients (11 males; mean age 63.8 years) were included in the analysis. Bowel preparation was rated as adequate in 80 % of patients on Fortrans vs. 60% on PicoPrep. CCE colonic transit time was 235 minutes with Fortrans vs. 496 minutes with PicoPrep. The excretion rate within 10 hours was 100% vs. 30 % respectively. **Conclusions:** In a small number of patients the combination of a split-dose of PEG solution and booster using Fortrans was superior to PicoPrep and resulted in higher rates of adequate cleansing level and CCE excretion. Based on these results we continued the study using a split dose regimen of Fortrans.

PP15. JEJUNAL ULCER DEVELOPED AFTER ROUX-EN-Y GASTRO-JEJUNOSTOMY

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Background: Approximately 5% of GI bleeding occurs between the ligament of Treitz and the ileocecal valve. Obscure gastrointestinal (GI) bleeding constitutes 5% of all GI bleeds, and it is mostly due to vascular anomalies of the colon and small bowel. **Case report:** We report the case of a 63-year-old woman admitted to our service for further investigation of an obscure overt hemorrhage. In the last four years, the patient has presented 2 episodes of melena and 1 episode of hematemesis followed by melena (the latest episode). Repeated upper (4) and lower (2) gastrointestinal endoscopies with ileal intubation have failed to find the source of bleeding. Her history included a distal gastric resection with Roux – en- Y anastomosis for a gastric ulcer that had occurred 20 years earlier. At the time of admission in our center, her hemoglobin was normal and there were no further signs of active bleeding. We repeated the upper endoscopy but, besides the resection of the stomach, findings were normal. The abdominal CT scan showed no luminal abnormality; nevertheless, it revealed a thickening of the wall in the region of the jejunum, suggesting midgut pathology. The video capsule endoscopy (VCE) that we performed has shown several punctiforme jejunal angiodysplasias. There was no evidence of any other pathological abnormality. She was referred for a double balloon enteroscopy, for a more detailed examination. During this examination, several punctiforme jejunal angiodysplasias were revealed and in the jejunal Roux limb distal of the gastro-jejunal anastomosis, we detected an ulcer of 1 cm. Patient received treatment with IPP and angiodysplasias were treated with plasma argon.

PP16. SMALL-INTESTINAL BACTERIAL OVERGROWTH AND IRRITABLE BOWEL SYNDROME – SIMILARITIES AND DIFFERENCES

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Background: Small-intestinal bacterial overgrowth (SIBO) and irritable bowel syndrome (IBS), diseases characterized by a normal endoscopic appearance, have many similarities in clinical features. An appropriate differential diagnosis between these two conditions is based on H₂-breath tests. Specific treatment may improve the symptoms in many "functional", difficult to treat, patients. **Aim:** Estimating the prevalence of SIBO in patients with an initial diagnosis of IBS, comparing the main symptoms in these groups of patients and evaluating the efficacy of specific treatment with Rifaximin in SIBO patients. **Methods:** Our prospective study evaluated the patients with IBS admitted in clinic during a three years period. All the patients had a normal colonoscopic appearance. We identified the SIBO patients by performing a H₂-breath test with glucose. We compared the symptoms between these two groups of patients and we evaluated the efficacy of the treatment with Rifaximin in SIBO patients. **Results:** From the 132 patients initially considered to have IBS, 43.9% were diagnosed with SIBO. Diarrhea, nocturnal diarrhea and weight loss were significant in SIBO patients ($p < 0.001$; $p = 0.048$; $p = 0.029$), while alternation of diarrhea-constipation, abdominal pain, and abdominal bloating +/- flatulence were prominent in IBS patient ($p < 0.001$). Specific treatment with Rifaximin in patients with SIBO led to the negativity of the H₂-breath test with glucose in 70.9% cases. **Conclusions:** In almost 50% of the IBS patients evaluated we identified SIBO. The similarity of clinical manifestations between these two conditions required a H₂-breath test with glucose for a proper differential diagnosis. The specific treatment with nonresorbable antibiotics (Rifaximin) led to the negativity of the H₂-breath test with glucose and improved considerably the symptoms in many cases of SIBO.

PP17. PSEUDOMEMBRANOUS COLITIS – AN EMERGING DISEASE

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Pseudomembranous colitis (*Clostridium difficile*) reached an increased incidence, especially in developed countries. Generally, it is associated with antibiotics, immunosuppressive therapy, and, more recently with proton pump inhibitors therapy (PPIs). **Aim:** Identification of frequency of occurrence and clinico-evolutive aspects of pseudomembranous colitis in Constanta County. **Material and method:** The study was performed on a population of 17 patients diagnosed with pseudomembranous colitis in the last 12 months. A positive diagnosis was established on at least one of the following tests: positive toxin A/B in fecal specimens, culture, or typical appearance at colonoscopy. **Results:** Of those 17 patients, 10 were female (59%) with mean age 61 ± 12.5 years. Clinical context was: recently treated with antibiotics - 15 cases, associated oncologic diseases (kidney, colon) - 4 cases, chronic treatment with PPI - 2 cases, inflammatory bowel disease - 1 case. Predominant clinical presentation was watery diarrhea lasting for 2-3 weeks, toxin A and B test was positive in 12 cases (70%) and cultures in 5 cases (30%) in which antibiogram was made (2 cases resistant at Metronidazole). The appearance at colonoscopy (8 cases) was white-yellow exudates with rectosigmoidian extension - 5 cases, left colitis (up to splenic angle) - 2 cases, pancolitis - 1 case. All cases responded to Rifaximinum 1.2 g/day \pm Metronidazole 1.5 g/day (for 2 weeks). In 3 cases there were early recurrences requiring extension of therapy for 2 weeks. **Conclusions:** Pseudomembranous colitis registers an increased incidence compared to previous years. Risk factors are antibiotics and immunocompromised states. Although testing toxin A/B in feces is the most common diagnostic method, colonoscopy is important for diagnosis, revealing typical issues if other tests have failed. Rifaximinum \pm Metronidazole is an effective therapeutic solution to be used as first choice.

PP18. CLOSTRIDIUM DIFFICILE INFECTION INCIDENCE IN FUNDENI GASTROENTEROLOGY AND HEPATOLOGY DEPARTMENT AND RELAPSE ASSOCIATED RISK FACTORS

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Background: Clostridium difficile infection (CDI) incidence is the most common nosocomial infection cause and is associated with increasing morbidity and mortality. The study aimed to evaluate the CDI incidence and the relapse associated risk factors in our service. **Methods:** the retrospective reexamination of the Fundeni Epidemiology and Gastroenterology & Hepatology departments' database. **Results:** between 01.01.2012 and 30.03.2013, 36 new patients were diagnosed with CDI in our clinic (21 patients in 2012- incidence 0.19%, 15 patients in 2013, incidence 3.28%). Eight patients were relapsers. The risk factors considered were male gender, age above 65, liver cirrhosis, inflammatory bowel disease, IPP treatment, large spectrum antibiotic therapy, colonic resection, immunosuppressant therapy, long previous hospitalization (> 2 weeks). Chi square and Fischer tests were used to evaluate the statistic influence of these risk factors in relapsing CDI. The unique risk factor with significant statistic influence was long hospitalization. **Conclusions:** the CDI incidence grew dramatically in our service in the first 2013 trimester comparing to 2012. The statistically significant associated risk factor for CDI relapse was long previous hospitalization.

PP19. MICROSCOPIC COLITIS - AN UNDER DIAGNOSED CONDITION. YOUNG PATIENT WITH ROME III CRITERIA FOR IBS DIAGNOSED WITH COLLAGENOUS COLITIS

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Introduction: Although microscopic colitis is almost as common as inflammatory bowel disease, in practice it is under diagnosed, especially due to failure of biopsy sampling in case of normal or almost normal colonoscopies and need of a dedicated histopathologist, able to recognize specific lesions. The diagnosis is supported by clinical presentation (chronic/recurrent watery diarrhea), normal or almost normal endoscopic appearance and characteristic microscopic changes. **Methods:** We present the clinical case of a 44 year old patient referred to our clinic for the

investigation of a chronic diarrhea (3-4 watery stools/day without pathological products) which started 7 months prior to submission, accompanied by rectal tenesmus and pain in the periumbilical region and left upper quadrant with radiation to the lower abdomen; we mention a weight loss of 9 kg in the last 3 months. Following investigations, the patient is diagnosed with collagenous colitis, although initial suspicion was irritable bowel syndrome based on Rome III diagnostic criteria. **Conclusions:** in case of chronic diarrhea syndromes, asserting a diagnosis of irritable bowel syndrome should be based not only on the lack of endoscopic lesions, but also on histological examination of colonic biopsies.

PP20. PREDICTIVE FACTORS FOR DEATH IN LOWER GASTROINTESTINAL BLEEDING

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Lower gastrointestinal bleeding is a gastrointestinal emergency which can lead to hemorrhagic shock and complication. We considered all cases of lower gastrointestinal bleeding hospitalized in a gastroenterology department between Jan. 2010-Dec. 2012, 242 patients. The median age of patients was 55.9 years (19-93), 116 women (47.93 %) and 126 men (52.07 %). Causes of lower gastrointestinal bleeding were gastrointestinal inflammatory diseases 55 cases (22.72%), 48 cases of colorectal cancer (19.82%), 37 cases of polyps (15.28%), 36 cases of diverticuli, 31 cases of hemorrhoids (12.8%), 6 cases of rectal ulcerations (2.47%), 7 cases of teleangiectasia (2.89%), 6 cases of lower gastrointestinal bleeding with indefinite etiology, 4 cases of ischemic colitis, 4 cases of radicle proctitis, 2 cases of post-polypectomy bleeding pedicle. Of all patients 11 deaths were recorded, calculated mortality was 4.13%. Mean hemoglobin was 10.78 g/dl. Average amount of hemoglobin in patients which died was 5.34 g/dl and in survivors it was 11 g/dl

($p < 0.0001$). Average age in patients which died was 71.5 years, and in survivors was 58.2 years ($p < 0.0001$). 31 of the survivors experienced hemorrhagic shock (31.3%) versus 100% of the deceased ($p < 0.0001$).

Conclusion: lower gastrointestinal bleeding is a common cause of death in our Department and severity of anemia, hemorrhagic shock and age are predictors for death in lower gastrointestinal bleeding.

PP21. FREQUENCY OF INFECTION WITH CLOSTRIDIUM DIFFICILE IN THE GASTROENTEROLOGY CLINIC TIMISOARA

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Introduction: Clostridium difficile colitis occurs more frequently in older people with a long period of hospitalization and who had previously undergone antibiotic treatment. The **Aim** of the study was identifying the incidence of pseudomembranous colitis and identifying the factors that predispose to this disease. **Methods:** We performed a retrospective study that included cases of pseudomembranous colitis admitted in the Gastroenterology Department of the Emergency County Hospital Timisoara in 2012. The diagnosis was sustained by positive toxin A & B culture \pm the typical endoscopic appearance. **Results:** 24 cases were diagnosed with Clostridium difficile infections representing 1% of the total admissions in our Gastroenterology department during 2012, of which 12 men (50%) and 12 women (50%) with an average age of 66.16 ± 16.43 years. Regarding the reasons for admission, 7 patients (29.2%) had a severe flare of IBD, 9 (37.5%) chronic diarrheic syndrome, or other gastroenterological diseases (cirrhosis, cancers) 8 (33.3%). Of the total number of cases, 20 (83.3%) have been previously hospitalized, 16 (66.6%) received antibiotics before admission and 10 cases (41.6%) were treated with proton pump inhibitors (PPIs); 8 (33.3%) had prior antibiotic and PPIs. The death rate in the study group which was subsequently followed

up was 20.8% (5 cases, from which 3 in septic shock); 100% of the deceased received antibiotics in the previous hospitalization or during current hospitalization, 4 cases (80%) received both prior antibiotic and PPIs. The rate of disease recurrence was seen in 4 patients (16.6%). **Conclusion:** The elderly and immunocompromised patients are those most likely to develop Clostridium difficile colitis. The incidence of the disease is increased in patients hospitalized or previously on antibiotic therapy with the mortality rate reaching 20%.

PP22. SMALL INTESTINAL BACTERIAL OVERGROWTH AND IRRITABLE BOWEL SYNDROME. IS THERE ANY CORRELATION?

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Aim: Searching for the role of Small Intestinal Bacterial Overgrowth (SIBO) in the pathogenesis of mechanisms and symptoms in patients with Irritable Bowel Syndrome (IBS). **Method:** 44 patients with irritable bowel syndrome according to Rome III criteria were screened for proximal small intestinal bacterial overgrowth by glucose hydrogen breath test (GHBT). Positive patients received a 10 day course with the antibiotic Rifaximin and 6 patients were retested 4 weeks after completing the treatment. **Results:** SIBO was found in 7 patients out of 44 (16%) - 6 females (86%) and 1 male (14%). All patients receiving Rifaximin and retested 4 weeks after the end of treatment were found negative for SIBO. **Conclusions:** In this preliminary study, a minority of patients with irritable bowel syndrome had instrumental evidence of small intestinal bacterial overgrowth. Thus, the role of such condition, in irritable bowel syndrome remains poorly understood. Rifaximin effectively normalized the glucose breath test by possibly counteracting the small intestinal overgrowth. Whether such therapeutic approach is ultimately associated with symptom improvement in the long term, however, requires additional studies. **Key words:** Irritable bowel syndrome- Small Intestinal bacterial overgrowth- Hydrogen

breath tests.

PP23. THE EVALUATION OF SMALL INTESTINAL BACTERIAL OVERGROWTH WITH HYDROGEN BREATH TEST IN PATIENTS WITH IRRITABLE BOWEL SYNDROME

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The breath test can measure the hydrogen concentration in the exhaled air before and after the administration an amount of glucose. The hydrogen concentration is always a reflection of the mass of bacteria and of the bacterial metabolic activity in the intestine. The **aim** of our study was to evaluate if the irritable bowel syndrome can be associated with small intestinal bacterial overgrowth. **Material and methods:** in our study were included patients diagnosed with irritable bowel syndrome according Rome III criteria. All the subjects were evaluated in order to exclude any organic pathology (laboratory tests, abdominal ultrasound, gastroscopy, colonoscopy). All patients had a restrictive diet without any carbohydrates with a day before and without any antibiotic and laxative medication with a month before they took the breath test. We observe if any of these tests were positive in order to give a specific therapy. **Results:** We evaluated 20 patients with irritable bowel syndrome, 55% women and 45% man, between 27 and 65 years old. 55% from these had irritable bowel syndrome with constipation (IBS-C), 15% irritable bowel syndrome with diarrhea (IBS-D) and 30% irritable bowel syndrome unsubtype (IBS-U). In 95% (19 cases) the hydrogen breath tests were negative and only in 5% (1 case) were positive for small intestinal bacterial overgrowth in a patient with irritable bowel syndrome unsubtype (IBS-U). **Conclusion:** we cannot find an association between the irritable bowel syndrome symptoms and the small intestinal bacterial overgrowth in our patients.

PP24. PREVALENCE AND RISK FACTORS FOR CLOSTRIDIUM DIFFICILE INFECTION: A RETROSPECTIVE ANALYSIS

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Aim The spectrum of Clostridium difficile-associated diarrhea (CDAD) is changing. Apart from antibiotic use, other risk factors such as use of proton pump inhibitors and immunosuppressive agents, intensive care unit stay, surgery and inflammatory bowel disease are being recognized. The aim of this study was to assess the prevalence and risk factors for C. difficile infection in our center. **Material and Method** We retrospectively analyzed data on patients admitted to Institute of Gastroenterology and Hepatology Iasi, whose stool samples were tested for C. difficile toxin between January 2012 and March 2013. Demographic and clinical data, and risk factors (antibiotic use, underlying malignancy, chemotherapy, corticosteroids, PPI use) were noted. Patients whose stool samples were CDT-positive were grouped as study subjects and those with negative stool samples were included in the control group. **Results** Of the 45 patients (mean age 63.5 years; 21 men) whose stool samples were tested during this period, 15 were positive for CDT. As compared with control subjects (n=30), study subjects were more likely to have fever, underlying malignancy, and exposure to antibiotics and chemotherapeutic agents. None of the patients developed any complication, except one patient who died from liver failure. **Conclusion** Antibiotic usage is a common cause of diarrhea and these drugs have been implicated as an important risk factor for CDAD. In our study, C. difficile positivity was influenced by prior antibiotic use and additional risk factors such as malignancy and inflammatory bowel disease and exposure to chemotherapy, PPI and surgery.

PP25. DIVERTICULOSIS OF THE COLON IN ELDERLY

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Introduction: The appearance of colon diverticulosis is favored in elderly due to colon wall texture deterioration, reduced consumption of dietary fibers and the presence of chronic constipation. The current study aims to analyze the prevalence of colonic diverticulosis and its clinical manifestations in a longitudinal study conducted over a 1 year period. **Methods:** A total of 156 elderly patients (aged 65-87 years) were hospitalized and investigated undergoing barium examination, double contrast radiography, ano-recto-sigmoidoscopy, colonoscopy, CT. **Results:** Diverticulosis was detected in 85 patients (54.49%). The main clinical manifestations were: diffuse abdominal pain (71: 45.52%), spontaneous lower gastrointestinal bleeding (3: 8.3%), diverticulitis (31: 19.87%), obstructive syndrome (7-4, 40%) and other symptoms, including fever, dysuria and tenesmus (19-20%). **Conclusions:** Diverticulosis of the colon is very common in elderly and raises difficult problems of differential diagnosis. The most common clinical manifestation is diffuse abdominal pain. Complications pose difficult therapy problems in the elderly, considering the life-threatening pathology.

PP26. FECAL CALPROTECTIN WITHIN THE CHRONIC DIARRHEIC SYNDROMES

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Calprotectin, an important component of the cytoplasm of polymorphonuclear granulocytes, is used as a non-invasive marker for the inflammatory activity evaluation, but also as a screening test for the irritable bowel diseases differentiation. This paper's **purpose** is to show the correlation between the calprotectin level and the intestinal damage within different conditions for the patients with chronic diarrheic syndrome. A total of 51 patients were evaluated between October 2012 – March 2013, of which 27 patients (15 men, 12 women) had chronic diarrheic syndrome. They are compared with 24 patients, already known with IBD under treatment. The average age is 36 years old (6-36 years old) vs. 38.3 years old in IBD-known patients. The average level of the fecal calprotectin in IBD patients was 204.54 µg/dg vs. 142.3 µg/dg in patients with chronic diarrheic syndrome. Among these, 15 (55.5%) had the calprotectin level > 60 µg/dg; 13 patients agreed to undergo a colonoscopy, which, together with the biopsy established the inflammatory bowel disease diagnosis (86.6%). Among the de novo cases, 5 were Crohn's Disease (34.4%) and 8 were ulcerative colitis cases (61.6%). The diagnosis average age was 27.69 years old. **Conclusions:** Fecal calprotectin can be used as a screening test for inflammatory bowel diseases in patients who have chronic diarrheic syndrome, its level being correlated to the damage of intestinal mucosa.

PP27. ILEO-COLONIC CROHN'S DISEASE IN TWO SIBLINGS, ASSOCIATED WITH D AND K HYPOVITAMINOSIS – CASE REPORT

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Inflammatory bowel disease (IBD), Crohn's disease (CD) and Ulcerative colitis (UC), may present familial aggregation in about 15% of subjects. Crohn's disease involving the ileum and small bowel resection can lead to malabsorption of fat-soluble vitamins

(A, D, E, K). **Case report:** S M., female, 30 y.o., from Suceava county, was diagnosed with ileo-colonic CD at the age of 25, after an appendectomy complicated by external fistulae. Intestinal obstruction after ileal stenosis occurred later, requiring right hemicolectomy and ileal resection with ileo-colic anastomosis. Five years after being diagnosed, she presents with tetany and bleeding syndrome. After parenteral substitution therapy, symptoms resolved with correction of blood parameters. Patient's brother, S G, 28 y.o., was diagnosed with stenosing ileo-colonic CD, five years after his sister. He ileal segmental resection and right hemicolectomy was performed in emergency, followed by suture dehiscence and peritonitis. Histopathologic examination of the resected segment supports the diagnosis of CD. **Discussion:** We presented the cases of two patients, sister and brother, diagnosed five years away with ileo-colonic CD. In both cases the diagnosis was delayed, requiring emergency surgery. In our country we found no published case of BC with family aggregation. At patient S M, the malabsorption of D and K vitamin was symptomatic, demonstrated by serum assays and responded to substitution therapy. **Conclusions:** 15% of patients with IBD have familial aggregation. Malabsorption of fat soluble vitamins may be a complication of CD. **Keywords:** Crohn's disease, hypovitaminosis K, tetany.

PP28. CHRONIC COUGH: A RARE EXTRA INTESTINAL MANIFESTATION IN CROHN'S DISEASE - CASE REPORT

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Inflammatory bowel disease (IBD) - ulcerative colitis (UC) and Crohn's disease (CD) - is associated in 36% of cases with extra digestive manifestations. Respiratory manifestations have been described in patients with IBD by affecting mainly the large airways. Bronchiectasis is found in two thirds of patients with IBD presenting large airway damage, being more common in CD, women and non-smokers. **Case re-**

port: Patient C M, 31 years, non-smoker, from rural area, addressing for dry cough, producing vomiting, day and night fever, diffuse abdominal pain, tibio-tarsal arthralgia. On physical examination: general condition influenced, fever, pallor, clubbing, episcleritis of the right eye, spontaneous and diffuse abdominal pain on palpation. Biological: inflammatory syndrome, anemia mixed type, negative blood cultures, negative Quantiferon test, calprotectin T3. Chest X-ray: rich pulmonary hilum. Colonoscopy: 20 cm to 90 cm of the anal edge, longitudinal ulcerations, aspect of "paving stone". Histopathologic examination supports the diagnosis of CD. Upper gastrointestinal endoscopy and abdominal CT scan were normal. **Discussion:** We present the case of a patient of 31 year old man in whom the diagnosis of colonic CD was established 2 years after onset, because the main symptoms were cough and fever. The patient was initially investigated by excluding tuberculosis. Diagnosis of CD was supported by colonoscopy and histopathologic appearance. Under biological treatment (adalimumab) the patient had a favorable evolution with remission of symptoms, inflammatory syndrome and colonic lesions. **Conclusion:** Chronic cough can be an extra intestinal manifestation of IBD.

PP29. FECAL CALPROTECTIN IN INFLAMMATORY BOWEL DISEASES

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Calprotectin is a cytosolic protein of neutrophils, and release of calprotectin into the feces represents a marker for assessing intestinal inflammation. Elevation of fecal calprotectin (FCP) may be due to inflammatory bowel disease (IBD), colorectal cancer or infectious colitis. The **aim** of the study was to evaluate FCP measurements in irritable bowel syndrome (IBS) or in different clinical or therapeutic influenced IBD forms. **Patients and Methods:** A prospective study of 40 patients was performed: 10 controls with IBS and 30 patients with IBD- 11 Crohn's Disease (CD) and 19 Ulcerative Colitis (UC). Colonoscopy

and serological inflammatory markers were performed in all patients, and those with infectious colitis were excluded from controls. Fecal calprotectin was determined by Buhlman-Quantum Blue rapid assay, with normal value under 50 microg/g. **Result.** In control IBS patients, FCP values were under 50 microg/g, and in active severe forms of IBD (18 patients) values were higher than 300 microg/g. In 12 patients with IBD and clinical remission under therapy, FCP values were lower than 150 microg/g (between 30-138). We have found no correlation between FCP and serological markers of inflammation (ESR and CRP). **Discussion and Conclusion.** Fecal calprotectin is a non-invasive marker generally acceptable to the patient with gastrointestinal symptoms. FCP can aid in distinguishing inflammatory disorders from non-inflammatory conditions. In previously diagnosed IBD, FCP normalization can predict a good response following treatment compared to patients whose calprotectin never falls in to reference range who are at risk of relapse.

PP30. CORRELATIONS BETWEEN SERUM FERRITIN AND SERUM IRON LEVELS IN PATIENTS WITH IBD

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Introduction: anemia is a complication frequently observed in inflammatory bowel disease (IBD). The main mechanisms are iron deficiency and chronic inflammation **Aim:** the goal is to find possible correlations between the anemia in inflammatory bowel disease and its causes, as compared with a group of healthy adults. **Material and methods:** prospective study between June 2010 and March 2013 which included 83 patients diagnosed with Crohn's disease or ulcerative colitis and anemia followed up in the Gastroenterology Department of Timisoara. The diagnosis of IBD was established based on clinical, biologic, endoscopic and histological criteria. Dia-

gnosis of anemia followed the following criteria: Hb <13gr/dl in men and <12 g/dL in women. The group of healthy adults included a number of 70 people. **Results:** among patients diagnosed with IBD, 39 had Crohn's disease (46.98%) and 44 with ulcerative colitis (53.01%). The average patient age was 40.17 years (16-75 years), 36 women (43.37%) and 47 men (56.62%). Among patients with CD, 19 (48.71%) had involvement of the colon only, 4 (10.25%) had involvement of the ileum only, and 16 patients had ileocolonic involvement (41.02%). Among patients with UC, 10 patients showed an impaired rectum only (22.72%), 24 impairment of the left colon (54.5%) and 10 patients (22.72%) had pancolitis. The value of C-reactive protein in patients with IBD versus healthy people - 26.04 versus 7.85 (p = 0.0012). Average serum iron in patients with IBD was 53.47 microg/dl, and in the healthy adults group it was 96.04 microg/dl (p <0.0001). Average serum ferritin in patients with IBD was 123.4 ng/ml, while the healthy ones it was 135.2 ng/ml (0.4959). **Conclusions:** Serum ferritin does not reflect the real iron deficiency in patients with IBD, as serum iron, which can be explained by the fact that its value increase as acute phase reactant during intestinal inflammation.

PP31. CROHN'S DISEASE FEATURES IN ELDERLY PEOPLE

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Introduction: Crohn's disease presents very heterogeneous features from a clinical point of view, and classifying Crohn's disease patients in homogeneous subgroups is challenging. The Montreal classification for Crohn's disease was proposed in 2005 as an effort to characterize patients with Crohn's disease according to the latest clinical and research advances in inflammatory bowel diseases. **Aim:** Crohn's Disease evidence of phenotypic features of adult population and observation of their differences to extreme categories of age (< 40, > 65 years). **Methods:** Sixty-three patients with Crohn's Disease, admitted to the Insti-

tute of Gastroenterology and Hepatology Iasi, between January 2010 and December 2012 were studied prospectively. We assessed demographic characteristics, clinical onset of disease, age at diagnosis, disease location and behavior, presence of extra intestinal manifestations, treatment with biological agents and a history of surgery. **Results:** Patients were predominantly female (60.6%), urban (81.81%) with a mean age at diagnosis of 42 ± 12 years. Most patients were diagnosed between 18 and 40 years (82%), with predominant localization in the terminal ileum (54.54%) with a nonstricturing, nonpenetrating behavior (68.62%). The young patients had as onset symptoms abdominal pain and diarrhea, and elderly patients had the main manifestation bloody stools. Complications (stenosis, fistulas, abscesses) were significantly more numerous in younger patients group (67.67% vs. 33.34%, $p = 0.0386$). Regarding treatment, the need to maintain remission with immune-modulators was also increased in the young population (44.44% vs. 16.6%, $p = 0.3644$). Biological therapy was necessary only in younger patients. Surgical therapies were more frequent in patients under 40 years (51.8% vs. 16.67% $p = 0.1861$). **Conclusions:** Young patients have more severe forms of disease activity requiring immunosuppressive therapy and biological agents. There were no significant differences in the disease phenotype. Young people had more frequent complications and surgery compared with older people. Studies are needed on larger groups of patients to confirm or refute the data obtained.

PP32. USE OF FECAL CALPROTECTIN IN MONITORING ANTI-TNF ALPHA THERAPY IN CROHN'S DISEASE

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Background: Although monitoring activity in Crohn's disease (CD) is amenable to endoscopic examination and subsequent histological analysis, these are time-consuming, expensive and relatively invasive for patients. So, if quantifying low calprotectin levels after treatment indicates response of disease activity, this non-invasive marker can become routinely used in

optimizing treatment and compliance. Aim: to evaluate the role of fecal calprotectin in monitoring the anti TNF-alpha treatment in patients with CD. Methods: We prospectively included 15 patients (46 ± 2 years) with moderate to severe ileo-colonic CD (CDAI 250-450), who were about to receive either Infliximab i.v. (7 patients) or Adalimumab s.c. (8 patients). Stool samples were collected and calprotectin was measured before starting the treatment and after the induction period (lateral flux immunochromatography technique - Bioclinica Laboratory). In addition, clinical activity was measured using CDAI index before and after induction treatment. For mucosal healing assessment, colonoscopy was performed before and after 6 months of anti-TNF treatment and CDEIS (Crohn's Disease Severity Index) index was assessed. Results: Clinical response (expressed by CDAI drop) at 6 months was obtained in 12 out of 15 patients (80%) -5 with Infliximab and 7 with Adalimumab. Calprotectin value was $>300 \mu\text{g/g}$ before starting the treatment in all patients and after the induction period between $50-200 \mu\text{g/g}$ in 12 patients. Of the 15 patients, 11 (73%) showed an endoscopic response to treatment and 6 of these achieved endoscopic remission ($\text{CDEIS} < 3$). In these 6 patients calprotectin concentration declined below $50 \mu\text{g/g}$. Conclusions: Fecal calprotectin has great potential to become widely use as a simple, non-invasive, cheap marker of response to treatment in patients with clearly established diagnosis of Crohn's disease and it can be recommended in monitoring response and mucosal healing during anti-TNF therapy.

PP33. B12 AND D VITAMIN DEFICIT IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE

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Inflammatory bowel disease is associated with a high prevalence of low serum levels of vitamin D and B12. The aim of this paper is to analyze if lower levels of these two vitamins are found in patients with in-

inflammatory bowel disease as compared to the rest of the population in the Western part of Romania. This prospective study was conducted between 15.06.2010 and 15.03.2013 in the Gastroenterology and Hepatology Department from Timisoara and it included 83 patients with inflammatory bowel disease: 44 with ulcerative colitis and 39 with Crohn's disease. The diagnosis was confirmed clinically, by endoscopy and histology. The control group comprised 71 patients. Serum levels of B12 and D vitamin were measured. The mean age of the patients was 40.17 years (16-75 years), 36 women (43.37%) and 47 men (56.62%). Out of the patients with Crohn's disease, 19 (48.71%) had exclusive colon involvement, while 4 (10.25%) had exclusive ileum involvement and 16 had ileocolic involvement (41.02%). Meanwhile, out of the patients with ulcerative colitis, 10 patients (22.72%) had only involvement of the rectum, 24 left-sided colitis (54.5%) and 10 pancolitis (22.72%). The mean age of the healthy adults from the control group was 47.42 years (18-75), 33 women (47.42%) and 37 men (52.6%). The mean value of serum vitamin D in patients with inflammatory bowel disease was 22.84 pmol/l (20.57 for CD and 21.84 for UC), as compared to the control group 52.78 pmol/l ($p < 0.0001$), being a statistically significant difference. The mean value of serum vitamin B12 in patients with inflammatory bowel disease was 406.3 pg/ml (404 for CD and 392.74 for UC), versus 554.1 pg/ml, $p = 0.003$. **Conclusion:** as in other geographical areas, among patients with inflammatory bowel disease from the Western part of Romania, there is a significant prevalence of lower serum levels of vitamin B12 and vitamin D.

PP34. EPIDEMIOLOGY OF INFLAMMATORY BOWEL DISEASES IN A TERTIARY CENTER IN NORTH-EASTERN ROMANIA

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Introduction: Inflammatory bowel diseases (IBD) are chronic, idiopathic illnesses with extremely varied clinical manifestations. It is considered that

these conditions occur in an individual's genetic susceptibility. **Aim:** to assess the characteristics of these conditions in North - Eastern Romania. **Methods:** prospective study included 156 patients with IBD (105 UC, 55 CD) hospitalized between January 2010 - December 2012. We evaluated: age, gender, area of origin, status smoker/nonsmoker, presenting symptoms, presence of inflammatory syndrome, the extension of lesions, severity, treatment, complications, need for surgery. **Results:** One hundred and five patients had UC and 55 had CD. The average age of diagnosis was 40 ± 14 years with no significant differences between patients with UC and those with CD (42 ± 15 years vs. 34 ± 12 years). In both conditions prevailed young (48.5% vs. 82%, $p < 0.05$) and urban patients. As the onset the main symptoms were: diarrhea (UC: 55.07%, CD: 48.48% $p = 0.90$), bloody stool (UC: 47.26%, CD: 33.33%), abdominal pain (UC: 13.3%, CD: 48.27%, $p < 0.05$). As severity, there is a significantly large number of moderate to severe forms in young versus elderly (60.8% vs. 13.04%, $p = 0.028$). In CD, complications were significantly more frequent in young patients (67.67% vs. 33.34%, $p = 0.0386$). The need to maintain remission with biological therapy was increased in patients with CD compared with those with UC (66.67% vs. 24.49%, $p = 0.028$). **Conclusions:** There are no significant differences between young and elderly regarding inflammatory bowel disease phenotype. Young patients had more frequent and severe complications

PP35. QUALITY OF LIFE AND ENDOSCOPIC REMISSION IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE

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Introduction: Inflammatory bowel diseases (IBD) are potential debilitating diseases, which may lead in time to impaired quality of life (QoL). One of the goals of IBD treatment is to achieve and mai-

tain remission of the disease. To understand if patients' perception of health correlates with endoscopic remission we used the Inflammatory Bowel Disease Questionnaire-32 (IBDQ-32). **Aim:** To determine whether patients with Crohn's disease (CD) and ulcerative colitis (UC) in clinical and endoscopic remission improve their perception of health and QoL. **Methods:** This is a prospective, observational study between October 2011 and December 2012 that included IBD-patients who are in clinical and endoscopic remission. Crohn's disease activity index (CDAI) and ulcerative colitis disease activity index (UCDAI) were used to assess disease activity. IBDQ-32 was used to assess HRQoL. Significant improvement of QoL was believed to have occurred when the global score in the IBDQ-32 was at least 185 points. **Results:** A total of 70 IBD patients in clinical and endoscopic remission (15 with CD, 55 with UC) were included. Eighty five percent (60 IBD patients), of which 14.8% (10 CD patients) and 71.42% (50 UC patients) improved significantly their QoL. Type of treatment was not related to normalization of QoL. The lack of restoration of health was related to persistence of chronic fatigue and anxiety/depression. **Conclusion:** Endoscopic remission is associated with an improvement of the perception of health and QoL by most IBD patients, independently of the type of treatment. However, a significant group of patients do not achieve restoration of QoL, which reinforces the necessity to identify the patients in need of a special support.

PP36. THERAPEUTIC ACTION OF ANTI-TNF ALPHA DRUGS ON SMALL INTESTINAL MACROSCOPIC INFLAMMATION IN PATIENTS WITH SERONEGATIVE SPONDYLARTHROSIS

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Introduction: Discovery of the immunological link between patients with spondylarthritis (SpA) and inflammatory bowel disease (IBD) gave rise to the hypothesis that, similarly to their effect in IBD, biologic anti-TNF alpha drugs can also be beneficial for the intestinal inflammation in patients with SpA. **Material and methods:** Between January 2008 and December 2012, 61 consecutive patients suffering from a form of SpA on stable doses of medication and 23 controls were enrolled and submitted to a small bowel video capsule endoscopy examination (VCE). After reading each VCE recording, a capsule endoscopy scoring index for small bowel mucosal inflammatory change (Lewis score) was calculated. **Results:** 50 patients (84.7%) had evidence of small bowel mucosal inflammation (Lewis score of more than 135). 13 patients (21.3%) received anti-TNF alpha biologic therapy at the time of the small bowel examination. Patients on biologic therapy had significantly lower Lewis scores for the distal tertile ($p=0.048$), but not for the bowel as a whole, or of the proximal or mid tertiles. The Lewis scores were much lower in the Adalimumab/Infliximab group than in the Etanercept group ($p = 0.035, 0.117, 0.083$ and 0.028 for the bowel as a whole and its proximal, mid and distal tertiles, respectively). **Conclusion:** These results bring into question the possible role of an early intervention with anti-TNF alpha drugs in patients with SpA and small intestinal inflammation, condition that predicts an aggressive course of their rheumatologic disease. Compared to the other anti-TNF alpha agents available, Etanercept seems to be different in its therapeutic action on the intestinal inflammation in SpA, similarly to what happens in Crohn's disease. Acknowledgement: This work was supported by CNCSIS/PNII-IDEI, ID_323/2007 and is part of a study registered on ClinicalTrials.gov with the number NCT00768950.

