## Proceedings of the 40<sup>th</sup> National Gastroenterology Week and 11<sup>th</sup> Congress of Gastrointestinal Surgery

**Oral Presentations** 

## **Z-POEM in İzmir since 2018: A Single Center Experience**

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**Background/Aims:** Zenker diverticulum develops between the cricopharyngeus muscle and the inferior pharyngeal constrictor muscle. Zenker Divertuculum was named in 1877 by a German pathologist F. A. von Zenker. Zenker diverticulum rate varies in different parts of the world. It is more common in men and the elderly population. Surgical methods have been replaced by endoscopic methods in the treatment of Zenker's diverticulum. Z-POEM is a new endoscopic technique that has been performed in recent years and has been successful in terms of clinical and procedural efficiency. The aim of this study is to assess the efficacy and safety of Z-POEM in our clinic.

**Materials and Methods:** Thirty patients with Zenker's diverticulum who underwent Z-POEM were included in the study. We performed the paired samples T-test on patients whose Kothari-Haber score was recorded before and after Z-POEM treatment.

Results: One patient excluded from the evaluation. In this patient, Z-POEM process was started but continued to open-POEM process. One patient required repeated process due to recurrence clinical symptoms. In this patient, diverticulum size was 8 cm. Mean patient age  $\pm$  standard deviation (SD) was 70  $\pm$  13 years. Most of the patients were males (n = 23, 79.3%); 6 patients (20.7%) were females. The mean size of the diverticula was 4.4 cm (range 2-8 cm). Pre-operative Kothari-Haber Score values was used to assess clinical symptoms; values ranged from 4 to 12 (mean 8). Post-operative KHS values mean is 0.76 (ranged from 0-4). There is a statistically significant reduction in the Kothari-Haber Score after Z-POEM (P < .0001). Most of the patients (89.7%) values were <2 points. Clinical success was achieved in 28/29 (96.5%) of the patients with a median follow-up of 32 months (range 6- 48 months). There were no major complications during the procedures. The average procedure time for Zenker-POEM was 28.3 (ranged from 23-45) minutes. The value of clips were used to close the submucosal tunnel in all patients are mean 4.3 (ranged from 2-10), median 3. The post-procedure hospitalization mean value was 4 days (range 1-14 days). Two patients had a history of hospitalization for 11 and 14 days.

**Conclusion:** Z-POEM is a safe and effective modality for treatment of ZD in our clinic. It can reduce symptoms and improve quality of life.

GS2

### Early Enteral Nutrition Outcomes on the Day of the Procedure in Patients Undergoing Peroral Endoscopic Myotomy for Achalasia: Single Center Experience

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**Background/Aims:** The best timing to start enteral feeding after peroral endoscopic myotomy (POEM) is still unknown. Delayed enteral feeding also increases the length of hospital stay. This study aimed to assess the safety of early feeding in patients who met certain criteria following POEM.

**Materials and Methods:** Data from 74 individuals who underwent POEM at our center between January and December 2022 were collected. Early feeding was defined as the introduction of clear liquid foods at 4 h post-procedure. At 4 and 24 h, the pain was rated using the visual analog scale (VAS) in all patients. Patients without intraoperative complications (arterial bleeding requiring the use of hemostatic forceps and severe mucosal injury) and severe pain (VAS score <7) and nausea-vomiting at the 4<sup>th</sup> postoperative hour were given the early feeding approach. In patients who did not meet these requirements, enteral feeding was initiated after 24 h.

**Results:** Fifty-one of 74 patients (68.9%) started early enteral feeding, whereas 23 (31.1%) started late enteral feeding. Early enteral feeding had significantly lower VAS ratings at 4 h (P = .001) and at 24 h (P = .001). One patient (2%) in the early enteral feeding group and 15 (65.2%) in the late group had nausea and vomiting (P = .001). No patients in the early enteral feeding group and six (26.1%) patients in the late enteral feeding group required second-look endoscopy (P = .001). The median hospital stay in the late enteral feeding group was statistically significantly higher than the early feeding group.

**Conclusion:** According to the algorithm we developed for early enteral nutrition, early enteral nutrition can be begun in patients who do not have intraoperative complications, severe pain, or nausea/vomiting. In addition, the same algorithm can be useful in predicting the need for second look endoscopy.

GS3

#### Current Endoscopic Retrograde Cholangiography Trends in Turkey-National Survey Study

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**Background/Aims:** Current endoscopic retrograde cholangiopancreatography (ERCP) is considered one of the most technically challenging endoscopic procedures. The room allocated for ERCP and the level of expertise are important factors that can influence the results. As technical variations should be associated with differences in quality and safety, it is important to consider these parameters in practice. In this study, we aimed to evaluate the current trend of ERCP in Turkey by conducting a national survey on basic techniques and related characteristics about ERCP.

**Materials and Methods:** A 35-question survey including demographic and ERCP procedure characteristics was prepared through the "Google Forms" system. The results of the questionnaire, which could be answered online only by Gastroenterology specialists between April and July 2023, were analyzed.

**Results:** A total of 188 physicians participated in the survey, 162 (86.2%) of whom were male, most commonly between 30-50 years of age (72.3%) and with 5-15 years of experience in Gastroenterology

(45.9%). At least one physician from 21 regions participated in the survey, mainly from Istanbul (20.2%). Of the respondents, 172 (91.5%) were performing ERCP. 54.7% stated that they routinely used rectal NSAID for Post-ERCP pancreatitis (PEP) prophylaxis in every patient. Again for PEP prophylaxis, 66.3% of the participants stated that they inserted pancreatic stents in patients with more than one wire to the pancreas, and heterogeneous responses were obtained regarding aggressive intravenous fluid administration. Sphincterotome+Guidewire (87.2%) was the most common method used for biliary cannulation, while Double Guidewire Technique and Pre-cut sphincterotomy were the two most common methods used in standard cannulation failure. For patients who could not be cannulated, appointment with PTK was the most preferred method (66.3%).

**Conclusion:** According to the survey results, ERCP can be performed by gastroenterologists in almost every region of Turkey and it is thought that information on PEP prophylaxis should be updated.

GS4

#### Transpapillary Gallbladder Drainage Reduces the Frequency of Biliopancreatic Events in the Waiting Period for Surgery, Even in Patients Without Comorbid Diseases

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**Background/Aims:** In patients with acute cholecystitis and choledocholithiasis, the decision to perform interval cholecystectomy (waiting period 6 weeks-3 months) after endoscopic retrograde cholangiopancreatography (ERCP) is associated with a recurrence rate of biliopancreatic events ranging from 17% to 41.8%. The accepted indication for transpapillary gallbladder drainage (TPGD) in this patient group is comorbidities that prevent surgery. This study aimed to compare biliopancreatic events occurring during the waiting period for cholecystectomy in patients who underwent TPGD beyond its classical indication and those who underwent ERCP without subsequent TPGD under the same indication.

Materials and Methods: Between January 2018 and January 2023, 37 patients with choledocholithiasis underwent ERCP, where stones were removed, and a 7 Fr 10 cm double-pigtail stent was placed in the bile ducts, leaving the gallbladder in situ. The control group was selected retrospectively from an equal number of patients with acute cholecystitis and choledocholithiasis who underwent ERCP during the period when TPGD was not performed in our hospital. Biliopancreatic events occurring during the waiting period in both groups were analyzed.

**Results:** In the TPGD group, the mean age was 54.54, with 56.7% females. In the non-TPGD group, the mean age was 63.18, with 50% females. Technical success rate for TPGD placement was 91.9%. The mean follow-up duration was 10 months in the TPGD group and 12 months in the control group. When comparing biliopancreatic events during the interval cholecystectomy period between the groups, biliary colic [1/37 (2.9%) vs. 18/34 (52.9%), P = .000], cholecystitis [0/37]

(0%) vs. 6/34 (17.6%), P = .009], choledocholithiasis  $[0/37\ (0\%)$  vs. 9/34 (26.4%), P = .001], cholangitis  $[0/37\ (0\%)$  vs. 3/34 (8.8%), P = .105], and pancreatitis  $[0/37\ (0\%)$  vs. 2/34 (5.8%), P = .226] were observed.

**Conclusion:** TPGD reduces the frequency of biliopancreatic events during the waiting period for surgery in patients with acute cholecystitis and choledocholithiasis without comorbidities, who are planned for interval cholecystectomy. It should be considered in these patients when ERCP is performed.

GS5

# Predicting Selective Biliary Cannulation Difficulty Using Ampulla Images with Artificial Intelligence: A Retrospective Study

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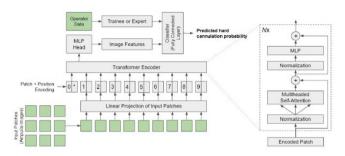
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**Background/Aims:** This study aimed to develop deep learning models to predict the likelihood of difficult cannulation before endoscopic retrograde cholangiopancreatography (ERCP) procedure from ampulla morphology and the operator's experience level.

Materials and Methods: A total of 1193 ampulla images were collected during ERCP procedures of 492 patients (228 male, 264 female) of mean age 60.57 ± 3.98 (95% CI) before any cannulation attempt. Trainees have operated 190 of all the cases while experts operated 302. Images with sub-optimal quality and ones that contain operational instrumentation in the frame were excluded to prevent biased results. The dataset was splitted into training and test subsets which contain 80% and 20% of the cases, respectively. Splitting was done on a patient basis to prevent biased results. A series of deep learning models implementing different variants of Vision Transformer (ViT) architecture were trained. Model architecture was modified to incorporate the auxiliary operator data. Models were given the image of the ampulla and whether a trainee or an expert carried out the procedure, and were tasked to predict if the cannulation would be "easy" or "hard" in a binary classification setting. Pretrained weights of each variant were utilized to improve classification performance. Accuracy, precision, recall, f1-score and ROC AUC were used to measure model performance.

**Results:** Experiments concluded that the ViT B/32 variant trained with 8x10<sup>-5</sup> learning rate performed best on the test set with 61.48% accuracy, 64.18% precision, 65.15% recall, 64.66% f1-score, and a ROC AUC score of 0.6115.

**Conclusion:** Experiments have shown that given the specified inputs, deep learning models can become capable of predicting cannulation difficulty. Complicated cases that the trainee is unable to manage can be referred to an experienced endoscopist or alternative options, thus increasing procedural efficiency and safety.



**Figure 1.** Simplified technical diagram of the deep learning architecture used in the study.

**Table 1.** Patient and Procedural Characteristics in Easy and Hard Cannulation Groups

Factors	Easy Cannulation (n = 159)	Hard Cannulation (n = 333)
Sex, n (%)		
Male	69 (43.3)	159 (47.7)
Female	90 (56.7)	174 (52.3)
Age (SD)	59.37 ± 17.32	61.15 ± 15.00
Cannulation Time, s (SD)	158.0 ± 65.5	307.0 ± 170.58
Operator, n (%)		
Trainee	44 (27.6)	146 (43.8)
Expert	115 (72.3)	187 (56.1)
ERCP Indication, n (%)		
Choledocholithiasis	90 (56.6)	218 (65.5)
Malignant Stenosis	33 (20.7)	75 (22.5)
Benign Stenosis	15 (9.5)	7 (2.1)
Billiary Leakage	6 (3.7)	13 (4.0)
Other	15 (9.5)	20 (6.0)

ERCP, endoscopic retrograde cholangiopancreatography; s, seconds; SD. standard deviation

GS6

#### Endoscopic Retrograde Cholangiopancreatography Experience in Children

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**Background/Aims:** Data regarding diagnostic and/or threupatic endoscopic retrograde cholangiopancreatography (ERCP) in pediatric population is limited. ERCP is very rarely necessary in this population and most of ERCP procedures are usually performed by adult endoscopists. We evaluated the efficacy and safety of ERCP in pediatric patients.

**Materials and Methods:** We retrospectively evaluated data of pediatric patients who underwent ERCP during the period of 2013 and 2023 from two adult gastroenterology centers (Harran University and Gaziantep University Gastroenterology).

**Results:** We included 75 patients (37%, male) with median age of 12.9 years (range = 3-17) at the time of ERCP procedure. ERCP was preformed in 69 patients (90.1%) due to biliary disorders while in 7 patients (9%), pancreatic diseases were the indication. ERCP was performed under sedation (propofol  $\pm$  midazolam  $\pm$  ketamine). The most common reason was choledocholithiasis (n = 32, 42.6%) followed by hydatic cyst complications (n = 20, 26.6%), and post-liver transplant complications (n = 6, 8%). Overall, the procedure was successful in 74 (98.6%) patients while in only one patient common bile duct could not be cannulated due to tumor invasion. Post ERCP pancreatitis developed in 6 (4.2%) patients and was mild in all. No major adverse event was observed.

**Conclusion:** Our data suggest that ERCP is a safe and effective method in the management of pancreatobiliary diseases in pediatric patients.

GS7

### Examining the Effect of Anti Reflux Surgery on Esophageal Mucosal Integrity with Molecular Changes in Intercellular Spaces

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**Background/Aims:** Patients report improvements in their quality of life after laparoscopic anti-reflux surgery (LARS). In another study by our team, LARS was shown to increase esophageal epithelial tissue resistance and reduce permeability. However, the effects LARS on the epithelial barrier function are not fully understood. For this reason, tight junction gene expression levels were determined and dilated intercellular space (DIS) was measured in patients before (pre-LARS) and after (post-LARS) anti-reflux surgery.

**Materials and Methods:** Twenty-two GERD patients with LARS (10 ERD-AB, 6 ERD-CD, 6 NERD) and 16 healthy volunteers (HV) were included. Upper gastrointestinal endoscopy was performed and

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esophageal biopsies were taken in HV and GERD patients before and after surgery (2-18 months later). E-cadherin, Occludin, Claudin1, Claudin4, Zonula occludens-1 (ZO-1), Zonula occludens-2 (ZO-2) gene expressions were determined by qRT-PCR in biopsies. For DIS measurements, 100 histological measurements were made for each patient.