PP37. ULCERATIVE COLITIS IN A TERTIARY GASTROENTEROLOGY CENTER. RETROSPECTIVE STUDY OF 5 YEARS

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Introduction: specific phenotype of IBD will probably indicate disease prognosis and patient's specific treatment with specific pursued medication. The clinical course of disease in individual patients, prognosis and any associated complications are of major importance for the patient and physician. The **aim** of the study was to determine the epidemiological aspects and clinical course of patients with UC in a tertiary gastroenterology center. **Methods:** The study was conducted on a lot of 160 patients with UC of 190 cases of IBD (27 with CD and 3 indeterminate colitis), in Gastroenterology Clinic dispensary on a 5-year period (2007 - 2011). The diagnosis was established based on clinical examination, endoscopy and histopathology. We noted demographics, patient's symptoms, biological data, results of ultrasound and endoscopic examination (to assess the extent and severity of disease), as well as the evolution. **Results:** From the patients followed-up, 78 were men, 82 women, predominantly from an urban area (113 patients). Minimum age at the onset was 15 years, maximum age - 80 years. 47 patients were smokers, 27 ex-smokers and 86 non-smokers. At onset, 26 (16.25%) had proctitis, 88 (55%) had left colitis and 46 (28.75%) had extensive colitis or pancolitis. 56.58% had a moderate form of disease, 8.75% a severe form, and 31.25% mild disease, and in 4.37% the diagnosis was made only on the basis of histopathologic examination, endoscopic examination was not highly suggestive and not specific IBD symptoms were present. The presence of lower-grade dysplasia was found in 2 patients (4.25%), high-grade dysplasia was found in 1 patient (2.12%) and CRC was found in 2 patients (4.25%). Therapeutic indication in these patients was surgery. **Conclusions:** Correct approach in patients with UC should include clinical dispensary regular visits, intensive control of disease activity by medical treatment in combination with endoscopic surveillance with biop-

sy sampling. The purpose of colonoscopic surveillance consists in assessing the lesions' and detection of pre-neoplastic lesions before malignant transformation. Thus, detection and management of dysplastic lesions is crucial in reducing CRC and mortality in patients with UC.

PP38. EFFICIENCY OF THE SEMI-QUANTITATIVE CALPROTECTIN RAPID TEST IN INFLAMMATORY BOWEL DISEASE

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Introduction: The golden standard in Inflammatory bowel disease (IBD) is colonoscopy with biopsy. Biological tests currently used (CRP, fibrinogen, ESR) are not accurate markers for diagnosis and for following reactivation. These observations led to the need to find other noninvasive sensitive and specific markers for inflammatory bowel disease (IBD). **Aim:** To assess the efficiency of semi-quantitative calprotectin rapid test in evaluating the activity of inflammatory bowel diseases. **Material and methods:** This prospective study included 105 patients with inflammatory bowel disease (72 with ulcerative colitis, 33 with Crohn's disease) between January 2011 - February 2013. In the surveillance period patients were analyzed during flares and remission, with a total of 187 cases (124 cases of ulcerative colitis and 63 of Crohn's disease). All patients were evaluated using clinical and endoscopic activity scores. A full hematological and biochemical balance was performed. We collected samples of stool for fecal calprotectin quantification. The diagnosis was confirmed by colonoscopy and histological examination. Fecal calprotectin was measured by means of a semi-quantitative rapid test. The data were statistically analyzed by SPSS 18 **Results:** There were 127 cases with UC and 63 with CD. 87% of the UC patients were evaluated during the active disease. 31 of them had a severe episode of active disease, 46 had a moderate one, while 33

had a mild activity episode. The correlation between the calprotectin values and lesions localization was analyzed, without finding any statistical differences. The data have shown a very strong correlation between the severity of the active disease, assessed through the UCDAI (Mayo) score, and the calprotectin value. We performed the same statistical analysis in patients with Crohn's disease. We found a good correlation between disease activity assessed by CDAI score in colonic luminal disease. Calprotectin value poorly correlated with other lesions' location and with fistulizing disease. **Conclusions:** The rapid test for assessing calprotectin can be a useful non-invasive marker in appreciating the severity of clinical and biological disease activity. We found a statistic correlation between ulcerative colitis activity and calprotectin and colonic luminal localization in Crohn's disease. The calprotectin value poorly correlated with other Crohn's disease pattern or localization

PP39. ASSESSMENT OF ACTIVITY IN ULCERATIVE COLITIS (UC) USING A MORPHOLOGICAL INDEX

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Introduction: In ulcerative colitis, it is not important only to reach a correct diagnosis, but also to evaluate disease activity, which can be done using clinical parameters, endoscopy and often morphological study of colonic biopsies. **Aim:** to determine the severity and staging of UC by histological evaluation and to correlate it with endoscopic aspects; **Methods:** Our study included 30 patients with UC (20 women, 10 men, 23-67 years) who underwent colonoscopy (Olympus video endoscope ExeraCLE145) with multiple sampling of colonic biopsies for histological analysis. Samples were fixed in 10% formalin and processed for inclusion in paraffin. 5 micron sections were stained with hematoxylin-eosin and examined with a Nikon Eclipse 200 optical microscope. Interpretation was based on a 0-5 grading system, evaluating: architectural changes (mild, moderate, severe diffuse, multifocal), chronic inflammatory infiltrate (mild, moderate,

highly raised), presence of neutrophils and eosinophils in the lamina propria, cryptitis, destruction of intestinal crypts, highlighting erosions and ulcerations of the mucosa. **Results:** In terms of endoscopic aspects, UC patients were differentiated by the level of activity and by the stage of disease. Endoscopic lesions were: granular mucosa, edema, erosion, ulceration; presence of pseudo polyps – the latter observed in a small number of 7 cases. Morphological appearance was different depending on the stage of disease activity. In 3 of the 30 cases we observed severe mucosal alterations (grade 4 and 5), in 14 cases we found moderate acute inflammation, and in 13 cases the severity of intestinal mucosal damage was low grade (grade 1 and 2). **Conclusions:** Morphological appreciation based on criteria of severity is an important method for grading activity in UC. Morphological activity index can be used both for monitoring disease evolution and for evaluating the treatment effectiveness.

PP40. PROBLEMS IN DIAGNOSIS AND TREATMENT OF INFLAMMATORY BOWEL DISEASE - CASE REPORT

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We report the case of a 47 year-old man presenting with diarrhea (6-7 stools per day), significant weight loss, anemia. Personal history reveals the presence of diarrheic stools (3-4 per day) over 20 years. He underwent a colonoscopic investigation 10 years before, with no pathological findings. The disorder was interpreted as an irritable bowel syndrome. During current hospitalization, laboratory examinations showed a pronounced inflammatory syndrome (ESR= 68/106, CRP= 20.6, CDAI= 258), negative stool cultures, endoscopic and histological appearance confounding elements of ulcerative colitis (UC) and Crohn's disease (CD). Aminosalicylates and corticosteroid therapy was started. After 3 months, the patient's clinical and biological status did not improve, and he also presented with a more severe anemic syndrome, which is why we continued investigating the digestive tract. Video capsule endoscopy showed aphthous ulcers and cobble stoning throughout the ileum, with active ble-

eding in the terminal ileum. The diagnosis was steroid-resistant CD, with colonic changes of a remissive UC. Adalimumab treatment was started. Assessment of therapeutic response at 3 and 9 months showed the patient had clinically improved, with CDAI of 35 and 25 respectively, with normal serological markers (ESR, CRP, Hb). Colonoscopy and histology showed no significant changes from the initial examinations, while video capsule endoscopy showed persistence of initial lesions, but without bleeding on the ileum. Patient outcome is consistent with published data. Biological therapy produces a significant improvement in clinical and biological activity, but mucosal healing occurs in less than half of cases after 12 months of treatment. The peculiarity of the case is the discrepancy between colonoscopic and histological appearance of indeterminate colitis, without active lesions and severe changes in clinical and biological findings at admission. Nosological classification and effective therapeutic conduct were possible only after the video capsule endoscopy.

PP41. IMMUNOSUPPRESSIVE DRUGS IN INFLAMMATORY BOWEL DISEASES: EXPERIENCE FROM A TERTIARY CENTER

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Immunosuppressive drugs (thiopurines and biologic agents) are the mainstay of maintenance treatment in moderate to severe inflammatory bowel diseases. Even in the absence of an excellent efficacy, these drugs are avoided by fear of adverse events and inadequate (5ASA derivatives) or dangerous on the long-term alternatives (steroids) are preferred. We present a retrospective analysis on the use of azathioprine and biologic agents (infliximab and adalimumab) in patients diagnosed with moderate to severe Crohn's disease or ulcerative colitis, followed in our department from January 2008 to March 2013. 88 ulcerative colitis patients (50 followed-up until present) and 48 patients with Crohn's disease (34 followed-up

until present) were included. 18/35 ulcerative colitis patients and 17/34 Crohn's disease patients were treated with azathioprine (median duration of therapy: 5 months for ulcerative colitis and 8.9 months for Crohn's disease). In ulcerative colitis patients, 10 were in remission with azathioprine monotherapy, in 6 patients infliximab was added because the disease was uncontrolled, in 2 patients infliximab was supplemented with azathioprine in order to control the disease. 7 patients with Crohn's disease are in remission with azathioprine, 10 received antiTNF (8 because azathioprine inefficiency and 2 due to adverse reactions to azathioprine). 10 patients with ulcerative colitis are maintained in remission with infliximab, but in 3, a dose optimization was performed. 17 patients with Crohn's disease received an antiTNF, 2 had a dose optimization and other 2 were nonresponders. In **conclusion**, the majority of patients are/were treated with immunosuppressive drugs, usually starting with azathioprine. The good therapeutic efficacy was maintained over the studied interval. Optimizing the antiTNF dose is useful for regaining efficacy. Adverse reactions were rare and should not lead to avoiding such therapies.

PP42. SHORT TIMED REMICADE INFUSIONS

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Biologic therapy with infliximab is used for moderate and severe forms of IBD. The experience with this drug in IBD is longer than 10 years. Currently, it is recommended to use a two hours infusion monitored by an experienced personnel, although there are several studies that showed that short period infusions of 60 minutes or even thirty minutes did not affect the outcome, neither showed more side effects. The short time infusions using a double dose of infliximab is less studied. We present our experience of eight patients with IBD that had short timed infusions-sixty minutes using simple and double doses. The

infusions were well tolerated and we did not encounter any side effects. Although further studies are necessary, we consider short timed Remicade infusions a valuable option in the current setting of our medical system.

PP43. THE PREVALENCE AND PREDICTIVE FACTORS OF ANEMIA IN IBD PATIENTS FROM A TERTIARY CARE CENTER IN ROMANIA: A RETROSPECTIVE SURVEY

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Background Anemia is the most common complication of inflammatory bowel diseases (IBD), its prevalence ranging from 6% – 75% in different published studies. **Material and methods** We included the last 117 consecutive patients visiting our clinic, with both Crohn's disease (CD) and ulcerative colitis (UC), regardless of disease activity. Patients were stratified with Montreal classification for both CD and UC for localization of disease, and for the severity of UC. The severity of CD was assessed using the CDAI score. Anemia was defined as Hb<13g/dl for both men and women according to our laboratory parameters. **Results** The prevalence of anemia in our cohort was 47.8% (56/117). Severe anemia was present in 2.5% (3/117), moderate in 7.7% (9/117) and mild anemia in 37.6% (44/117) IBD patients. There was a trend of significance for the occurrence of anemia in ileal involvement of CD. Also, anemia inversely correlated with severity of both CD and UC, and with CRP values, as expected. We also observed a correlation between the presence of anemia and azathioprine treatment, probably because of direct antifolonic toxicity of the drug. **Conclusions** The prevalence of anemia in IBD patients in our study is comparable with published data. We conclude that CRP value, severity, ileal localization of CD and AZA treatment are predictive factors for the presence of anemia in IBD

patients. **Reference** 1. P. Zita et al., P619. The prevalence of anemia and its predictors in an out-patient cohort of IBD patients from a tertiary center, ECCO Congress Abstract Vienna 2013; 2. M. Muscat et al., P318. The prevalence of anemia in inflammatory bowel disease in relation to disease activity, as stratified by fecal calprotectin, ECCO Congress Abstract Vienna 2013

PP44. INFLIXIMAB IN THE TREATMENT OF IBD (INFLAMMATORY BOWEL DISEASE) - RESULTS OVER TIME

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Objective: We wanted to analyze the benefits of maintenance therapy with infliximab in patients with IBD. **Material and method:** we followed a group of 16 patients with IBD (12 ulcerative colitis and 4 - Crohn's disease) treated with Infliximab, over a period of 3-36 months. CDAI and MAYO score were determined, before and after induction. Colonoscopy was performed after induction and after 6-12 months of treatment. **Results** 1. In patients with UC: - MAYO score after induction was reduced to 1.75; - Endoscopic mucosal healing was 85%. Maintenance treatment has been extended for a period of 3 to 21 months, with an average of 9.6 months. Clinical and endoscopic healing was recorded at 75%; and relapse in 25%, requiring an increased dose, with favorable response. 2. In patients with CD: CDAI decreased after induction treatment from 248 to 71. In one patient CDAI decreased to 175 after induction, requiring surgical treatment, with the resumption of maintenance therapy. Maintenance treatment has been extended from 14 to 36 months, noticing the good clinical and endoscopic response in 75%, increase in dose was required in 25%. In a patient with good clinical and endoscopic response, after 24 months of treatment, we recorded a hyperergic IDR, with negative Quantiferon test, so that the treatment was stopped. **Conclusions:** 1. In UC, sustained therapeutic response was obtained in 85% of patients, 25% requiring a double dose of infliximab 2. In CD, we recorded sustained therape-

utic response in 75% cases, 25% requiring doubling the dose of infliximab 3. We registered one case with hyperergic IDR, thus the treatment was ceased.

PP45. THE PREVALENCE OF ULCERATIVE COLITIS AND CROHN'S DISEASE IN OUR CASUISTRY

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Until recently, ulcerative colitis and Crohn's disease were believed to be more frequent in the developed countries of Western Europe. In the last 10-20 years, an increase in the frequency of inflammatory bowel diseases in countries from the Central and Eastern Europe has been observed. Especially in Hungary an increase in the frequency of Crohn's disease, in young men has been noticed. The **aim** of our study was to follow-up the prevalence of ulcerative colitis and Crohn's disease in our casuistry and to compare the results with published data, especially from Romania and Hungary. **Methods:** We retrospectively evaluated the prevalence of ulcerative colitis and Crohn's disease, from a number of 1995 patients hospitalized between 1 January – 31 December 2012 in the Gastroenterology Department of County emergency Clinical Hospital Tîrgu Mureș. We noted the patient's age and gender, the number of admissions during the year, the County from where the patient came and the presence of biological treatment. **Results:** From 1995 patients, in 29 cases was found ulcerative colitis-1.45% and in 14-0.70% we found Crohn's disease. Ulcerative colitis was more common in men (55.17%); and in the age group between 51-60 years old. Crohn's disease was more common in females (64.28), at in the age group of 61-70 years in females and 21-30 years old for men. The majority of patients with inflammatory bowel disease originated in the Mureș County; patients with Crohn's disease have received biological treatment in 50% and 71.42% of them had been hospitalized several times during the year. **Discussion:** Due to the small number of patients with inflammatory bowel disease we could not perform

statistical analysis, but we compared and discussed our data with those published in Romania and Hungary. **Conclusion:** The prevalence of ulcerative colitis and Crohn's disease obtained by us do not differ from those known from Romania. We found fewer cases of Crohn's disease than in studies from Hungary, but also we found a higher prevalence of Crohn's disease at young men-between 21-30 years old.

PP46. COURSE AND PROGNOSIS OF ULCERATIVE COLITIS – CHANGE IN THE EXTENT OF COLONOSCOPIC AND HISTOLOGICAL INVOLVEMENT

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Introduction: Longstanding ulcerative colitis (UC) is a precancerous condition, as well as the extensive UC (pancolitis). **Aim:** to record the clinical characteristics and course of disease in patients with UC; to determine the changes in disease extent assessed by colonoscopy and histological examination. **Methods:** 41 patients with UC were treated and followed-up in a medical clinic during 10 years. Colonoscopies with biopsies and serum analyses were performed every 12 months and at the time of relapse. **Results:** after 1 year there were endoscopic signs of progression in 14.6% of cases; 24.3% showed regression; 34.1% had a normal colonoscopy. A greater proportion of females than males relapsed during one-year follow-up. The extension of the disease after 10 years was as follows: 12.1% proctitis, 48.7% rectosigmoiditis, 24.3% left side colitis and 14.6% total colitis. The histological changes from diagnosis until the first year follow-up showed progression in 21.9% of cases, 24.3% showed regression and 22% had normal histological findings. Presence of active colitis on histology specimens, in particular lamina propria leukocytes and cryptitis was associated with high relapse rate. After 10 years 7.3% of patients developed dysplasia and 4.8% colonic cancer. **Conclusions:** Colonoscopic surveillance is a

standard procedure in many patients with longstanding, extensive UC, in order to avoid death from colorectal cancer. Histological evaluation at the follow-up examination represents the best indicator for long term prognosis and to predict the relapse.

sing calprotectin could be a useful non-invasive marker in appreciating the severity of clinical and biological disease activity.

PP47. THE VALUE OF CALPROTECTIN AS A MARKER OF INTESTINAL INFLAMMATION IN INFLAMMATORY BOWEL DISEASE- FINDINGS FROM A TERTIARY CARE CENTER

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Background: Fecal biomarkers are useful to assess the activity of inflammatory bowel disease (IBD). The aim of the study was to evaluate the efficacy of the fecal calprotectin as indicator of intestinal inflammation. **Methods:** The prospective study included 115 IBD patients (97 with ulcerative colitis, 18 with Crohn's disease) admitted between May 2012- March 2013 in the Gastroenterology and Hepatology Institute Cluj-Napoca, Romania. Fecal calprotectin was measured by means of a semi-quantitative rapid test-Quantum Blue. C-reactive protein, erythrocyte sedimentation rate and hemogram were also measured, and inflammatory markers were compared with fecal calprotectin in determining disease activity. **Results:** The majority of the patients were evaluated during active disease (88% in ulcerative colitis, 83.33% in Crohn's disease). The data have shown a strong correlation between the severity of the active disease and the calprotectin value. Calprotectin findings correlated with Mayo clinical score (ulcerative colitis) and with CDAI (Crohn's disease). The correlation between the calprotectin values and lesions localization was analyzed, without finding any statistical difference. There was a correlation between calprotectin and C reactive protein in both the CD and UC groups ($p = 0.006$; $p = 0.000$). **Conclusion:** Fecal calprotectin is a useful marker in the diagnosis of active disease and evaluation of clinical and endoscopic activity in inflammatory bowel diseases. The rapid test for asses-

POSTER PRESENTATIONS

Chronic hepatopathies

PP48. HOW OFTEN DO WE „MISS” CHRONIC HEPATITIS C PATIENTS WITH AT LEAST SIGNIFICANT FIBROSIS BY USING ACOUSTIC RADIATION FORCE IMPULSE ELASTOGRAPHY (ARFI) CUT-OFF VALUES PROPOSED BY META-ANALYSIS?

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Aim: to evaluate how often we “miss” chronic hepatitis C patients with at least significant fibrosis ($F \geq 2$) that must be treated with specific antiviral therapy by using ARFI cut-off values proposed by meta-analysis. **Methods:** Our study included 132 patients with chronic hepatitis C patients evaluated by means of ARFI and liver biopsy-LB (interpreted according to the METAVIR score). Ten liver stiffness (LS) measurements were performed in each patient. Reliable measurements were defined as: median value of 10 LS measurements with a success rate $\geq 60\%$ and an interquartile range interval $< 30\%$, values expressed in meters/second (m/s). For predicting $F \geq 2$ we used the LS cut-off proposed in the published meta-analysis (1): 1.34 m/s. **Results:** Reliable LS measurements by means of ARFI were obtained in 117 patients (87.9%). The classification of liver fibrosis in LB was: F0-5.9%, F1-9.4%, F2-44.5%, F3-28.2% and F4-11.9%. In our study, 58 patients (49.6%) had LS values < 1.34 m/s; from these 75.8% had $F \geq 2$ in LB. From the 59 patients (50.4%) with LS values ≥ 1.34 m/s, only 6.8% had F0 or F1 in LB. **Conclusions:** Similar with Transient Elastography, ARFI had a very good positive predictive value (93.2%) for predicting the presence of significant fibrosis, but the negative predictive value was low (24.2%). So, if the LS value obtained by means of ARFI elastography is at least 1.34 m/s, we can recommend directly antiviral therapy,

but if the value is lower than 1.34 m/s a LB should be performed. **References** 1. Friedrich-Rust et al. J Viral Hepat. 2012;19:e212-9

PP49. TRANSIENT ELASTOGRAPHY IN PATIENTS WITH NAFLD

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Aim: to evaluate liver fibrosis noninvasively by transient elastography in patients with non-alcoholic fatty liver disease (NAFLD) having in mind that liver biopsy is not routinely performed for those patients. **Material and method:** we evaluated 779 patients with NAFLD by means of transient elastography (FibroScan, EchoSens, Paris, France) in the Department of Gastroenterology and Hepatology-UMF Timisoara during 2007-2013. We included in the study patients with NASH (moderate/severe liver steatosis on ultrasonography, chronic hepatocytolytic syndrome with or without dislipidemia, diabetes or obesity, without any known other causes of hepatocytolysis: negative HBs Ag, Anti HCV Ab, alcohol or other etiologies) as well as patients with only liver steatosis (moderate/severe liver steatosis without cytotoxicity). **Results:** Out of the 779 patients, 275 were women (35.3%) and 504 men (64.7%), average age 47.7 ± 12.5 years. In 200 patients we could not obtain a valid result with an insuccess rate of 25.6%. We could not obtain 10 valid measurements in 160 P (20.5%) while an invalid result $IQR > 30\%$ was found in 40 P (5.1%). The final study lot was made of 579 P with an average fibrosis rate of 7.6 ± 6.2 kPa. We divided the 579 P into 3 categories according to Wong criteria: < 7.9 kPa (absence of severe fibrosis, FF3): 94 P (16.3%). Overall, 27.3% (11%+16.3%) of the patients with NAFLD can have significant fibrosis. **Conclusion:** In NAFLD it is possible that approximately 1/6

(16.3%) of subjects have severe fibrosis and therefore might need further evaluation.

PP50. DOES EXPERIENCE PLAY A ROLE IN LIVER STIFFNESS MEASUREMENTS BY MEANS OF SUPERSONIC SHEAR IMAGING (SSI)?

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Aim: to identify if experience plays a role in the liver stiffness (LS) measurements by means of SSI because there are no recommendation regarding this issue. **Material and methods:** the study included 371 consecutive subjects with or without hepatopathies, in which LS was evaluated with an Aixplorer™ ultrasound system (SuperSonic Imagine S.A., Aix-en-Provence, France). Reliable LS measurements by means of SSI were defined as the median value of 5 LS measurements expressed in kilopascals (kPa). The SSI measurements were performed by a novice (with less than 300 abdominal ultrasounds performed) or by a more experienced operator (with approximately 500 ultrasounds performed). **Results:** the study group included 371 consecutive subjects, 42% men and 58% women, with a median age of 48 years (ranging between 17-85 years). The novice performed 57.4% and the more experienced operator 42.6% of the SSI measurements. The more experienced operator had a higher rate of reliable examinations compared with the novice: 87.4% vs. 72.8% ($p=0.001$). The rate of reliable measurements was similar for novice and experienced operator in patients with a normal weight ($BMI < 25 \text{ kg/m}^2$) and in overweight patients (BMI between $25.1 - 29.9 \text{ kg/m}^2$), 92.3% vs. 97.5%, $p=0.24$, respectively 71.1% vs. 80.4%, $p=0.39$. For obese patients ($BMI \geq 30 \text{ kg/m}^2$) the rate of reliable LS measurements was significantly higher for the more experienced operator as compared with the novice: 73.4% vs. 45.9%, $p=0.03$. **Conclusion:** it seems that experience in liver ultrasound plays a role in perfor-

ming LS measurements by means of SSI and leads to achieving more reliable LS measurements especially in obese subjects.

PP51. LIVER STIFFNESS MEASUREMENTS BY MEANS OF SUPERSONIC SHEAR IMAGING (SSI) SHOULD BE PERFORMED IN FASTING CONDITION OR NOT?

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Aim: to assess the influence of food intake on liver stiffness (LS) measurements by means of SSI, knowing that food intake increase LS values assessed by means of other two elastographic methods (Transient Elastography and Acoustic Radiation Force Impulse elastography). **Patients and methods:** Our study included 75 healthy volunteers, with a median age of 25 years (19-58 years), 58 women (77.3%) and 17 male (22.7%). SSI measurements were performed in fasting condition, then 1h and 3h after a standard meal. All subjects included in the study received the same meal: one sandwich and 500ml water. SSI measurements were performed in supine position. In each patient 5 valid SSI measurements were performed by intercostals approach, a median value was calculated and expressed in kilopascals (kPa). **Results:** in 3 patients we could not obtain 5 valid LS measurements assessed by means of SSI in at least one condition (fasting, 1h and 3 h after food intake), so in the final analysis were included 72 subjects (96% of all healthy volunteers). The mean LS values were similar in fasting condition, 1h and 3 h after food intake were: $6.1 \pm 1.3 \text{ kPa}$, $5.8 \pm 1.1 \text{ kPa}$ and $5.7 \pm 1.1 \text{ kPa}$, respectively. No significant differences were observed between mean SSI values in the different food conditions: fasting vs. 1h after food intake: $p=0.28$, fasting vs. 3h after food intake: $p=0.17$ and 1h. vs. 3h after food intake: $p=0.80$ respectively. **Conclusions:** LS

values assessed by means of SSI had similar values in fasting condition and after food intake, so probably food condition is not an issue for SSI measurements.

PP52. VALIDATION OF LIVER STIFFNESS MEASUREMENT BY FIBROSCAN VALUES IN PORTAL HYPERTENSION

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Aim: to validate the anterior established FibroScan values in another batch of patients **Material and method:** 773 patients admitted in which we performed liver stiffness measurements (LSM) by transient elastography were divided in subjects without significant portal hypertension and with significant portal hypertension. The mean LSM in the two groups were 27.35 ± 0.7471 versus 48.79 ± 0.9989 kPa, $P < 0.0001$. In a study from our group that included 1000 cirrhotic patients, we found out that a cut-off value of >40 kPa can predict significant portal hypertension with a positive predictive value of more than 85%. A cut-off value of 17.1 kPa excluded patients with EV grade 2 and 3 with a negative predictive value close to 90%. Starting with these cut-off values previously established we analyzed the batch of 773 patients obtaining the following results: >40 kPa criterion we had 288/332 pat. with significant portal hypertension 86.7%, PPV 86,7% <17 kPa criterion 75/100 patients without significant portal hypertension - 75%, NPV 72.12. From those 25 patients with significant portal hypertension the majority, 80% (20 patients), had decompensated liver cirrhosis **Conclusions:** In patients with TE values >40 kPa almost 9/10 cases will have significant portal hypertension. Therefore we recommend prophylactic beta-blocker without endoscopy. Below the cut-off value of 17 kPa the chance of those patients having significant EV is only 1 in 10 in the previous study but, in this batch of patients, the 17 kPa criteria misclassified 3 of 10 patients. However,

from those misclassified patients, 80% had decompensated liver disease, thus we recommend endoscopy for screening for portal hypertension in all patients with decompensation regardless of FibroScan values

PP53. THE USEFULNESS OF TRANSIENT ELASTOGRAPHY FOR THE EVALUATION OF SUBJECTS CHRONICALLY INFECTED WITH HEPATITIS C VIRUS

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Aim: to evaluate the usefulness of Transient Elastography (TE) for the evaluation of subjects chronically infected with hepatitis C virus (HCV). **Methods:** Our study included 788 successive patients chronically infected with HCV evaluated in our Department between June 2007-December 2012 (473 patients with chronic hepatitis C evaluated by liver biopsy -LB, and 315 patients with liver cirrhosis diagnosed by means of biological, clinical, ultrasonographic and/or endoscopic criteria). In each patient we performed liver stiffness measurements (LSMs) by using a FibroScan device (Echosens, Paris, France). Ten valid LSMs were performed in each patient, by using the standard M-probe; a median value was calculated and expressed in kiloPascals (kPa). TE measurements were considered reliable if 10 valid measurements could be acquired with at least 60% success rate and less than 30% interquartile range interval. **Results:** Reliable LSM measurements were obtained in 84.2% of patients. The rate of reliable measurements was significantly higher in chronic hepatitis patients (with LB) as compared with cirrhotic patients: 95.9% vs. 66.7%, $p < 0.0001$. In patients with LB, the mean LSMs values (kPa) according to the different stages of fibrosis were: F0- 5.2 ± 0.7 (median 4.9), F1- 5.6 ± 1.8 (median 5.4), F2- 6.7 ± 2.5 (median 6.3), F3- 10.1 ± 4.9 (median 8.8) and F4- 18.1 ± 5.5 (median 17.1). The

best TE cut-offs for predicting various stages of liver fibrosis were: $F \geq 1-6.4$ kPa (AUROC=0.783), $F \geq 2-6.8$ kPa (AUROC=0.751), $F \geq 3-7.7$ kPa (AUROC=0.810), $F=4-12.6$ kPa (AUROC=0.954). The mean LSMs values (kPa) were significantly higher in patients with liver cirrhosis diagnosed by means of biological, clinical, ultrasonographic and/or endoscopic criteria as compared with those diagnosed by LB: 31.6 ± 17.8 (median 26.3 kPa) vs. 18.1 ± 5.5 (median 17.1), $p < 0.0001$. **Conclusions:** TE is a useful method for non-invasive liver fibrosis evaluation in subjects chronically infected with HCV.

PP54. COMPARISON BETWEEN THE FEASIBILITY OF SHEAR-WAVE ELASTOGRAPHIC METHODS FOR NON-INVASIVE ASSESSMENT OF LIVER FIBROSIS

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Aim: to assess the feasibility ("intend to diagnose") of the 3 shear waves elastographic methods (Transient Elastography-TE, Acoustic Radiation Force Impulse-ARFI and SuperSonic Shear Imaging-SSI). **Methods:** Our study included 383 consecutive subjects, with or without chronic hepatopathies, in which liver stiffness (LS) was evaluated by means of TE (using the standard M-probe), ARFI and SSI. Reliable measurements were defined as: median value of 10 (TE, ARFI) LS measurements with a success rate $\geq 60\%$ and an interquartile range interval $< 30\%$, values expressed in kPa (TE) or m/s (ARFI). Reliable LS measurements by means of SSI were defined as the median value of 5 LS measurements expressed in kPa. **Results:** The etiology of liver disease was: chronic hepatitis C – 99 patients (25.8%), chronic hepatitis B – 67 patients (38.9%), coinfection (B+C virus or B+D virus) – 6 patients (1.6%), patients with liver cirrhosis diagnosed by means of clinical, biological, ultrasound and/or endoscopic criteria – 43 patients (11.2) and

healthy volunteers – 56 subjects (14.6%). Reliable LS measurements were obtained in a significantly higher percentage of subjects by means of ARFI elastography as compared with TE and SSI: 90.8% vs. 73.9%, ($p < 0.0001$) and 90.8% vs. 79.9%, ($p < 0.0001$), respectively. The rate of reliable LS measurements was statistically similar for TE and SSI: 73.9% vs. 79.9%, ($p = 0.06$). **Conclusions:** The most feasible shear-waves ultrasound elastographic method for non-invasive assessment of liver fibrosis in our cohort of subjects was ARFI elastography.

PP55. NONINVASIVE ASSESSMENT OF LIVER FIBROSIS IN ASYMPTOMATIC HBV CARRIERS

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Introduction: Asymptomatic HBV carriers are patients with positive HBsAg for more than 6 months, negative HBeAg, persistently normal transaminases and HBV DNA < 2000 IU/ml (or 10,000 copies/ml). According to current guidelines these patients have no indication for antiviral treatment. The **aim** of the study was to noninvasively evaluate liver fibrosis severity in asymptomatic HBV carriers. **Methods:** We've made a retrospective study that included 340 asymptomatic HBV carriers evaluated in our Department between 2008-2012. Patients with liver cirrhosis diagnosed by clinical, biologic, ultrasound and/or endoscopic criteria were excluded from our study. All patients were evaluated by means of transient elastography (TE) (FibroScan, Echosens) (10 valid measurements with $IQR \leq 30\%$ and $SR \geq 60\%$, median value calculated and expressed in kiloPascals - kPa). We considered values ≥ 7.2 kPa as indicator of significant fibrosis ($F \geq 2$ Metavir), and values ≥ 11 kPa as indicators of severe fibrosis ($F \geq 3$ Metavir) (*) **Results:** 173 (50.8%) patients were female and 167 (49.2%) male. 6 (1.7%) patients had unreliable measurements by TE (2 of them were overweight with a BMI > 25 kg/

m2, and the other four were obese with a BMI >30 kg/m²). 41 (12%) patients had TE values >7.2 kPa suggestive for significant fibrosis (16 women and 25 men). Only 6 (1.7%) patients (3 women and 3 men) had TE values ≥11kPa, suggestive for severe fibrosis. **Conclusion:** Significant fibrosis was detected in 12% of asymptomatic HBV carriers and severe fibrosis was detected in 1.7%. Probably these patients require further evaluation of liver disease severity by other methods.

* Marcellin P, Zioli M, Bedossa P, Douvin C, Poupon R, de Ledinghen V, et al. Non-invasive assessment of liver fibrosis by stiffness measurement in patients with chronic hepatitis B. *Liver Int.* 2009;29(2):242-7.

PP56. THE FEASIBILITY OF TRANSIENT ELASTOGRAPHY FOR LIVER FIBROSIS EVALUATION IN OVERWEIGHT AND OBESE PATIENTS USING THE M AND XL PROBE – PRELIMINARY RESULTS

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Aim: to assess the feasibility of Transient Elastography (TE) for liver fibrosis evaluation in overweight and obese patients using the M and XL probe. **Methods:** Our study included 135 overweight and obese patients with chronic hepatopathies in which liver stiffness (LS) was evaluated by TE (FibroScan, EchoSens, Paris, France) using the standard-M and XL probes. Ten valid LS measurements were performed with both M and XL probes, a median value was calculated and expressed in kilopascals (kPa). Failure of TE measurements was defined if no valid measurement was obtained after at least 10 shots; and unreliable if: fewer than 10 valid shots obtained; success rate (SR) <60% and/or interquartile range interval (IQR) ≥30%. **Results:** In our study group, 62.3% of patients were overweight and 37.7% were obese. The

rate of reliable LS measurements was similar with M and XL-probes: 56.3% vs. 59.3%, p=0.70. However, the proportion of cases in which 10 valid TE measurements could not be obtained was higher in case of M-probe as compared with XL-probe: 23.7% vs. 11.1%, p=0.01, but the proportion of cases with improper technical parameters (IQR, SR) was higher, but not reaching statistical significance in case of XL as compared with the standard M-probe: 29.6% vs. 20%, p=0.09. In both overweight and obese patients the rate of reliable LS measurements was statistically similar for M and XL-probe: 64.3% vs. 59.6%, p=0.63 and respectively 43.1% vs. 58.8%, p=0.16. **Conclusions:** In our study the rate of reliable LS measurements by means of TE in overweight and obese patients was similar for M and XL-probe, however in a significantly higher number of cases 10 valid TE measurements could be obtained by means of XL probe.

PP57. THE INDICATIONS OF LIVER STIFFNESS EVALUATION BY MEANS OF TRANSIENT ELASTOGRAPHY – LARGE MONOCENTRIC EXPERIENCE

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Aim: to retrospectively analyze the indications of liver stiffness evaluation by means of Transient Elastography (TE) in our Department. **Methods:** Our study included 7791 adults subjects evaluated by means of TE (using the standard M-probe) in our Department during a five years period (June 2007 – June 2012). In each patient, liver stiffness measurements were performed using a FibroScan device (EchoSens, Paris, France). Ten valid measurements were performed in each patient; a median value was calculated and expressed in kilopascals (kPa).

Results: The indications of liver stiffness evaluation by means of TE were: chronic hepatitis C patients – 2552 measurements (32.8%), chronic hepatitis B

patients – 1406 measurements (18.1%), liver cirrhosis patients (various etiologies) – 1058 measurements (13.6%), non-alcoholic fatty liver disease – 855 measurements (10.9%), chronically elevated aminotransferases level – 409 measurements (5.2%), AgHBs carriers – 336 measurements (4.3%), alcoholic liver disease – 293 measurements (3.7%), chronic hepatopathies of non-viral etiology – 179 measurements (2.3%), healthy volunteers (research purpose) – 130 measurements (1.7%), chronic hepatitis B+D patients – 85 measurements (1.1%), primary biliary cirrhosis – 72 measurements (0.9%), patients with liver masses – 76 measurements (0.9%), autoimmune hepatitis – 58 measurements (0.8%), non-obstructive jaundice – 54 measurements (0.7%), splenomegaly – 46 patients (0.6%), cholestasis – 40 measurements (0.5%), small amount of non-perihepatic ascites – 36 cases (0.5%), chronic hepatitis B+C patients – 35 patients (0.4%), others indications – 71 measurements (0.9%).

Conclusions: The main indication of liver stiffness measurements by means of TE was the non-invasive evaluation of liver fibrosis in chronic hepatitis C and B patients.

PP58. THE INDICATIONS OF LIVER STIFFNESS EVALUATION BY MEANS OF ARFI ELASTOGRAPHY – LARGE MONOCENTRIC EXPERIENCE

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Aim: To assess the value of liver stiffness (LS) measurements by means of ARFI as a predictive factor for the severity of fibrosis. **Methods:** Our study included 1150 subjects with an median age of 55 years (18-87): 652 patients (56.7%) diagnosed with liver cirrhosis by clinical, ultrasound, endoscopy criteria; 244 subjects (21.2%) without known liver disease, 133 patients (11.6%) with chronic hepatitis C in whom liver biopsy (LB) was performed, 72 chronic hepatitis B patients (6.3%) with LB and 49 patients (4.2%) with non-cir-

rhotic ascites. Ten LS valid ARFI measurements were performed in each subject and a median value was calculated, expressed in meters/second (m/s). Reliable LS measurements were considered the median of 10 valid measurements with a success rate $\geq 60\%$ and an interquartile range interval $< 30\%$. **Results:** Reliable LS values by means of ARFI measurements were obtained in 1076/1150 (93.5%) subjects. In „normal subjects” the mean LS value assessed by ARFI was 1.22 ± 0.31 m/s (median 1.19 m/s). In patients with LB, the best LS ARFI cut-offs values for predicting different stages of liver fibrosis were: $F \geq 2 - 1.48$ m/s (AUROC=0.671), $F \geq 3 - 1.61$ m/s (AUROC=0.709) and $F = 4 - 1.75$ m/s (AUROC=0.824). The mean LS values were significantly higher in cirrhotic patients with significant esophageal varices (at least grade 2) as compared with those without or with grade 1 varices: 2.96 ± 0.71 m/s vs. 2.81 ± 0.71 m/s, $p = 0.01$; also in cirrhotic with ascites as compared with those without ascites: 3.01 ± 0.70 m/s vs. 2.78 ± 0.68 m/s, $p = 0.0001$. The mean LS values assessed by ARFI were significantly higher in cirrhotic patients with ascites as compared with patients with non-cirrhotic etiology of ascites: 3.01 ± 0.70 m/s vs. 1.43 ± 0.49 m/s, $p < 0.0001$. **Conclusion:** ARFI is a good method for noninvasive liver fibrosis assessment.

PP59. THE USEFULNESS OF TRANSIENT ELASTOGRAPHY FOR THE EVALUATION OF SUBJECTS CHRONICALLY INFECTED WITH HEPATITIS B VIRUS

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Aim: to evaluate the usefulness of Transient Elastography (TE) for the evaluation of subjects chronically infected with hepatitis B virus (HBV). **Methods:** Our study included 604 successive patients chronically infected with HBV, evaluated in our De-

partment between June 2007-December 2012 (293 HBV carriers, 217 patients with chronic hepatitis B evaluated by liver biopsy –LB, and 94 patients with liver cirrhosis diagnosed by means of biological, clinical, ultrasonographic and/or endoscopic criteria). In each patient we performed liver stiffness measurements (LSMs) by using a FibroScan device (Echosens, Paris, France). Ten valid LSMs were performed in each patient, by using the standard M-probe; a median value was calculated and expressed in kiloPascals (kPa). TE measurements were considered reliable if 10 valid measurements could be acquired with at least 60% success rate and less than 30% interquartile range interval. **Results:** Reliable LSM measurements were obtained in 84.1% of patients. The mean value of LSMs in HBV carriers was 5.8 ± 2.5 kPa (median 5.4). In patients with LB, the mean values of LSMs (kPa) according to the different stages of fibrosis were: F0-1 - 6.2 ± 1.8 (median 6), F2- 7.1 ± 1.2 (median 6.8), F3- 9.5 ± 3.9 (median 8.8) and F4- 18.4 ± 8.8 (median 15.9). The best TE cut-offs for predicting various stages of liver fibrosis were: $F \geq 2 - 7.8$ kPa (AUROC=0.663), $F \geq 3 - 8.6$ kPa (AUROC=0.771), $F = 4 - 13.8$ kPa (AUROC=0.914). The mean LSMs values (kPa) were significantly higher in patients with liver cirrhosis diagnosed by means of biological, clinical, ultrasonographic and/or endoscopic criteria as compared with those diagnosed by LB: 32.8 ± 19.7 (median 28.8 kPa) vs. 18.4 ± 8.8 (median 15.9), $p < 0.0001$. **Conclusions:** TE is a useful method for non-invasive liver fibrosis evaluation in subjects chronically infected with HBV.

PP60. THE ROLE OF CLINICAL MARKERS IN EVALUATING NUTRITIONAL STATUS FOR PATIENTS WITH CIRRHOSIS

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Background: Almost all forms of advanced liver diseases are associated with malnutrition: approx. 80% of patients with decompensated liver disease have this condition. In patients with advanced stages of liver disease, PCM (protein-calorie malnutrition) is pre-

sent in almost all cases. Many studies have shown higher rates of complications and mortality in cirrhotic patients with protein malnutrition as well as reduced survival when such patients undergo liver transplantation. **Aim:** we evaluate the nutritional status of patients using BMI (Body Mass Index), TST (triceps skin fold thickness) and MAMC (mid-arm muscle circumference) and we used three classes of severity: well, moderately malnourished and severely malnourished. **Material and methods:** this was a prospective study of 276 consecutive patients with a well established diagnosis of cirrhosis, who were admitted in the Department of Gastroenterology, Elias Emergency Hospital. Our analysis included 68% male and 32% female, with a mean age of 56.4 years. **Results:** Subjective Global Assessment (SGA) allows us to classify the patients into three groups: well-nourished (76%), mild/moderately malnourished (15%) and severely malnourished (9%). The well-nourished patients were all Child A and 32 patients were Child B. They have no encephalopathy (88%), or grade 1-2 (8%) or slight ascites (4%), and in 2 cases both elevated serum ammonia and slight ascites. Triceps skin fold thickness (mm) and mid-arm circumference (cm) decreased significantly according to the Child score, a positive correlation was found between these two parameters and the severity of cirrhosis. Patients with alcoholic cirrhosis have ascites ($p < 0.05$) and hepatic encephalopathy ($p < 0.001$) more frequently and smaller triceps skin fold thickness than those with non-alcoholic cirrhosis. **Conclusions:** Malnutrition was correlated with the clinical severity of liver disease. TST and MAMC are significant markers of severity for cirrhosis.

PP61. THE EFFECT OF ANTIVIRAL THERAPY WITH ENTECAVIR IN PREVENTING THE OCCURRENCE OF HEPATOCARCINOMA IN PATIENTS WITH CHRONIC B INFECTION

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Introduction: Chronic B infection is known as a major risk factor for hepatocellular carcinoma (HCC). It may develop on B liver cirrhosis, on chro-

nic B hepatitis or in persons with HBs Ag without anterior liver disease. The **aim** of this study is to estimate the impact of treatment with Entecavir on the occurrence of HCC carcinoma in patients with chronic B infection. **Materials and method:** It is a retrospective study on 70 cases of chronic B infection (66 patients with chronic B hepatitis and 4 patients with B liver cirrhosis) who received treatment with Entecavir for different periods of time; all of them were screened for HCC all over the treatment period. The study included 34 women and 36 men with mean age 49.2 ± 10.5 years (range 21-66) diagnosed with chronic B hepatitis (66 patients) or B liver cirrhosis (4 patients) who have had Entecavir for different periods of time, upon the case. Our patients were evaluated for the characteristics of viral B infection at the start and every 6 months during treatment; all of them had the criteria of initiating antiviral therapy. The duration of treatment ranged between 1-4 years, the period followed being January 2009 – January 2013. All patients were tested with abdominal ultrasound and alpha-fetoprotein (AFP) every 6 months during the treatment. **Results:** All our patients with chronic B infection treated with Entecavir had normal AFP values (1-5.5 ng/ml) and had no echographic abnormalities suggesting HCC for all the surveillance period (1-4 years). **Conclusion:** The results of our study suggest that Entecavir treatment has not only the effect of stopping the progression of viral B infection but also that of preventing the development of HCC, whatever the stage of chronic liver disease (chronic B hepatitis or B liver cirrhosis).

PP62. TREATMENT WITH ENTECAVIR IN CHRONIC HEPATITIS B: WHEN TO STOP?

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Introduction: Between the antiviral drugs used in chronic hepatitis B, Entecavir is a nucleotide analogue preferred as first line treatment. The **aim** of this

study is to estimate the results of Entecavir treatment in chronic hepatitis B patients and to determine how long this therapy should be continued. **Materials and method:** It is a retrospective study on 71 cases of chronic hepatitis B who received first line treatment with Entecavir. The duration of treatment ranges between 1 year and 4 years, the period followed being January 2009 – January 2013. The study consists of 34 women and 37 men with mean age 49.3 ± 10.7 years (range 20-66) diagnosed with chronic hepatitis B, who received Entecavir for different periods of time, upon the case. All patients were Delta-negative, 65 patients were HBe Ag negative in the beginning, the other 6 patients were HBe Ag positive. All patients were evaluated for the characteristics of viral B infection at the start and every 6 months during treatment. **Results:** All patients presented undetectable viral load after 24 to 48 weeks of treatment and till now. All patients HBe Ag positive had seroconversion to anti-HBe. The clinical tolerance is very favorable and no patient has developed immune resistance till now. **Conclusion:** In our study Entecavir is a very efficient antiviral drug in chronic hepatitis B in terms of suppression of HBV DNA and HBe Ag seroconversion. As antiviral resistance did not occur in our patients and seroconversion in HBs system did not appear, we have recommended the prolongation of Entecavir treatment with the same close surveillance. From our results, the treatment must be continued à la longue or even life-long.

PP63. ENTECAVIR THERAPY AND FIBROSIS REVERSAL IN PATIENTS WITH CHRONIC HEPATITIS B

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Introduction Viral replication is now recognized as the key driver of liver injury and disease progression, so the primary aim of treatment for chronic HBV infection is long-term suppression of HBV replication to undetectable levels. The **aim** of this study was to evaluate the influence of antiviral treatment with En-

tecavir on fibrosis in patients with chronic hepatitis B infection. **Material and methods** in this study we included patients diagnosed with Ag HBe-negative chronic hepatitis B, treated with Entecavir, in which fibrosis was evaluated by elastometry (FibroScan) at the inclusion and then every 6 months until the end of the study. All patients signed the informed consent. **Results** We included 16 patients (9 male, mean age 56.5±7.4 years); the mean follow-up period was 42 months. After long-term treatment with entecavir, 87.5% of patients (14/16) demonstrated fibrosis improvement; 15 (93.75%) patients in the cohort had a hepatitis B virus DNA level <20 UI/mL, and 86% had a normalized alanine aminotransferase level in the study period. One patient developed Entecavir resistance caused by the voluntary stop of medication. **Conclusion** The majority of patients with CHB who were treated with entecavir in this cohort achieved substantial regression of fibrosis, with very good treatment tolerability.

PP64. ENTECAVIR TREATMENT RESULTS IN PATIENTS WITH VIRUS B CHRONIC LIVER DISEASE

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Introduction: Entecavir is a nucleoside analogue used in the treatment of HBV chronic hepatitis. The advantages of Entecavir are: increased antiviral activity, fewer side effects, the possibility to be administered to patients with decompensated cirrhosis and low secondary resistance (1-2% after 5 years of treatment) (*) The **aim** of our study was to evaluate the results of treatment with Entecavir in HBV patients, namely the occurrence of primary and secondary resistance. **Methods:** We performed a retrospective study on a group of 69 patients with chronic HBV liver disease treated with Entecavir for at least 48 weeks between 2008-2012 and in which the viral load was quantified at least two times: one at the beginning and one

6 months after treatment initiation. Primary resistance to Entecavir was defined as absence of at least 2log viral load decrease after 24 weeks of treatment, and secondary resistance as an increase of viral load during treatment. **Results:** 12 (17.3%) patients were women and 57 (82.7%) men. Mean age of patients was 39±13,1 years; 8 (11.5%) with HBV cirrhosis and the remaining 61 (88.5%) with chronic hepatitis. Of those 69 patients 4 (5.7%) had primary resistance to Entecavir (2 were naive and 2 with secondary resistance to Lamivudine, thus we can speculate that only 2 patients had "true" primary resistance while in the other two a cross-resistance to Lamivudine suspected) and one (1.4%) developed secondary resistance at one year after initiation of treatment. **Conclusion:** In our group, secondary resistance to Entecavir was lower (1.4%) than primary resistance (2.8%).

* Tenney DJ, et al. Long-term monitoring shows hepatitis B virus resistance to entecavir in nucleoside-naïve patients is rare through 5 years of therapy. *Hepatology*. 2009 May;49(5):1503-14.

PP65. FEMALES, MENOPAUSE, ANTIVIRAL THERAPY AND CHRONIC HEPATITIS C – IS ANY RELATION?

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Aim: to study the differences between men and women regarding the severity and the therapeutic response in chronic hepatitis C (CHC) and to investigate if menopause influences the women with CHC. **Methods.** We performed a prospective study of 110 treatment naïve patients with CHC who received antiviral therapy with PegInterferon alpha and Ribavirin. We studied the viral load, the degree of liver fibrosis according to Metavir score by liver biopsy and/or transient elastography (FibroScan), and the sustained virologic response (24 weeks after the treatment stopped). **Results.** There were 50 men (group A) and 60 women (group B): 35 premenopausal (group B1), 10 with menopause less than 5

years after no menstrual period (group B2) and 15 with more than 5 years after menopause (group B3). We didn't find significant differences between group A and group B regarding the viral load (mean value 1,176,000 UI/l in group A and 926,000 UI/l in group B), the severity of fibrosis: F3-F4 18% vs. 18.33%, and SVR (52% vs. 53.33%). Analyzing the subgroups in group B, we found significantly lower severe fibrosis in group B1 (11.42%, $p < 0.05$) and a significant lower rate of SVR in group B2 (40%, $p < 0.05$). **Conclusions.** There were no significant differences between men and women regarding the severity of CHC and the response to antiviral treatment. Women premenopausal have lower severe fibrosis compared to men and postmenopausal women. Women in the first years after menopause have the worst SVR, may be due to hormonal and inflammatory changes associated with menopause installation. Treating female with CHC before menopause or hormone replacement therapy may improve the SVR in these patients.

PP66 TRIPLE THERAPY IN HCV INFECTION- MONITORING OF ADVERSE REACTIONS

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Introduction: It is estimated by the World Health Organization that approximately 170 million individuals, or 3.1% of the world population, are infected with HC. With the current standard of care, only 40% to 50% of genotype 1-infected patients achieve a sustained virologic response (SVR). In the last years we have achieved significant progress in the treatment of HCV infection **Background:** Current study estimates the adverse effects in two lots of population: 1. PegIFN/RBV and Boceprevir; and 2. PegIFN/RBV and Telaprevir. **Methods:** We included 10 treatment-experienced patients in the lot of PegIFN/RBV and Telaprevir and 25 treatment-experienced patients in the lot of PegIFN/RBV and Boceprevir. **Results:** Triple therapy greatly increases treatment complexity, involves multiple daily pills, plus injection drug.

Increased risks with nonadherence to triple therapy include potential for resistance. Most notable adverse events occurring more frequently with boceprevir-based therapy are: • Anemia: 15 patients • Hb=12-10 g/dl: 6 patients • Hb=10-8 g/dl: 7 patients • Hb=8-6 g/dl: 2 patients • Rash: 2 patients • Dysgeusia: 10 patients • Hepatic decompensation (ascites): 1 patient (therapy interruption) • Extrasistolic arrhythmia: 2 patients. Telaprevir-related adverse events are, in our experience: purpura, pruritus, hyperuricemia, rash. **Conclusions** 1.Boceprevir or Telaprevir + PegIFN/RBV represent the new standard of care for genotype 1 HCV patients previously untreated or previous treatment failures. 2.SVR Rates with BOC or TVR in genotype 1 treatment-naive patients are 63-75% vs. 38-44 (bitherapy). 3. SVR Rates With BOC or TVR vs. PegIFN+ R therapy: - relapsers: 69-83% vs. 24-29%; partial responders: 40-59% vs. 7-15 %; null responders: 29-38% vs. 5%.

PP67. INFLUENCE OF TRIPLE THERAPY ON NUTRITIONAL STATUS OF PATIENTS WITH CHRONIC HEPATITIS C

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Background: Loss of appetite, dysgeusia and weight loss are frequent adverse events of therapy for chronic hepatitis C (CHC). **Aim:** to evaluate variations of nutritional status in CHC patients treated with triple therapy compared with those treated with bitherapy. **Patients and method:** We included patients receiving triple therapy (PegIFN + Ribavirin + Boceprevir/Telaprevir- PRBPRT) in our unit in a prospective ongoing study. The nutritional status was appreciated by BMI, waist circumference, right arm circumference and tricipital cutaneous fold, measured at start, at 4/8, 12, 24 and 48 weeks of therapy. **Data were compared with those of a group of patients receiving bitherapy with PegIFN and Ribavirin.** **Results:** We are treating 56 patients with CHC (14 males), median age 53.5 years (31-70), all with severe fibrosis (F3/F4 METAVIR) using triple therapy. Median height was 172.087 cm, weight 90 kg and a me-

dian BMI of 28.39%. The mean values for waist, arm circumference and tricipital fold were respectively 101cm, 32cm and 28cm. At 8 weeks BMI decreased in 24 patients (with 1.02 ± 0.86), remained unchanged in 11 and 35 patients gained weight; at 12 weeks only 20 patients continued to lose weight (-3.23 ± 1.88 kg), but thereafter, (when Telaprevir was stopped) weight of these patients decreased. Surprisingly, weight of patients receiving Boceprevir decreased too after 12 weeks. By comparison, all 40 patients in bitherapy group experienced weight loss (BMI decreased with 2.86 ± 1.14 at 8 weeks, with 3.12 ± 1.26 at 12 weeks and 3.2 ± 1.41 at 48 weeks) ($p=0.05$) The other nutritional indices varied accordingly. Conclusion: patients receiving triple therapy are, in the first weeks of therapy, better nourished than those treated by bitherapy, probably due to the need to take the pills with food (\pm fat) at regular times; after that, weight decreases as in patients receiving bitherapy.

PP68. THE PREVALENCE OF HEPATORENAL SYNDROME IN PATIENTS WITH LIVER CIRRHOSIS OF DIFFERENT ETIOLOGIES

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Background: Hepatorenal syndrome (HRS) is a particular type of renal failure in patients with severe liver disease, usually liver cirrhosis (LC). There are three forms of HRS: HRS type I, HRS type II and HRS type III, the last one recently described in patients suffering of chronic liver disease associated with renal impairment. **Aim:** Evaluation of HRS prevalence in patients with LC of different etiologies and assessment of the prevailing HRS type. **Material and method:** The study comprises a selective group of 82 patients (50 men and 32 women) with HRS evaluated in Gastroenterology Institute Iași, between February 2012 and March 2013, the mean age 59 ± 8 years. Patients were evaluated clinically, by biologic (urea, creatinine and creatinine clearance) and by imaging tests

(ultrasound, upper digestive endoscopy, CT). **Results:** From the 82 patients with LC and HRS, 40 presented HRS (48.7%) with the toxic LC, from which 30 HRS type II and 10 HRS type I, 20 LC patients with C viral LC (24.3%) of which 14 HRS type II and 6 HRS type I, 12 patients with B virus LC (14.6%) from which 8 HRS type II and 4 HRS type I, 8 patients with B+C LC (9.75%) from which 6 HRS type II and 2 HRS type I, 1 patient with biliary primitive LC (1.21%) with HRS type II, 1 patient with polycystic liver and kidney disease (1.21%) with HRS type III. **Conclusions:** HRS is a common complication in the evolution of LC, independent of its etiology. Type II HRS predominated (71.95%), followed by HRS type I (26.84%) and HRS type III (1.21%).

PP69. IMPAIRED BONE METABOLISM IN PATIENTS WITH VIRAL CIRRHOSIS B AND C: MYTH OR REALITY?

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Introduction: The bone demineralization represents a common complication in cirrhotic patients. The **aim** of the study was to determine the prevalence of bone demineralization in patients with viral cirrhosis B and C and to identify the main triggers. **Material and Methods:** Prospective study performed in IGH Iași on a group of viral cirrhotic patients. Patients with other potential causes of impaired bone metabolism: another etiology of cirrhosis, prolonged corticosteroid therapy, patients co-infected with HIV and chronic renal failure were excluded. The bone mineral density at lumbar and femoral neck was determined using DEXA. The levels of 25 OH vitamin D, alkaline phosphatase, serum and ionic Calcium were measured. **Results:** 72 patients with a mean age of 59 ± 11.56 years, mean duration of evolution of the liver disease of 10.2 ± 5.37 years. The viral C etiology (75%) and Child-Pugh score A (69%) predominated.

Bone mineral density was decreased in 49 patients (68.05%) with osteoporosis in 20 cases (27.77%). Inadequate levels of vitamin D was observed in 87.5% of patients, with severe deficiency in 31.94% patients (vitamin D <20 ng/ml). A more significant decrease in bone mineral density were observed in elderly patients (65.5 years vs. 57.8 years $p = 0.02$), with a lower body mass index (22.4 kg/m² vs. 26.7 kg/m² $p = 0.01$), with an older liver damage (10.8 years vs. 6.6 years $p = 0.04$) and a more pronounced deficit of 25 OHD (12.3 µg/l vs. 16.8 µg/l, $p = 0.01$). **Conclusions:** Bone demineralization was more pronounced in elderly cirrhotic patients with long evolution of viral hepatopathy presenting an inadequate level of vitamin D. Assessing the bone mineral density, phospho-calcium balance and the level 25 OH vitamin D should represent a systematically monitoring of the viral cirrhosis patients.

PP70. NONINVASIVE PREDICTORS OF LARGE ESOPHAGEAL VARICES IN CHRONIC LIVER DISEASE PATIENTS

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Background Esophageal varices (EV) are a major complication of portal hypertension in chronic liver disease patients. Follow-up of cirrhotic patients by periodical upper GI endoscopy can be quite costly and poorly accepted by patients. In this setting we need to identify noninvasive models to predict the presence of large varices (LV). **Materials and methods** We retrospectively studied 104 patients with chronic liver disease (hepatitis or cirrhosis) of various etiologies (viral, ethanol, autoimmune, drug-induced) admitted to our unit in 2012. Clinical, biological, ultrasonographic and endoscopic data were collected from their charts. **Results** Of the 104 patients (62.5% males, mean age 62 years), 83 (79.80%) were cirrhotic. On EGD, 25% were without EV, 55.77% had small vari-

ces and 19.23% had large varices. Portal vein, splenic vein and spleen diameter were significantly higher in patients with LV. ASPRI (age-spleen-platelets ratio index) and SPRI (spleen to platelets ratio index) scores were good predictors for the presence of LV on endoscopy (AUROC 0.703 and 0.702). **Conclusions** Non-invasive scores can accurately predict large EV in liver disease patients, targeting those who need to undergo EGD.

PP71. FACTORS CORRELATED WITH MORTALITY IN CIRRHOTIC PATIENTS WITH INFECTIONS

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Aim: to assess the factors correlated with mortality in cirrhotic patients with infections. **Methods:** Our retrospective study included 170 episodes of infection in 141 cirrhotic patients admitted in our Department between January 2011-December 2012. We analyzed in univariant and multivariate analysis the correlation of following parameters with mortality: age, gender, Child-Pugh score, MELD score, AST, ALT, total bilirubin, direct bilirubin, INR, blood nitrogen urea (BUN), serum creatinine, serum Na, serum K, albumin, prothrombin time, serum cholinesterase, hemoglobin, white blood count and platelet count. **Results:** In our cohort of cirrhotic patients with infections, 20/141 (14.1%) died during the hospitalization. In univariant analysis, the following factors were correlated with mortality: BUN ($r=0.342$, $p<0.0001$), serum creatinine ($r=0.285$, $p=0.002$), MELD score ($r=0.260$, $p=0.001$), white blood count ($r=0.248$, $p=0.001$) and INR ($r=0.216$, $p=0.007$), while the following factors were not correlated with the mortality: age ($r=-0.059$, $p=0.43$), gender ($r=-0.025$, $p=0.76$), Child-Pugh score ($r=0.116$, $p=0.14$), AST ($r=0.053$, $p=0.45$), ALT ($r=0.022$, $p=0.77$), total bilirubin ($r=0.072$, $p=0.35$),

direct bilirubin ($r=0.188$, $p=0.06$), serum Na ($r=0.029$, $p=0.70$), serum K ($r=0.083$, $p=0.28$), serum albumin ($r=-0.121$, $p=0.16$), prothrombin time ($r=-0.134$, $p=0.09$), serum cholinesterase ($r=0.013$, $p=0.87$), hemoglobin ($r=-0.150$, $p=0.06$) and platelet count ($r=-0.031$, $p=0.68$). In multivariate analysis, only BUN was correlated with mortality ($p=0.001$). **Conclusions:** A mortality of 14.1% during hospitalization was observed in our cohort of cirrhotic patients with infections and BUN was best correlated with the mortality rate.

PP72. HIGHLY FILTERED EXTRACT OBTAINED FROM CALF BLOOD USEFUL IN HEPATIC ENCEPHALOPATHY TREATMENT?

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Introduction One of the most frequent and severe complications of liver cirrhosis is hepatic encephalopathy. The treatment of this disease is complex using multiple drugs in order to sustain liver functions such as non-absorbable disaccharides, amino acids, non-absorbable antibiotics. **Aim:** To demonstrate the utility of highly filtered extract obtained from calf blood in cirrhotic patients presenting to the emergency room with hepatic encephalopathy phenomena. **Methods:** We collected data from 25 patients (M/F 5/20; age 52 years) who were admitted to the Institute of Gastroenterology and Hepatology Iasi between January 2012- march 2013. The patients had a past history of liver cirrhosis (viral, toxic or mixed etiology) and were admitted with signs of liver failure and hepatic encephalopathy. Their mental status varied from mild confusion to severe disorientation or hepatic coma without response to painful stimuli. These criteria were supported by biological measurements, including ammonia levels. The treatment for this neurological complication included highly filtered extract obtained from calf blood. Clinical parameters, vital signs and neurological status were closely monitored along with ammonia levels. **Results:** The study show-

ed improvement of the signs and symptoms of encephalopathy. Patient's recovery time was associated with the severity of neurological impairment. Thus, in patients with grade I or II of encephalopathy (17 patients) we observed normalization of thymic condition and the rate of sleep, also decreased ammonia blood level to normal values in 1-2 days after onset of therapy. In patients with more important neurologic impairment, including comatose state, the return to a cvasinormal neurological status was possible in 3-4 days. **Conclusions:** Although the data obtained is not sufficient, thus requiring further study, the importance of highly filtered extract obtained from calf blood in the treatment of liver encephalopathy cannot be easily dismissed.

PP73. ADRENAL INSUFFICIENCY IN PATIENTS WITH LIVER CIRRHOSIS

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Objective: Liver cirrhosis is a major cause of mortality worldwide, often with severe sepsis as the terminal event. Patients with sepsis and those with liver cirrhosis share many clinical features. Adrenal insufficiency is a common finding in critically ill patients, with sepsis and liver cirrhosis. Adrenal insufficiency may also be present in patients with stable cirrhosis without sepsis. The aim of this study was to evaluate the adrenal function in patient with liver cirrhosis. **Patients and Methods:** We conducted a prospective study that targeted the assessment of the presence of adrenal insufficiency in 40 patients with stable liver cirrhosis admitted in The Gastroenterology and Hepatology Institute Iasi, Romania, between January - February 2013. We assessed basal and post stimulation serum total cortisol after administering 1 mcg ACTH to non-highly stressed patients with liver cirrhosis within 5 days from admission. All patients signed the informed consent. **Results:** We found that 28 patients (70%) had adrenal impairment. Among these, 8 patients (20%) displayed subnormal peak cor-

tisol values (<18 mcg/dl) and 20 patients (50%) presented altered delta cortisol values (<9 mcg/dl), but all patients were asymptomatic in regard to adrenal insufficiency clinical manifestations. The baseline peak cortisol levels were 15.04 mcg/dl in the patients with Child-Pugh score A and 14.94 mcg/dl in those with Child-Pugh score B compared with 11.56 mcg/dl in the cirrhotics with Child-Pugh score C ($p=0.007$). The blunted post-stimulation response to ACTH was marked in patients with Child-Pugh score B and C (8.13 mcg/dl), compared to those with Child-Pugh score A 13.27 mcg/dl ($p<0.0001$). **Conclusions:** Adrenal insufficiency is a common finding in patients with stable liver cirrhosis and it is more likely to be found in not critically ill cirrhotics with a more advanced liver disease.

PP74. CHRONIC VIRAL AND ETHANOLIC HEPATITIS-HISTOPATHOLOGIC EXPRESSIONS

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Viral hepatitis is a global health problem so that updated information is particularly important for doctors, researchers, patients and for the public health from worldwide. Alcoholic liver disease remains a challenging enigma for both scientists and clinicians. Goal of the study is to evaluate the changes produced by viral and alcoholic aggression on the stroma and hepatic parenchyma. The study was conducted on samples harvested by liver biopsy (83 cases) or by necropsy (67 cases) over a period of 4 years. The study followed three main directions: clinical study, histopathologic study completed by the immunohistochemical and morphometric study. Depending on the type of aggression, the toxic ethanolic type was present in 78 patients, the viral type B in 42 patients and the viral type C to 30 patients. Pansteatosis was more frequent in ethanolic aggression. The process consisted of lymphocytes infiltrating plasma cells and fibroblasts/ fibrocytes. Repeated viral and ethanolic aggressions on liver produce significant changes in the liver cell.

PP75. DETERMINING FACTORS OF THE DEVELOPMENT AND PROGRESSION OF ESOPHAGEAL VARICES IN PATIENTS WITH CHRONIC HEPATITIS C

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Aims: In this study we aimed to identify the incidence and predictors of de novo esophageal variceal formation and progression in patients with chronic hepatitis C and advanced fibrosis. **Methods:** All patients performed an endoscopy at the beginning of the study and again after 2 years. Patients with varices at baseline also had an endoscopy at 1 year. Baseline laboratory and clinical parameters were analyzed as predictors of de novo variceal formation and variceal progression. **Results:** De novo varices developed in 4 of the 15 (26.6%) patients. Most new varices were small (76.8%). The likelihood of developing varices was associated with lower baseline levels of albumin ($P = 0.051$). Among the 5 patients with pre-existing esophageal varices, 2 (40%) developed variceal progression or bleeding during the follow-up. Patients with higher baseline ratios of serum aspartate/alanine aminotransferase ($P = 0.028$) and lower platelet counts ($P = 0.0002$) were at greatest risk of variceal progression. **Conclusion:** Development of varices in patients with chronic hepatitis C is associated with laboratory markers of disease severity. Prolonged β -blockers therapy does not reduce the risk of variceal development or progression.

PP76. NATURAL COURSE OF EXTRAHEPATIC NONMALIGNANT PORTAL VEIN THROMBOSIS IN PATIENTS WITH CIRRHOSIS

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Introduction: Portal vein thrombosis (PVT) has a high incidence in patients with liver cirrhosis (LC)

and determines a poor prognosis of hepatic disease. The **aim** of our study was to define the natural course of extrahepatic nonmalignant partial portal vein thrombosis (PVT), including the progression from partial to complete PVT, in patients with cirrhosis. **Materials and methods:** In this study we included 11 patients diagnosed with partial nonmalignant PVT, without anticoagulant treatment, who were followed up between January 2011-March 2013, until the final clinical evaluation, liver transplantation, or death. All the patients were evaluated by Doppler abdominal ultrasound and computed tomography. We evaluated the thrombus lumen occlusion, portal velocity and diameter of main portal vein, superior mesenteric vein, and splenic vein. Written informed consent was obtained for each procedure. **Results:** After a mean follow-up period of 14 months, partial PVT worsened in 5 (45.4%) patients, improved in 3 (27.27%), and was stable in three (27.27%). The Kaplan-Meier probability of episodes of hepatic decompensation at 12 and 18 months was 46% and 52%, and survival rates, 90.9% and 72.7%, respectively. There was no clear association between progression or regression of partial PVT and clinical outcome. Multivariate analysis showed that the MELD score at diagnosis was the only independent predictor of survival (hazard ratio, 1.92; 95% confidence interval: 1.20-3.34; $P=0.007$) and hepatic decompensation (hazard ratio, 1.54; 95% confidence interval: 1.31-2.67, $P=0.001$). **Conclusion:** Extrahepatic nonmalignant partial PVT improved spontaneously in 27.27% of patients with cirrhosis, and the progression of partial PVT was not associated with clinical outcome, which appeared to be dependent on the severity of cirrhosis.

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PP77. RISK OF PORTAL VEIN THROMBOSIS IN PATIENTS WITH LIVER CIRRHOSIS

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Aim: Recently, our understanding of coagulopathy in cirrhosis has changed, and cirrhosis is no longer considered to be a hypocoagulable state. The aim of this study was to evaluate the risk factors for portal vein thrombosis in patients with liver cirrhosis. **Material and methods:** In the study we included patients diagnosed with liver cirrhosis admitted in our department between January 2010-December 2011, who were evaluated at the inclusion in the study and then every six months until portal vein thrombosis was diagnosed. Criteria for exclusion were: the use of drugs known to interfere with blood coagulation, bacterial infections, hepatocellular carcinoma, extrahepatic malignancy, and known haemostatic disorders other than cirrhosis. All the patients included in the study signed the informed consent. **Results:** In the study we included 335 patients, the incidence of portal vein thrombosis was 4.17%. Serum albumin and portal velocity were significantly lower in cases than controls, and MELD score, mean platelet volume (MPV) were higher in cases than controls. In multivariate analysis, albumin level $\leq 3\text{mg/dl}$ (HR=1.65, CI 1.10-2.51, $p=0.018$), MPV $\geq 11,5\text{fl}$ (HR=1.98, CI 1.24-3.29, $p=0.008$) and MELD score >13 (HR=2.94, CI 1.61-5.47, $p=0.001$) remained independently predictive of portal vein thrombosis. **Conclusions:** Low serum albumin, MPV and high MELD score could predict the development of portal vein thrombosis in patients with liver cirrhosis. This work was made possible by the project "Interuniversity partnership for increasing quality and interdisciplinary medical research by providing doctoral scholarships - docmed.net" POSDRU/107/1.5/s/78702.

PP78. MEAN PLATELET VOLUME: A RISK FACTOR FOR NON-MALIGNANT PORTAL VEIN THROMBOSIS IN PATIENTS WITH LIVER CIRRHOSIS

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Introduction: Platelet size, measured as mean

platelet volume (MPV), is associated with platelet reactivity. MPV has been actively investigated in liver disease such as steatosis and hepatitis. The **aim** of the study was to determine the impact of platelet count and MPV on the incidence of non-malign portal vein thrombosis (PVT) in a prospective study, in patients with liver cirrhosis (LC). **Methods:** Platelet count, platelet width distribution (PDW), MPV and baseline characteristics were registered in cirrhotic with and without non-malign PVT patients, admitted in our department between January 2011-December 2011. Criteria for exclusion were: the use of drugs known to interfere with blood coagulation, bacterial infections, hepatocellular carcinoma, extrahepatic malignancy, and known haemostatic disorders other than cirrhosis. All the patients included in the study signed the informed consent. Results: In this study we include 16 patients with non-malign PVT and 47 patients without PVT. Both groups were comparable for age, gender, etiology of cirrhosis, Child-Pugh score and Model of End-Life Disease (MELD) score. Subjects with MPV ≥ 11.5 fL had a 1.8-fold [95% confidence interval (CI) 1.2–1.9] higher risk of total PVT and a 1.6-fold (95% CI 1.4–2.7) higher risk of PVT than subjects with MPV < 9.5 fL in analyses adjusted for age, sex, smoking, body mass index, and platelet count. There was no significant association between platelet count and risk of PVT. **Conclusions:** An increasing MPV was identified as a predictor for non-malign PVT, in patients with liver cirrhosis. The present findings support the concept that platelet reactivity is important in the pathogenesis of non-malign PVT despite thrombocytopenia.