**Results:** When Pre-LARS and Post-LARS were compared, ZO-1 expression significantly increased 1.8-fold in Post-LARS. Post-LARS biopsies were also divided into 6 months before (<6 months) and after (>6 months) surgery. While there was no difference in gene expression of patients in the <6 months group, a 1.5-fold increase in Occludin expression was observed in the post-LARS group of patients in the >6 months group. When the DIS characteristics of all patients were examined, the DIS values of HVs differed between Pre-LARS (1.31  $\pm$  0.5  $\mu$ m) and Post-LARS (1.26  $\pm$  0.00).

**Conclusion:** The increase in expression of the ZO-1 molecule in the post-LARS group may be associated with the fact that this molecule may have an important role in mucosal repair. The lack of change in DIS after surgery is in line with our previous study, suggesting that the sensitivity of this parameter may be low or that a longer recovery period may be required to repair the already expanded mucosa.

GS8

#### Effect of Stretta Treatment on Esophageal Epithelial Barrier Function in Gastroesophageal Reflux Patients

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**Background/Aims:** Stretta is an endoscopic procedure that is effective in improving GERD symptoms by applying radiofrequency energy to the lower esophageal sphincter. This study aims to examine changes in epithelial barrier function in GERD patients treated with Stretta.

Materials and Methods: This study investigated the impact of Stretta treatment on the esophageal epithelial barrier in six patients and 15 healthy volunteers. Gene expressions of tight junction molecules (E-cadherin, Zonula ocludens1, Zonula ocludens2, Claudin1, Claudin4, Occludin) were analyzed using qRT-PCR. The Ussing-Chamber system was used to determine the transepithelial resistance (TEER) of the esophageal epithelium. In DIS measurements, 100 histological measurements were made for each patient, for a total of 2100 measurements.

**Results:** Comparison gene expressions before (Pre-str) and after (Post-str) Stretta, Claudin4 expression was 6.91 fold higher in Post-str. When the Post-str group was compared with the HV

group, Claudin4 expression increased 6.02 fold. TEER values of HVs (165.8  $\Omega$ ) were significantly higher than Pre-str. When the permeability results were examined, it was determined that the Post-str (30.1 pmol) group had lower permeability than the Pre-str (67.3 pmol) group, and there was no difference between the SG and stretta groups. The group with the largest DIS was Post-str (0.974  $\pm$  0.212) group. However, no significant difference was between Pre-str (1.030  $\pm$  0.266) and Post-str. However there was a significant difference between HV (1.374  $\pm$  0.269) and Post-str.

**Conclusion:** Our findings indicate that Stretta strengthens epithelial barrier function as determined by the increase in Claudin4 expression and the corresponding decrease in fluorescence permeability. However, the lack of support of our DIS results in terms of gene expression and electrophysiological changes may be explained by the low sensitivity of DIS measurements or the lack of reversibility of expansions. In line with our results, research in larger series is needed to fully understand the effects of Stratta on the epithelial barrier.

GS9

#### Unveiling the Link: Helicobacter pylori Infection and its Impact on Ischemia Modified Albumin, Thiol, and Disulfide Levels

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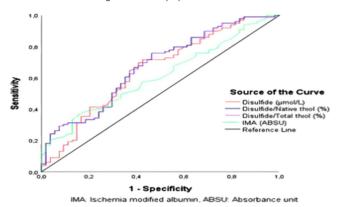
**Background/Aims:** This study aimed to investigate the association between Helicobacter pylori (H. pylori) infection and alterations in ischemia modified albumin (IMA), thiol, and disulfide levels, with a focus on their potential clinical implications.

**Materials and Methods:** We conducted a prospective observational cohort study, enrolling 153 patients who underwent upper gastrointestinal endoscopy between January and July 2023. Biopsies were obtained from the stomach antrum to diagnose H. pylori. Biochemical parameters, including IMA, thiol, and disulfide, were measured in fasting blood samples. Statistical analysis, including ROC curve analysis, was performed to assess the diagnostic potential of these biomarkers.

**Results:** In this prospective observational cohort study, a total of 153 patients were included, of which 99 tested positive for H. pylori, while 54 tested negative. The H. pylori-positive group exhibited significantly higher levels of disulfide, disulfide/native thiol ratio, disulfide/total thiol ratio, and ischemia modified albumin (IMA) compared to the H. pylori-negative group (P < .05 for all parameters). In contrast, the native thiol/total thiol ratio was significantly lower in the H. pylori-positive group (P < .05). ROC curve analysis indicated that disulfide, disulfide/native thiol ratio, disulfide/total thiol ratio, and IMA had the potential to predict H.

pylori positivity, with varying sensitivities and specificities. These findings suggest that these biomarkers could serve as non-invasive diagnostic tools for H. pylori infection, warranting further validation in larger cohorts.

**Conclusion:** This study contributes to the understanding of H. pylori's systemic effects on biochemical markers, offering insights into their diagnostic utility. Elevated levels of disulfide, disulfide/native thiol, disulfide/total thiol, and IMA in H. pylori-positive individuals suggest their potential as non-invasive diagnostic markers. Further research is warranted to explore the underlying mechanisms and validate these findings in diverse populations.



**Figure 1.** Receiver operating characteristic (ROC) curves of disulfide, disulfide/native thiol, disulfide/total thiol, and ischemia modified albumin for predicting Helicobacter pylori positivity.

**GS10** 

#### The Relationship between Trimethylamine N-Oxide and Butyrate, Products of Intestinal Microbiota, with Pancreatic and Hepatic Steatosis

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**Background/Aims:** It is suggested that dysbiosis, which is called the disruption of microbiota balance, is effective in the formation of non-alcoholic steatohepatitis and metabolic syndrome, especially obesity and diabetes mellitus (DM). It was aimed to reveal the relationship between the level of Trimethylamine N-oxide (TMAO) and butyrate, which are intestinal microbiota products that play a role in various metabolic processes, immune response formation and inflammatory events, and steatosis.

**Materials and Methods:** A total of 136 randomly selected individuals with DM, prediabetes, obesity and healthy individuals, at least 30 each, were included in the study. Demographic characteristics, anthropometric measurements and biochemical parameters were evaluated. Pancreatic and hepatic steatosis were evaluated by abdominal ultrasonography. TMAO and butyrate levels were measured from 5cc blood samples taken after at least 8 hours of fasting. Chi-Square Test, Mann-Whitney U test and Kruskal Wallis Analysis of Variance were used.

**Results:** Fifty-two of the individuals were male and 84 were female; the average age was  $44.5 \pm 14.6$ . While pancreatic steatosis (PS) was detected in 70.6% of the individuals, the detection rate of hepatosteatosis was 64%. TMAO levels were found to be higher in patients without PS than in those with PS, although not significantly. A significant difference was detected in terms of butyrate level, and butyrate level was found to be higher in those without PS (P = .007). On the other hand, both TMAO and butyrate levels were significantly higher in those without hepatic steatosis than in those with it.

**Conclusion:** Butyrate from SCFA (short-chain fatty acids), which is suggested to be associated with hepatosteatosis as well as many metabolic conditions, was significantly lower in pancreatic steatosis and hepatosteatosis in our study. SCFA may be protective in pancreatic steatosis and hepatosteatosis, and low SCFA in patients with steatosis suggests that dysbiosis may also play a role.

GS11

### The Role of Artificial Intelligence and Deep Learning in Determining the Histopathological Grade of Pancreatic Neuroendocrine Tumors by using EUS Images

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**Background/Aims:** Pancreatic neuroendocrin tumors (pNETs) are relatively rare and approximately 2% of the all pancreatic tumors. Currently, World Health Organization (WHO) 2017 classification is using for the histopathological grading of the pNETs. In our study, we aim to determine the grade of pNETs according to the WHO 2017 classification by using AI-via deep learning algorithms, and to identify which endoscopic ultrasound (EUS) image features could be predictive in this regard.

Materials and Methods: Patients were enrolled to the study between 2012-2021 who evaluated with EUS for pancreatic mass lesions. A total of 803 EUS images were collected from a single center. The Synthetic Minority Over Sampling Technique (SMOTE) was applied for data augmentation. Convolutional Neural Networks (CNN) were utilized to train the machine to predict the grades from EUS images.

**Results:** Among these 44 patients, 31 (65%) were female, with a median age of 61 years. pNETs were most frequently located in the

pancreatic head in 25 cases (53%). The performance of AI for predicting the pathological grade of pNETs using EUS images resulted in an overall sensitivity of 94.29%, specificity of 97.14%, positive predictive value of 94.29%, negative predictive value of 97.14%, and an accuracy of 96.19%. When the patient groups were sub-analysed as G1, G2, and G3 by the AI model to predict the pathological grade, the results were as follows: for G1 sensitivity 89.47%, specificity 96.7%, for G2 sensitivity 93.42%, specificity 95.71%, and for G3 sensitivity 100%, specificity 99.01%.

**Conclusion:** In our study, AI via deep learning algorithms were able to determine the grade of pNETs with an accuracy of 96.1% using EUS images. In sub analyses, we achieved an accuracy of over 90% for all three different grades. In this context, by enhancing the machine learning model with EUS images, further studies can be designed to determine the grade of pNETs, and alternative non-invasive histological classifications may find their place in the literature.

GS12

#### Natural History of Asymptomatic Walled-Off Necrosis Due to Acute Pancreatitis

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**Background/Aims:** Walled- off Necrosis (WON) may develop after acute pancreatitis (AP). Symptomatic WON is an indication for intervention involving various approaches. However, the management of patients with asymptomatic WON is controversial due to the limited information available on its natural history. In this study, we aimed to determine the long-term natural history of WON in patients who remained asymptomatic.

**Materials and Methods:** Patients with AP who were followed up in the Gastroenterology Clinic of Sakarya University Training and Research Hospital between 2016-2019 were evaluated retrospectively. Among these patients, who developed WON after an episode of AP and did not undergo any therapeutic intervention after the initial diagnosis due to their asymptomatic course were included in the study.

**Results:** WON developed in 46 of 1173 AP patients followed up during the study period. Eleven patients had an indication for drainage due to the presence of symptoms at initial presentation. The remaining 31 asymptomatic patients constituted the study group. These patients were followed up for a mean duration of 25.6 ± 17.3 months. During follow-up, 10 (32.3%) patients required interventional treatment. Twenty-one patients (67.7%) remained asymptomatic and did not require any interventional treatment for WON during a

mean follow-up of 35.6±10.2 months. In 12 patients (38.7%) the WON disappeared, and in 7 patients (22.5%) the mean size of the largest WON decreased from 64.7 ± 34.2 mm to 29.8 ± 27.4 mm. The initial WON size and the amount of necrosis were significantly higher in those who required interventional treatment. The AUC for the amount of necrosis and initial WON size were 0.844 and 0.733, respectively.

**Conclusion:** Asymptomatic WON patients without an initial indication for drainage can be safely followed under close surveillance. Initial characteristics of WON (e.g. amount of necrosis involved, size, etc.) may help to determine the need for drainage during follow-up of asymptomatic patients.

GS13

### Triglyceride Glucose Index: Can It Predict Pancreatic Steatosis?

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**Background/Aims:** Triglyceride glucose (TyG) index is a new biomarker for metabolic disorders. The relationship between diabetes mellitus (DM), obesity, non-alcoholic fatty liver disease and TyG index has been determined in recent studies, but there is no study

on pancreatic steatosis, which is a relatively new entity. This study aimed to determine the relationship between TyG index and pancreatic steatosis.

**Materials and Methods:** This study was conducted based on the data of patients included in the 'Turkey Pancreatic Steatosis Prevalence Study' conducted by the TGD Pancreas Study Group. Demographic data and clinical information of the patients were collected. TyG index was calculated with the formula 'in [fasting triglycerides (mg/dL) × fasting plasma glucose (mg/dL)/2)'. Pancreatic steatosis was evaluated with abdominal ultrasonography (USG) by experts in this area.

**Results:** A total of 1700 patients were included in the study. There were 967 women (56.9%) and 733 men (43.1%). Mean ages, respectively;  $48.6 \pm 24$ , and  $47.25 \pm 15$  years. Body mass indexes (BMI) were  $27.3 \pm 5.6$  and  $27.05 \pm 4.04$ . Three hundred forty-seven (26.4%) of the participants were diagnosed with metabolic syndrome (MS), 230 (17.2%) were diagnosed with DM, and 319 (23.9%) were diagnosed with hypertension. Hepatosteatosis was detected in 943 (55.5%) and pancreatosteatosis was detected in 1132 (69.9%) in USG. Mean TyG index was  $4.69 \pm 0.32$ . A statistically significant, positive (r = 0.334, r = 0.383, r = 0.206, r = 0.299, respectively) correlation was detected between the TyG index and BMI, waist-hip circumference and HOMA-IR (P < .05). Mean TyG index; It was significantly higher in individuals with HT, DM, MS and pancreatic steatosis (P < .05).

**Conclusion:** TyG index is a relatively new biomarker that indicates the metabolic profile. This is the first study conducted between pancreatic steatosis, which awareness has just increased and TyG index. TyG index was found to be statistically significantly higher in individuals with pancreatic steatosis.

GS14

#### Effect of Biliopancreatic Tree Anatomy on Development of Gallstone Pancreatitis

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**Background/Aims:** Acute pancreatitis is a complex disorder with varying clinical pictures from mild disease to organ failure and death, and can be caused by a large number of etiological factors. A mechanism that is proposed to play role in acute pancreatitis development is reflux of pancreatic exocrine secretion back to pancreas and following tissue damage. The relationship between biliary and pancreatic ducts and factors affecting bile flow partake in this picture. In this study, the effect of biliopancreatic tree anatomy and angles between ducts in this anatomic structure on acute gallstone pancreatitis development was investigated.

Materials and Methods: The study was carried out in Antalya Training and Research Hospital. Acute gallstone pancreatitis patients who were evaluated by magnetic resonance cholangiopancreatography (MRCP) were designated as patient group. Patients who were evaluated by MRCP for indications other than acute pancreatitis and had a normal biliary and pancreatic duct anatomy were designated as control group. Overall, 232 patients were in the patient group and 75 patients were in the control group. The level at which cystic duct opened to common bile duct (as in proximal-mid-distal 1/3) and type of cystic duct course and opening (parallel, perpendicular, straight, tortuous) were evaluated. Additionally diameters of main pancreatic duct, common bile duct and angles between main pancreatic duct-common bile duct and cystic duct-common bile duct were calculated and compared.