PP79. PREDICTORS OF MORTALITY IN PATIENTS WITH SPONTANEOUS BACTERIAL PERITONITIS

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Introduction: Spontaneous bacterial peritonitis (SBP) is a common complication, severe, in patients with cirrhosis and ascites, with high recurrence rate and poor prognosis in the long term. **Aim:** Evaluation of the patients with SBP over a period of 2 years admitted to our clinic to determine the most important predictors of mortality in patients with SBP. **Material**

and Method: The study was conducted on a sample of 52 cases in our department over a period of 2 years (January 2011 - December 2012), of which 18 women (34.6%) and 35 men (67.4%), average age was 61.7 ± 9.4 years. We analyzed using multivariate regression method the potential predictors associated with mortality in cirrhotic patients with SBP: age, albumin, bilirubin, cholinesterase, creatinine, presence of portal encephalopathy (PE), leucocytosis, leukocyte count in ascites fluid, MELD score, Na and K serum. **Results:** From the total study group of 52 patients, 36 patients (69.2%) survived and 16 (30.8%) died of complications. Out of the total study group, 9 patients (17.3%) had hepatorenal syndrome (HRS), all of them being part of the deceased patients (56.2% in our study). The following factors were correlated with mortality: portal encephalopathy ($r=0.378$, $p=0.01$), leucocytosis ($r=0.372$, $p=0.01$) and HRS ($r=0.686$, $p=0.000003$) and following factors were not associated with the rate of death: age ($r=0.130$, $p=0.4$), albumin ($r= -0.234$, $p=0.1$), bilirubin ($r= -0.176$, $p=0.2$), cholinesterase ($r=0.106$, $p=0.5$), creatinine ($r=0.113$, $p=0.4$), the number of leukocytes in ascites fluid ($r=0.030$, $p=0.8$), MELD score ($r=0.078$, $p=0.6$), Na serum ($r=0.103$, $p=0.5$), K serum ($r= -0.059$, $p=0.7$). **Conclusion:** In our study the predictive factors associated with mortality were portal encephalopathy and leucocytosis. The death rate was significantly influenced by the presence of HRS.

PP80. HYDROGEN GLUCOSE BREATH TEST TO DETECT SMALL INTESTINAL BACTERIAL OVERGROWTH SYNDROME IN PATIENTS WITH CIRRHOSIS AND SPONTANEOUS BACTERIAL PERITONITIS

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Aim: to correlate the episodes of spontaneous bacterial peritonitis with the presence of small intestinal bacterial overgrowth syndrome in patients with cirrhosis. **Methods:** our study included 15 patients with cirrhosis and spontaneous bacterial peritonitis,

without any prior antibiotics, from our department. All patients underwent a glucose breath test after oral intake of 50 g of glucose diluted in 250 ml water. The detection of the expired hydrogen was determined every 15 minutes for a total duration of 2 hours. A peak of H₂ values >10 p.p.m above the basal value was considered suggestive of small intestinal bacterial overgrowth. **Results:** from a total of 15 patients, 73% (11) were men and 26.6% (4) were women, with a mean age of 56.8 years (SD ±7 years), 40% (6/15) were with ethanol cirrhosis, 26% with HCV cirrhosis, 13% with HBV cirrhosis and 20% other etiologies, 13% of patients had several episodes of spontaneous bacterial peritonitis. No patient from our study group presented positive values at the hydrogen glucose breath test. **Conclusion:** although some studies described the presence of small intestinal overgrowth syndrome in patients with cirrhosis and spontaneous bacterial peritonitis, our study did not indicate any correlation between spontaneous bacterial peritonitis and small intestinal overgrowth syndrome.

PP81. THE INCIDENCE OF ACUTE ETHANOLIC HEPATITIS IN PATIENTS WITH ETHANOLIC CIRRHOSIS

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Introduction: Acute ethanolic hepatitis represents the inflammation of the liver determined by the destruction of hepatic cells associated with long - term consumption of ethylic alcohol. Ethanolic hepatitis is usually followed by cirrhosis. The minimal dose of alcohol that leads to initiation of hepatic injuries in men is 40 g and in women 20 g of pure alcohol. **Aim:** To analyze the patients with acute ethanolic hepatitis admitted in Gastroenterology Clinic of Timisoara, between 2010-2013. **Material and method:** From 25 patients, 7 female and 18 males, with the average age of 48.9 years, the incidence of acute ethanolic hepatitis in patients with ethanolic cirrhosis was 5%.

Results: From the 25 patients with acute ethanolic hepatitis, 9 patients (36%) had a mild form of acute hepatitis, Maddrey score <32, that don't needed corticotherapy. The rest of 16 patients (64%) developed a severe form of acute ethanolic hepatitis, Maddrey score >32 and needed initiation of corticotherapy. Comparing the two cohorts, mild vs. severe we're obtained the next results: cytolysis, average value of 11,3xVN in the group with mild form vs. 19xVN, in the group with severe form, p<0.0001 ES. Lille score had an average value of 0.432 in the group of patients with mild form vs. 0.978 in the group of patients with severe form, p<0.0001 ES. The average value of total bilirubin was 5.95 mg% in the group with mild form vs. 18.5 mg% in the group with severe form. From the group of patients with severe form, 2 deaths (12.5%) were recorded. **Conclusions:** The incidence of acute ethanolic hepatitis in patients with ethanolic cirrhosis is 4.7%. 64% of cases had a severe form of disease with a mortality rate of 12.5%.

PP82. EFFICACY OF HELICOBACTER PYLORI ERADICATION THERAPY ON PEPTIC ULCER DISEASE IN CIRRHOTIC PATIENTS

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Background: The role of Helicobacter pylori infection in the pathogenesis of peptic ulcer disease in cirrhotic patients is still poorly defined. **Aim:** To evaluate the efficacy of proton pump inhibitor (PPI)-based triple therapy on peptic ulcer course in patients with liver cirrhosis. **Patients and methods:** The study has been conducted in a single tertiary-care hospital with 125 beds. In this prospective follow-up study we included 247 cirrhotic patients who underwent endoscopy. Peptic ulcer was detected in 43 patients (17.4%) and 39 patients were enrolled. Patients with peptic ulcer and proven H. pylori infection received eradication therapy and H. pylori negative patients received PPI treatment. The eradication of H. pylori was confirmed by the rapid urease test and histological examination. Follow-up endoscopies were performed at 6 and 12 months. Patients with peptic ulcer

recurrence were treated with PPI maintenance therapy. **Results:** There were 22 (56.4%) *H. pylori* positive and 17 (43.6%) *H. pylori* negative patients. *H. pylori* eradication was achieved in 63.6% (14/22) of patients. Thirty-six patients with healed ulcers entered into the follow-up period of the study. Recurrent peptic ulcers within 1 year were noted in 14 patients (38.8%). Peptic ulcers relapsed in 2 of 13 patients (15.4%) who achieved *H. pylori* eradication, and also in 10 patients (66.7%) who were *H. pylori* negative. Recurrent ulcer was noted in 2 patients who remained *H. pylori* positive (25.0%). Patient's age ($p = 0.018$), Child-Pugh stage ($p = 0.019$), peptic ulcer site ($p = 0.008$) and *H. pylori* negative status ($p = 0.004$) were significantly related to ulcer recurrence. **Conclusions:** Eradication of *H. pylori* infection in patients with liver cirrhosis and peptic ulcer disease does not protect all cirrhotic patients from ulcer recurrence. The majority of relapsed ulcers were gastric ulcers in *H. pylori* negative patients.

PP83. POTENTIAL CAUSES IN PORTAL ENCEPHALOPATHY IN CLINICAL PRACTICE

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Introduction: Portal encephalopathy is defined through all neuropsychological signs that appear in cirrhosis related to hepatocellular insufficiency. **Aim:** to assess causes of portal encephalopathy in cirrhotic patients hospitalized in 2010-2013. **Materials and methods:** we retrospectively analyzed the causes of encephalopathy in patients with cirrhosis, on a sample of 314 patients hospitalized in our department in 2010-2013. **Results:** The studied group included 314 patients, presenting multiple hospitalizations for encephalopathy with average age-57 years. As degree of encephalopathy, the cases were classified as: grade I-152 patients (48.4%), grade II-102 patients (32.5%), grade III-46 patients (14.7%), grade IV-14 patients

(4.5%). Causes of portal encephalopathy were: urinary tract infection-84 patients (26.8%), gastrointestinal hemorrhage-43 patients (13.7%), electrolyte disturbance-73 patients (23.2%), spontaneous bacterial peritonitis-24 patients (7.6%), pneumopathies-32 patients (10.2%), drug related (sedatives)-3 patients (0.9%), without an obvious cause-95 patients (30.2%). **Conclusion:** most frequently in clinical practice, portal encephalopathy was precipitated by an infectious cause (urinary tract infections or respiratory infections, spontaneous bacterial peritonitis), but in approximately 30% of patients an obvious cause of encephalopathy could not be detected.

PP84. IMPLICATIONS OF OXIDATIVE STRESS IN SPONTANEOUS BACTERIAL PERITONITIS

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Introduction Spontaneous bacterial peritonitis (SBP) is a major complication of liver cirrhosis, graft mortality is important. Recent studies have demonstrated the involvement of oxygen free radicals in the pathogenesis of liver cirrhosis, but the role of oxidative stress in the development of SBP has not yet been specified. The study **aims** to examine these active species in blood and ascitic fluid from patients with SBP and the role of oxidative stress in the pathogenesis of this complication. **Method** The study is a prospective case-control, which included 52 patients divided into 3 groups, group 1- 20 patients diagnosed with decompensated liver cirrhosis with ascites, group 2- 16 patients with liver cirrhosis and PBS and group 3-16 patients, controls. PBS was defined as the presence of > 250 PMN/mm³. Malondialdehyde (MDA), a product of lipid peroxidation, was dosed in blood and ascitic fluid of these patients. **Results** A statistically significant increase of MDA was recorded in group SBP compared to patients with ascites, without SBP, both in serum and in ascites. Also, there was a signifi-

cant increase in MDA in patients with decompensated cirrhosis with ascites than in control group. After antibiotic treatment, MDA levels decreased to control group values. **Conclusions** The study demonstrates the presence of oxidative stress in blood and ascitic fluid of patients with SBP, which can be considered a predictor of the evolution of cirrhosis towards SBP and a marker of treatment response.

PP85. MELD SCORE, A PREDICTOR OF PBS IN PATIENTS WITH LIVER CIRRHOSIS

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Introduction PBS represents a major health problem and is a severe complication of liver cirrhosis. MELD score, based on more blood constants (bilirubin, INR, creatinine) is able to predict the prognosis and the mortality rate of viral and alcoholic cirrhosis, and the results of liver transplantation. This study **aims** to assess the predictive value of the MELD score in cirrhotic patients complicated with PBS. **Methods** The prospective, descriptive study included 68 patients diagnosed with CH on the basis of clinical, biological, ultrasound and endoscopic features, followed over a period of 1 year. PBS was defined as the presence of $> 250\text{PMN}/\text{mm}^3$ and MELD score was calculated via the Internet, according to bilirubin, INR, creatinine. **Results** In the study group, males predominated (43 vs. 25), chronic alcohol abuse (39 vs. 29) and the Child classification A, B, C recorded a rate of 43%, 46% and 38% respectively. From the 68 patients, PBS was diagnosed in 17% of patients. Positive culture from ascites fluid was recorded in 37.3% of cases with PBS, neutrocytic ascites with negative cultures in 62.7%. MELD score in the PBS group was an average of 48, and significantly lower in the group without PBS, with an average value of 37.3. Proteins in ascitic fluid showed a value of 12.3 g / dL in the group with PBS, versus 17.8 g / dl in the group without PBS. In PBS group, increased MELD score was associated

with a survival rate far inferior. **Conclusions** MELD score is a predictor of infection of the ascitic fluid in cirrhotic patients, with advanced degree of liver decompensation (Child) and low levels of protein in the ascitic fluid, and associated with increased mortality. Antibiotic prophylaxis of PBS is required in cirrhotic patients with high MELD score, in order to improve survival of these patients.

PP86. THE SOLUBLE TRANSFERRIN RECEPTORS AND PORPHYRIA CUTANEA TARDA

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Objective. To evaluate the impact of hepatitis C virus (HCV) infection on iron status in patients with porphyria cutanea tarda (PCT). **Methods.** We conducted a prospective study that included PCT patients, classified into two groups, similar in age and biological profile: group A (86 men with PCT, negative for anti-HCV antibodies), group B (77 men with PCT positive for anti-HCV antibodies). We performed the following tests: urine dosage for coproporphyrin, uroporphyrin, 5-aminolevulinic acid, porfobilinogen, and serum dosage for iron, ferritin, soluble receptors for transferrin (sTfR), C-reactive protein (CRP), anti-HCV antibodies. **Results.** For group A: High serum ferritin levels ($304 \pm 101 \text{ ng/ml}$), low serum levels of sTfR ($1.46 \pm 0.33 \text{ mg/l}$), high serum iron levels ($174 \pm 61 \mu\text{g/dl}$), normal serum CRP levels ($0.42 \pm 0.21 \text{ mg/dl}$), strong positive association between sideremia and serum ferritin ($r = 0.513$, $p = 0.0437$, $\text{CI} = 95\%$), statistically insignificant association between the sTfR /ferritin ratio and CRP ($r = 0.104$, $p = 0.492$, $\text{CI} = 95\%$). For group B: Marked increase in serum ferritin ($387 \pm 122 \text{ ng/ml}$), low serum levels of sTfR ($1.51 \pm 0.26 \text{ mg/l}$), marked increase in serum iron ($189 \pm 77 \mu\text{g/dl}$) marked increase in serum CRP ($1.04 \pm 0.28 \text{ mg/dl}$), moderate positive association between side-

remia and serum ferritin ($r = 0.748$, $p = 0.017$, $CI = 95$), strong negative relationship between the sTfR/ferritin ratio and CRP ($r = 0.748$, $p = 0.017$, $CI = 95$). **Conclusions.** The sTfR /ferritin ratio could be used for differentiating HCV non-infected patients with PCT from those associating HCV infection. Ferritin synthesis was overestimated during acute phase reactions and iron status assessment, based on sTfR, was not influenced by infection with HCV. This analysis provides important information for monitoring the therapeutic response of PCT patients.

PP87. EPIDEMIOLOGICAL FEATURES OF VIRAL CHRONIC HEPATITIS B AND C IN PREGNANT WOMEN - THE EXPERIENCE OF A TERRITORIAL CENTER

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Aim Evaluation of the frequency of these types of hepatitis among pregnant women recorded and monitored in Moinești Municipal Emergency Hospital during April 2012 and March 2013; also highlighting particular risk factors for transmission of hepatitis B and C viruses infection in pregnant women. **Materials and method** All pregnant women were tested for transaminases, HBs antigens, anti-HCV antibodies, and those who have given consent filled in a questionnaire on general data (age, place of origin, studies, occupation), personal and family history of specific pathology (obstetrical pathology, dental treatment, sexual activity, drug consumption, injury with possibly contaminated objects, transfusion history, other infected family members), anti HBV vaccination, anti hepatitis treatments performed. **Results** 757 pregnant women filled in the questionnaire; of which 28 were positive for HBs antigen (3.69%), and 10 for anti-HCV antibodies (1.32%). The median age of seropositive pregnant women was 28 years (17-39 years). We did not find a significant statistical difference between seropositive pregnant women and seronegative ones taking into account the social place, but the differentiation was statistical significant taking into account studies

and occupation; only 2.63% of seropositive pregnant women were college graduates, and 13.15% were unemployed, unlike of seronegative pregnant women in whom the percentages were 14.32% and respectively 28.17%. Between seropositive pregnant women, 78.94% had at least one risk factor for transmission of hepatitis viral B and C infections, only 36.84% had been previously tested in May, and 7.89% lived in orphanages. **Conclusions** Corroborating our findings with those of previous studies, inclusively before the introduction of anti HBV vaccination obligativity, we believe that, in Romania, there is a downward trend of the prerequisites of chronic viral hepatitis B and C prevalence. In fertile women, seropositivity correlates strongly with educational level and with socioeconomic condition.

PP88. STUDY OF NON-VARICEAL UPPER GASTROINTESTINAL BLEEDING (UGIB) PATTERN IN A GROUP OF PATIENTS WITH LIVER CIRRHOSIS DEPENDING ON THE ETIOLOGY

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Background: Upper gastrointestinal bleeding is a serious complication in patients with liver cirrhosis, with increased morbidity and mortality. **Objectives:** To assess the pattern of non-variceal upper GI bleeding in a group of patients with cirrhosis according to disease etiology. **Methods:** There were 56 patients included into the study (mean age 47 years) with liver cirrhosis; they were examined endoscopically for an episode of upper gastrointestinal bleeding in 2nd Internal Medicine Clinic in Emergency County Hospital of Craiova, between January 2010 - January 2011. The diagnosis of liver cirrhosis was established based on clinical, biological and imaging criteria. We excluded patients with hepatocellular carcinoma and portal vein thrombosis. We analyzed in all patients: history (alcohol, NSAIDs or other drugs, genetic disorders), clinical, hematological (hemoglobin, number of

leukocytes, number of platelets), biological (SGOT, SGPT, total and direct bilirubin, albumin, time prothrombin, HBs antigen, Anti- HCV antibodies, Anti- Helicobacter Pylori antibodies), imaging (liver, spleen, portal vein, ascites) and endoscopic (establishing cause of UGIB) data. **Results and Discussion:** Of the 56 patients, 38 had chronic alcohol abuse, the rest being of viral etiology (B, B + D, C), autoimmune alpha 1 antitrypsin deficiency. Non-variceal bleeding was present in 43 patients (76.78%). The main causes of non-variceal UGIB were the portal-hypertensive gastropathy, peptic ulcer, hemorrhagic erosive gastritis, Mallory-Weiss syndrome. For patients with ethanol etiology of the disease, the most common causes of bleeding were erosive gastritis and peptic ulcer and for viral etiology we identified a higher rate of bleeding in portal hypertensive gastropathy. **Conclusions:** -Common causes of non-variceal bleeding are gastric or duodenal ulcer, portal hypertensive gastropathy and erosive gastro-duodenitis. -Prevalence of non-variceal bleeding causes was different depending on the etiology of liver injuries.

PP89. UPPER GASTROINTESTINAL BLEEDING: A RISK FACTOR FOR BACTERIAL INFECTION IN CIRRHOSIS?

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Introduction: Cirrhotic patients, particularly those with a poor liver function and those admitted with gastrointestinal hemorrhage, are at a high risk of developing acute bacterial infections. **Aims:** The aim of the study was to determine if bacterial infection is a frequent complication in patients with decompensated cirrhosis with upper gastrointestinal bleeding (UGB) and if invasive procedures (diagnostic or therapeutic) can predispose to bacterial infections. **Methodology:** We conducted a retrospective study which included a group of 34 cirrhotic patients with upper gastrointestinal bleeding (UGB) and 35 cirrhotic patients with

without any sign of hemorrhage (control group). All patients were in Child B and C Pugh groups. They were evaluated by chart reviews regarding the prevalence of bacterial infection during hospitalization to determine whether UGB was a risk factor. An infection was considered present if a specific organ system was identified (chest radiography, multiple cultures) or if fever ($> 38^{\circ}\text{C}$) persisted for more than 24 hours with associated leucocytosis. The presence of spontaneous bacterial peritonitis was based on a diagnostic paracentesis and cultures. **Results:** Infections were recorded in 23/34 (67%) patients with UGB, and in 12/35 (35%) of those without UGB ($p=0.005$). The presence of infections per admitted patients, was significantly larger in the group with UGB (0.75 ± 0.84 vs. 0.36 ± 0.59 ; $p=0.028$). In the UGB group compared to non UGB group, ascites was more frequent (51% vs. 32%; $p=0.07$); the patients with infection and UGB were more likely to have undergone endoscopic procedures ($p<0.005$). **Conclusion:** UGB is an important factor that contributes to bacterial infection among cirrhotic patients and the endoscopic procedures increase this risk.

PP90. WHAT TYPES OF INFECTIONS ARE MORE COMMON IN CIRRHOTIC PATIENTS?

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Aim: to evaluate which types of infections are more frequent in cirrhotic patients. **Methods:** Our retrospective study included 170 episodes of infection in 141 cirrhotic patients admitted in our Department between January 2011-December 2012. We analyzed the type of infection, the number of infectious episodes/patient and the mortality rate. **Results:** The following types of infections were observed: urinary infections – 113 episodes (66.5%), respiratory infections – 19 episodes (11.1%), spontaneous bacterial

peritonitis – 16 episodes (9.5%), skin infections – 4 episodes (2.3%), sepsis of biliary etiology – 2 episodes (1.2%), sepsis of unknown etiology – 4 episodes (2.3%), two concurrent infections -12 cases (7.1%) (urinary+respiratory infection-6 cases, urinary infection+ spontaneous bacterial peritonitis-2 cases, urinary+skin infection-2 cases, respiratory+skin infection-1 case, respiratory infection+ spontaneous bacterial peritonitis-1 case). One episode of infection was observed in 121 patients (85.8%), two episodes in 13 patients (9.2%), three episodes in 3 patients (3.6%) and 4 episodes in 2 patients (1.4%). In our cohort, 20/141 (14.1%) patients died during the hospitalization. The mortality rate was statistically similar in patients with one vs. those with at least 2 infectious episodes: 13.2% vs. 20%, $p=0.64$. 14/20 (70%) patients with at least two infectious episodes had 2 episodes of the same infection: 11/14 patients (78.5%) had two episodes of urinary infection, 2/14 patients (14.3%) had two episodes of spontaneous bacterial peritonitis and 1/14 patients (7.2%) had two episodes of skin infection. In patients with urinary infection, urine culture showed E.Coli infection in 56.8% cases. **Conclusions:** In our study, the most common infection in cirrhotic patients was urinary infection and E.Coli was the most common etiologic agent. A strategy to prevent the recurrence of urinary infections is required.

PP91. ONE-YEAR EXPERIENCE OF TIPSS INSERTION IN A ROMANIAN TERTIARY CARE CENTER

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Introduction: Transjugular Porto-Systemic Shunt (TIPSS) represents an efficient therapeutic method for portal hypertension (PHT) related complications. Principal indications are: recidivate or refractory variceal bleeding and refractory ascites. Patients and methods: Between November 2011 and Mars 2013 seven TIPSS were inserted in our center. The

indications were: recidivate variceal bleeding (5 patients), refractory variceal hemorrhage (1 patient) and refractory ascites (1 patient). Due to the unavailability in Romania of the Viatorr (Gore, USA) TIPSS dedicated stent, we used either simple auto-expandable bare-stents (Luminexx, Bard, USA or Wallstent, Boston-Scientific, USA) or bare-stents combined with ePTFE graft-stents (Fluency, Bard, USA) for intrahepatic portion of the shunt for preventing TIPSS dysfunction. **Results:** The patients' characteristics were: mean age 50.2 ± 8.4 [37-58], Child-Pugh score 8 ± 2.6 [5-12] and MELD 14.3 ± 5.7 [9-25]. Hepatic venous pressure gradient (HVPG) was 16 ± 2.6 [13-20] before TIPSS insertion and 6 ± 1.6 [4-8] after TIPSS insertion. All patients obtained an HVPG < 10 mmHg, the cut-off for the prevention of PHT related complications. The mean follow-up period was 276 ± 181 [11-503] days. One patient presented total occlusion of his simple bare-stent and the angioplasty attempt has failed. However, up to now the patient had no bleeding in spite of the variceal augmentation. No other patient presented signs of TIPSS dysfunction. One patient died after 11 days from septic shock. The TIPSS was recommended for refractory variceal bleeding which necessitated Blackmore balloon tamponade but the patients had advanced liver dysfunction (Child-Pugh score=12 and MELD=25). No patient with ePTFE stents presented PHT related complications. **Conclusion:** TIPSS insertion is a very efficient therapeutic method for PHT related complications. The insertion of ePTFE graft-stents may improve the patients' prognosis.

PP92. IN-HOSPITAL MORTALITY AMONG CIRRHOTIC PATIENTS ADMITTED IN EMERGENCY

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The **objective** of our study was to determine the in-hospital mortality rate among a cohort of hospitalized cirrhotic patients in emergency and to evaluate the risk factors for mortality. **Material and method:** 173 patients admitted in emergency, (42.9% from

total cases with cirrhosis) in our department in a 12 month period of time. We had 63 females and 110 males with a mean age of 60.9+/-11 years. In-hospital mortality was 17.9% (31 patients) **Results:** Causes of admittance Upper digestive bleeding 63/173- 36.4% Portal encephalopathy 41/173 - 23.6% Large ascites 29/173 - 16.7% Spontaneous bacterial peritonitis 15/173 - 8.6% Diselectrolytemia 6/173- 3.4% Obstructive jaundice - 5/173 - 2.8% Acute pancreatitis 4/173 - 2.3% Other cases (abdominal pain, acute alcoholic hepatitis, hemorrhoidal bleeding) 10/173 - 5.7% In univariant analysis, the following factors were correlated with mortality: encephalopathy ($r=0.329$, $p=0.0002$), SBP ($r=0.11$ $p=0.0364$), serum creatinine ($r=0.256$, $p=0.001$), INR ($r=0.222$, $p=0.0034$) MELD score ($r=0.377$, $p=< 0.0001$). In multivariate analysis only encephalopathy ($p=0.0002$) and MELD score (0.0029) correlates with mortality **Conclusions** 1. More than 40% of cirrhotic patients were admitted in emergency, the principal acute complication was upper digestive bleeding, followed by portal encephalopathy 2. The mortality rate of these patients was 18% 3. MELD score and portal encephalopathy were the most important predictive factors for mortality

PP93. THE MORTALITY TREND OF VARICEAL BLEEDING IN CIRRHOTIC PATIENTS

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Upper gastrointestinal bleeding remains one of the most frequent problem in medical practice, that especially on patient with hepatic cirrhosis, has a major significance due to its determined mortality and morbidity. Even if the prognosis of these patients improved in the last decades, the mortality remains increased. **Aim:** to analyze the outcome of patients with liver cirrhosis and upper digestive bleeding **Material and method:** We have made an observational study on two batches of patients: 447 patients with hepatic cirrhosis hospitalized for variceal bleeding in

a 5 years period (ian.2004-dec.2008) and 248 patients hospitalized in a 4 years period (Jan. 2009-Dec.2012) to find if the patients outcome has improved in the last period of time. **Results:** In the first group we had 17.2% mortality rate (77patients) and a rebleeding rate of 35.3% (158 patients) In the second group we had 14.5% mortality rate (36 pat.) and 18.5% rebleeding rate (46 cases) Comparing the two batches we observe a decrease in the number of cases admitted for variceal bleeding and also a decrease in rebleeding rates 35.3% vs. 18.5% (p value<0.0001 ES). We observe a stationery trend in mortality rate despite the fact that we the opportunity to perform emergency endoscopic hemostasis 17% vs. 14.5% (p value-0.3 NS) **Conclusion:** Mortality rate in variceal bleeding has not decreased in the last years even if we have the opportunity to perform emergency endoscopic hemostasis in the last years but the rebleeding rate has significantly decreased

PP94. HOW OFTEN DO WE HAVE MALNUTRITION IN CIRRHOTIC PATIENTS?

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The nutritional imbalance is frequently found in patients with chronic liver disease, especially in liver cirrhosis. Denutrition in these patients is caused by a negative energetic balance, even in early stages. **Aim:** to evaluate the nutritional state of patients with liver cirrhosis of different etiologies and to compare the nutritional state of these patients with that of healthy individuals. **Methods:** We performed a prospective study on 64 consecutive patients diagnosed with liver cirrhosis of different etiologies and we compared this group with a control group of 24 healthy individuals. The mean age was 61 ± 12.8 years, 50 women (56.8%) and 38 men (43.2%). Regarding the Child-Pugh stage, the cirrhosis group had the following distribution: 20/64 Child-Pugh A, 26/64 Child-Pugh

B, 18/64 Child-Pugh C. Every patient was assessed regarding clinical parameters (height, weight), laboratory findings and everybody filled 2 questionnaires: Subjective Global Assessment (SGA) and Mini-Nutritional Assessment (MNA). **Results:** From the patients with chronic liver disease, 10/64 (15.6%) were malnourished, 24/64 (37.5%) had malnutrition risk and 30/64 (46.9%) had normal nutritional status. The nutritional status correlated only with Child-Pugh score, the patients with advanced liver disease having a worse nutritional status ($p < 0.0001$). Also we found a correlation between low protein intake and malnutrition ($p < 0.0001$). **Conclusions:** Malnutrition is frequent in patients with liver cirrhosis (15.6%) compared with only 4% from the individuals in the control group, 70% of them having decompensated disease (Child-Pugh C stage).

PP95. BODY MASS INDEX (BMI) AND NUTRITIONAL RISK INDEX (INR): HOW USEFUL ARE FOR ASSESSING THE NUTRITIONAL STATUS IN PATIENTS WITH CHRONIC LIVER DISEASE?

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There is no consensus regarding the parameters that we should consider for assessing the nutritional status in patients with chronic hepatitis or cirrhosis. **Aim:** to evaluate the parameters used in general population for assessing nutritional status in patients with chronic hepatitis or cirrhosis of different etiologies. **Methods:** We used the data of a prospective study performed in our department on 98 consecutive patients with chronic liver disease, in which we evaluated the nutritional status using 2 questionnaires: Subjective Global Assessment (SGA) and Mini-Nutritional Assessment (MNA). For every patient we calculated the body mass index (BMI) and we evaluated the nutritional status using nutritional risk index (INR). **Results:** Using the combined value of the 2

tests (SGA and MNA) we obtained the following results: 10/64 (15.6%) were malnourished, 24/64 (37.5%) had malnutrition risk and 30/64 (46.9%) had normal nutritional status. We considered these 2 tests as the standard in diagnosing malnutrition and we evaluated the other 2 parameters: BMI and INR. For BMI we obtained 88.4% sensibility, 33.3% specificity, 85.1% positive predictive value, 40% negative predictive value, with 0.781 accuracy in diagnosing malnutrition. Using INR we obtained 61.5% sensibility, 33.3% specificity, 80% positive predictive value, 16.6% negative predictive value, with 0.562 accuracy in determining the correct nutritional status. **Conclusions:** Using BMI and INR we can identify the cases of malnutrition with a good sensibility (60-90%), but they have a poor negative predictive value (16-40%), especially because of the presence of ascites, edemas and hypoalbuminemia which are modifying these 2 parameters.

PP96. INFECTIONS IN CIRRHOTIC PATIENTS ADMITTED TO HOSPITAL

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Infections are one of the common co morbidities in patients with liver cirrhosis that affects the number and duration of hospitalizations and sometimes even life expectancy. **Aim:** assessing the number and type of infections identified in patients with liver cirrhosis admitted to the Institute of Gastroenterology and Hepatology, Iasi (IGH) **Method:** We retrospectively evaluated the records of all patients with liver cirrhosis hospitalized in the period 01.01.2012-31.12.2012 in IGH and we counted the infections diagnosed during hospitalization. In that period, there were 1684 patients with liver cirrhosis summing 4127 admissions. The etiology was predominantly viral (715 (42.5%) cases), followed by toxic (572 (34%) cases) and mixed - toxic and viral (368 (21.8%) cases), and 29 (1.7%) cases with other etiologies. During the 4127 admissions, were diagnosed 881 (21.4%) infections: 325 (7.8%) urinary tract infection, 236 (5.7%)

respiratory infections, 177 (4.3%) spontaneous bacterial peritonitis, 110 (2.7%) skin infections and 33 (0.8%) spontaneous bacteremia. According to Child class, 105 cases were identified in patients with Child A, 286 cases in patients with Child B and 490 cases in patients with Child C. **Conclusions.** Infection rate in patients with liver cirrhosis admitted to IGH is lower compared with literature data; the most probable explanations are the lower rate of diagnosis and the higher proportion of patients with Child A hospitalized which were included in the study group

PP97. D VIRUS CO-INFECTION FREQUENCY IN BANAT

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Introduction: It is estimated that 5-10% of patients infected with HBV worldwide have HDV coinfection. The regions with the highest frequency of HBV+HDV coinfection are Mediterranean Basin, the Middle East, Central Africa, Japan, Taiwan (*). The **aim** of this study is to determine the frequency of HBV + HDV coinfection in Banat. **Material and Methods:** We evaluated a group of 2063 successive patients with chronic HBV infection (HBsAg positive > 6 months), evaluated in the Gastroenterology Department of the Emergency County Hospital Timisoara and in the "Victor Babes" Infectious Diseases Hospital Timisoara, between 2008-2012. In all these patients we searched for HDV coinfection by determining anti HDV antibodies (anti HDV Ab). **Results:** In the group of 2063 patients we found 162 (7.8%) patients with positive anti HDV Ab: 38 with cirrhosis (F4 on liver biopsy or assessed by noninvasive methods: FibroTest, FibroScan) and 124 with chronic hepatitis. The frequency of HBV + HDV coinfection was 17,1% (38/222) in patients with liver cirrhosis and 6,7% (124/1841) in patients with chronic hepatitis. **Conclusion:** The frequency of HBV + HDV co-infection in Banat is 7.8%, similar to publi-

shed data.

* Huo, T.I., Wu, J.C., Lin, R.Y., Sheng, W.Y., Chang, F.Y., Lee, S.D.. Decreasing hepatitis virus infection in Taiwan: an analysis of contributory factors, J. Gastroen. Hepat. 1997, 12 (11): 747-751.

PP98. THE ROLE OF DIETARY THERAPY IN PATIENTS WITH HEPATIC ENCEPHALOPATHY

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Background: Malnutrition affects more than 80% of patients with decompensated liver disease and is associated with an increased number of complications and increased mortality. **Aim:** for evaluating the effect of dietary therapy on patients with hepatic encephalopathy, we evaluated the mental status, serum level of ammonia and nutritional parameters, before and after one month diet. **Materials and methods:** We performed a prospective analysis of 136 patients (63% male and 37% women) with diagnosis of cirrhosis and at least one previous episode of encephalopathy, patients who were admitted in Elias Emergency Hospital, Gastroenterology Department, during January 2011-January 2012. The mental status was assessed by West-Haven criteria, the anthropometric measurements included mid-arm muscle circumference (MAMC) and body weight. Patients from this study received medical treatment including lactulose in order to obtain 2-3 semisolid stools daily and Rifaximin 1200mg/day, than the parameters were measured again after one month. During that period they received high caloric high protein (HPHC) diet: 30kcal/kg/day and 1.2g of proteins/kg/day (vegetables, fruits, cereals, milk products). **Results:** A significant decrease in the blood ammonia levels was observed after a month (from 58.3 micromole/l to 35.2 micromole/l). A significant number of patients showed an improvement of their mental status after diet: 45% of patients with stage I became stage 0.75% of patients with

stage II (75%) became stage I and only 25% of patients remained in stage II. Body weight was slightly but significantly increased after a month of diet (68.3 kg before and 69.2 kg, $p=0.008$). MAMC increased from 28.6cm to 29.3cm after one month diet, but not statistically significant. **Conclusion:** A significant decrease in the blood ammonia levels and an improvement of mental status was observed after diet. Body weight was slightly but significantly increased and the MAMC increased, but not statistically significant.

PP99. SPONTANEOUS BACTERIAL PERITONITIS IN LIVER CIRRHOSIS

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Introduction: Spontaneous bacterial peritonitis (SBP) is a life-threatening complication of advanced liver disease with ascites. The prevalence of SBP in patients (pts) with cirrhosis and ascites is 15-20%, the hospital mortality being 20-40%. **Aim:** To estimate the incidence and the evolution of SBP under medical treatment in hospitalized cirrhotic pts with ascites. **Material and methods:** a total of 140 consecutive pts were included in the study. SBP diagnosis was based upon elevated ascitic neutrophilic $>250/mm^3$ in the absence of data suggesting secondary peritonitis. Cefotaxime 2g t.i.d. i.v. during 7 days was the first choice therapy in severely infected cirrhotics (11 pts=first group); 11 pts received Ofloxacin 800 mg orally for 10 days in uncomplicated SBP (second group). **Results:** The incidence of SBP in cirrhotics with ascites was 15.7%. SBP usually develops in pts with advanced liver cirrhosis (Child's class C) and particularly of alcoholic etiology. In the cefotaxime treated group, laboratory improvement and recovery was achieved in 9 pts (81.8%), 2 pts (18.1%) died. In the second group, oral administration of ofloxacin was effective in 72.7% pts. **Conclusions:** The incidence of SBP in cirrhotics with ascites was 15.7%. Since SBP is a severe infection (22.7% mortality for all treated pts)

antimicrobial therapy should be started immediately, before identification of the causative organism. Cefotaxime was the drug of first choice, safe and effective in 81.8% of cases.

PP100. DIGESTIVE BLEEDING IN CIRRHOSIS

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Upper digestive tract bleeding is one among the most serious complications, most commonly fatal in patients with liver cirrhosis. Most frequently, it is localized in the upper digestive tract (manifested by hematemesis and melena, or only melena), and more rarely in the lower digestive tract (rectal varices, hemorrhoids) manifested as rectorrhagia. In the majority of cases of digestive bleeding, either upper or lower, the underlying mechanism is portal hypertension. In our study performed on 75 patients with liver cirrhosis and digestive bleeding, admitted in the Emergency Hospital Oradea between 2011-2013, upper digestive bleeding occurred in 70 patients (93%), whereas lower digestive bleeding occurred in only 5 cases (7%). Among the cases of cirrhosis with upper digestive tract bleeding, 58 patients were found with the etiology of esophageal varices (85%), among which, 3 cases of fundic gastric varices (4.3%), 4 cases of hemorrhagic gastric portal hypertension (5.7%), 1 case of hemorrhagic gastric cancer (1.4%), 2 cases of hemorrhagic duodenal ulcer (2.8%), and in 2 cases (2.8%), the etiology of upper digestive bleeding could not be established. 21 cirrhotic patients (28%) with digestive tract bleeding died, all cases among which upper digestive tract bleeding resulted from esophageal and gastric varices. **Conclusion:** in majority of cases of digestive hemorrhage in patients with liver cirrhosis, the inducing lesions were localized in the upper digestive tract, the predominating cause being esophageal varices. Mortality in these cases was significant, as a result of upper digestive tract bleeding.

PP101. PREDICTIVE FACTORS FOR MORTALITY AND REBLEEDING IN VARICEAL HEMORRHAGE

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Among cirrhotic patients, especially those with advanced liver disease or complications such as variceal bleeding, the mortality rate is high. Thus, the identification of risk factors for mortality can help us discriminate patients at risk. **Aim** –the evaluation of different parameters as possible risk factors for rebleeding and death in cirrhotic patients with variceal hemorrhage. **Material and method:** 248 cirrhotic patients admitted in our department for variceal bleeding in a four years period of time (Jan. 2009-Dec.2012), 83 females and 201 males with a mean age of 58.8+/-10.7 years. **Results:** Univariant analysis identifies the following parameters which correlates with mortality: rebleeding ($p<0.0001$), decompensated cirrhosis ($p=0.003$), serum creatinine ($p<0.0001$), MELD score ($p<0.0001$), serum bilirubin ($p<0.0001$) and those involved in rebleeding are: INR ($p=0.03$), decompensated cirrhosis ($p=0.002$), serum bilirubin ($p<0.001$) and MELD score ($p<0.0001$). The following parameters are not correlating with mortality: age ($p=0.49$), gender ($p=0.69$), AST level ($p=0.59$), ALT level ($p=0.64$), cholinesterase ($p=0.78$), serum albumin ($p=0.2$), serum Na ($p=0.5$), K ($p=0.2$), platelet count ($p=0.59$). Multivariate analysis showed that the most powerful correlation with mortality had serum bilirubin level ($p=0.0003$), decompensated cirrhosis ($p=0.02$), serum creatinine ($p=0.03$) and MELD score ($p=0.0001$). Serum bilirubin level ($p=0.04$) and MELD score ($p=0.03$) are the most important factors which predict rebleeding. **Conclusion** The decompensation of underlying disease is the most important predictive factor for rebleeding and mortality in cirrhotic patients with variceal hemorrhage.

POSTER PRESENTATIONS

Pancreas

PP102. DIABETES MELLITUS IN PANCREATIC CANCER PATIENTS

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Introduction. Diabetes mellitus (DM) has been increasingly recognized as both a risk factor and an early manifestation of pancreatic cancer (type 3c or pancreatogenic DM). Our goal was to evaluate glyce-mic abnormalities in pancreatic cancer (PC) patients. **Method.** We retrospectively reviewed 40 cases of his-tologically proven pancreatic malignancy admitted to our hospital between January 1st 2012 – December 31st 2012. We divided PC patients into two groups: those with diabetes (n=28), and those without diabe-tes (n=12). **Results.** Of the 40 patients with PC, 36 (90%) had either diabetes or hyperglycemia. Of the 28 diabetics, 15 (37.5%) had new-onset DM, while the other 13 (32.5%) had long-standing disease. Two thirds of patients with new-onset DM were refer-red to us because of pancreatic mass found on US. Mean age, BMI and size of the tumor were similar between diabetic and non-diabetic patients with PC, but males and tail-located tumors had a higher risk of diabetes. **Conclusions.** Diabetes is a frequent associa-tion in PC. New-onset DM should prompt screening for PC, as it could be a harbinger of pancreatic ma-lignancy.

PP103. ENDOCRINE INSUFFICIENCY IN CHRONIC PANCREATITIS WITH BILIARY PATHOLOGY REPORT

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Purpose of the study: Evaluation of evolutionary interrelationships of chronic pancreatitis (CP) with

biliary pathologies. **Materials and methods:** The study included 76 patients with CP, 30 men and 46 women, mean age 52.1 + 2.8 years, who were divided into 2 groups: group I - 34 patients with CP with-out endocrine insufficiency and group II - 42 patients with CP complicated by diabetes. To confirm the di-agnosis the following factors were taken into account: medical history: superior severe pain syndrome, dyspeptic syndrome, pancreatic exocrine insufficien-cy, pancreatic exocrine insufficiency indices (alpha-amylase, lipase, elastase-1 in stool) and endocrines (blood sugar and glucose tolerance tests). All patients were given a duodenal survey which consisted of a macro-, microscopic and biochemical bile investiga-tion. **Results:** Complaints of discomfort and pain in the right hypochondria were documented in 44.1% patients of the first group, 37.5% in group II, “bitter taste in mouth” at 47.1% vs. 26.2%, nausea at 17.6 % vs. 9.4%. Ultrasound examination has determined gallbladder wall thickening at 88.3% patients in group I and 53.1 % in group II; gallbladder deformation at 35.3% and 18.8% respectively; presence of bile sludge at 76.5% of patients in group I and 37.5% in group II. Microscopic analysis confirmed the presence of bile cholesterol crystals and Ca bilirubinate at 82.4% in group I and 53.1% in group II. In the bile of group I the cholesterol levels were increased and the levels of bile acids in portions “B” and “C” were low. **Conclusi-on:** In most patients with chronic pancreatitis, mainly in those with diabetes, colloidal evolving pathophysio-logical changes of the gallbladder were determined. Usually subclinical, these changes can be detected in a complex investigation of the gallbladder.

PP104. THE LONG TERM PROGNOSIS OF AUTOIMMUNE PANCREATITIS: LITERATURE REVIEW AND NUMBER OF CASES IN OUR EXPERIENCE

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Autoimmune pancreatitis (AIP), an infrequent etiology, increasingly recognized in the last decade, is characterized by lympho-plasmacytic inflammation of the pancreas. Based on clinical-pathological features,

AIP has been classified into two subtypes (Type1 and Type2) with distinct geographical, age, gender distributions and different serological and pathological characteristics. Type1 disease, called lympho-plasmacytic sclerosing pancreatitis, the most common form worldwide, is associated with extra pancreatic manifestations and elevated levels of IgG4-positive cells. This form seems to be the pancreatic manifestation of an IgG4-related systemic disease. Type2, corresponding to idiopathic duct-centric pancreatitis, is characterized by a paucity of IgG4-positive cells and is more difficult to diagnose. Recently, based on five features, the international consensus diagnostic criteria for AIP were proposed: imaging of pancreatic parenchyma and ducts; serology; other organ involvement; pancreatic histology; response to steroid therapy. The majority of patients with AIP treated with steroids obtain clinical remission. Relapse is more common in pancreas and biliary tree, particularly in patients with Type1. High IgG4 and low immune complex level, as well as HLA and cytotoxic T-lymphocyte antigen 4 polymorphisms are predictors for AIP recurrence. Pancreatic stone formation or atrophy is observed in some relapsing AIP patients. Some studies have also suggested a slightly increased risk of pancreatic cancer. To date, the long term prognosis of AIP remains undefined. Our experience is limited to 2 patients diagnosed with possible Type2 and one with definite Type1 who were followed 24-64 months. One patient was operated and others have achieved remission with prednisone. Patients with Type1 had 2 recurrences followed by atrophy of the pancreas and extensive retroperitoneal fibrosis. This presentation provides on the one hand, an update on diagnosis, treatment and the natural history of AIP and on the other hand a series of 3 cases in our experience.

PP105. TREND EVOLUTION OF ACUTE PANCREATITIS DURING A 7 YEARS PERIOD

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Aim: To analyze the evolution of acute pancreatitis (AP), regarding the severity, etiology and mortality during a 7 years period. **Methods:** Between January 2006 and December 2012, 822 patients with AP were admitted in our Department. According to the Atlanta criteria we classified AP as mild or severe. We compared the severity of AP, the etiology and mortality rate in patients hospitalized between 2006-2009 (422 patients) vs. those hospitalized between 2010-2012 (400 patients). **Results:** From the entire cohort of patients, 62.5% had mild AP and 37.5% severe acute pancreatitis, while the mortality rate was 4.2%. The etiology of AP was: alcoholic -31.9%, biliary -46.5% and non-alcoholic, non-biliary-21.6%. The mortality rate was similar for patients hospitalized between 2006-2009 and those hospitalized between 2010-2012: 4.5% vs. 4%, $p=0.85$. Also, the proportion of severe AP was similar in these two categories of patients: 38.4% vs.40%, $p=0.69$. The proportion of alcoholic AP etiology was significantly higher in patients hospitalized between 2006-2009 vs. those hospitalized between 2010-2012: 39% vs. 24.7%, $p<0.0001$, while the proportion of biliary AP was higher in patients hospitalized between 2010-2012 as compared with those hospitalized between 2006-2009: 53.3% vs. 40.2%, $p=0.0002$. The proportion of non-alcoholic, non-biliary AP was similar in patients hospitalized between 2006-2009 vs. those hospitalized between 2010-2012 :20.8% vs. 22%, $p=0.73$. **Conclusions:** The mortality rate in our cohort of AP patients was 4.2%, being similar in the two time periods analyzed. The proportion of biliary AP increased in the last period, probably because more patients with this disease are referred to our center for endoscopic procedures.

POSTER PRESENTATIONS

Digestive oncology

PP106. IS IT JUSTIFIED TO BIOPSY HEPATIC NODULES CONSIDERED METASTASIS OF SOME KNOWN PRIMARY TUMORS?

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Introduction: Known neoplastic masses, with different locations, sizes, histopathologic forms, can be found, at the moment of diagnosis, together with other liver nodules, which can be considered after clinical and imaging investigations, as metastases with a known spreading place. The **aim** of the study: to identify the connection between primary malignant structures, diagnosed by histopathologic methods, and the nodular hepatic masses, supposed to be metastases. **Material and method:** We performed a prospective study on 54 patients, with a presumption of liver metastases, originating from a known primary malignant tumor. We performed liver biopsy in all cases, followed by histopathologic assessment, thus evaluating if a correlation with the already known primary neoplastic lesion exists. **Results:** Out of 54 patients from our group, a connection between primary tumor and the metastatic mass in 31 cases (57.4%) was confirmed, concluding the following diagnostics for the secondary malignant liver masses: digestive carcinoma-1, gastric carcinoma-1, mammary carcinoma-6, colon carcinoma-6, pancreatic carcinoma-4, renal carcinoma-2, prostatic carcinoma-1, pulmonary carcinoma-1, neuroendocrine carcinoma-1, adrenal gland carcinoma-2, insulinoma-2, melanoma-2, angiosarcoma-1, timoma-1. In 9 patients (16.67%), we observed a diagnosis of metastasis, without a sure and direct correlation with the primary tumor: adenocarcinoma with unsure origin-1, digestive or ovarian carcinoma-1, undifferentiated metastases-3, and me-

tastasis with unspecified origin-4. Also, in 14 patients (25.93%), diagnoses included malignant or benign lesions, but without a connection with the known primary neoplasia, which was our first suspicion: normal liver-1, macronodular cirrhosis-1, colangiocarcinoma-4, inconclusive dystrophic lesions-1, lymphomas-3, adenoma-2, granuloma-1 and teratoma-1. **Conclusion:** Liver biopsy is mandatory for the liver nodules considered as metastasis, taking into account the fact that in 1 case from 4 the suspected secondary tumoral masses, have other etiology.

PP107. NEXAVAR IN HCC: FROM THE INTERNATIONAL TRIALS TO THE ROUTINE CLINICAL PRACTICE. EXPERIENCE OF FUNDENI CLINICAL INSTITUTE, ONCOLOGY DEPARTMENT

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Background: Advanced and unresectable HCC is a clinical challenge with limited treatment options. The multikinase inhibitor Sorafenib is the first and only agent showing a survival benefit in these patients. In this study we evaluate clinical benefits of Sorafenib in a wide range of patient population treated in Fundeni Clinical Institute between 2010 March and 2013 February. Furthermore we explore the therapy duration based on patient status and disease characteristics. **Methods:** In this observational, open label, retrospective study, we evaluated 98 patients with advanced hepatocellular carcinoma who had not received previous systemic treatment to receive Sorafenib. Primary outcomes were overall survival and the time to symptomatic/radiologic progression. Secondary outcomes included the safety profile and occurrence of toxicities depending on daily dosage. **Results:** At the planned analysis, the median overall survival was 8 months (95% confidence interval, 6.3 to 9.6). The median time to radiologic progression was 5

months (95% confidence interval, 2.7 to 7.2). About 70% of patients registered stable disease; one patient had a complete response. Duration of treatment was depended on baseline patient characteristics (BCLC staging, Child-Pugh score and concomitant infections with HBV and HCV). The percentage of adverse events related to Sorafenib (diarrhea, weight loss, hand-foot skin reaction and liver failure) was similar to the phase III and phase IV published studies (SHARP & GIDEON clinical trials). Conclusion: In daily practice, the consistent survival benefit for patients with advanced hepatocellular carcinoma treated with Sorafenib is correlated with the results of international prospective studies.

PP108. THE TREATMENT OF HEPATOCELLULAR CARCINOMA AND THE PREDICTIVE VALUE OF ALPHA-FETOPROTEIN

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The **aim** of this study is to establish a correlation between the value of alpha-fetoprotein (AFP) at the diagnosis of hepatocellular carcinoma and the treatment options. **Methods:** We evaluated 188 patients with chronic liver disease and hepatocellular carcinoma (HCC) regarding the etiology and the stage of liver disease, the stage of the HCC (Barcelona Classification) and indicated treatment. In all patients we determined the AFP. After staging the disease, the treatment options were: 13 patients (6.9%) underwent surgical resection, 22.3% of the patients had percutaneous treatment, 4.8% of the patients had TACE, 29.3% received Sorafenib and 36.7% of the patients could benefit only from palliative treatment. The resection therapy and the percutaneous treatment were recommended as curative therapies for HCC. **Results:** From the patients who received curative treatment (resection therapy and percutaneous treatment) 83.6% didn't have diagnostic values of AFP (>200

ng/l according to AASLD 2005 Guidelines) and only 16.4% of the patients had diagnostic values of AFP. 47.3% from the patients who received Sorafenib had diagnostic values of AFP and 68.1% from the patients with the advanced stages of the liver disease and HCC had diagnostic AFP. **Conclusions:** The majority of the patients who had indication for curative treatment didn't have diagnostic AFP (83.6%). AFP had diagnostic values in statistical significant more cases of HCC who had indication only for palliative treatment versus the patients with HCC who had indication for curative treatment ($p < 0.01$ and respectively $p < 0.001$).

PP109. TERAPIA SISTEMICĂ ÎN CANCERUL HEPATOCELULAR (HCC)

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Incidența HCC este în continuă creștere, în timp ce supraviețuirea generală la 5 ani continuă să rămână sub 10%, fenomen datorat imposibilității aplicării unui screening eficient pacienților cu factori de risc pentru HCC. Această patologie este unică printre cele oncologice prin faptul că boala neoplazică este de cele mai multe ori secundară unei afecțiuni hepatice cronice precum hepatitele virale, ciroza hepatică. Implicit, prognosticul pacienților și decizia terapeutică este dependentă de mulți factori: stadiul afecțiunii tumorale, afectarea hepatică preexistentă, statusul funcțional al pacienților și comorbiditățile acestora.

Pentru a răspunde nevoilor clinicienilor, Llovet și colab. (A4) au elaborat un sistem de stadializare ce grupează toți acești factori. În plus, stadializarea BCLC (Barcelona Clinic Liver Cancer) se suprapune pe categorii prognostice și oferă sugestii de tratament. Opțiunile terapeutice sunt bine definite în funcție de factorii mai sus enumerați, însă, în practică, suntem puși în fața alegerii unui tratament la pacienți ce ies în afara „granițelor” impuse de studiile clinice ce au dus la stabilirea standardelor terapeutice. Oncologie Iași.

Cercetarea oncologică se axează, în prezent, pe

două direcții aparent diametral opuse, dar aflate într-o strânsă relație. Pe de o parte, analiza profilului expresiei genetice reprezintă o sursă reală de identificare de noi markeri tumorali și terapii țintite. Pe altă parte, la nivel mondial se desfășoară multiple studii ce vizează utilizarea medicației moleculare țintite în context neoadjuvant sau adjuvant la pacienții cu transplant hepatic, în combinații cu citostatice sau cu metode locale, în încercarea de a integra terapiile actuale într-o abordare personalizată, multidisciplinară.

Prin urmare, ne propunem să prezentăm experiența noastră în tratamentul sistemic al pacienților cu hepatocarcinom atât în cadrul clinic cât și în cazul studiilor clinice. Baza de date a fost realizată în manieră retrospectivă prin analiza foilor de observație a pacienților cu HCC tratați în cadrul Spitalului Clinic de Urgențe „Sfântul Spiridon” din Iași și al Institutului Regional de

PP110. ALPHA-FETOPROTEIN AS BIOMARKER FOR THE EARLY DETECTION OF HEPATOCELLULAR CARCINOMA

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Aims: The prognosis of patients with hepatocellular carcinoma (HCC) remains poor because of late diagnosis. Alpha-fetoprotein (AFP) is used as a surveillance test for hepatocellular carcinoma (HCC) in patients with liver cirrhosis. The aims of this study were to determine performance of AFP for the diagnosis of early HCC. **Methods:** We conducted a case-control study of 14 HCC cases (8 early stage) and 16 matched controls, to appreciate the performance of AFP. Controls were patients with compensated liver cirrhosis and cases were patients with HCC. Early stage HCC was defined by BCLC staging system (Barcelona Clinic Liver Cancer) as a single tumor <5cm or 3 tumors <3cm, with/without portal hypertension and normal/abnormal bilirubin. AFP levels were measured and correlated to clinical data. **Results:** A total of 30 patients were enrolled: 16 (53.33%) were cirrhosis

controls and 14 (46.66%) were HCC cases, of which 7 (50%) had early stage HCC. AFP had the area under the receiver operating characteristic curve 0.80 for early stage HCC. The optimal AFP cutoff value was 10.9 ng/mL leading to a sensitivity of 66%. **Conclusions:** AFP was more sensitive for the diagnosis of early stage HCC at a new cutoff of 10.9 ng/mL. Biomarkers are needed to complement ultrasound in the detection of early HCC.

PP111. TREND EVOLUTION OF HEPATOCELLULAR CARCINOMA STAGING DURING A 6 YEARS PERIOD

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Aim: to assess the evolution of hepatocellular carcinoma (HCC) staging during a 6 years period. **Methods:** Between January 2007- December 2012, 309 patients were diagnosed in our Department with HCC by specific imaging techniques (CEUS, CT, RMN). The patients were classified according to Barcelona Clinic Liver Cancer (BCLC) staging system. We compared the BCLC stages of patients diagnosed with HCC between 2007-2009 with the BCLC stages of patients diagnosed with HCC between 2010-2012. **Results:** According to BCLC staging system the patients from the entire cohort studied were classified as: stage 0- 2 patients (0.6%), stage A-85 patients (27.5%), stage B-56 patients (18.1%), stage C-104 patients (33.7%) and stage D-62 patients (20.1%). The proportion of different BCLC stages of HCC diagnosed between 2007-2009 (141 patients) and those diagnosed between 2010-2012 (168 patients) was similar: stage 0 – 0.7% vs. 0.6%, p=0.54; stage A: 28.4% vs. 26.8%, p=0.85; stage B: 14.2% vs. 21.4%, p=0.13; stage C: 34.1% vs. 33.3%, p=0.97; stage D: 22.6% vs. 17.9%, p=0.37. **Conclusions:** More than 50% of HCC patients are still diagnosed in BCLC stage C and D, where a curative treatment is

not possible. Even if was not statistically significant, an increase of HCCs diagnosed in stage B and a decrease of HCCs diagnosed in stage D was observed in our cohort of patients.

PP112. DIFFICULTIES IN HCC DIAGNOSIS

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Background Hepatocellular carcinoma (HCC) is a primary tumor of the liver, which usually develops in the setting of chronic liver disease, particularly in patients with chronic hepatitis B and C. The diagnosis of HCC can be difficult and often requires the use of one or more imaging modalities. Ideally, tumors should be detected when they are approximately 2 cm in size so that all treatment options can be offered. **Case presentation** Difficulties of HCC diagnosis in two cases. Case 1 – 75 year old patient known with chronic hepatitis C in which in 2010 a nodule in the 5th hepatic segment is found on ultrasound. After 2 imaging methods that suggested HCC, the biopsy HP exam diagnosed a regenerative nodule. For 2 years the patient underwent every 6 months liver ultrasound. After 2 years another nodule appeared also in the 5th hepatic segment, in which 3 imaging methods suggested HCC. Hepatic surgical resection is made with immediate favorable evolution. The histopathologic exam: HCC. Case 2 – 57 year old patient recently diagnosed with chronic hepatitis B. On 3 imaging methods (ultrasound, ultrasound with contrast, CT scan) the suggested diagnosis was HCC. Hepatic surgical resection is made. The histopathologic exam: regenerative nodule. **Conclusion** Further larger prospective studies are still needed to establish its value for detecting HCC in patients with chronic liver disease. The only way to effectively diagnose HCC in a timely fashion is to enter patients who are at high risk for development of HCC in a regular surveillance program using ultrasound imaging every six months. The differentiation of HCC from benign hepatocellular nodules remains difficult, particularly in patients with cirrhosis because of the architectural

distortion of liver parenchyma and the development of the cirrhotic nodules. **Key words:** hepatocellular carcinoma, cirrhotic nodules.

PP113. EVOLUTION OF THE ETIOLOGY OF HEPATOCELLULAR CARCINOMA DURING A 6 YEARS PERIOD

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Aim: to retrospectively assess the evolution of hepatocellular carcinoma (HCC) etiology during a 6 years period. **Methods:** Between January 2007- December 2012, 309 patients were diagnosed in our Department with HCC by specific imaging techniques (CEUS, CT, RMN). The patients were classified according to Barcelona Clinic Liver Cancer (BCLC) staging system. We compared the liver disease etiology of patients diagnosed with HCC between 2007-2009 (141 patients) with the etiology of liver disease of patients diagnosed with HCC between 2010-2012 (168 patients). **Results:** The etiology of liver disease in the entire cohort of patients was: chronic infection with hepatitis C virus (HCV)– 166 patients (53.8%), chronic infection with hepatitis B virus (HBV) – 56 patients (18.1%), alcohol abuse – 33 patients (10.7%), nonviral etiology – 17 patients (5.5%), alcohol + virus infection – 14 patients (4.6%), coinfection with hepatitis B and D virus – 7 patients (2.2%), coinfection with hepatitis B and C virus – 6 patients (1.9%), while in 10 cases (3.2%) the etiology of liver disease was not specified in the patients files. Comparing the etiology of liver disease of patients diagnosed with HCC between 2007-2009 with that of patients diagnosed with HCC between 2010-2012, we observed a significant decrease of chronic infection with HCV: 60.3% vs. 48.3%, $p=0.04$; while in case of the others etiologies the proportion was similar: alcohol abuse: 7.8% vs. 13.1%, $p=0.18$; HBV infection: 15.6% vs. 20.2%, $p=0.36$; nonviral etiology: 4.9% vs. 5.9%,

p=0.89; alcohol abuse+virus infection: 2.2% vs. 6.5%, p=0.12; HBV+HDV coinfection: 2.9% vs. 1.8%, p=0.79; HBV+HCV coinfection: 1.4% vs. 2.4%, p=0.82. **Conclusions:** A significant decrease of HCV infection and a growth trend of alcohol abuse etiology were observed in our cohort of HCC patients.

PP114. FACTORS INVOLVED IN PREDICTION OF HEPATOCELLULAR CARCINOMA DEVELOPMENT IN PATIENTS WITH HEPATIC CIRRHOSIS

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Objectives: Evaluation of potential factors involved in hepatocellular carcinoma development through hepatocyte proliferation in cirrhotic liver. **Material and method:** 48 patients have been included into the study, hospitalized in the 2nd Internal Medicine Clinic for a period of 12 months (January 2011- January 2012). All were known with hepatic cirrhosis from various causes and suspected with degeneration of hepatic nodules (HCC), ages between 37 and 68 years. In each patient we recorded: age, gender, evolution of the disease, CBC (complete blood count), AST (or SGOT), ALT (or SGPT), alkaline phosphatase, GGT (gamma-glutamyl transpeptidase), viral hepatitis B, D and C markers, sed rate (sedimentation rate of erythrocytes), CRP, AFP (alpha fetoprotein), TNF alpha, abdominal ultrasound (objectifying of hepatospleno-portal injuries), UGI (upper gastrointestinal endoscopy) and abdominal CT scan. **Results:** The frequency of HCC in patients with liver cirrhosis was correlated with: age, duration of disease progression, serum levels of CRP and TNFalpha and viral etiology of the disease. **Conclusions:** The main factors associated with confirmed hepatocellular carcinoma in patients from the studied group were: age, duration of disease progression, viral etiology of liver disease and systemic inflammatory status.

PP115. TREATMENT OF HEPATOCELLULAR CARCINOMA IN A TERTIARY ROMANIAN GASTROENTEROLOGICAL AND SURGICAL CENTER. DEVIATIONS FROM BCLC RECOMMENDATIONS AND INFLUENCE ON SURVIVAL RATE.

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Background&Aim. The Barcelona-Clinic Liver Cancer (BCLC) staging system is based on results obtained in the setting of several cohort studies and randomized clinical trials. We have evaluated the applicability of the BCLC staging system and the effect of treatment allocation according to BCLC on survival rate and prognosis in patients with hepatocellular carcinoma (HCC) in a tertiary center. **Methods.** Treatment indications for 473 patients referred to our center with the diagnosis of hepatocellular carcinoma (HCC) were retrospectively analyzed. Patients were split in 3 groups: group treated according to BCLC recommendation, over treated group and undertreated group. The survival rate was calculated using the Kaplan Meier method and compared using log-rank test. **Results.** Patients distribution according to BCLC staging system was: 17 patients (3.59%) - very early stage (O), 161 (34.04%) -early (A), 140 (29.60%) - intermediate (B), 82 (17.34%) in advanced (C) and 73 patients (15.43%) in terminal stage (D). Only 277 patients (59%) from stage 0, A-D were treated according to BCLC. The mean survival rate in stage 0 and A was higher for patients receiving curative treatment in comparison with undertreated patients (41 vs. 28 months, p=0.08). Over treated patients in stage B or C had a better survival rate than patients treated according to BCLC (25 months vs. 21 months, p=0.973 respective 28 months vs. 4 months, p=0.308) but without statistical significance. Patients in stage B and C treated according BCLC recommendations had a better survival than those

undertreated (21 months vs. 13 months, $p=0.002$, respective 4 vs. 3 months, $p=0.036$). **Conclusions.** Deviations from BCLC recommendations occur in 40% of patients with HCC. Under treatment results in decreased survival of patients diagnosed with HCC. Over treated BCLC-B and C patients have an increased survival in comparison with those treated with standard treatment.

PP116. IMPACT OF CYTOLYSIS AFTER TRANSARTERIAL CHEMOEMBOLIZATION FOR HEPATOCELLULAR CARCINOMA – A SINGLE CENTER EXPERIENCE

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Background: Transarterial chemoembolization (TACE) is a widely applied standard treatment option for treatment – naïve patients with hepatocellular carcinoma (HCC). It is used in the treatment of large unresectable tumors, but also as a bridge therapy before liver transplantation. Cytolysis, which may occur within days following the procedure, is due to tumoral or non-tumoral parenchyma necrosis. **Aims:** The aim of this retrospective study is to evaluate the impact of cytolysis after TACE on tumor response, incidence of hepatobiliary complications and overall survival. **Methods:** Between January 2011 and April 2012 we enrolled 80 treatment-naïve patients who underwent 126 TACE procedures for hepatocellular carcinoma. Cytolysis was defined as an increase of AST value above 100 IU/l, with at least doubling of the baseline value. The associations between cytolysis and radiologic tumor response one month following each treatment and adverse hepatobiliary events were estimated. **Results:** The average age was 59 years and the male gender predominated (70.4%); 93.7% had

a diagnosis of cirrhosis. Chronic HCV infection was the most common cause of cirrhosis. Doxorubicin was the chemotherapeutic agent in all cases. Cytolysis occurred in 98 out of 126 cases and was associated with a favorable radiological response (OR 1.91) at one month compared to non-cytolysis with no difference in the occurrence of hepatobiliary complications. The adjusted hazard ratio for overall survival was 1.29 times greater in the group with cytolysis compared to non-cytolysis group. **Conclusions:** Our study showed that cytolysis after TACE in patients with hepatocellular carcinoma was associated with an improved radiological response, but had no impact on short-term adverse events and on overall survival up to 12 month after treatment. Furthermore, TACE is relatively safe in well selected patients with no cases associated with irreversible liver failure despite transient deterioration in liver function.

PP117. ANALYSIS OF HEPATOCARCINOMA TIME TRENDS IN ROMANIA, 1980-2008: VALUATION OF IARC/OMS AND GLOBOCAN STATISTICS

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Aim. Analysis of some of the epidemiological aspects of hepatocarcinoma (HC) in Romania: mortality (1980-2008), incidence (2008), sex ratio and fatality index. **Methods.** Statistic data as regard to HC mortality (years 1980-2008), and HC incidence and mortality (year 2008) in Romania were identified through the valuation of historical statistics of IARC/OMS and of GLOBOCAN 2008, expressed as ASR(w). For 2008, the sex ratio and the fatality index could be calculated. **Results.** Between 1980-2008, HC mortality increased by 5.9 in men (from 1.77 to 10.50/100.000 population) and by 4.8 in females (from 0.83 to 4.0/100.000 population) (ASRw). In 2008, the general incidence of HC was appreciated at 5.3/100.000 population) (8.1 in males and 3.6 in females). General mortality related to HC

was 6.9/100.000 population (10.5 in males and 4.0 in females) (ASRw). Sex ratio was 2.2/1. Global fatality index (mortality/incidence) was 1.3/1 (1.3/1 in males and 1.1/1 in females). **Conclusions.** An increasing confrontation with hepatic carcinoma was registered in the last 28 years in both sexes. Hepatocarcinoma appeared to have been under-diagnosed in clinical practice, in the period under study.

PP118. PANCREATIC CANCER- ANALYSIS OF TERRITORIAL CANCER REGISTRY FROM BIHOR COUNTY BETWEEN 2010-2012

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Introduction: In Europe, pancreatic cancer is the 10th in frequency, accounting for 2.6% of all cases of cancer and ranks 8 as the cause of cancer mortality, with approximately 65,000 deaths annually. Pancreatic cancer is one of the cancers with the highest mortality, death due to this disease occurring in over 95% of those affected. **Aim:** assessment of pancreatic cancer in 2010-2012 in Bihor County. **Material and methods:** We evaluated retrospectively in terms of statistical analysis the database of Bihor Territorial Cancer Registry during 2010 - 2012 regarding the incidence / prevalence of pancreatic cancer cases registered during this period in our county. **Results:** In the Bihor Territorial Cancer Registry database a total of 5520 cases of cancer were registered during 2010 - 2012, of which 217 (7.96%) were represented by pancreatic cancer. In 2010 there were registered 69 cases (3.27%) in 2011 were registered 82 cases (4.65%) and in 2012 there were 66 cases (4%). It was reported more frequently in men versus women, 3:1. Most patients diagnosed with pancreatic cancer were over 65 years old and have been in stages III and IV disease at diagnosis. Also, most cases of pancreatic cancer were recorded at the time of death. **Conclusions:** In our county pancreatic cancer is an important cause of mortality, affecting mostly men and is diagnosed in advanced stages of the disease.

PP119. BARRETT'S ESOPHAGUS (BES) AND INFECTION WITH HELICOBACTER PYLORI (HP)

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BEs is detected in approx. 1% of patients who undergo endoscopy (Cameron - 2002). Existing studies give conflicting results on the role of Hp infection in BEs (Graham and Yamaoka 1998) **Objective:** The authors have proposed to analyze the incidence of BEs and relationship with Hp infection **Material and methods:** We analyzed 2066 upper gastrointestinal endoscopies, watching the incidence of BEs (Type I and II) and Hp infection (urease test) **Results:** - BEs was present in 2.3% of cases; - BEs was present in 75% - M and 25% - F; - BEs type I - 53% and type II - 47%; - BEs type I was in M - 73% and F - 27% and the BEs type II in M - 80% and F- 20% - by age, incidence was 12% at 31-40 years, 22% between 41-50 years, 40% between 51-60 years, 16% between 61-70 years and 10% over 70 years - Hp infection was present in 51% of patients with BEs and is more common in patients with BEs type I - 60% - Hp infection was 67% in men with BEs and 33% in female. **Conclusions:** 1. We recorded a BEs incidence to 2.3% 2. BEs is common in men - 75% 3. BEs was recorded in type I to 53% and type II to 47% of patients 4. High incidence of BEs was recorded between 40-60 years - 62% 5. Hp infection was present in 51% of cases, more frequently in males - 67% and more frequently in BEs type I - 60%.

PP120. COLORECTAL CARCINOMA - THE EPIDEMIOLOGICAL, CLINICAL AND MORPHOLOGICAL ASPECTS

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Colorectal carcinoma represents a major health problem in the world. **Objectives:** The objectives of our study were to identify cases of colorectal cancer,

the epidemiological, morphological and clinical aspects of this cancer. **Methods:** In collaboration with the gastroenterology clinic and oncology clinics, we performed between January 2008 - December 2012 a retrospective study in order to identify cases of colorectal cancer, morphological and clinical aspects. **Results:** In the period 2008-2012 we diagnosed 186 patients with CRC. The average age of the patients was 64 ± 13 years, and the incidence was equally distributed per genders. Colon tumor was noted in 68 (36.5%) patients, and in 118 (64.5%) tumor was found elsewhere in the rectum. TNM staging of the study group revealed 38 patients in stage I, 56 patients stage II, 45 patients in stage III and 47 cases on stage IV. The largest number of patients 136 (73%) had an advanced stage of disease. The histopathologic examination showed that: 64 (94%) patients with colon cancer and 115 (97%) with rectal cancer had adenocarcinomas and other malignant polyps. Of the 186 patients, 124(67%) originated from an urban area. Also 5 patients with colon cancer and 8 with rectal cancer refused surgery. The majority of tumors were grade II - moderately differentiated tumors (61.5%), followed by 17.4% grade III and 13.4% grade I. About 9.8% cases had no grade information. **Conclusion:** Analysis of the 186 cases of colorectal carcinoma revealed the following important findings: a relatively high incidence of colorectal cancer in subjects 40 years and older and significantly low incidence in subjects under age 40 years, high proportion of tumors located in the rectum, a vast majority of tumors did not have polyps and, also, living in an urban area was associated with higher rates of colorectal carcinoma.