**Results:** Statistical analysis revealed a significant difference between patient and control groups in the level of cystic duct opening to common bile duct (P < .001) and the type of cystic duct course and opening (P < .001). In addition to this, the angle between main pancreatic duct and common bile duct was found to be different between two groups (P = .002).

**Conclusion:** The findings of this study revealed that biliopancreatic tree anatomy and its variations can affect acute gallstone pancreatitis development.

**GS15** 

# How Useful Are the ESGE and ASGE Criterias for Estimating Common Bile Duct Stones in Acute Biliary Pancreatitis Patients?

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**Background/Aims:** There is currently no consensus on the indications and timing of endoscopic retrograde cholangiopancreatography (ERCP) in the treatment of acute biliary pancreatitis. The classification of patients based on their risk groups is a key aspect of the guidelines published by American and European associations for assessing the indications for ERCP in patients with gallbladder stones and identifying those who require further investigation.

This study aims to determine how well ASGE and ESGE guidelines predict choledocholithiasis among patients who have been hospitalized with a diagnosis of biliary pancreatitis.

**Materials and Methods:** The patient groups who underwent ERCP and those who did not were compared in terms of the criteria included in ESGE and ASGE among these patients.

**Results:** The data of 1538 patients were analyzed in the study. According to the ASGE and ESGE criteria, the specificity of indicating

the presence of choledocholithiasis was 96% and 97.5%, respectively, and the Positive Predictive Value (PPV) of ESGE was slightly higher than that of ASGE (83.9% and 79.5%, respectively). Adding the criteria of T.Bilirubin >4 mg/dL and choledochal dilatation in ultrasonography (USG) to the ASGE criteria increased the specificity to >99%, and was identified as the criterion with the highest positive Likelihood ratio (LR+) (22.26). The specificity of the moderate probability of presence according to the ASGE and ESGE criteria was around 40%. However, the presence of abnormal liver function tests (LFT) and choledochal dilatation in USG criteria together in the moderate probability criteria doubled the specificity in both ASGE and ESGE (98.6% and 95.4%, respectively).

**Conclusion:** In conclusion, it was determined that the use of high probability ASGE and ESGE criteria is helpful for selecting appropriate patients for elective ERCP in patients with biliary pancreatitis.

GS16

#### Fully Covered Metal Stent Usage in the Treatment of Pancreatic Duct Stenosis in Chronic Pancreatitis

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**Backgroun/Aims:** 10F plastic stent (ps) is often used for benign pancreatic duct stricture (BPDS) in chronic pancreatitis (CP). In refractory cases, the efficacy of multiple ps and fully covered metal stents (FC-SEMS) is under investigation. This study aims to share our experience with FC-SEMS in these patients.

Materials and Methods: Data of 21 patients [9 (42.9%) women, median age 32, 4 (19%), 17 (81%) refractory to ps, 4 (19%) primary, 4 (19%) accompanying biliary stricture (BS)] who underwent ERCP and placed FC-SEMS due to painful CP and stricture in the head of the pancreatic duct (pd) between 2017-2023, were evaluated. Along side assessing technical and clinical success, side effects and long-term effectiveness were investigated.

**Results:** Stents (mostly 8 mm) were placed through major papillae in 15 (71.4%) cases, minor papillae in 6 (28.6%) with 100% technical success. BS was treated with FC-SEMS in 2 patients concurrently, in 2 sequentially. Pancreatitis developed in 1 (4.7%) patient postprocedure. Apart from this case, stent removal before planned time wasn't necessary in any patient. The metal stent was successfully removed in a median of 89 days. FC-SEMS migration occurred in 3 (14.3%) patients (1 into duct, 2 into duodenum). Stricture resolution was achieved in 20 (95.2%) patients, with no resolution observed only in 1 (4.8%). Sixteen (76.2%) patients had pd Stones removed, and 2 (9.5%) had broken stent fragments removed. De novo stricture developed in four (19%) patients, which wasn't critical and didn't lead to clinical symptoms. Pain relief was achieved in all patients. The median stent-free follow-up period was 24 months. Four (19%) patients developed recurrence after a median of 12 months. Patients who developed recurrence were treated with a metal/ps again.

**Conclusion:** The placement of FC-SEMS in CP with BPDS is safe and effective in all age groups, both in refractory and primary treatment. The response seems to be long-lasting.

**GS17** 

#### Correlation of Serology, Endoscopy, and Histopathology in Celiac Disease

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**Background/Aims:** The diagnosis of celiac disease is made by intestinal biopsy. Although studies show that diagnosis can be made without biopsy according to the titers of celiac antibodies in serological tests used as screening tests, biopsy is still considered the gold standard method in diagnosis, görmektedir. In this study, we retrospectively screened patients who applied to our hospital between 2014-2022 and had at least one celiac antibody with intestinal biopsy. With this study, we evaluated the correlation of serology, endoscopy, and pathology in the diagnosis of celiac disease. By looking at the antibody titers, we investigated whether celiac disease can be diagnosed without biopsy if the titers are in specific multiple ratios without biopsy.

**Materials and Methods:** The total of 205 patients were included in our study, and 205 were evaluated as newly diagnosed celiac disease. Endoscopy, pathology, and laboratory data of the patients were retrospectively reviewed. Titers of celiac antibodies, if any, were recorded.

Results: It was determined that 73.7% of the patients were female, and the mean age was  $39.0 \pm 15.0$ . Of all the patients 41% were diagnosed with celiac disease as a result of pathology, 63% of the patients with newly diagnosed celiac disease were female and were mostly located in the 4<sup>th</sup> and 3<sup>rd</sup> decades, respectively. Sensitivity: 66.7%, specificity: 95.4% for tissue transglutaminase (Ttg)-IGA. For tissue transglutaminase-IGG, sensitivity: 53.2%, specificity: 95.7%. Sensitivity: 74.7%, specificity: 86.7% for DGP-IGA. Sensitivity: 76.7%, specificity: 77.1% for DGP-IGG. A statistically significant difference was found between the patients' anti-DGP-IGA, anti-DGP-IGG levels and pathology results. Accordingly, the antibody levels of patients with celiac-compatible pathology results are significantly higher. Anti-DGP-IGA levels were 2.26 times higher, and anti-DGP-IGG levels were 1.63 times higher. In the results of the ROC analysis, the optimum predictive level for anti-DGP-IGA: 34 is taken as sensitivity: 76.8%, specificity: 61.5%. When the optimum predictive level for anti-DGP-IGG is 60, sensitivity is 60.7%, and specificity is 63.6%. In the Roc analysis, when the sensitivity was taken as 100%, and a titer level was tried to be reached, a prediction level in which the sensitivity was 100% could not be determined because the specificity fell below 50%, which was not considered statistically significant. There was no statistically significant difference between the D-Transglutaminase-IGA and D-Transglutaminase-IGG levels of the patients and the pathology results. There was no statistically significant difference between the levels of celiac antibodies and MARSH scores.

**Conclusion:** The sensitivity and specificity rates of celiac antibodies were found to be different from the literature. This difference may be due to the HLA-type differentiation in Turkey.