PP121. NON-INVASIVE COLORECTAL CANCER SCREENING – ARE THERE ANY COST-EFFECTIVE ALTERNATIVES BEYOND COLONOSCOPY?

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Background Colonoscopy is the method of choice for colorectal cancer (CCR) screening. Our **aim** was to identify inexpensive and reliable biomarkers

for premalignant and malignant recto-colonic lesions. **Method** We included patients aged 18 to 74, undergoing a colonoscopy between January 2011 –March 2012. We took blood samples for cytogenetic analysis using a standardized protocol of Cytokinesis-Blocked Micronucleus Assay (CBMN) technique; Nuclear Division Index (NDI) calculated through this method is an expression of lymphocytic proliferation in specific stimulated cultures; it represents a measure of general cytotoxicity. We calculated NDI for patients undergoing colonoscopy in our study. SPSS 11.0 software was used for statistical analysis. **Results** 94 patients were included. Their mean age was 55.1 years (range 24 – 75), men and women were equally represented, 47 each (50%). There were: 37 patients with normal colonoscopy; 4 patients with hyperplastic polyps; 30 patients with adenomas (from these 30 adenomas, 9 were advanced: size over 10mm, with high grade dysplasia or with a villous component larger than 25%); 23 patients with colorectal adenocarcinoma. Firstly, NDI was significantly lower in patients with adenomas or colorectal cancer than in patients with normal colonoscopy or only hyperplastic polyps (AUC ROC = 0.637, $p = 0.036$). Secondly, NDI was also significantly lower in patients with advanced adenomas or colorectal cancer than in patients with normal colonoscopy, hyperplastic polyps or non-advanced adenomas (AUC ROC = 0.677, $p = 0.005$). Lastly, patients with colorectal cancer had a significantly lower NDI than patients with no colorectal cancer (AUC ROC = 0.655, $p = 0.026$) **Conclusion** By identifying a low Nuclear Division Index through Citokinesis-Blocked Micronucleus Assay Method, we can predict the presence of significant neoplastic colorectal lesions in patients undergoing colonoscopy.

PP122. RISK FACTORS OF COLON CANCER IN PATIENTS WITH TYPE 2 DIABETES

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Introduction: Colorectal cancer (CC) is common

in people with hyper caloric diet, low in fruits and vegetables or sedentary life style, these factors could influence carcinogenesis through hyper insulinemia.

Objectives: We want to determine factors leading to coexistence of CC and diabetes mellitus type 2 (DM type 2) in the same patients. **Materials and methods:**

We studied 65 patients diagnosed with DM type 2 and CC for a period of 10 years (January 2001 - December 2011) admitted in IVth Medical Department and IVth Surgery Department Cluj Napoca. Data was collected from the observation sheets and diagnosis of diabetes was made based on fasting glucose > 126 mg / dl and CC based on histopathologic outcome. We watched backgrounds, family history (AHC) and personal pathology (APP), toxic consumption, activity level, weight, diet, blood type, blood sugar, age of CC and DM type 2, hypoglycemic therapy. **Results:**

Most patients were overweight. Nearly half suffer from diabetes for less than 5 years, only 6.16% were newly diagnosed. Most were being treated with oral hypoglycemic agents, but inefficiently. Most patients had AHC of CC. Blood group AII was seen in 61.5% of subjects. Patients had at least 6 months history of symptoms, rectorrhagia were frequently ranked as hemorrhoidal bleeding. We observed an increasing presence of appendectomies in APP. Most of them practiced no/ small physical activity and had a diet over 2500 calories/day. 58.7% of them are/were smokers and 36.2% reported chronic alcohol consumption.

Conclusions: Most patients were overweight, sedentary, with hyper caloric diet and unbalanced diabetes. We observed a correlation between the presence of diabetes and CC in patients with blood group AII. Most reported chronic consumption of toxic. We draw attention to the treatment of rectal bleeding seriously and we propose time tracking by serial colonoscopies for diabetic patients with appendectomy.

POSTER PRESENTATIONS

Genetics in gastroenterology and hepatology

PP123. QUANTITATIVE GENE EXPRESSION OF LIVER PROGENITOR CELLS SPECIFIC GENES IN CURATIVELY TREATED HEPATOCELLULAR CARCINOMA

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Background. The identification of molecular markers of early recurrence of hepatocellular carcinoma (HCC) after curative treatment is an important research goal for translational medicine. The liver progenitor phenotype of HCC is a distinct clinical entity, with a bad prognosis. **Aim.** Our study has focused on the identification of liver progenitor cells features in HCC after curative treatment (resection/liver transplantation) by quantitative RT-PCR and the investigation of prognostic significance for tumor recurrence. **Methods.** 24 patients were included in our analysis, 12 patients with liver resection and 12 patients with liver transplantation. There were 6 females and 16 males with a mean age of 58.5 ± 7.9 years. The expression of the following genes has been investigated by qRT-PCR in tumor nodules and paired non-tumoral tissue from the same patients: CK18, CK19, Epcam, AFP, SOX17, using beta-actin as a reference gene. **Results.** Expression of CK19 and Sox17 were not detectable by qRT-PCR. Expression of Epcam was detectable in one patient (4.1%) and AFP was significantly up-regulated in 4 patients (16.6%). The patient with detectable Epcam expression had also the highest increase in AFP expression (1221-fold change), indicating liver progenitor cells features. The patient had an early tumor recurrence after liver resection. **Conclusion.** The liver progenitor phenotype of hepatocellular carcinoma is not frequently encoun-

tered in liver samples after curative treatment but has a bad prognosis. EPCAM and AFP expression can be used to identify these patients better than CK19.

PP124. CYP27B1-1260 PROMOTER POLYMORPHISMS PREDICT THE VIROLOGIC RESPONSE IN CHRONIC HCV INFECTION

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Background: Low vitamin D serum levels are associated with failure to achieve sustained virologic response (SVR) in chronic hepatitis C (CHC). The CYP27B1-1260 promoter polymorphisms have substantial impact on 1,25-dihydroxyvitamin D serum levels.

Objective: The aim of the study was to investigate the CYP27B1-1260 promoter of single nucleotide polymorphisms (SNPs) and evaluate the correlation with virologic response in patients with CHC treated with pegylated interferon and ribavirin.

Patients and method: One hundred and two CHC patients with liver biopsy proven CHC genotype 1 were studied. The CYP27B1-1260(rs10877012) promoter polymorphisms were studied by RT-PCR. Insulin resistance (IR) (HOMA-IR), stages of fibrosis, grades of activity and SVR were assessed for each polymorphism. The association with IL-28B polymorphism was established.

Results: Genotype AA was found in 12.7%, CA in 47.1% and CC in 40.2% of the patients. According to CYP27B1 polymorphism, SVR was obtained as follows: 80.6% in genotype AA, 61.6% in genotype CA and 42.7% in genotype CC. Patients with AA polymorphism had a lower IR and necroinflammatory activity and significantly lower stages of

fibrosis. AUROC for SVR prediction in CYP27B1 polymorphism was 0.57 with a sensitivity of 20%, specificity of 97%, positive predictive value (PPV) of 64.8% and negative predictive value (NPV) of 43.8%, AUROC for IL28B polymorphism was of 0.768. The association of the two variables determined an increase of AUROC value to 0.785 with a sensitivity of 41.9%, specificity of 92.3%, PPV of 89.7% and NPV of 50.0%.

Conclusions: CYP27B1-1260 promoter polymorphism is associated with a lower SVR. The simultaneous evaluation of CYP27B1 and IL-28B polymorphisms increases the predictive value of SVR.

PP125. CLOSTRIDIUM DIFFICILE – NOVEL STRATEGIES DERIVED FROM THE CONCEPT OF “QUORUM SENSING”

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Pseudomembranous colitis prevention is crucial giving the widespread use of antibiotics and immunosuppressant therapies. Treatment is hampered by the remarkable resistance of bacteria to antibiotics and the possibility of non-toxigenic strains turning into toxin-producing strains under antibiotic pressure. In addition, probiotic prophylaxis is potentially dangerous in immunocompromised persons. Genetic silencing methods are encumbered by unpredictable effects and the difficulty of Clostridium strains manipulation. Beyond the classical approach, with its limitations, and genetic approach which is impractical at present, a viable alternative derived from the possibility of manipulating the inter-bacterial communication mechanisms, namely “Quorum Sensing and Response”. Current strategies focus on suppressing Clostridium difficile via potent auto-inducers produced by other bacteria. Promising results were obtained after using the tetramic acids of Pseudomonas aeruginosa in attempt to kill Clostridium difficile strains. Also, other QSI – type substances (Quorum Sense Inhibitors) originally designed for preventing the development of biofilms were tested for their hypothetically bactericidal activity. Genetic silencing of sequences

involved in the synthesis of auto-inducers was used in attempt to sabotage inter-bacterial communication mechanism. We propose a novel strategy for the prevention of pseudomembranous colitis, namely misleading the detection mechanisms of Clostridium difficile using auto-inducers in order to mimic a large bacterial community, even in its absence. We start from the premise that the lowered level of auto-inducer-type substances in the colon following the antibiotic destruction of bacteria that produce them may be the real trigger for clone expansion of Clostridium difficile. Such substances would have the advantage of using without risk in immunocompromised patients and this “ecological” approach do not initiate defensive mechanisms that could alter the genetic background of Clostridium difficile.

POSTER PRESENTATIONS

Ultrasonography in gastroenterology and hepatology

PP126. PORTAL VEIN THROMBOSIS IN GASTROENTEROLOGY – THE CAUSES AND THE ROLE OF CONTRAST ENHANCED ULTRASOUND (CEUS) IN THE DIAGNOSIS OF THE NATURE OF PORTAL VEIN THROMBOSIS

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The **aim** of this study was to evaluate the clinical conditions when portal vein thrombosis (PVT) is diagnosed and to determine the role of contrast enhanced ultrasound (CEUS) in assessing its nature (benign/malignant). **Methods:** Between 2011-2013 we diagnosed 117 patients with PVT located in different segments of the portal vein. PVT was diagnosed during routine ultrasound in all patients admitted in our service. After diagnosing PVT, all patients were evaluated for the clinical condition in which this appeared. For assessing PVT we used CEUS. Malignant thrombosis was defined as enhancement of the solid content of portal vein in arterial phase and washout in portal/late phases and benign thrombosis without arterial enhancement. For cases in which CEUS was inconclusive, we used another imaging method (CT/MRI). **Results:** From 117 cases with PVT, 99(84.6%) were found in patients with liver cirrhosis with or without hepatocellular carcinoma (HCC) (75/24). For the other 18 cases of PVT (15.4%) the causes were: multiple liver metastasis – 8, after abdominal trauma – 1, sepsis – 2, acute pancreatitis – 3, idiopathic – 4. After performing CEUS, 70/117 cases were malignant PVT, 45/117 were benign PVT and in 2 cases the results were inconclusive. **Conclusions:** The majority of the cases of PVT were found in patients with liver cirrhosis and HCC: 75/117 (65%). CEUS was useful for determining the nature of PVT benign/malignant in 115/117 cases (98.3%).

PP 127. CLINICAL AND IMAGING ASPECTS IN GIARDIASIS

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Background Giardia lamblia is the most frequent gastro-intestinal human parasite. Giardiasis is diagnosed by performing a microscopic examination of a stool sample or by serological tests. The parasite infection can evolve sometimes asymptotically or with dyspeptic symptoms and signs, sometimes affecting the hepatic samples and with signs of reactive hepatitis. Due to the medical imaging one can observe modifications of the biliary tract, of the pancreas and characteristic aspects of the liver structure. **Material and methods** We studied 144 cases diagnosed with giardiasis in the Infectious Disease Clinic of Oradea, 98 female (68.05%) and 46 male (31.95%). The diagnosis was established by identification of the parasite in the feces. The hepatic affection was studied by performing the hepatocytolysis tests (ALAT and ASAT), tests of biliary retention (serum bilirubin, GGT, ALT) and the mesenchymal inflammatory syndrome (ESR, Tymol test). Serologic tests were performed in order to exclude other etiologies of hepatic injury (IgM HAV, HBS Ag, HCV Ab, tests for EBV and CMV). The imaging aspects observed in abdominal ultrasound were interpreted. **Results and discussions** 126 patients (87.5%) diagnosed with giardiasis presented symptoms or signs of hepatobiliary injury: dyspeptic syndrome, abdominal pain, intestinal transit disorders, abdominal meteorism, sensitivity at the palpation of the gallbladder or of the epigastria, increasing of the liver size. The alteration of the hepatic samples was distinguished at 92 patients (73%), of which 62 female (67.4%), with modifications in the sense of a reactive hepatitis. The imagistic aspects observed at these patients pointed out: modifications of the gallbladder size, with thicker walls or with edema, (76 patients – 82.6%), granular hepatic eco-structure (45 patients – 48.9%), which supports a granulomatous hepatitis, pancreas with low echogenicity or increased sizes (37 patients – 40.2%), which supports a catarrhal pancreatitis reaction. **Conclusions** The hepatic and neighboring affection in giardiasis is more frequent in females, being manifested as an

inflammation of the gallbladder, of the biliary ducts, catarrhal pancreatitis reaction and, frequently enough, as a granulomatous reactive hepatitis. **Bibliography**
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PP128. IS CONTRAST ENHANCED ULTRASOUND (CEUS) A COST-EFFECTIVE METHOD FOR THE DIAGNOSIS OF FOCAL LIVER LESIONS?

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Aim: To assess the cost-effectiveness of CEUS as a diagnostic method for focal liver lesions (FLLs). **Methods:** We have studied 1329 FLLs evaluated by CEUS in our Department, between September 2009 and January 2013. A CEUS examination was considered conclusive if the FLLs presented a typical enhancement pattern according to 2012 EFSUMB guideline. We compared the cost of a positive diagnosis established by CEUS with the one established by a CT or MRI with contrast. For an inconclusive examination was also calculated the additional cost of a CT or MRI with contrast. The cost of a CEUS examination was calculated as the cost of half a SonoVue[®] sample plus the cost of an abdominal ultrasound examination (150 RON + 30 RON = 180 RON). The cost of CT/MRI contrast investigations was estimated by calculating an average cost used in Timisoara, in 4 diagnostic imaging centers, which is 290 RON and 580 RON, respectively. **Results:** From all the 1329 FLLs studied, 880 (66.2%) were discovered in patients without a chronic liver disease and 449 (33.8%) were met in patients with chronic hepatopathies. CEUS established a positive diagnosis in 1,102 (82.9%) cases, the cost being 198,360 RON. For the rest of 227 (17.1%) inconclusive FLLs, the cost of this method (40,860 RON) was added to that

of a contrast CT examination (65,830 RON) and a contrast MRI investigation (131,660 RON). Finally, the total cost for the evaluation of all 1,329 FLLs would be 305,050 RON (when using contrast CT to investigate inconclusive FLLs) and 370,880 RON (when using contrast MRI). If, for evaluating all the FLLs, we would have used contrast CT, as a first-line diagnostic imaging, the cost would have reached 385,410 RON. Using CEUS as a first diagnostic method, 80,360 RON (60.5 RON/FLL) were saved. If a contrast MRI would have been used as a first-line method, the cost would have been 770,820 RON. Instead, using CEUS as a first diagnostic method a total amount of 399,940 RON (301 RON/FLL) were saved. **Conclusion:** CEUS is cost-effective as a first-line diagnostic method for FLLs.

PP129. CHARACTERIZATION OF FOCAL LIVER LESIONS- A MONOCENTRIC EXPERIENCE

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Aim: to present a monocentric experience in the characterization of focal liver lesions (FLL). **Material and Method:** a retrospective study was performed in the Gastroenterology and Hepatology Department, Timisoara, between Sept.2009-Jan.2013 and a total of 1329 FLL were evaluated. A CEUS examination was considered conclusive, if the FLL respected the typical enhancement pattern stated in the EFSUMB Guidelines. **Results:** From the 1329 FLL, 449 (33.8%) patients had a known liver disease and 880 (66.2%) were patients without known liver disease. CEUS was conclusive for 1102 FLL (82.9%). For the differentiation of benign/malignant lesions CEUS showed a conclusive diagnosis in 1196 (90%) FLL. **Conclusion:** CEUS was conclusive in 83% of the FLL and the benign/malignant character of the lesions was discovered in 90% of the cases. In this case, we can strongly recommend CEUS as a first line imaging method to characterize focal liver lesions.

POSTER PRESENTATIONS

Endoscopy

PP130. COLONOSCOPY IMPORTANCE IN DETECTION OF COLORECTAL ORGANIC BLEEDING DISEASES

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Background: colonoscopy is the best method for colorectal cancer screening with high accuracy in evaluation of the colon. **Aim:** to detect by colonoscopy the colorectal lesions in patients with rectorrhagia. **Material and method:** our study included 186 patients (120 men, 66 women), mean age 58±12 years explored by blood tests, colonoscopy, histological exam and ultrasound in GHI Iasi for rectorrhagia, weight loss, anemia. We included also incomplete colonoscopies and all patients underwent exclusion diagnosis by upper endoscopy. **Results:** from 186 colonoscopies, 150 were complete (80.64%), and the rest (19.35%) were incomplete because of the stenotic tumors and inadequate preparation and/or pain. The pathologic spectrum was represented by: 50 cases of hyperplasic and adenomatous polyps more than 1 cm (33.33%), 40 cases colorectal cancers (21.50%), from which 10 were rectal cancers (25%), 15 sigmoidian cancers (37.5%), 10 descendent tumors (25%), 1 transverse neoplasm (2.5%), 2 ascending colon tumors (5%) and 2 cecal cancers (5%). The other bleeding lesions were represented by 46 cases of hemorrhoidal disease (47.91%), 30 cases of diverticuli (31.25%), 10 angiodysplasias (10.4%), 8 ulcerative colitis (8.3%) and 2 Crohn's diseases (2.08%). **Conclusions:** colonoscopy is the ideal method for detection of colorectal lesions and diagnosis in patients with rectorrhagia. The pathological spectrum is represented first by colonic polyps, colorectal cancer, followed by hemorrhoids, diverticuli, angiodysplasias, ulcerative colitis and Crohn's disease.

PP131. CONFOCAL LASER ENDOMICROSCOPY PATTERNS IN THE ESOPHAGUS IN PATIENTS WITH NON-EROSIVE REFLUX DISEASE DIAGNOSED BY PH-IMPEDANCE

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Introduction: more than 60% of patients with reflux symptoms have a normal white-light endoscopy examination (non-erosive reflux disease – “NERD”). At present, the inclusion of patients with reflux symptoms in a subgroup of NERD is made on the basis of ambulatory 24-hour esophageal pH-impedance monitoring (MII-pH). Confocal laser endomicroscopy (CLE) may be able to detect lesions predictive of NERD. **Objectives:** to analyze correlations between MII-pH data (acid exposure time, symptom indexes) and findings on CLE images in patients with symptomatic NERD. **Methods:** 15 patients with reflux symptoms suggestive of GERD were included in the study. Normal white-light endoscopy was performed to exclude esophagitis and complications of reflux disease, followed by CLE above the Z-line. All subjects underwent afterwards 24-hour MII-pH. Data from CLE (increased number and dilatation of intrapapillary capillary loops - IPCLs) and MII-pH were correlated. **Results:** 9 patients had acid esophageal exposure or positive symptom indexes (SI, SAP) for acid reflux (NERD with acid-reflux) (group 1), while 6 patients had positive symptom indexes for non-acid reflux (NERD with non-acid reflux) or no correlation of symptoms with reflux episodes (functional heartburn) (group 2). At CLE we noticed increased density of IPCLs and dilatation of IPCLs. Those two abnormalities correlated statistically with acid-reflux exposure or positive symptom indexes for acid reflux in comparison to patients in group 2 (p=0.027 and 0.015 for dilatation and increased number of IPCLs respectively in patients with positive DeMeester score

compared to patients with negative DeMeester score; $p=0.007$ for increased number of IPCLs in patients with positive SAP for acid-reflux; $p=0.019$ for dilatation of IPCLs and positive SI for acid-reflux). **Conclusions:** in patients with NERD caused by acid reflux subtle mucosal vascular changes can be identified by CLE. In patients with non-acid reflux or functional heartburn these changes appear in a statistically significantly lower percent. Future studies are needed to find more specific subtle endoscopic lesions to predict NERD.

PP132. SEDATION FREE TOTAL COLONOSCOPY PERFORMED IN PRIVATE PRAXIS ASSOCIATED WITH THE USE OF PEDIATRIC COLONOSCOPE IN ADULTS

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Total colonoscopy needs an experienced endoscopist and is considered painful. In many centers, total colonoscopy is made under sedation (midazolam, propofol, fentanyl). The disadvantages of sedation are: an increased time commitment from the patients and possible complications that makes the sedation difficult in a private praxis, and also the higher costs. The study followed-up the results of sedation free colonoscopy performed in a private praxis and the improvement of colonoscopy with the use of a pediatric colonoscope. **Methods:** We compared the number of cecal intubation in patients who underwent colonoscopy with an adult colonoscope (Olympus Evis Exera 165) in 2009 with the patients who underwent colonoscopy with pediatric colonoscope, 2012. All the patients received No-Spa (drotaverine) 40mg/2ml intramuscularly before the examination. **Results:** from 410 patients who underwent colonoscopy in 2009, at 362 (88.29%) total colonoscopy was performed, and cecum was intubated. In 48 (11.71%) patients colonoscopy was not completed. From 578 patients in

2012 in which a pediatric colonoscope was used, in 532(92.04%) patients the cecum was reached. The causes of incomplete colonoscopy were the same: previous abdominal or pelvic surgery (hysterectomy), malignant stenosis, poor bowel preparation, high anxiety of the patient, dolicosigmoid, diverticular disease. The number of incomplete colonoscopies was significantly higher in females, in older people and in patients with low body mass index. **Conclusions:** In 88.29% of patients examined in sedation free colonoscopy, but under antispasmodic drug (drotaverine) the cecum was reached. The pediatric colonoscope improved the rate of total colonoscopy up to 92.04%. The age of the patient, the female gender and the low body mass index have a strong correlation with the risk of the incomplete colonoscopy $p<0.05$. Antispasmodic drugs (drotaverine) are efficient in performing total colonoscopy and the use of a pediatric colonoscope improves the rate of cecum intubation.

PP133. ENDOSCOPIC AND HISTOPATHOLOGIC CHANGES OF THE UPPER DIGESTIVE TRACT AND THEIR ECHO ON THE DUODENAL GLANDS.

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Introduction: In evolution, chronic lesions occurring in the segments of the upper digestive tract cause changes in the duodenal glands. **Aim of study:** To highlight these changes we conducted a descriptive and retrospective study having as main objective to highlight endoscopic lesions in the upper digestive tract and the histopathologic aspects of these lesions, as well as the changes which they determine at the level of duodenal glands. **Methods:** The study had duration of 5 years and was performed on human material procured after endoscopic examination of 319 patients. Endoscopically harvested material consisting of 68 pieces of endoscopic biopsy was processed and colored by histological techniques using staining techniques such as hematoxylin-eosin, Goldner-Szeckelly, Mayer PAS hematoxylin, alcian blue, Giemsa modified, as well as immunohistochemical

staining. The control group consisted of 12 patients. **Results:** In terms of endoscopic appearance, 152 patients presented chronic gastritis; 92 patients specific changes gastric and duodenal ulcers; and 63 patients (9%) tumors with various sites at level of upper digestive tract. Histopathologic changes highlighted by staining used in the study group were specific to acute and chronic gastritis, gastric or duodenal ulcers and digestive malignancies. Histochemical staining intensity was lower in cases of chronic antrum gastritis metaplasia, and in cases of chronic antrum atrophic gastritis and superficial chronic antrum gastritis intensity was normal. Histopathologic examination of biopsies taken from the duodenum revealed the presence of hyperplasia and hypertrophy of duodenal glands. **Conclusions:** The results of morphometric measurements performed indicate association of duodenal gland hyperplasia and of the cells that line the glands.

PP134. FOLLOW-UP STUDY OF THE RECURRENCE OF LARGE COLORECTAL POLYPS AFTER PIECEMEAL RESECTION

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Background: Large colorectal polyps may be amenable to endoscopic piecemeal resection (EPR) with curative intention, however close follow-up for possible recurrence might be needed. **Aim:** To assess outcomes and recurrence rates among patients who have been diagnosed and excised of large colorectal polyps. **Methods:** Out of 1154 polypectomies previously performed in our endoscopy over five years, 147 were EPR for large polyps (>2 cm). These patients were included in a follow up study. Endoscopic examination was repeated at 3, 6 and 12 months after initial endoscopic resection. Patients in whom no residual tumor was found (endoscopic and histological examination) were considered to be "cured". **Results:** Initially there were 68 men and 79 women, aged 43.2 ± 14.2 years. Median polyp size was 3 cm. 56% were tubular adenomas (17% with HGD and 83% LGD or indefinite for dysplasia), 42% other types and 2% were malignant. There were 8 (5.4%) cases with EPR-related bleeding and 2 (1.4%) perforations managed by en-

doscopy clipping. Three patients did not comply with the follow-up proposition. Recurrence was identified in 13 cases (9.02%): 10 local recurrences detected at 3 months post-EPR and 3 local recurrences detected at 12 months post-EPR. There were 8 dysplastic cases, 3 benign recurrences and 2 malignant. **Conclusions:** Complete excision of large polyps is possible by EPR but close follow-up endoscopic examinations are necessary for early detection of recurrence.

PP135. PREPARATION OF THE COLON FOR COLONOSCOPY IN AMBULATORY SETTING USING SODIUM PICOSULPHATE

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Introduction. Colonoscopy is the current standard method for evaluation of the colon. The preparation for colonoscopy is complex, involving changes in diet and the use of laxatives. **Purpose.** To evaluate the effectiveness of sodium picosulphate (PicoPrep) in cleansing for colonoscopy. **Material and method.** We studied two groups of patients (A and B) in which colonoscopy was performed by the same examiner. The group A included 87 pts. (patients) in the Department of Gastroenterology between April and July 2012, and Group B comprised 92 pts. evaluated in the ICR of Dr. Ion Gheorghiu between January and March 2013. Both groups used PicoPrep (2 envelopes) and ingestion of 3-4 liters of liquid. The preparation of the colon in group A, which performed colonoscopy in the morning, began in the day before examination (17.00 o'clock and 22.00 o'clock), and in group B, in which colonoscopy was performed in the afternoon-evening, began on the day of the examination in the morning (5.00 o'clock and 11.00 o'clock). For the cleansing quantification of the colon we used the Boston score (BBPS). **Results.** In the group A, which included 87 pts (45 M 42 W), with the average age of 62 years (M = 60.7 years; W = 63.4 years) total colonoscopy was made in 51 pts. (58.6%) and short colonoscopy (SC) in 36 pts (41.4%). The Boston score in total colonoscopy was 5. The short colonoscopy was the result of: the bad preparing of the colon (61% - 22 PTS.), the lesions detected (29% - 11 pts.) and the

interruption of the proceedings due to pain (10% - 3 pts.). No sedation was used. In the group B, which comprised 92 Pts. (49 M and 43 W), with the average age of 50.8 years (M = 48.7 years; W = 63.4 years) total colonoscopy was made at 80 pts. (87%), while short colonoscopy was made at 12 pts. (13%). The Boston score in total colonoscopy was 8. The short colonoscopy was the result of: the bad preparing of the colon (2.2% - 2 pts.) and pathologies encountered (10.8% - 10 pts.). In all patients mild sedation with Dormicum was used, or deep sedation with Propofol.

Conclusions. 1. Preparation for colonoscopy, using PicoPrep, is made better at home than in hospital; the patient is mobilized, consumes the recommended fluids (in hospital, he stays more in bed, where he doesn't consume liquids). 2. Colonoscopy with mild sedation or deep sedation gives comfort to the patient and the examiner. 3. PicoPrep is also very good in preparing the right colon in patients in ambulatory setting.

PP136. ONE YEAR PREVALENCE OF UPPER GASTROINTESTINAL DISEASES DETECTED BY ENDOSCOPY IN A UNIT FROM BIHOR COUNTY

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Background: Endoscopy is useful for the assessment of gastrointestinal disorders. Upper gastrointestinal endoscopy is a safe and relatively easy procedure, not very expensive and of great diagnostic help. **Aim:** to assess the one year prevalence of significant diagnoses of upper gastrointestinal tract evaluated by endoscopy. **Methods:** The study took place in the endoscopy unit of 1st Medical Clinic from Oradea Emergency Clinical County Hospital, during 2011-2012. All consecutive eso-gastro-duodenoscopies were retrospectively studied. All endoscopic procedures were done with an Exera CLE 145 Olympus endoscope. Significant endoscopic diagnoses comprised esophagitis, hiatus hernia, gastric ulcer, duodenal ulcer, gastritis, duodenitis, and malignancies. Helicobacter pylori infection was done with the help of Pronto Dry urea test. All endoscopy reports were noted in a written report and subsequently retrospectively introduced in a computerized system. **Results:** In one year a total of 524 endoscopies were performed. The most common diagnosis in the esophagus was reflux esophageal varices (13.5%), followed by esophagitis (9.1%), hiatus hernia

(5.3%), malignancy (2.5%), pill esophagitis (0.19%) and other causes (1.33%). In the stomach we found 43% of the patients with gastritis, 4.6 % malignant tumors, 3% ulcers, 1.9% other lesions. In the duodenum we found: ulcers (7.6%), duodenitis (5.3%) erosions (1%), and other diseases (1.5%). Overall prevalence of Helicobacter pylori infection was 58.4%. **Conclusion:** Upper gastrointestinal endoscopy is a procedure with a high diagnostic yield so it can be widely recommended in the investigation of upper gastrointestinal symptoms. We can say that in our region we have a low prevalence of gastro-duodenal ulcers and a high prevalence of gastritis and esophageal varices.

PP137. DIGESTIVE MANIFESTATIONS IN PATIENTS WITH CHRONIC KIDNEY DISEASE ON HEMODIALYSIS

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Introduction: Digestive manifestations are severe complications of chronic kidney disease on chronic hemodialysis. Gastric hypersecretion with hyperacidity is the etiologic factor of these complications. **Aim** of study: The aim of the study is the follow-up of the endoscopic and histological changes of the gastric and duodenal mucosal in patients with chronic kidney disease on hemodialysis. **Patients and methods:** 152 patients with chronic kidney disease entered this study, between January 2011 and March 2013. Statistics analysis pointed out the prevalence of males (61.5%); average age 56.3 ± 5.65 years. The research protocol included a clinical, biological and complete imaging evaluation of the kidney and liver, neurological and endoscopic exams. **Results and discussions:** The digestive lesions were varied: uremic gastritis 21 cases (40.38%), gastric ulcer 6 cases (11.53%), duodenal ulcer 9 cases (17.3%), gastric cancer 3 cases (5.75%), peptic esophageal lesions 24 cases (46.15%) associated with other endoscopic lesions in 18 cases, esophageal and gastric varices in 2 cases (3.9%) and normal endoscopic exam in 5 cases (9.61%). Hemorrhagic lesions were observed in 16 cases (30.76%), epigastric pain in 24 cases (46.15%) and dyspeptic

manifestations in 12 cases (23.09%). **Conclusions:** The incidence of digestive manifestations is higher in patients with chronic kidney diseases on hemodialysis. The relative high percentage of patients with endoscopic lesions indicates the implication of other factors in their etiology: neurological disorders, digestive effects of medications and HP infection.

PP138. COMPLICATIONS OF ENDOSCOPIC POLYPECTOMY

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Purpose: To perform a retrospective study to evaluate the frequency of endoscopic polypectomy complications and the factors which predict them. **Material and methods:** The study included a total of 1215 patients admitted for colonoscopy in the Gastroenterology Department in Timisoara between 01.01.2012 and 01.04.2013. 427 patients were diagnosed with colonic polyps and underwent polypectomy. The only procedural complication was bleeding, which occurred in 54 patients (12.6%) with mean age of 61.5 years, 13 women (24.07%) and 41 men (75.92%). We analyzed the morphologic macroscopic appearance of polyps and their degree of dysplasia as predictive factors for bleeding (Fisher's exact test). We used a control group (54 patients without polypectomy complications) excluding from the study patients with hyperplastic polyps. **Results:** In the group of patients with bleeding polyps a total of 24 patients (44.4%) had sessile polyps and 30 (55.5%) had pedunculated polyps (55.5%). In the group of patients with no bleeding polyps a total of 26 patients (48.1%) had sessile polyps and 28 (51.8%) had pedunculated polyps. We didn't achieve a statistically significant P in terms of macroscopic morphological appearance of polyps. Analyzing dysplasia as a risk factor, the following results were obtained: - In the group of polyps which didn't bleed, 42 polyps had no/mild dysplasia and 6 polyps had high grade dysplasia. -In the group of polyps which bled, 28 polyps had no/mild dysplasia

and 13 polyps had high grade dysplasia. Comparing the two groups with the Fisher exact test we obtained a $p = 0.03$. **Conclusions:** Polypectomy is a safe therapeutic intervention. The only post procedural complication was bleeding. High-grade dysplasia was found to be an important predictor for the occurrence of bleeding. All complications were treated endoscopically. There were no deaths or transfers in surgery.

PP139. IS COCA COLA EFFECTIVE AFTER ESOPHAGEAL DILATION FOR CAUSTIC INJURY?

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Case presentation- We present a case of caustic esophageal stenosis in a 50 years old lady with a background history of caustic ingestion. **Aim** – To determine the outcome of patients that received coca cola after esophageal dilation for caustic injury. She was initially evaluated with barium swallow. Guide was positioned across the stricture with the help of the scope GIF 140. Savary Guillard dilators of increasing sizing were employed. After each dilatation she took Coca Cola. After 8 dilation sessions her dysphagia improved and the endoscope could pass through the stricture. **Conclusion-** Coca cola is effective combined with endoscopic dilation in relieving dysphagia.

PP140. RETROSPECTIVE ANALYSIS OF SURGICAL MANAGEMENT IN GASTROINTESTINAL BLEEDING

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Non-variceal upper gastrointestinal bleeding is still one of the most common and serious emergencies with increased incidence in patients with advanced age, especially in recent years due to the use of NSAIDs, anticoagulants and antiplatelet agents treatments, because of increasing cardiac in-

terventions. We retrospectively analyzed a group of 112 patients, hospitalized in our surgical clinic with a diagnosis of upper gastrointestinal hemorrhage, variceal bleeding was excluded. Comparative data were analyzed: conservative treated group compared to the group that failed endoscopic therapy and in which surgery was required (evolution of hemodynamic data at admission, risk factors, lesion type, attitude therapeutic endoscopic Rockall score, type of surgery). In the conservatively treated group mortality was 1.7%, in the surgical cases (16% - 21 cases) it was 11%. In **conclusion**, the introduction of routine Rockall score can have a major impact in identifying patients at high risk of failure of endoscopic therapy, since delaying of surgery is accompanied by high mortality in these patients.

PP141. IS COLONOSCOPY A DISCOMFORTING INVESTIGATION FOR THE PATIENT?

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Introduction: Colonoscopy is the gold standard method for assessing colonic pathology, but it is also an invasive and uncomfortable method. **Aim:** to assess the satisfaction degree as well as the discomfort when performing colonoscopy. **Material and methods:** Was interviewed through a questionnaire, a group of 124 consecutive patients who underwent colonoscopy in two endoscopy services, public and private. The accessibility to information, discomfort at preparation, at colonoscopy and after the procedure were assessed. All procedures were performed with sedo-analgesia. **Results:** The studied group consisted of 124 subjects, 53 men and 71 women, average age-55 years, 96 patients(77.4%) being at first colonoscopy. In 74.1% of cases, colonoscopy was recommended by the gastroenterologist, in 21.8% of cases by GP and in 4% of

cases by non-medical personnel. The access to doctors before colonoscopy, for questions related to the procedure was in most cases (96%) easy and very easy. The discomfort in preparation was: high and very high in 33% of cases, moderate in 38%, small and very small in 29% of cases. The pain during colonoscopy was: high in 0.8% of cases, moderate in 15.3% of cases, low and very low in 83.9% cases. The discomfort after colonoscopy was: very high and high in 4.8% of cases, moderate in 29.8%, small and very small in 65.3% of cases. Regarding patient's satisfaction related to colonoscopy: in 95.2% cases they were very satisfied and satisfied, in 4% cases they were moderately satisfied, in 0.8% cases were less satisfied. The most uncomfortable were considered: preparation for colonoscopy (78.2%), colonoscopy itself (11.3%), the period immediately following colonoscopy (10.5%). 84.7% of patients would accept to repeat the colonoscopy, while 15.3% patients would not, especially due to discomfort in preparation and fear of the result. **Conclusions:** in the context of sedo-analgesia, colonoscopy is considered a less uncomfortable procedure, in most cases the discomfort in preparation being higher.