#### **GS18**

## Esophageal Foreign Bodies in Children: A Pediatric Gastroenterology Clinic Experience

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**Background/Aims:** Foreign body aspirations in children continue to be an important health problem overall the world. However, foreign bodies located in the esophagus must be removed endoscopically because there is a risk of serious complications. This study aimed to examine the clinical characteristics and treatment results of cases with esophageal foreign body aspiration in a tertiary care center.

**Materials and Methods:** The study included 207 pediatric patients who were treated for foreign body in the esophagus in Fırat University Hospital, Pediatric Gastroenterology Clinic between 2010 and 2022. Hospital records of 207 cases, 113 of whom (54.6%) were male, with a mean age of 3.8 years (0.5-15), were retrospectively examined.

**Results:** 110 (53.1%) of the cases applied from Elazia, and the rest from the neighboring provinces and districts of Elazığ. It was observed that esophageal aspiration was most common (n = 66, 3.9%) in the summer months. Accompanying comorbid conditions mainly included attention deficit and hyperactivity disorder (n = 5), cerebral palsy (n = 3) and Down syndrome (n = 1). Eight of cases (3.85%) were operated on due to esophageal atresia in the neonatal period. Foreign bodies in the esophagus were removed within the first 6 hours in 68 cases (33%) and within the first 6-12 hours in 90 cases (43%). The foreign body in the esophagus was detected in the 1st stenosis (n = 150, 72.5%), 2<sup>nd</sup> stenosis (n = 36, 17.4%) and 3<sup>rd</sup> stenosis (n = 21, 10.1%), respectively. The most common foreign bodies stuck in the esophagus were coins (n = 135, 65.2%), food (n = 16,7.7%), lithium batteries (n = 9, 4.3%) and chicken bones (n = 5, 2.4%) was observed. No complications were observed in any of the cases during and after the endoscopy procedures.

**Conclusion:** Pediatric cases with esophageal foreign bodies can be treated successfully and without serious complications with the endoscopic approach.



Figure 1. Coin in the 1st esophageal stenosis.



Figure 2. Key in medial esophagus.

#### Factors Determining the Prognosis of Chronic Intestinal Pseudoobstruction: A Single Center Case Series

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**Background/Aims:** CIPO is a rare diseases characterized by ileus whose etiology and pathogenesis are not clearly revealed, and management is complex. The aim of study is to determine the factors that predict mortality in patients followed with a diagnosis of CIPO.

**Materials and Methods:** The data of 12 patients we followed with a diagnosis of CIPO were retrospectively scanned. The demographic information, laboratory findings, clinical course were evaluated. CIPO was diagnosed by pathology in 3 patients.

Results: A total of 12 patients diagnosed with CIPO, 6 males and 6 females were included in the study. The mean age was 31.5 ± 8.7 years. Follow-up period was 66.6 ± 42.8 months. When the patients were evaluated for etiology, SLE was detected in 1 patient as secondary CIPO. The patients had complaints of diarrhea in 75%, abdominal pain in 63%, nausea and vomiting in 90%, weight loss in 55%, and bloating in 63%. Esophageal dysmotility was detected in 72% of the patients and gastroparesis in 45%. The most common esophageal motility disorders were ineffective motility disorder and aperistalsis. When the pathology of the bowel resection materials of 5 patients was evaluated: visceral myopathy, insufficiency of smooth muscle cells in the tunica muscularis in 2 patients, findings of dysganglionosis in the neural system in the intestinal wall in 1 patient, endometriosis and submucosal fibrosis in the mesocolica in 1 patient, luminal dilatation, vascular congestion findings were observed in 1 patient. Nine patients received prokinetic, 4 patients received steroid, 3 patients received azathioprine treatment, and 1 patient received colonic decompression. Mortality was found to be higher in patients with earlier age at diagnosis (P < .05). During the follow-up of the patients, all patients required parenteral nutrition support and PEG was inserted into 2 patients and an ileostomy was performed in one patient. During the 5-year follow-up period, 6 of the patients (50%) died.



**Figure 1.** Etiological, symptomatological and mortality-related distributions of CIPO patients.

**GS20** 

#### Double Balloon Enteroscopy in Various Age Groups: Indications, Findings, Diagnosis, and Treatment

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**Background/Aims:** The use of double balloon enteroscopy since the early 2000s has provided new alternatives for the diagnosis and treatment of small intestinal diseases, becoming an effective and reliable method utilized in various clinical settings. This study investigates differences in indications, complications, diagnostic findings, and treatment of small intestinal diseases in patients undergoing double balloon enteroscopy based on age groups: 18-45 years (young), 45-64 years (middle-aged), and 65 years and older (elderly).

**Materials and Methods:** Data from 817 patients who underwent double balloon enteroscopy over a 17-year period (2006-2023) were analyzed. Demographics, indications, findings, diagnoses, and complications were recorded.

**Results:** Among 1101 procedures in 817 patients, young (36.2%), middle-aged (32.8%), and elderly (31%) patients were similarly represented. Bleeding was common in the elderly, while diarrhea, abdominal pain, IBD, and polyposis syndromes were prevalent in young patients. Inflammatory lesions and polyps were frequent in young patients, whereas vascular lesions and tumors were common in the elderly. Young patients often underwent diagnostic endoscopic procedures, while the elderly received interventions for vascular lesions. Benign or malignant neoplasms were more common in the elderly, while celiac disease and polyposis syndrome were frequent in young patients. Non-specific enteritis, Crohn's disease, and lymphoma diagnoses were consistent across age groups. Complication rates did not significantly differ.

**Conclusion:** This study revealed differences in double balloon enteroscopy applications between young and elderly patients, while middle-aged patients exhibited similarities with both groups in certain cases. These differences aid in age-specific differential diagnosis and treatment selection, providing valuable epidemiological data for future research.

### Factors Affecting Minor Papilla Cannulation Success in Pancreatic Divisum Patients

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**Background/Aims:** In patients with Pancreatic Divisum (PD), endoscopic treatment through the minor papilla may be the only option for various indications such as Chronic Pancreatitis (CP), Recurrent Acute Pancreatitis (RAP). The most important step in the endoscopic treatment of these diseases is cannulization of the Santorini duct. In this study, we aimed to determine the factors affecting the success of cannulation of the minor papilla.

Materials and Methods: Patients with PD who underwent ERCP procedure in two tertiary centers between 2014 and 2023 were retrospectively analyzed. Cannulation success, need for needle-knife use and factors affecting cannulation success were tried to be revealed.

**Results:** The study group consisted of 50 patients, 41 adults [mean age 44.2 ± 17.4 years, 21 (51.2%) female] and 9 pediatric patients [mean age 11.7  $\pm$  4.6 years, 6 (66.7%) female]. There was no statistical significance between the adult and pediatric groups in terms of minor papilla characteristics (P = .2, P = .41, P = .08, respectively). The total cannulation success rate was 88% (44 patients), 90.2% in the adult group and 77.8% in the pediatric group (P = .29). The number of patients cannulated without needle-knife incision was 35 (70%) and 33 (94.3%) of them were cannulated with guidewire and 2 (5.7%) with rendezvous method. Needle knife incision was used in 15 (30%) of the patients, the minor papilla could be cannulated in the first session in 9 patients (60%) and 2 patients after 4 weeks in the second session. Cannulation success was statistically significantly higher in patients with recognisable papillary orifice (96.4% vs. 68.8%, P < .05). In univariate analysis, the presence of a recognisable papillary orifice was found to be an independent predictor for successful cannulation (P < .05; OR: 12.27).

**Conclusion:** Papillary pattern is one of the most important parameters for successful minor papilla cannulation in patients with pancreatic divisium.

GS22

### Factors Affecting Recurrence After Full Covered Metal Stent (FC-SEMS) in Benign Biliary Strictures

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**Background/Aims:** Although full-covered metal stent (FC-SEMS) implantation in the endoscopic treatment of patients with benign biliary stricture (BBD) has shortened the endoscopic treatment time compared to multiple plastic stents (MPS) application, the problem of migration and recurrence has not yet been solved. The aim of this study was to determine the factors affecting recurrence in patients with BBD and to propose an endoscopic treatment model to prevent it.

**Materials and Methods:** Prospectively collected data of patients with BBD who underwent FC-SEMS in two different tertiary centers over a 10-year period were retrospectively evaluated and factors affecting recurrence were investigated.

**Results:** In our study, a total of 136 procedures performed in 120 patients, 76 (63.3%) of whom were male, with a mean age of 56.2 ± 11.8/years were retrospectively evaluated. A total of 21 procedures were excluded from the study because their results were not reached. The mean follow-up period after metal stent removal in 115 procedures was 37.9 ± 29.5 (range 1-105) months. The median duration of metal stent removal was 3 (1-12) months. In 26 (22.6%) procedures, recurrence was detected. In 61 (53%) procedures, an additional plastic stent was implanted and in 29 (25%) procedures, multiple plastic stents (MPS) were implanted in one more session after metal stent removal. The recurrence rate was lower in procedures with a metal stent removal time of >3 months compared to those with ≤3 months (8% vs. 34.8%, P < .001). The recurrence rate was significantly lower in procedures with MPS (3.4% vs. 19.9%, P < .05). FCSEMS duration >3 months (OR = 5.12) and MPS application (OR = 9.32) were independent predictors of recurrence.

**Conclusion:** In patients with BBD, a treatment period of at least 3 months with FCSEMS and also as a new endoscopic approach, one session of MPS after FCSEMS, can be considered may be recommended to prevent recurrence.

**GS23** 

# Could High-Dose Proton Pump Inhibitor (PPI) + Antibiotic Dual Therapy be a Solution to the Chaos of Helicobacter Pylori Treatment?

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**Background/Aims:** Although nearly 40 years have passed since the discovery of Helicobacter Pylori (H. Pylori) an ideal treatment has still

not been found. To ensure eradication, first double and then triple treatments were applied. However, the expected results were not obtained from these treatments. In recent years, there are few studies reporting high eradication rates when dual therapy is given in high doses. The rationale for dual high-dose PPI and Amoxicillin treatment is that the resistance to amoxicillin is very low and the bactericidal effect against H. Pylori increases at high gastric PH. We aimed to prospectively evaluate the eradication success high-dose dual therapy.

Materials and Methods: Patients with H. Pylori detected by biopsy during Upper Gastrointestinal Endoscopy were included in the study. These patients were given Esomeprazole 120 mg/day (40 mg 3x1) + Amoxicillin 3 g/day (1g 3x1) orally for 14 days. A second upper GI endoscopy and histopathological examination was planned for all patients, at the earliest at the 24th week and at the latest at the 48th week after treatment.

**Results:** To date, 418 cases have been included in the study. Post-treatment evaluation of 168 cases (142 naive, 26 experienced treated) was performed. Eradication was achieved in 134 of 168 treated patients (79.7%). Eradication success was quite high in treatment-naïve (142/113) and treatment-experienced (26/21) cases.

**Conclusion:** The results of the high-dose dual therapy we recommend in the treatment of H. Pylori are encouraging. There was no difference in eradication between naive and treatment-experienced cases. Since the number of our cases with treatment experience is low, a definitive comment cannot be made on this issue yet. Dual high-dose therapy may reduce the chaos in H. pylori treatment due to ease of administration and patient compliance with treatment.

**GS24** 

### The Frequency of Helicobacter Pylori Infection and the Effect of Eradication Therapy on Symtom Improvement in Functional Dyspepsi Subgroups According to Rome IV Criteria: A Study from Turkey with a High Prevalence of Helicobacter Pylori

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**Background/Aims:** We investigated the helicobacter pylori (H. pylori) infection frequency and the effect of eradication therapy on symptom relief, in each functional dyspepsia (FD) subgroups, subdivided according to Rome IV criteria, in a high H. pylori prevalance country, Turkey.

**Materials and Methods:** The cases diagnosed with FD according to Rome IV criteria, who were subsequently found to have H. pylori gastritis through endoscopic biopsy, received eradication treatment. They were divided into Rome IV FD subgroups of postprandial

distress syndrome (PDS), epigastric pain synrome (EPS) and overlapping. 2-3 months after the treatment, the H. pylori eradication was assessed with fecal antigen test. Symptom responses were evaluated using a Likert scale. The findings were evaluated statistically using SPSS version 23.0.

**Results:** There were 127 H. pylori positive patients among 244 patients, who were identified as FD. The H. Pylori infection frequency was more common in individuals with symptoms consistent with EPS compared to consistent with PDS and with overlapping [73.1% in EPS, 41% in PDS and 43.9% in overlappping (P < .05)]. In all subgroups, there was a significant response and the response rates didn't change between the subgroups [42.2%, 63.2%, 73.7% in total cases; 45.1%, 67.4%, 70.5% in EPS; 38.5%, 51.4%, 71.4% in PDS; 42.3%, 72%, 82.6% in overlapping at  $2^{nd}$  month, at  $6^{th}$  month and at  $12^{th}$  month, respectively (P > .05)]. The response rate increased in all groups over time, with the highest response observed in the  $12^{th}$  month (P < .05). Eradicated patients showed significant symptomatic improvement with the frequency of 60.4% at  $6^{th}$  month and 70.2% at  $12^{th}$  month. None of the non-eradicated patients experienced symptomatic improvement (P < .05).

**Conclusion:** H. pylori is one of pathogenic factors of FD, especially of EPS. Overall, H. pylori eradication provides significant improvement of symptoms in all FD subgroups, especially in areas of high H. pylori prevalance.

**GS25** 

### Comparison of Anxiety and Depression Frequencies in Roma IV Functional Dyspepsia Subgroups: A Cross-Sectional Observational Study from Turkey

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**Background/Aims:** Studies are needed to determine whether FD Rome IV subgroups are associated with different pathophysiologies, thus with different treatment responses. This study is conducted to investigate the difference in psychopathological comorbidities between the FD subgroups defined by the Rome IV criteria.

Materials and Methods: This is a cross-sectional observational study conducted at a tertiary gastroenterology center in Turkey between December 2022-April 2023. Dyspeptic patients, aged over 18 years old referred for an upper endoscopy were recruited. Participants filled out the Rome IV gastroduodenal questionnaire and the Hospital Anxiety and Depression Scale questionaire. Statistical analyses were conducted using SPSS 23.0 programe.