PP142. INHALATIONAL SEDATION WITH NITROUS OXIDE IN DIGESTIVE ENDOSCOPY

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Sedation is intended primarily to reduce a patient's anxiety and discomfort, consequently improving their tolerability and satisfaction for the procedure. Endoscopic sedation also minimizes a patient's risk of physical injury during an examination and provides the endoscopist with an ideal environment for a thorough examination. Despite the benefits, sedation delays patient recovery and discharge, adds to the overall cost of an endoscopic procedure, and increases the risk of cardiopulmonary complications. The most used drugs in sedation are benzodiazepines and propofol. Nitrous oxide, less used till now, became available once the portable systems appeared. The **aim** of the study was to evaluate the safety, utility and advantages of nitrous oxide sedation in digestive endoscopy. **Methods:** star-

ting from September 2012 until April 2013, 149 patients undergoing colonoscopy, sedation with a inhaled mixture of nitrous oxide and oxygen using MATRX MDM apparatus (Lot I) was compared with intramuscular sedation with Midazolam according to our protocol in 140 patients (Lot II). The results compared the tolerability and satisfaction of the patients and the degree of comfort for the endoscopists. **Results:** 136 patients (91.2%) underwent complete colonoscopy and 37 (24.8%) need conversion to intravenous sedation in Lot I; Lot II, 131 colonoscopies (93.55%) were complete and 30 (21.4%) needed conversion to intravenous sedation. The tolerability was very good for 88 patients (59.06%), good for 24 (16.10%) and bad for 37 patients (24.83%) in Lot I compared with 91 (65%), 19 (13.57%) respectively 30 (21.42%) in Lot II; The degree of comfort for the doctors was very good for 103 patients, good for 19 patients and satisfactory for 27 patients in Lot I, respectively 109, 21 and 10 in Lot II. No serious adverse effects were noted in both lots; Recovery was faster in lot I. **Conclusion:** nitrous oxide is safe for endoscopic sedation; in our study it is as efficacious as intramuscular Midazolam; it allows faster recovery; when used in combination with intravenous sedation, small amounts of drugs are used and these means small cost per procedure.

PP143. EVALUATION OF CECAL INTUBATION RATE AND DETECTION OF COLONIC ADENOMAS IN A TERTIARY GASTROENTEROLOGY CENTER IN ROMANIA

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Introduction This study aims to assess the rate of cecal intubation and polyp detection using the following key markers: Ottawa scale, the level of progression and withdrawal time. In cases where the cecal intubation didn't succeed, factors that have prevented this were analyzed. **Methods** The study is currently conducted at a University Hospital, and is an observational, analytical and ambispectiv one; the study was initiated on 15.01.2013 and preliminary data were reported during the 15th of January and 15th of Mar-

ch 2013. Outcomes of 386 colonoscopies performed by 13 faculty gastroenterologists were evaluated. We analyzed colonoscopy completion and polyps' detection rate by evaluating age, gender, BMI, indication for performing colonoscopy, quality of bowel preparation, the level of progression, withdrawal time and complications that occurred. **Results** Cecal insertion rate was 87.12%. Causes for not achieving cecal intubation were represented by tumor stenosis, moderately-severe forms of ulcerative colitis, adherence abdominal syndrome and patient intolerance to the procedure. The median age of patients was 56.83 years old with a standard deviation of 14.83; the detection rate of lesions (polyps, neoplasms, ulcers and diverticuli) was almost 43%; the average time of withdrawal in patients with no lesions detected was 5.88 with a standard deviation of 3.88; quality of bowel preparation calculated by Ottawa scale was 5.65 with a standard deviation of 2.83. Perforation and uncontrolled bleeding occurred after 0.25% of procedures - after polypectomy. **Conclusions** There is a strong correlation between the cecum intubation rate, the preparation of the colon and colonic lesion detection rate.

PP144. REAL TIME EVALUATION OF COLONIC POLYPS USING NBI ENDOSCOPY

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Introduction: Narrow Band Imaging (NBI) is a recently discovered endoscopic technique which allows direct visualization of mucosal superficial elements, namely the mucosal pit - pattern and the vascular pattern. NICE Classification (NBI International Colorectal Endoscopic) represents an actual classification of polyps into 3 types (hyperplastic, adenomas, adenomas + colorectal adenocarcinomas) which takes into consideration the color of polyp mucosa, the aspect of mucosal capillaries and the architecture of the mucosal pattern. **Material and method:** We exemplify 3 clinical cases, patients with colonic polyps who were admitted to the Gastroen-

terology Clinic, Mures County Hospital during the period December 2012 - March 2013. The correct framing of the modifications discovered at NBI endoscopy corresponded to the histological results. We have performed colonoscopy on the patients using an Evis Exera III colonoscope, which has NBI technology. In all of our cases, the polyps were visualized in white light endoscopy (WLE), NBI light, photographed and polypectomy was performed for histological examination. Furthermore, the polyps were examined using near focus mode. Case 1: Sigmoidian polyp NICE type I - color of the polyp's mucosa similar with that of the background, vascularization of the mucosa poorly represented and regular, absent mucosal pattern. The histopathologic result confirms the aspect of hyperplastic polyp. Case 2: Polyp classified as NICE type II - well defined vascularization, slightly irregular and oval mucosal pattern, villous - like. The histopathologic result of tubular adenoma with low grade dysplasia (LGD) confirms the NBI aspect of a polyp with LGD. Case 3: Rectal polyp with a broad base of implantation, 2 cm in diameter, NICE type III - irregular shape, darker color compared to background, accentuated vascularization of the mucosa, disorganized, and amorphous mucosal pattern. The result of the histopathologic examination is: tubulo - villous adenoma with high grade dysplasia (HGD) which correlates with the aspect of the polyp. **Conclusion:** The evaluation of colonic polyps using NBI endoscopy and their distribution to one of the 3 types of NICE classification allows the assessment of polyp histology, facilitating differentiation between non - neoplastic (hyperplastic) polyps and neoplastic polyps with malignant potential, thus avoiding unnecessary polypectomy.

PP145. THE PREVALENCE OF COLONIC ADENOMAS AND CARCINOMAS IN PATIENTS WITH NON-ALCOHOLIC LIVER DISEASE NAFLD

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Background: Few studies have evaluated the prevalence of colonic adenomas and carcinomas in patients with NAFLD. **Aim:** To compare prevalence rate of colonic adenomas and carcinomas detected by panchromoendoscopy in patients with or without

NAFLD. **Design:** Prospective study. Setting: tertiary referral center. Patients: Patients with or without NAFLD who underwent panchromoendoscopy. Main outcome measures: The primary objective was to compare the detection rate of colonic adenomas and carcinomas by panchromoendoscopy in patients with or without NAFLD. NAFLD with or without NASH was diagnosed by abdominal ultrasound followed by laboratory tests to eliminate other causes of steatosis (viral, toxic, immunologic, genetic). Personal and familial medical history, age, sex, environmental status, blood pressure, anthropometric measures, BMI index, cholesterol and triglycerides blood levels, and diabetic mellitus status were noted. The patients were matched regarding age, gender, BMI index, blood pressure value, diabetic mellitus status, cholesterol and triglycerides blood levels. **Results:** Of 45 patients who underwent panchromoendoscopy, 21 (45.6%) had NAFLD and 24 (53.3%) did not have NAFLD. Of 21 patients with NAFLD, 4 (19%) had NASH and 18 (81%) were without NASH. At panchromoendoscopy 3 invasive carcinomas (2 in the NAFLD group and 1 in patients without NAFLD) and 23 adenomas (12 adenomas in 7 patients in NAFLD group and 11 adenomas in 7 patients without NAFLD) were detected. There was no difference in detection rate of adenomas between patients with NAFLD or without NAFLD (57.14% vs. 45.83%; $p=0.76$), but there was a difference in the prevalence of invasive carcinomas in patients with or without NAFLD (9.52% vs. 4.16%; $p<0.05$). Limitations: low number of patients **Conclusions:** The prevalence of colonic adenomas in patients with NAFLD is the same in patients without or without NAFLD but the prevalence of invasive colonic carcinomas is increased in patients with NASH.

PP146. PROGNOSTIC FACTORS IN UPPER GASTROINTESTINAL BLEEDING IN PATIENTS WITH LIVER CIRRHOSIS.

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Cirrhosis is a common condition in our region and variceal bleeding is a serious complication with a high mortality. **Aim:** To study the upper gastrointestinal bleeding in cirrhosis: the frequency, the evolution, the prognostic factors according to data presented at admission and the treatment. **Patients**

and methods: 6 months prospective study including all cases of upper gastrointestinal bleeding at cirrhotic patients admitted at Constanta County Hospital. We noted clinical and laboratory data on admission, upper gastrointestinal endoscopy result, treatment in emergency and during hospitalization and clinical outcome. Statistical analysis was performed with SPSS v12.0. **Results:** 48 cases of upper gastrointestinal bleeding associated with liver cirrhosis while 31 (65%) were men. The etiology of cirrhosis was predominantly ethanol (58%), then C virus (13%), B (6%) B + D (2%), B + C (2%), autoimmune (2%) and in other cases the etiology remained unknown (13%). At over half the cases (52%) endoscopy was performed in the first 24 hours of admission and it revealed active bleeding (35%), non-bleeding esophageal varices (53%), other bleeding sources (12%, gastric ulcer, portal hypertensive gastropathy etc.). Endoscopic variceal ligation was performed in 38% of cases. Injectable Sandostatin was used in 33% of cases. Death during hospitalization occurred in 21% of cases. Multivariate analysis of prognostic factors revealed CHILD class C as a factor associated with a negative prognosis. **Conclusions:** Variceal bleeding mortality remains high and it correlates with the degree of liver failure existing at admission (Child C). Ligation of esophageal varices is performed especially in cases with active bleeding at endoscopy; administration of Sandostatin right from the patient's hospitalization remains an unattainable goal, probably explained by the high cost of the treatment.

PP147. VARICEAL BLEEDING -ATTITUDE IN EMERGENCY HOSPITAL FLORESCA

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Emergency Clinical Hospital Floreasca

Background and aims Upper gastrointestinal bleeding represent a frequent pathology in Gastroenterology Unit at Emergency Hospital Floreasca, referring at severe patients with a high mortality risk. We wanted to establish the best emergency treatment for variceal bleeding according to some parameters such as: age, associated diseases, severity of bleeding, time

from onset to presentation to hospital and last but not the least -local possibilities in our endoscopy lab. **Methods** A prospective study for five months. There were 156 patients with upper gastrointestinal bleeding, 33 of them variceal and the other non-variceal. They were surveyed during hospitalization and six weeks after. **Results** From 33 patients we did endoscopic band ligation for 28 and Blakemore tube for 5 of them. There were 15 deaths during hospitalization and other 4, 6 weeks after. There were 14 survivors. These results are linked with hemoglobin value at admission, the severity of associated pathology and the number of anterior variceal bleeding. **Conclusions** We found a significant mortality rate of 45.4% during hospitalization despite endoscopic treatment and one of 57.5% at six weeks especially depending of associate pathology and the severity of cirrhosis.

PP148. ETIOLOGY AND HOSPITAL MORTALITY OF UPPER GASTROINTESTINAL BLEEDING IN A TERTIARY REFERRAL CENTER WITH PERMANENT ENDOSCOPY CALL

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Regional Institute of Gastroenterology and
Hepatology "Prof. Dr. Octavian Fodor"

Background: Upper gastrointestinal bleeding (UGIB) is a common emergency with substantial patient morbidity and medical expense, with a mortality of 3.5% to 10%. **Objective:** We aimed to assess the etiologic factors of GI bleeding and the outcome of patients in a tertiary academic center. **Methods:** This is a prospective study including all patients referred to our emergency unit from November 2012 to March 2013 due to UGIB. Emergency endoscopy was performed on all the patients and in some cases at once, and followed until discharge. **Results:** 299 patients were admitted for UGIB of which 205 men (68.56%) and 95 female (31.44%) with a mean age of 62.44 years (19 to 94). The medium hospitalization was 8.04 days (8.88 days for AVUGIB and 7.67 days for NVUGIB) (P=0.169). Nonvariceal upper GI bleeding (NVUGIB) was present in 208 (69.57%)

patients. The most common cause was represented by peptic ulcer disease (40.13%), followed by acute hemorrhagic gastritis/duodenitis (10.37%), neoplasia (6.35%), esophagitis (3.33%), Mallory- Weiss syndrome (2.68%), multiple lesions (2.34%), Dieulafoy lesions (2.01%), angiodysplasias (1.34%) and two cases with unknown bleeding sources. Acute variceal bleeding (AVUGIB) was present in 30.43% of patients. The bleeding source for these cases was: 28.76% patients bled from esophageal varices, 1.34% patients from subcardial gastric varices and 0.33% cases from portal hypertensive gastropathy. Overall mortality in the study was 13.7% of the cases, significantly higher in AVUGIB patients compared to those with NAVUGIB (19.78 versus 11.06) ($P=0.044$). **Conclusion:** NAVUGIB represents the most common cause for upper gastrointestinal bleeding (approximately 70% of the cases). The hospital mortality rate for UGIB still remains as high as 13.7%.

PP149. THE IMPORTANCE OF ROCKALL AND GLASGOW-BLATCHFORD SCORING SYSTEMS IN PREDICTING OUTCOME IN PATIENTS WITH UPPER GASTROINTESTINAL BLEEDING

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Regional Institute of Gastroenterology and Hepatology Prof Dr "Octavian Fodor"
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Aim The importance of scoring systems in predicting outcome in patients with upper gastrointestinal bleeding **Material and method** 299 patients with UGIB admitted in IRGH Cluj Napoca's Emergency Department between November 2012 - March 2013 were included in the study. Upper endoscopy was performed in all patients and they were followed prospectively until discharge. Pre-endoscopy Rockall score, post-endoscopy Rockall and Glasgow-Blatchford score were determined; rebleeding episodes, death and the need for blood transfusion were recorded. **Results** The mean time from admission to endoscopy was 4h 38m, and the average hospital

stay time was 8 days. Rebleeding occurred in 7.69% of the patients. The mean scores for the patients who had at least one more bleeding episode while they were admitted, compared to those who did not, were: pre-endoscopy Rockall 2.39 vs. 2.83; post endoscopy Rockall 4.70 vs. 4.76; Glasgow-Blatchford 11.83 vs. 11.42 ($p>0.05$). Death occurred in 13.71% of the patients. The mean scores for the patients who died compared to those who survived were: pre-endoscopy Rockall 3.83 vs. 2.64; post endoscopy Rockall 5.76 vs. 4.60; Glasgow-Blatchford 13.63 vs. 11.11 ($p<0.05$). Regarding the need for blood transfusion, the patients were divided in 4 categories: A – no need for transfusion; B - a need between 1 to 5 units of blood; C- 6 to 10 units; D – more than 10 units of blood needed. The mean pre-endoscopy Rockall score was 2.43; 2.91, 3.19 and 3.80 ($p=0.021$); mean post endoscopy Rockall score was 4.29; 4.89, 5.31 and 6 ($p=0.023$); mean Glasgow-Blatchford score was 8.98; 12.54, 12.62 and 14.20 ($p=0.000$). **Conclusions** The pre-endoscopy Rockall, post endoscopy Rockall and Glasgow-Blatchford scores were significantly higher in patients who died compared to those who survived. All of these 3 scoring systems were higher in patients who needed blood transfusions, and there was a correlation between these scores and the number of blood units needed. None of these scores correlated with the occurrence of a new bleeding episode.

PP150. THE INCIDENCE OF UPPER DIGESTIVE BLEEDING IN CIRRHOTIC PATIENTS

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Aim – to evaluate the incidence and characteristics of upper digestive bleeding in a cohort of patients with liver cirrhosis **Material and method** – 1766 patients with liver cirrhosis admitted in our department (Jan. 2009-Dec. 2012), 404 females and 697 males, with a mean age of 59.7+/-10.5 years. We had 299/1766 patients with upper digestive bleeding (16.9%),

51/299 (17.%) cases with nonvariceal hemorrhage and 248/299 (82.9%) with variceal bleeding. **Results** The mortality rate in patients with upper digestive bleeding was 13.7% (41/299), significantly higher than in patients admitted for other reasons – 9.9% (146/1487), $p < 0.04$. Comparing nonvariceal bleeding with variceal bleeding group we also find statistic significant difference: in the first group of nonvariceal bleeding was 7.8% (4/51) versus variceal group 14.5% (36/248) $P < 0.001$ **Conclusions** 1. The incidence of upper digestive hemorrhage in cirrhotic patients was 17% 2. The mortality rate in bleeding group was 13.3%, higher than in cirrhotics without bleeding 3. The mortality rate in variceal hemorrhage is 14.5%, higher than in nonvariceal bleeding

PP151. ETIOLOGIC AND THERAPEUTIC SPECTRUM OF LOWER GASTROINTESTINAL HEMORRHAGE

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Lower gastrointestinal bleeding is a medical condition with a broad etiologic spectrum, which can be challenging in diagnosis and treatment for clinicians. This paper is a retrospective study conducted between 01.01.2011-31.03.2013, which approaches the important bleeding cases that caused a more than 2 g of hemoglobin rapid decrease and/or hemodynamic abnormalities that required therapeutic emergency maneuvers (endoscopic, radiologic and/or surgical). The exclusion criterion was the presence of inflammatory bowel disease. Out of lower gastrointestinal bleeding (370) admitted to our unit, 15.13% were severe. The most common etiology was angiodysplasias (30.35%), followed by radiation proctosigmoiditis (14.28%), tumors (10.71%), hemorrhoids (5.35%), polyps (3.57%), and more. To investigate the location and the cause of bleeding, maneuvers such as colonoscopy were required in all cases, angiography in 12.5%

of cases, entero-CT in 5.35% of cases, video capsule in 3.57% of cases and in 10.71% of cases a combined method has been required. Therapeutic maneuvers were varied: embolization (14.28%), argon plasma coagulation (37.5%), banding ligation (3.57%), surgical treatment (14.28%) or combined methods (3.57%). Frequently, hemostasis was obtained by applying the therapy, only 4 cases diagnosed with radiation rectitis had recurrent hemorrhage and in other 4 exitus occurred. Lower gastrointestinal bleeding is relatively rare, but sometimes can cause severe hemodynamic imbalances with implications on vital prognosis. For diagnosis and optimal therapeutic conduct, multiple and laborious investigations are necessary, sometimes without discovering etiology, repetitive maneuvers and consistent follow-up care.

PP152. MANAGEMENT OF PATIENTS WITH ACUTE LOWER GASTROINTESTINAL BLEEDING IN CLINICAL EMERGENCY HOSPITAL BUCHAREST

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Aim This study was performed to elucidate the etiology, effectiveness of diagnostic and therapeutic modalities in patients with acute lower gastrointestinal bleeding. **Methods** There were reviewed retrospective patients with lower GI bleeding from January 2012- March 2013. Were totally 661 cases with rectal bleeding/hematochezia; 86 (13%) were with acute hematochezia defined as recent hemorrhage, anemia or the need of transfusions. Hemodynamic resuscitation, upper digestive endoscopy, colonoscopy and angiography were done. **Results** From the 86 patients with hematochezia 18, (21%) were with upper GI bleeding; 9 with severe hemophilia, 5 with hemorrhagic ulcers Forrest I A/I B and 4 with bleeding from esophageal/gastric varices. Effective hemostasis was done in 14 cases. 12 patients from 86(14%) were with bleeding from colonic diverticuli, only 3 required endoscopic hemostasis, for the rest bleeding stopped

spontaneously. 10 cases (11,6%) were with ischemic colitis, 3 required surgery. 1 case was with acute entero-mesenteric infarction with postoperative death. 8 cases were with angioectasia, angiography was done in 6 cases-4 with embolization. Other 8 cases were with bleeding from colonic polyps-favorable outcome after polypectomy. 4 cases were with post-polypectomy bleeding, with effective hemostasis in 3 cases. It was one case of death after a duodenal polypectomy in a Peutz Jeghers syndrome. 5 cases were with malignant colonic tumors. 2 cases were by injury causes by rectal foreign bodies resolved after their removal. 4 cases were LGB with unknown cause, with negative colonoscopy, endoscopy and angiography; small bowel studies were recommended. **Conclusions** 21% cases from the severe hematochezia were with upper GI bleeding, that is why upper GI endoscopy should be the first investigation. Parallel to hemodynamic resuscitation polyethylene glycol solution orally or on nasogastric tube should be recommended as preparation for colonoscopy. Arteriography should be reserved for those patients with massive, ongoing bleeding when colonoscopy has not revealed a source. Collaboration between interventional endoscopy team, angiography and general surgery are key points in management of patients with lower GI bleeding in Clinical Emergency Hospital Bucharest.

PP153. EMERGENCY ENDOSCOPY VERSUS RAPID ENDOSCOPY IN UPPER DIGESTIVE HEMORRHAGE

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Introduction. The upper digestive hemorrhage is one of the biggest emergencies in gastroenterology. It is recommended to do an endoscopy in the first 24 hours. The study's **objective** was to determine the role of the moment the endoscopy was done on the hospitalization period, mortality and rebleeding in patients with UDH. **Materials and methods.** We conducted a five months (from November 2012 to March 2013) prospective study that took place in a tertiary health care facility with emergency endoscopy services. 294

patients with UDH were included. The endoscopy was done in the first 24 hours in all patients and they were monitored for the entire hospitalization period. Based on the time the endoscopy was done, there were two groups of patients: one with rapid endoscopy (RE)- done in the first three hours, and another one with emergency endoscopy (EE)- done in 3 to 24 hours after admission. **Results.** RE was done to 163 out of 294 patients, and EE was done to the rest of 131 patients. The average age was 62,8 years (from a minimum of 19 year old and a maximum of 94 year old) and the male gender was predominant (68,71%). During hospitalization 13,9% of the patients died. The mortality in patients with RE was lower compared to the patients with EE (13,5% versus 14,5%), but there was no statistic significance ($p=0,804$). 7,8% of the patients had a rebleeding, more frequent in the RE patients compared to the EE patients (8,59% versus 6,87%), but there was no statistic significance ($p=0,585$). Although the hospitalization period was a little higher in patients with EE (8,24 days versus 7,96 days), it was not significantly influenced by the moment the endoscopy was done. **Conclusions.** Rapid endoscopy didn't show significant improvements on mortality, rebleeding and hospitalization period compared to emergency endoscopy in patients with UDH. **Keywords:** rapid endoscopy, emergency endoscopy, upper digestive hemorrhage, rebleeding

PP154. NON-VARICEAL UPPER DIGESTIVE BLEEDING EVOLUTIVE TRENDS ON A 10 YEARS PERIOD

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Aim: To assess the dynamic of non-variceal upper digestive bleeding (UDB) characteristics on a ten years period. **Material and methods:** We performed a retrospective study including 1842 patients with non-variceal UDB (644 female and 1198 male), mean age 61 ± 15 years, admitted in the Department of Gas-

troenterology and Hepatology, Emergency County Hospital Timisoara during 2003-2012. We compared the characteristics of UDB on two periods of 5 years, 2003-2007 (group 1) vs. 2008-2012 (group 2): age, gender, etiology, Rockall score, rate of rebleeding, surgery and death during hospitalization. **Results:** Group 1, that encountered the first 5 years, included 810 patients with non-variceal UDB, 297 female (36,7%) and 513 male (63,3%), mean age 58,7±15. Group 2, that encountered the last 5 years, included 1032 patients with UDB, 347 female (33,6%) and 685 male (66,4%), mean age was 63,2±14,8 years, without significant statistical differences compared to group 1 ($p>0.05$). Main etiology of UDB consisted in peptic ulcer disease in 669 patients (82,6%) of group 1 and 741 patients (71,8%) of group 2. Mean Rockall score was 5±2.3 for group 1 and 5,1±2 for group 2 ($p>0.05$). Regarding rebleeding, there were no significant statistical differences between the two groups: 64/810 (7,9%) vs. 87/1032 (8,4%) patients, $p=0.93$. Surgery was needed in 4,7% (38/810 patients) for group 1 and 3,9% (40/1032) for group 2 ($p>0.05$). We noticed a significantly higher rate of death during hospitalization for group 2 vs. group 1: 91/1032 (8,8%) vs. 24/810 (3%) patients ($p<0.0001$). **Conclusions:** We have noticed an increasing tendency of the mean age of the patients with non-variceal UDB admitted during the last 5 years. The mortality rate increased over the past few years, approaching literature data.

PP155. THE PRACTICE OF COLONOSCOPY IN ROMANIA IN 2011 AND 2012 -A MULTICENTRE STUDY

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Colonoscopy is the most accurate method for the colonic evaluation, when it is performed with a certain quality standard. The aim of this paper was to evaluate the national practice of colonoscopy and the quality of this procedure in our country. **Material and method:** we performed a retrospective multicenter study that included a questionnaire regarding the number of colonoscopies, the number of total colo-

noscopies and the causes of incomplete colonoscopies performed in 2011 and 2012 respectively. 43 centers responded to this invitation. We assessed the data from all these centers. **Results:** in 2011 37280 colonoscopies were performed, 30084 (80.6%) of them being total colonoscopies. In 2012 the number was: 40467 colonoscopies, with 32421 total colonoscopy (80.1%). In 3567 cases in 2011, and 3557 cases in 2012, stenosis was the cause of incomplete colonoscopy. If we consider this an objective reason for an incomplete colonoscopy, there were 30084 total colonoscopies from 33713 colonoscopies (89.2%) in 2011 and 32421 total colonoscopies from 36910 colonoscopies (87.8 %) in 2012. However, comparing the present study with previous ones, performed in 2004, 2007 and 2009, the percentage of total colonoscopies increased (2004 vs. 2007 vs. 2009 vs. 2011 vs. 2012– 74.1% vs. 83.5% vs. 82.5% vs. 89.2% vs. 87.8%). The number of maneuvers performed is lower compared to other countries such as France - 900,000 colonoscopies for a population of 65.35 million or U.S. - 22 million colonoscopies in a population of 315,712,000. **Conclusions:** number of colonoscopies performed annually in Romania is relatively small, but seems to increase competence in colonoscopy.

We would like to thank everyone who supported us in achieving this statistic.

PP156. CORRELATIONS BETWEEN CLINICAL PRESENTATION, DEGREE OF MUCOSAL DAMAGE AND SERUM ANTIBODY TITERS IN PATIENTS WITH CELIAC DISEASE IN NORTH-EAST OF ROMANIA

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Introduction: Celiac disease also known as gluten sensitivity is a life-long condition of the small intestine that affects genetically predisposed individuals triggered by the consumption of gluten. **Aims:** The

study conducted in the Gastroenterology and Hepatology Institute in Iasi Romania aims to determine whether correlations can be made between clinical presentation, degree of mucosal damage and serum antibody titers in patients diagnosed with celiac disease in Moldavia. **Material and method:** This is a cohort retrospective transversal study which includes 43 patients who met the inclusion criteria, diagnosed with celiac disease between January 2011-December 2012. We collected results from laboratory and serology testing, mucosal biopsy samples, and used quality-life and health questionnaires to assess gastrointestinal symptoms at 3, 6 and 12 months after the introduction of a gluten-free diet. All patients were informed and signed a consent form. **Results and discussions:** The mean age of CD diagnosis was 35.8 years; 76% were female. Of the 43 patients who underwent diagnostic biopsy, 34 biopsy samples were graded according to Marsh- Oberhuber classification in Marsh III a-c with positive serology, 7 samples Marsh I-II with negative serology, 2 patients refused upper endoscopy with positive serology. The results showed significant correlations between the degree of small-bowel morphologic damage, quality of life and most of the measured clinical outcomes in celiac disease. **Conclusions:** This study showed that the presence of EMA or tTGA was significantly associated with more severe mucosal damage and correlated with all the laboratory values. More pronounced clinical features were determined in younger adults who also had varying degrees of villous atrophy. The sensitivity of serological testing is questionable in patients with minimal lesions.

POSTER PRESENTATIONS

Varia

PP157. EFFICIENCY OF THE COMPLEX ANTIULCEROUS TREATMENT IN ERADICATION OF H.PYLORI INFECTION

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Introduction: Though there is rich supply of material in the medical scientific literature regarding the efficiency of H.pylori infection eradication (up to 80-90%), some studies suggest a high rate of this infection following a complex antiulcerous treatment administered by physicians. **Purpose of study:** To assess the efficiency of complex antiulcerous treatment in eradication of H.pylori infection. **Material and methods:** The study comprised a lot of 74 patients with acute DU with H.pylori (+), aged between 18 and 59 (mean age 32.3±1.3years). Accurate diagnosis of acute DU with H.pylori (+) was established through clinical and paraclinic methods: FEGDS, intragastric ph-metry, detection of H.pylori infection by means of histopathologic examination. Depending on the severity of gastric mucosa infection with H.pylori: 16 patients had a high level of infection (+++); 34 patients had a middle level of infection (++); 24 patients had a minimal level of infection (+). Initially, in the acute stage of the disease, patients were administered a complex antiulcerous triply treatment up to healing of the ulcerous lesions; antibacterial medication: Famotidine 40mg/day till the ulcer healing defects; antibacterial medication: Amoxicillin 1,5 g/day; Metronidazole 1,5 g/day, with in the first 14 days of treatment. **Results:** As a result of applied treatment, the healing of the ulcerous lesions occurred in different periods of time, approximately 21.7±0.3 days. The endoscopic examination performed at the end of medical treatment, with biopsies sampling, confirmed the clearance of H.pylori infection in 92% (67 patients). The eradication of H.pylori infection confirmed by repeated histological investigation, after 40 days from medica-

tion ceasing has been registered in 50% of cases (37 patients). **Conclusion:** Medical triple treatment to eradicate H.pylori had a positive result for a short period of time (clearance 92%) and was insufficient for eradication of H.pylori infection (50%), which may depend on the genotype of infection.

PP158. RIFAXIMIN IN THE PREVENTION OF THE SPONTANEOUS BACTERIAL PERITONITIS

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Introduction Cirrhosis is characterized by an increased susceptibility to infection. SBP is the most common infectious complication, the main causes being the bowel bacterial overpopulation, the increased intestinal permeability and bacterial translocation. Antibiotic prophylaxis with Norfloxacin increases the rate of SBP with G+ multiresistant bacteria. The **purpose** of the paper is to demonstrate the advantage of using Rifaximin, nonresorbable broad spectrum antibiotic, in prophylaxis SBP. **Methods** The study is a prospective case-control, which included 46 patients diagnosed with Child class C cirrhosis and refractory ascites, based on clinical, biological, ultrasound and endoscopic findings, followed over a period of 6 months. Protein level in AL was higher 14g/dl. SBP was defined as the presence of > 250PMN/mm³. Patients were divided into 2 groups, group 1 -22patients who received Rifaximin treatment during the study for a previous episode of HE, and group 2 -24patients who did not receive antibiotic treatment during follow-up. **Results** Rifaximin significantly decreases the PMN in ascitic fluid from patients, one single case of neutroascitic SBP with negative cultures was recorded in this group, with a net improvement of the general condition. In group 2 who did not follow any

antibiotic treatment, SBP was recorded in 4 patients, an increase of PMN in ascitic fluid at 14 patients, an approximately constant value in 4 patients, a decrease in 2 subjects. **Conclusions** The study suggests that Rifaximin cause a significant decrease in PMN in AF, causing a decrease in SBP frequency and improvement of life in cirrhotic patients with refractory ascites. In this study, the effects of Rifaximin on intestinal bacterial overpopulation and bacterial translocation decisive factors in SBP, are consistent with literature data. Use of Rifaximin as an alternative method to prevent SBP deserves more attention.

PP159. CLINICAL BENEFIT AND PROTECTIVE ROLE AGAINST ACUTE DIVERTICULITIS OF NON-ABSORBABLE ANTIBIOTICS WITH CYCLIC ADMINISTRATION IN DIVERTICULAR COLONIC DISEASE

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Background: Colonic diverticular disease is a relatively frequent disease, with wide clinical spectrum: lack of symptoms/transit troubles, meteorism, abdominal discomfort or pain/complications as acute diverticulitis. **Aim:** to evaluate the clinical benefit and the protective effect against acute diverticulitis of non-absorbable antibiotics, in cyclic long-term administration, in patients with colonic diverticular disease. **Patients and methods:** we prospectively studied all patients diagnosed during one year in the Center of Gastroenterology and Hepatology with colonic diverticular disease, by colonoscopy or barium enema, with lower intestinal tract symptoms and to whom major colonic lesions were excluded. All patients received specific medication for irritable bowel syndrome and different supplementary treatment: group A-fiber-rich diet, B-fiber-rich diet and Rifaximin 7 days/month, 400 mgx2/day, for 1 year. We analyzed after one year of treatment the clinical be-

nefit on the lower intestinal tract symptoms (by questioning the patients) and the percent of patients which developed acute diverticulitis. **Results:** 84 patients diagnosed with colonic diverticular disease were followed. In the group A (42 patients), clinical benefit was obtained in 29 patients (69%) and 1 case of acute diverticulitis (2.3%) was noted. In the group B (42 patients), clinical benefit was obtained in 32 patients (76%) and 1 case of acute diverticulitis (2.3%) was noted. **Conclusions:** Non-resorbable antibiotics with cyclic administration could bring clinical benefit to symptomatic patients with colonic diverticular disease, but not in a significant manner, while prevention of acute diverticulitis was not demonstrated. More studies with longer follow-up and with cost-efficiency analysis would be useful.

PP160. EVALUATION OF HEPATOPROTECTIVE EFFECT OF HYDROETHANOLIC EXTRACTS OF BETULA PENDULA ROTH. (BIRCH) AND RUBUS IDAEUS L. (RED RASPBERRY) LEAVES IN ALLOXAN INDUCED DIABETIC RATS

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Introduction: non-alcoholic fatty liver is a hepatic disorder, associated with insulin resistance, diabetes mellitus, obesity, dyslipidaemia and cardiovascular risk. It is usually asymptomatic, but it can lead to cirrhosis and hepatocellular carcinoma. **Objectives:** evaluation of the potential hepatoprotective effect of birch and red raspberry leaves hydroethanolic extracts in alloxan induced diabetic rats. **Material and methods:** 200 mg/kg extracts, alone or combined with metformin (100 mg/kg), were given orally, to 72 Wistar diabetic rats (130 mg/kg alloxan i.p), divided in 6 groups of 12 each: group I (diabetic control), group II (metformin), group III (birch extract), group IV (birch extract + metformin), group V (red raspberry extract), group VI (red raspberry extract + metformin).

Standardized spectrophotometric methods were used for transaminases (AST, ALT - U/L), alkaline phosphatase (U/L), γ -glutamyl transferase (GGT - U/L), butyryl cholinesterase (BuChE - U/L), bilirubin (mg/dL) and albumin (mg/dL) quantitative analysis. **Results:** significant differences ($p < 0.01$, IC = 95%) for AST/ALT ratio, GGT and BuChE values were found in groups III (1.56 ± 0.12 ; 4.2 ± 1.2 ; 366 ± 82) and V (2.01 ± 0.09 ; 3.9 ± 0.6 ; 579 ± 87) in comparison with I (3.28 ± 0.36 ; 6.6 ± 2.2 ; 357 ± 41) and for IV (2.16 ± 0.17 ; 1.9 ± 0.5 ; 518 ± 53) and VI (2.31 ± 0.15 ; 4.1 ± 0.3 ; 446 ± 62) as compared to II (3.19 ± 0.24 ; 8.3 ± 1.8 ; 305 ± 98). Among groups, no significant differences were found for alkaline phosphatase, bilirubin and albumin: 355 ± 76 ; 0.13 ± 0.07 ; 2.6 ± 0.2 (group I), 355 ± 28 ; 0.06 ± 0.05 ; 2.2 ± 0.3 (group II), 483 ± 88 ; 0.03 ± 0.03 ; 2.5 ± 0.9 (group III), 424 ± 91 ; 0.09 ± 0.03 ; 3 ± 0.1 (group IV), 381 ± 31 ; 0.02 ± 0.02 ; 3.4 ± 0.5 (group V) and 376 ± 61 ; 0.13 ± 0.11 ; 3.3 ± 0.7 (group VI). **Conclusions:** both extracts lowered AST/ALT ratio and stimulated protein biosynthesis, making them future candidates for diabetes mellitus' hepatic disorders.

PP161. THE IMPACT OF HELICOBACTER PYLORI INFECTION ON ANTIHISTAMINIC TREATMENT RESPONSE IN PATIENTS WITH CHRONIC IDIOPATHIC URTICARIA

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Objective. To assess the impact of Helicobacter pylori (HP) infection on antihistaminic treatment response in patients with chronic idiopathic urticaria (CIU). **Methods.** We conducted a prospective study, which included 67 patients with CIU. All the patients were evaluated at baseline, at 1, 3 and 6 months after therapy initiation, to assess Urticaria Activity Score (UAS) and anti-HP antibodies. The favorable therapeutic response was assessed by 50% reduction in UAS from baseline (UAS0). The patients were divided into 3 groups: Group A: 23 HP-negative pa-

tients (UAS0 = 5.17 ± 0.63) who received antihistaminic treatment; Group B: 24 HP-positive patients (UAS0 = 5.26 ± 0.73) who received antihistaminic treatment; Group C: 20 HP-positive patients (UAS0 = 5.47 ± 0.36) who received antihistaminic treatment and anti-HP therapy. **Results.** Group A: After one month: UAS = 3.12 ± 0.98 ($p < 0.05$) and 9 patients had a 50% reduction of UAS0. After 3 months: UAS = 2.01 ± 1.66 ($p < 0.05$) and 19 patients had a 50% reduction of UAS0. After 6 months: UAS = 0.16 ± 0.42 ($p < 0.05$) and all the patients had a 50% reduction of UAS0. Group B: After 1 month UAS = 4.62 ± 1.42 ($p > 0.05$) and 5 patients had a 50% reduction of UAS0. After 3 months: UAS = 3.76 ± 1.37 ($p > 0.05$) and 14 patients had a 50% reduction of UAS0. After 6 months: UAS = 1.18 ± 1.1 ($p < 0.05$) and only 19 patients had a 50% reduction of UAS0. Group C: After a month: UAS = 4.32 ± 1.65 ($p > 0.05$) and 8 patients had a 50% reduction of UAS0. After 3 months: UAS = 3.18 ± 1.21 ($p > 0.05$) and 17 patients had a 50% reduction of UAS0. After 6 months: UAS = 0.62 ± 0.78 ($p < 0.05$) and 20 patients had a 50% reduction of UAS0. **Conclusions:** Helicobacter pylori eradication was associated with increased efficacy of the antihistaminic treatment in CIU patients.

PP162. ORAL MANIFESTATIONS IN THE PEPTIC ULCER. CLINICAL STUDY OF THE ORAL MUCOSA AND PERIODONTAL DISEASE

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Introduction: Multiple internal diseases are accompanied by oral manifestations, apparently insignificant, commonly asymptomatic or not put in account by the patient. The knowledge of them in the context of all symptoms allows the diagnostic and the causal treatment. **Aim:** The study objectives were to establish the oral manifestations and the prevalence of them in gastric ulcer and duodenal ulcer. **Method:** Prospective clinical study of a group consisted of 67 patients hospitalized in the Internal Medicine Department in 2012, with gastric ulcer and duodenal

ulcer. The distribution by sex was 39 men, 28 women, the average age 56. Exclusion criteria: chronic alcoholism, smoke, diabetes mellitus, cirrhosis. **Results:** The most common oral lesions were: dental erosion, superficial and deep chronic marginal periodontitis, chronic gingivitis, xerostomia, angular cheilitis, aphthae, candidosis, halitosis, leukoplakia, and increased tooth mobility. **Conclusions:** Oral manifestations in digestive diseases are common and frequently appeared in the same etiopathogenic context. Sometimes can be the first symptom and the knowledge of them allows an early diagnostic, inexpensive laboratory tests, an effective answer to the treatment and an increased patient compliance.

**PP163. MAIN CAUSES OF MORTALITY
IN THE GASTROENTEROLOGY
DEPARTMENT OF COUNTY HOSPITAL
FROM TIMISOARA DURING 2008-2012**

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Introduction- This work aims to analyze the causes of death in a Gastroenterology Department. **Material&method-**We took into our study the deceased patients' records admitted into the Gastroenterology Department from Timisoara County Hospital from 1.01.2008 to 31.12. 2012, with a number of 427 deceased patients from 11597 of total admitted patients (3.68%). **Results-**Gender distribution was: 268 men (62.7%), and 159 women (37.2%). Most of the patients (221, 51.7%) were aged between 50-69 years, for both genders. For 95 (22.2%) patients, the main diagnosis was established after performing the necropsy, most of the others suffering from known chronic illnesses. 132 (30.9%) of the patients had to be transferred to other departments, mostly (>98%) to ICU. One of the most incriminated cause for the patients' death was the hemorrhagic shock (116 cases, representing 27.1% of all cases), followed by acute respiratory distress that has necessitated mechanic ventilation (77cases, 18.03%). The toxic-septic shock has caused the death of 73patients (16.8%). Multi-

ple systems and organs failure (MSOF) was the main cause of death for 47 patients (11%). In a smaller percent we can cite as main causes of death: pulmonary edema, irreversible hepatic failure / hepato-renal syndrome, cardiac arrhythmias and acute myocardial infarction. **Conclusion-** About 44% of the patients deceased in our clinic have been lost because of variceal bleeding and toxic-septic state associated to other disorders. Those have lead to cardio-circulatory collapse in more than 66% of the patients, despite intensive care maneuvers.

**PP164. THE SYNCHRONOUS
ASSOCIATION OF VILLOUS ADENOMA
OF THE SIGMOID COLON WITH
COLONIC ADENOCARCINOMA-CASE
REPORT**

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The synchronous association of villous adenoma of the sigmoid colon with colonic adenocarcinoma – case report. **Introduction:** Colonic polyps represent the main precursor lesions in the colon cancer. A significant percentage of colon lesions labeled as polyps actually have inside either changes or even Islands dysplasia cancer. Adenomatous polyps are known premalignant polyps, involved in the etiology of colorectal cancer. **Case report:** We present the case of a 77-years old patient, which was presented at the hospital for epigastric pain and with lower abdominal floor pain accompanied by distension, nausea and disorders of intestinal transit-diarrhea alternating with constipation with the debut one year ago and exacerbated last month. **Results:** Biologically it is noticed – Inflammatory syndrome, hypochrome, microcytic anemia and hypokalemia. Upper digestive endoscopy: antrum erytemateous gastritis. The colonoscopy describes from 15 cm to 25 cm from the anus- a circumferential tumor with villous aspect which occupied $\frac{3}{4}$ from the colonic lumen-biopsy. Normal aspect of transverse colon. To the ascending colon –a circumferential tumor with vegetant aspect which occupied $\frac{1}{2}$ from the colonic lumen-biopsy. The ileo-cecal valve with normal aspect. The histopathologic examination

of the rectosigmoid tumor was a tubulovillous adenoma with high grade dysplasia and the biopsy of the vegetant tumor of the ascending colon was compatible with adenocarcinoma. The conclusions of the computed-tomography examination were: rectosigmoidian junction tumor and ileo-cecal lesion with perhaps inflammatory etiology. During the hospital stay, under treatment of hydro-electrolytic rebalancing, antiselector, and blood transfusions, the evolution was favorable. Requested surgical checkup which established surgical indication and so was practiced total colectomy with ileo-recto mechanical T-T anastomosis, for synchronous tumors of recto-sigmoidian junction and the ascending colon. **Conclusions:** early diagnosis and correct of synchronous colon tumor resulted in resolution of symptoms and avoiding serious complications, the target in this case. The particularity of this case is to identify a potential rectosigmoidian villous adenoma of malignant growth in a patient with ascending colon adenocarcinoma synchronously with the average secondary anemia – corrected with blood transfusions and martial treatment.

PP165. HER2 + METASTATIC GASTRIC CANCER, TREATED WITH BIOLOGICAL THERAPY -TRASTUZUMAB/HERCEPTIN - CASE REPORT

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Introduction: Metastatic gastric cancer is associated with a poor prognosis; the median survival rate is 10 months with currently available therapies. 22% of gastric cancers are HER-2 positive. Therapy targeting HER-2 oncogene with the monoclonal antibody trastuzumab (Herceptin) is prohibitive in our country due to high costs. **Case description:** Patient of 41 years presented with a diagnosis of stage IV gastric adenocarcinoma, documented in July 2012 based on following criteria: clinical (abdominal pain), endoscopic (infiltrative tumor of 4-5 cm on the greater curvature), histology (tubulo-papillary adenocarcinoma, GII, infiltrative) imaging (CT infiltrative tumor 5.5/4 cm on the greater curvature invading the pole of the

spleen, liver and multiple peritoneal metastases). He made 8 cycles of polychemotherapy in Milan, with EFC (Epirubicin, 5-Fluorouracil, Cisplatin), with documented disease progression in October 2012 by TC: increasing spleen infiltration, increased size of liver metastases, new liver lesions. He came for begging of salvage therapy. We performed immunohistochemistry of gastric biopsies documenting HER-2 status: 3+. We initiated therapy with Docetaxel and, given the patient's young age, Trastuzumab (Herceptin) from his own resources. Evaluation after 5 cycles of docetaxel and 4 cycles of Herceptin (April 2013) documents the following: the almost complete morphologic remission of the gastric tumor and mesenteric determinations; morphological and numerical remission of liver and spleen injuries. Patient continues Herceptin with a new evaluation in 3 months time. **Conclusions:** This patient is, the first from the Oncologic Registry Bihor treated with Herceptin who went into almost complete remission, despite disease progression after first-line therapy, thanks to administration of Herceptin, underlining the importance of both standardization of immunohistochemical assessment for HER2 over expression in all patients with gastric cancer and of obtaining financial resources for Herceptin biological treatment.

PP166. DYSPEPSIA MANAGEMENT TRAPS

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Patient PM, urban origin, age 64th, known with essential hypertension, ischemic stroke, autoimmune thyroiditis, euthyroidian status, dyslipidemia, was admitted for persistent dyspepsia symptoms, after investigations in another clinic for the same reasons (including upper endoscopy) and prior treatment with proton pump inhibitors, with no relief. At the admission the patient was pale and the blood work revealed: moderate normocytic normochrome anemia (Hb 9.9g/dl), creatinine 1.44mg/dl, severe increased

serum calcium (15.3mg/dl). X-rays showed two osteolytic islands – frontal right about 1.1/1.7cm and above left acetabular region about 0.8cm. Medullary biopsy and serum protein electrophoresis were normal. Ultrasound revealed in the posterior lower left half of the thyroid gland a hypoechoic formation, well delimited, of 15/13 mm. Serum parathyroid hormone was 2243 pg/ml. Computer tomography showed a paraesophageal node in the upper thorax and a slightly growth of the left adrenal gland. Whole body parathyroid scintigraphy made with technetium-99 sestamibi revealed an area of hyperfixation in the early and late time at the lower right thyroid gland. The final diagnosis was parathyroid adenoma and primary hyperparathyroidism. Hypercalcemia was treated with saline solution, i.v. diuretics, and biphosphonate. The dyspepsia symptoms faded away once with the serum calcemia levels. The patient was referred to a surgical unit and her post operative evolution was good. Generally, main symptoms of the parathyroid gland adenoma are the ones related to renal and bone symptoms. The interesting part of this case was the persistence and the severity of the dyspepsia.

PP167. RARE CONDITION OF SUBOCCLUSIVE SYNDROME OF THE SMALL BOWEL - CASE REPORT

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Introduction: Blunt abdominal trauma is well known to have an unpredictable evolution. In addition, most people consider that wearing the seat belt in case of car crashes it's a guarantee for their security. For this reasons, lesions of this kind are diagnosed late. **Case presentation:** 44 years old patient, without personal or familial history of digestive disorders comes to our attention with flatulence, mezogastric pain, slowed stool and gas transit, with onset of symptoms after an indigestible meal. During interview, he told us about being victim of a car accident 18 months ago, as a driver (he was wearing his seatbelt at that time), without any alarming symptoms or signs at the posttraumatic assessments. Clinical exam revealed supraumbilical muscular stiffness located on a small area. Biology – normal, except positive CRP (12.4 mg/dl). Ultrasound abdominal examination descri-

bed dilated bowel loops in the mezogastric region. Pansdorff examination described localized stasis in the ileal loops, with halftone images. CT revealed circumscribed thickening of the ileal loops and adjacent mesenteric border. Surgery is decided on the basis of clinical and imagistic data. Intraoperative surgical visceral epiplono-ental block is found, adherent to the parietal peritoneum and also three intestinal loops adherent to this mass, with necrotizing-tumoral evidence, involving serosa. Surgical cure was viscerolysis, partial omentectomy and segmental enterectomy with entero-entero anastomosis. Pathological examination excludes items compatible with a tumor or inflammatory bowel disease and found ischemic lesions. The particularity of the case is represented by severe clinical manifestations, long time away from the moment of the injury itself, creating potential confusion that could delay or confuse the diagnostic and therapeutic correct attitude .

PP168. A CASE OF DRUG-INDUCED HEPATITIS IN A PATIENT WITH LIVER CIRRHOSIS AND CEPHALOPANCREATIC NEOPLASM

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Introduction: Drug-induced liver injury represents an entity that can be difficult to define in clinical practice because of the highly variable manifestations; in the setting of chronic liver disease, establishing this diagnosis is even harder. We present the case of a 66 y.o. patient, ex-alcohol drinker, diagnosed with liver cirrhosis of mixed etiology (alcohol and hepatitis C virus), admitted in our clinic for sudden onset of jaundice (24 hours before presentation) accompanied by phenomena suggesting hepatic encephalopathy. Clinical examination revealed bradylalia, bradypsychia, somnolence, spontaneous flapping-tremor, severe jaundice, generalized abdominal tenderness, enlarged liver. Lab tests showed severe hepatic cytolysis (more than 100 times increase of amino-transferases values),

cholestasis with important increase of direct bilirubin, impaired synthetic function of the liver, thrombocytopenia, azotemia, hyperammonemia, hyponatremia. Anti-HAV IgM, HBs Ag, Anti-HBc IgM were negative; Anti-HCV antibodies - positive. Abdominal ultrasound identified a cirrhotic liver with portal-hypertension and did not show any intrahepatic mass or extrahepatic obstruction. Upper endoscopy revealed only mild portal-hypertensive gastropathy. Given the fact that the patient recently (15 days before admission) received treatment with valproic acid and that other causes of acute hepatic injury were eluted, the diagnosis that arise was drug-induced (valproate) hepatitis over imposed on liver cirrhosis. Discontinuation of the suspected drug, administration of L-carnitine and supportive treatment led initially to a favorable course, successfully decreasing the hepatic cytolysis and the signs of hepatic encephalopathy, but with persisting and afterwards worsening cholestasis. An abdominal computed tomography without contrast (because of the impaired renal function) was performed, showing a slight dilatation of the main biliary duct and giving rise to suspicion of a tumor located in the head of the pancreas, subsequently confirmed by the MRCP examination. **Conclusion:** An intricate case of drug-induced acute hepatic injury in the setting of chronic liver damage, in a patient that associated a cephalo-pancreatic tumor.

PP169. AN UNCOMMON CASE OF LOWER GI BLEEDING FROM A SOLITARY ASCENDING COLON DIVERTICULUM WITH ASSOCIATED DIVERTICULITIS

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Introduction: Solitary ascending colon diverticulum is a rare clinical entity, congenital in nature; it is a "true" diverticulum, consisting of all layers of the intestinal wall. It generally runs an asymptomatic course and becomes clinically important only when inflammatory, perforating, or hemorrhagic complica-

tions occur, generating problems in diagnosis and management. We present the case of a 62 y.o. man, with coronary artery disease and a recent NSTEMI, treated with dual antiplatelet therapy, admitted for hematochezia accompanied by right inferior quadrant pain and a fainting episode at home. On admission, the patient was hemodynamically stable; abdominal examination revealed pain in the right inferior quadrant, but no masses or signs of peritoneal inflammation; anemia and discrete inflammatory syndrome were the main biological findings. Shortly after entry, the patient developed hemorrhagic shock and was transferred to ICU, where he underwent endoscopic examinations the moment he was stabilized. Upper endoscopy did not reveal any active bleeding source; emergency colonoscopy showed blood and blood clots in the colon; in the ascending colon, 10 cm distally to the ileo-cecal valve, a large diverticulum, approximately 1.5cm in diameter, with blood inside, was revealed; no other lesions were identified. Contrast CT detected the single diverticulum, also describing signs of pericolic inflammatory changes. The bleeding ceased spontaneously and the subsequent clinical course was favorable under conservative antibiotic therapy. Surgical intervention has to be taken into consideration in a further moment, as for the time being, the cardiovascular status of the patient contraindicates it. **Conclusions:** Relatively rare case of solitary diverticulum of the ascending colon, complicated with inflammation and life-threatening hemorrhage in a patient with atypical clinical onset age and important associated illness which greatly influences the therapeutic approach and also the prognosis.

PP170. PERITONEAL EFFUSION OF A RARE CAUSE – POSTTRAUMATIC UROPERITONEUM

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Introduction: Ascites is the accumulation of fluid in the peritoneal cavity. The main causes of ascites

(94-98%) are: cirrhosis, peritoneal malignancy, congestive heart failure, peritoneal tuberculosis. Uroperitoneum is the accumulation of urine in the peritoneal cavity because of a urinary bladder rupture which can be spontaneous, posttraumatic or iatrogenic. **Case description:** We present you the case report of a 45 years old patient (P.C.), from urban area, without any medical history who had an abdominal trauma 4 days before admission. He presented to the emergency room complaining about: oliguria, diffuse abdominal pain, loss of appetite, acute constipation. Acute surgical abdomen was excluded. Thoracic-abdominal-pelvic scan with contrast showed massive ascites. The patient had a serum creatinine of 8,3mg/dl and a blood urea nitrogen of 174mg/dl and was retained in the nephrology service. They performed one dialysis session and then transferred the patient in the gastroenterology service on the third day from admission in order to assess the etiology of the peritoneal effusion. We performed large volume paracentesis (6 liters). The fluid was transparent and it was a transudate. We excluded the main causes of ascites by performing complex paraclinic tests, both morphological and histological. Because of the poorly evolution of the patient (rapid recurrence of the peritoneal collection, raise of weight, decreasing of urinary output to a 200ml/24h, increasing of the retention of nitrogenous) we performed a second large volume paracentesis and we measured the creatinine and urea level. It was elevated and we establish the diagnosis of uroperitoneum. We then performed CT cystography, which confirmed the bladder rupture and contrast/urine extravasation throughout the peritoneal cavity. The final diagnosis was posttraumatic uroperitoneum. The patient underwent surgery (cystorrhaphy) in the urology service, with a good post surgery evolution. In **conclusion**, we present you a rare cause of peritoneal effusion, which state a question of a differential diagnosis with other causes of ascites.

PP171. COLORECTAL FOREIGN BODY IN A BARIATRIC SURGICAL PATIENT

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Introduction: Obesity pandemic in recent deca-

des gave rise to an increased number of bariatric procedures with a growing prevalence of postoperative complications. Insertion of an adjustable gastric ring (LAGB) is one of the most common bariatric interventions performed worldwide. The **aim** of this paper is to present a rare complication associated with the use of LAGB. **Materials and Methods:** We present the case of a patient who was referred to our clinic 7 years after the placement of a LAGB with a perianal foreign body and otherwise minimal symptoms. A year after mounting ring, an infectious complication had made necessary the removal of the subcutaneous port. **Results:** The initial colonoscopic evaluation revealed the presence of an intracolonic tubular foreign body with a diameter of 13 mm. At 60 cm proximal to the anus this tube perforated the colonic wall. Upper endoscopy showed partial intragastric migration of the gastric ring. Laparoscopic intervention was performed and the ring and its attached tube were removed. An external drainage of the narrow fistulous opening in the colonic wall was performed. Patient evolution was favorable and she was discharged on the fifth day postoperatively. **Conclusions:** Fistulization of a LAGB tube is a rare complication that can happen after removal of an infected port. Symptoms are usually nonspecific, making diagnosis difficult to establish. The tube and sometimes the ring can be laparoscopically removed and another bariatric procedure may be necessary later.

PP172. RARE CAUSE OF CHRONIC DIARRHEA

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Is a 47 years old woman, known with Diabetes Mellitus treated by oral antidiabetic drugs (Amaryl), obesity, dislipidemia, chronic ischemic heart failure, chronic peripheral venous insufficiency, who was admitted in the hospital presented diarrhea from almost 3 months,(4-6 stools/day, without pathological products) and losing weight 17 kilos. She was in chronic treatment with Diosminum. Biological, the patient was without anemia, inflammatory parameters in normal limits, haemocult test was negative, gl = 145 mg/

dl, CEA – normal, HbA1c= 8,7; renal and liver tests in normal values, excepting a GGT=121 mg/dl. Copro-parasitologic test was negative, fecal antigen for *Giardia lamblia* also negative. Ultrasound examination proves a moderate increase of echogenicity of the liver, a normal gallbladder, CBP and CBIH in normal values. Colonoscopy and gastroscopy were performed and did not prove any abnormality. After approximately 14 days from the tests the suspicion of diarrhea secondary after diosminum treatment was raised, so we ceased the administration of this drug. 48 hours from this moment the intestinal transit was normal. **Conclusion:** even if diarrhea is an adverse effect of Diosminum, in practice it rarely appears.

PP173. A RARE TUMOR REVEALED BY ABDOMINAL TRAUMA: CASE PRESENTATION

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A 65 yo woman, with history of chronic constipation, appendectomy, presents for pain in the right hemiabdomen, after a trauma by falling from small height. At physical examination: the abdomen mobile, right flank painful at palpation, without signs of peritoneal irritation. Laboratory data: normal values of hemogram, liver enzymes, inflammatory markers. Abdominal ultrasonography reveals a transonic mass in the right pararenal space, 15/8 cm, with thick wall, hyperechoic septum, relatively well defined, with weak Doppler color signal. Due to the suspicion of right perirenal hematoma/urinoma, abdominal MRI with contrast agent is done, which identifies an ovoidal mass, measuring 17 cm, with mass effect on the right kidney, well defined, with septum inside and containing few tissular masses that captures gadolinium. Superiorly, the mass comes into contact with the liver and right kidney, anteriorly with the cecum

and ascending colon, and medial with the psoas muscle; pelvic ascites 2 cm thickness. Conclusions: retroperitoneal expansive lesion in the right flank, with characters of malignancy (sarcoma?), without signs of local invasiveness. Surgical intervention is decided, that showed a tumor attached to the right colon, containing mucinous fluid, with 2-3 hole punching, mucinous ascites. Right hemicolectomy is performed with favorable postoperative evolution. Pathological and immunohistochemical examinations diagnosed a pseudomyxoma peritonei, with borderline malignancy areas. The peculiarity of the case is the incidental diagnosis in an asymptomatic patient, in the context of abdominal trauma, which initially oriented the diagnosis in the direction of a traumatic disease, in a patient with appendectomy, in which the origin of the pseudomyxoma could not be identified.

PP174. GIST, STOMACH LOCATION- CASE REPORT

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Background: Gastrointestinal stromal tumors are rare, originating in interstitial cells of Cajal, predominantly localized in the stomach(60%), small intestine(30%). **Aim:** To present the case of a patient diagnosed with GIST, localized in the gastric wall, successfully treated with surgery and chemotherapy. **Material and methods:** B.A., a 73 year old woman from rural area, without any significant pathological history, which presents in the last 3 months progressive enlargement of the abdomen. Objective: global enlargement of the abdomen, especially in the inferior half, elevated consistence, unpainful, smooth surface, without any other important clinical findings. Biological findings revealed a mild hypochrome anemia, abdominal ultrasound and CT described a large intraperitoneal tumor, with mixed structure, fluid and parenchymal, with numerous septa, these investigations being unable to elucidate the affiliation to an organ. The investigations were completed with surgical and oncologic opinion, finally exploratory and therapeutic surgery being indicated. **Results:** The diagnosis of a large tumor originating in the posterior gastric wall,

with mixed structure, fluid and parenchymal, starting from diaphragm and extending to the pelvis was established during surgery. Total gastrectomy, splenectomy and regional lymphadenectomy were performed. Immunohistochemistry was positive for C-kit and confirming the diagnosis of GIST. **Conclusions:** The imagistic investigations we performed did not succeed to establish the diagnosis. Stromal tumors can evaluate a long time asymptomatic, the positive diagnosis being delayed. Although we put the diagnosis in an advanced stage, the case was successfully solved with both surgery and chemotherapy and the outcome after 6 months is good.

PP175. JAUNDICE AND MELENA IN THE EVOLUTION OF A PATIENT WITH CHRONIC PANCREATITIS

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Introduction: Obstructive biliary complications are common in patients with chronic pancreatitis, secondary to extrinsic compression by a cephalic-pancreatic mass. Hemobilia is a rare cause of upper GI bleeding that usually occurs after trauma and is exceptionally associated to porto-biliary fistulas. The aim of this paper is to present a rare cause of upper GI bleeding and jaundice in chronic pancreatitis. **Materials and methods:** We present a patient with known chronic pancreatitis was referred for jaundice and melena. Upper digestive endoscopy revealed no bleeding source in the esophagus and stomach. Computer tomography examination revealed nodular cephalic-pancreatic calcifications, Wirsung duct dilation in its corporeo-caudal segment, moderate dilatation of the biliary ducts and the presence of portal vein thrombosis with a portal cavernoma. Endoscopic retrograde cholangiography revealed the presence of blood clots in the extra and intrahepatic bile ducts that caused biliary obstruction. **Results:** Initial treatment focused

on fluid resuscitation, correction of anemia and administration of Glypressin. Hemodynamic stabilization of the patient was obtained. Subsequent surgical evaluation decided cholecistectomy, choledocotomy with extraction of clots from the bile ducts and hemostasis. When reevaluated two months later the patient was anicteric and without anemia. **Conclusions:** Hemobilia is a rare pathology but may be associated with high rates of mortality. This diagnosis should be considered in patients with gastrointestinal bleeding and jaundice especially in the absence of chronic liver disease.

PP176. PARANEOPLASTIC PERIPHERAL NEUROPATHY IN GASTRIC CANCER – CASE REPORT

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Introduction. Paraneoplastic syndromes are a heterogeneous group of diseases or symptoms that are the consequence of the presence of cancer in the body, but are not due to the local presence of tumor or its metastasis. These phenomena have several producing mechanisms: humoral factors (hormones or cytokines) excreted by tumor cells, autoimmune lesions induced by antigen-antibody complex and others. In most patients, the neurological disorder develops before the cancer becomes clinically overt. **Aim.** To report a case of paraneoplastic peripheral neuropathy associated with gastric cancer. **Material and methods.** **Case report. Results.** A 53 years old female was admitted in the Gastroenterology Department of The County Emergency Clinic Hospital Galați, for epigastric pain, asthenia, weight loss (6 kg in 2 months), distal paresthesias with symmetric distribution that involved the arms and the legs (occurring for five months). A month ago before admission, neurological consultation diagnosed idiopathic peripheral sensory neuropathy, after exclusion of nutritional deficit, diabetes mellitus, toxics and connective tissue disease as causes of neuropathy. Clinical examination revealed pale sclera and skin, epigastric pain at palpation. Biological tests showed: iron deficiency anemia (Hb=10.3

g%, serum iron = 38%), inflammatory syndrome (accelerated ESR = 30 mm/1 hour), positive fecal occult blood test (+). Abdominal ultrasound indicated hepatomegaly with steatosis appearance, without focal lesions. Upper digestive endoscopy revealed at the gastric angle on the lesser curvature infiltrated mucosa with central ulcer covered with fibrin (1 cm diameter), which was biopsied. The histopathologic exam confirmed diagnosis of gastric adenocarcinoma. The patient was referred to Surgery Department. It was performed distal gastrectomy with gastro-jejunal anastomosis. The postoperative evolution was favorable from oncologic point of view, without recurrence, but distal paresthesias were irreversible. **Conclusions.** The case is interesting by the early appearance of paraneoplastic neurological symptoms in the evolution of gastric cancer. Early diagnosis of the gastric tumor may lead to improving of the outcome in patients with paraneoplastic peripheral sensory neuropathy.

PP177. FAMILIAL ADENOMATOUS POLYPOSIS: CASE PRESENTATION

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This 43 years old male was diagnosed with familial adenomatous polyposis at the age of 40, a total colectomy with ileo-rectum anastomosis was performed, 5 cm of rectum were preserved. For gastrointestinal surveillance we started our investigations with an upper gastrointestinal endoscopy which revealed countless polyps in duodenum. In order to explore the remaining large bowel after colectomy we performed an inferior gastrointestinal endoscopy which pointed out polyps in rectum, ileo-rectal junction and the last 30cm of ileum. The enteroCT scan revealed enlarged duodenal walls suggestive for malignancies. The histopathologic results described adenomatous polyps with high degree dysplasia in duodenum. The particularity of this case consists in the necessity of duodeno-cephalic pancreatectomy whose risk is almost equal with the basic condition.

PP178. COLONIC POLYPOSIS WITH FLAT ADENOMA TURNED MALIGNANT IN A 82-YEAR-OLD PATIENT

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Introduction: Flat adenomas are usually small lesions, sometimes with slight central depression, associated with increased risk of colorectal cancer, which often go unnoticed at colonoscopic examination. The introduction of new endoscopic techniques, especially magnifying chromoendoscopy and confocal laser endomicroscopy has increased rates of diagnosis. **Method:** We present the clinical case of a 82 year old patient, whom the general physician sent to investigate a mild normochrome normocytic anemia with iron deficiency. The colonoscopy revealed multiple sessile and flat polyps, some of which have been biopsied; the histopathologic exam revealed tubulo-villous adenomatous polyps with moderate epithelial dysplasia and a malignant tubulo-villous flat adenoma. Abdominal-pelvic CT scan did not view changes in the colon. We used marking ink (SPOT) both for marking the malignant polyp and also for establishing the extension of the surgical resection, given the difficulty of endoscopic treatment. **Conclusions:** It is necessary to carefully view the entire colonic mucosa, in order not to overlook small lesions with neoplastic potential. Also, CT examination does not seem to be useful in detecting flat adenomas.

PP179. RENDU-OSLER-WEBER SYNDROME WITH THE ONSET IN THE SECOND LIFE DECADE?

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We present the case of a 27 years old patient, admitted in the Urology Department of Oradea Municipal Hospital, where 24 hours before presentation in the Endoscopy Unit, the patient underwent left ne-

phrectomy for acute pyelonephritis due to a stenosis of the pelvi-urethral junction. Noted that in recent history, the patient underwent a left orchiectomy for testicular cancer, after which underwent chemotherapy. 24 hours after nephrectomy, the patient had an episode of upper gastrointestinal bleeding with hematemesis, reason for which the upper gastrointestinal endoscopy was performed that showed multiple large and medium angiodysplastic lesions at esophageal, gastric and duodenal ulcers. Failure carrying argon plasma electrocoagulation therapy imposed directing the case to a tertiary center where besides lesions' therapy of the upper digestive tract - colonoscopy examination was required as well as the pill-cam evaluation of the small intestine. Detection of angiodysplastic lesions in the entire digestive tract raised suspicion of Rendu-Osler-Weber syndrome, but the absence of skin lesions, of a history of epistaxis and a family history of hereditary teleangiectasia make it impossible to support the diagnosis.

PP180. CASSIDY-SCHOLTE SYNDROME-CASE REPORT

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Introduction: Cassidy - Scholte syndrome (carcinoid syndrome) is the symptomatic expression of gastrointestinal argentaffin-tumors originating in the Kultchitzky cells of Lieberkuhn glands, secreting in excess vasoactive substances: serotonin, bradikinin, histamine, prostaglandins, catecholamines, P substance, neurotensin, VIP, motiline. It is a very rare disease (15/1.000.000 people), affecting mostly 60-70 years old men. Skin flush is the most important symptom in association with diarrhea, abdominal pain, cyanosis, face edema, teleangiectasias, bronchospasm, with involvement of right ventricle. Triggered by emotions, eating, alcohol intake, it is treated with noradrenalin or pentagastrine. **Case report:** Female patient 73 years old, admitted in our Department for abdominal pain, especially in right iliac fossa, epigastric pain, heartburn, diarrhea (3/4 by day), vomiting, skin flush,

cyanosis, face edema, headache, for 3-4 months that increase following physical exertion, after food intake and environmental factors. Clinical feature: Teleangiectasia of the face, cyanosis, edema, emphysematous thorax, wheezing, arrhythmic heart beats, systolic regurgitating murmur at xiphoid appendix 2/6 degree, bloated abdomen, pain in epigastric right iliac fossa, liver, spleen of normal size. Biological: Slight anemia, inflammatory syndrome, normal values of VMA, urinary catecholamines, adrenalin, dopamine, gastrin and high values of chromogranine A and 10 times increase of 5 HAA; antiendomysium antibodies and CAE19-9 - normal. Radiology: aspect of emphysema, ECG: extrasystolic arrhythmia, hypertrophy of right ventricle, tricuspid regurgitation. Ultrasounds: normal liver and spleen, inhomogenous aspect of pancreas, Wirsung duct=2 mm. Abdominal and pelvic CT scan with contrast don't show any masse or metastasis. Gastroscopy: erythematous erosive gastritis. Panzdorf barium-meal: non other pathology. Colonoscopy: normal. Treatment: After treatment IPP, prednisone, antihistaminic drugs, Spasmomen, Imodium, antiserotoninic drugs (ciproheptadine/sandos-tatin) symptoms improve, crisis become rare almost disappeared. Conclusions: Case particularities consist in the rarity of the disease, the association with Henderinger syndrome, certitude diagnosis being sustained by the high values of 5HAA and chromogranine A increased value. The good response at serotonin antagonist therapy, especially because we don't prove the existence of any primary masse of metastasis interns of respecting diet and treatment give a good prognosis for life.

PP181. COLONIC OR UTERUS TUMOR? DIFFERENTIAL DIAGNOSIS AND TREATMENT CASE REPORT

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Background: Pelvic tumors have, in some cases, similar symptoms to those of colo-rectal cases caused

by compressive phenomena, especially in complicated forms. **Material and methods:** Female, 63 years old who came in GEC for constipation, lower abdominal pain, intermittent rectal and uterus bleeding, anemia. She was investigated clinically, by serologic tests, echography, colonoscopy and genital examination. Results: colonoscopy found internal thrombosed hemorrhoids, rare sigmoidian diverticuli, abdominal ultrasound revealed hepatic steatosis, biliary sludge and a solid uterus tumor of 70/55mm. Liver viruses and tumoral digestive markers were negative, but CA 125>2N suggested a malignant pelvic tumor. She was operated and total hysterectomy with bilateral anexectomy was done. The anatomo-pathological result was uterus fibromyoma. **Conclusions:** Lower abdominal pain and bleeding can raise the suspicion of neoplastic lesions which must be differentiated from benign tumors. Also the affected organ should be found as soon as possible, for a successfully surgical treatment.

PP182. A RARE CASE OF SEVERE PANCREATITIS SUBSEQUENT TO TRANSARTERIAL CHEMOEMBOLIZATION IN A OLD WOMAN WITH HEPATOCELLULAR CARCINOMA

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Hepatocellular carcinoma (HCC) is a major health problem. It is the sixth most common cancer worldwide and the third most common cause of cancer-related death. Despite the availability of several treatment opportunities, diagnosis is still made in an advanced phase, limiting application of most therapeutic choices that currently are based on the Barcelona Clinic Cancer Liver Classification. Transarterial chemoembolization (TACE) represents a first-line noncurative therapy for hepatocellular carcinoma. Currently, TACE has been implemented widely, however, complications of TACE are still an issue. Com-

plications related to ischemic injury due to embolic material, such as acute cholecystitis, duodenal ulcerated complications and acute pancreatitis are rare. We report a case of post-TACE severe pancreatitis with abscess formation in a old woman with hepatocellular carcinoma BCLC stage B. A 72-year-old woman who performed TACE two weeks ago was admitted in emergency department with severe abdominal pain, nausea and vomiting. The ultrasonography describes multiple collections surrounding the head of the pancreas and a CT scan diagnosed a severe pancreatitis with multiple pancreatic pseudocysts. The pancreatic process progressed despite general management of the pancreatitis, including pain control, antibiotics, octreotide acetate, continuous intravenous macromolecular perfusion and fasting. The patient's symptoms improved and serum amylase and lipase level decreased to 143IU/l, 33IU/l, respectively and oral diet was permitted. She left hospital but ten days later she comes back with the same symptoms and an important increase of serum amylase – 2389 UI/l and lipase 1189 IU/l. CT scan showed a 7 cm fluid collection Percutaneous catheter drainage was performed, and the symptoms of the patient improved. Finally, on the 21-th hospital day, the patient was discharged. She is still alive, but the further active treatment of HCC could not be possible because of deterioration of liver function.

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