**Results:** Of 424 dyspeptic participants, FD was identified in 117 (27.5%). The mean age of FD cases was  $39.9 \pm 13.7$  and 74 (63.2%) were women (P < .05). There were 66 (56.4%) PDS (postprandial distress syndrome), 21 (18%) EPS (epigastric pain synrome) and 30 (25.6%) overlapping cases. 66.7% of EPS, 73.3% of overlapping and 55.6% of PDS were women (P > .05). Depression was detected in

35% of all FD; in 37.9% of PDS, 30% of overlapping, and 33.3% of EPS; There was no difference between the groups (P > .05). Anxiety was detected more frequently in PDS than in EPS and overlapping (29.9% of FD; 39.4% of PDS, 23.3% of overlapping and 9.5% of EPS; P < .05). The frequency of anxiety was significantly higher in patients with postprandial fullness and early satiation symptoms according to those without symptoms (35.8% vs. 15.6%, P < .05; 44.7% vs. 23.9%, P < .05, respectively); while the prevalence of depression between those with and without symptoms, wasn't different (37% vs. 31.3%, P > .05 and 36.8% vs. 32.8%, P > .05, respectively).

**Conclusion:** PDS subgroup, postprandial fullness and early satiety symptoms were more associated with anxiety. Evaluating this patient group in this respect and providing the necessary support can accelerate the recovery process of the patient.

**GS26** 

#### Long-Term Prescribing of Proton Pump Inhibitors: An Assessment of General Practitioners' Knowledge

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**Background/Aims:** PPIs have recently become one of the most widely prescribed drugs in general practice. The side effects of long-term prescribing have long been overlooked. However, recent data are worrying, and indications for 'deprescribing' have recently been established. Our study aimed to assess the current state of long-term PPI prescribing by general practitioners.

**Materials and Methods:** This was a descriptive cross-sectional study based on anonymous declarations. General practitioners from both public and private sectors were invited to complete a questionnaire. The parameters studied were current indications and knowledge of possible side effects of long-term PPI prescriptions.

**Results:** Of the 315 respondents to the questions, 67% were women, and the mean age of the participants was 42 ±12.7 years. In terms of PPI prescribing, 68.3% of participants prescribed between 1 and 25 PPIs per week. The molecules most often prescribed were omeprazole (89%) and esomeprazole (51%), for a duration of 7 to 15 days in 51% of cases. Long-term prescription of PPIs was indicated for the following symptoms: Recurrent GERD (68.3%) and HP eradication (52.4%). PPIs were routinely prescribed in conjunction with NSAIDs, anticoagulants, and aspirin by 43% of participants. Over 30% of respondents thought that PPIs increased the risk of the following adverse effects: Acid rebound effect (64%), iron malabsorption (55.2%) and chronic kidney disease (41%). Responders were unaware of any link between PPIs and dementia (64.2%), CD infection (66.1%) and SBP (62%).

**Conclusion:** Although GPs regularly prescribe PPIs, their knowledge of the adverse effects of long-term treatment remains poor. As a result, and as part of the proper prescribing of PPIs, training on how to prescribe them, the risks involved and the indications for "de-prescribing" PPIs is highly desirable.

**GS27** 

#### The Evaluation of Omit as the Endoscopic Resected Gastric Subepithelial Lesions: A Single Center Experience

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**Background/Aims:** Gastric subepithelial lesions (SEL) are often asymptomatic and frequently detected incidentally. These lesions typically require surveillance. This study aims to evaluate the characteristics of these lesions.

**Materials and Methods:** The study included 72 patients, of whom 47 were female, who underwent endoscopic resection between 2018 and 2023. The average age of the patients was 58 ± 11. Each patient underwent preoperative endoscopic ultrasound (EUS) to assess the origin and vascularity of the lesion. Endoscopic submucosal excavation, and endoscopic submucosal enucleation techniques were used for endoscopic resection. Lesions meeting malignancy criteria, being exophytic, or exceeding 50 mm were excluded from the study.

**Results:** Four patients were referred for surgery due to bleeding during the procedure. Three patients experienced macroscopic perforation, which was managed by clipping. The characteristics of the patients are summarized in the tables. GIST, NET, and leiomyoma were the most commonly encountered gastric SELs. Other SELs included Inflammatory Fibroid Polyp (n = 11), lipoma (n = 7), ectopic pancreas (n = 7), arteriovenous malformation (n = 1), and gastritis cystica profunda (n = 1).

**Conclusion:** Surveillance of gastric SELs can be an option; however, issues related to uncertainty in follow-up duration and patient compliance may arise. Therefore, in many cases, consideration should be given to methods such as histopathological diagnosis or lesion removal. In our study, age (>57.5), size (>21.5 mm), and the location of the lesion in the corpus were found to be independent predictors for GIST diagnosis.

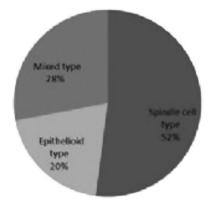
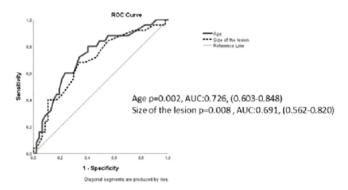


Figure 1. Histopathological type of the GIST.



**Figure 2.** ROC curve for age and size of the lesion for prediction of GIST.

Table 1. Demographic Data

		SETs <2 cm	SETs ≥2 cm	
	Total	(n = 37)	(n = 35)	Р
Age	58 ± 11	58 ± 10	57 ± 11	.506
Sex (F/M)	47/25	24/13	23/12	.94
BMI (kg/m <sup>2</sup> )	29 ± 4	29 ± 4	30 ± 4	.809
Size of the lesion (mm)	21 (7-60)	13 (7-19)	29 (20-60)	
Localization				
Antrum	32	17 (45.9%)	15 (42.9%)	.940
Corpus	27	12 (32.4%)	15 (42.9%)	
Cardia	13	8 (21.6%)	5 (14.3%)	
Histopathology				
GIST	25	6 (16.2%)	19 (54.3%)	.072
NET	2	1 (2.7%)	1 (2.9%)	
Leiomyoma	10	4 (10.8%)	6 (17.1%)	
Other SETs	27	18 (48.6%)	9 (25.7%)	
Non SETs	8	6 (16.2%)	2 (5.7%)	
Resection method				
Endoscopic submucosal excavation	28	13 (35.1%)	15 (42.9%)	.502
Endoscopic submucosal enucleation	44	24 (64.9%)	20 (57.1%)	
Complication				
Surgery for bleeding	3	1 (2.7%)	2 (5.7%)	1
Macroscopic perforation	4	0	4 (11.4%)	.051
Usage clips	36	18 (48.6%)	18 (51.4%)	1

Table 1. Demographic Data (Continued)

	Total	SETs <2 cm (n = 37)	SETs ≥2 cm (n = 35)	Р
Clips number	4 (1-20)	3 (1-8)	6 (2-20)	.003
Hospitalization rate	29	6 (16.2%)	23 (65.7%)	.001
Hospitalisation (day)	2 (1-11)	1 (1-4)	3 (1-11)	.111
Comorbities				
Diabetes Mellitus	15	7 (25.9%)	8 (27.6%)	.775
Hypertension	32	16 (59.3%)	16 (55.2%)	1
Malignancy	10	3 (11.1%)	7 (24.1%)	.183
Other disease	32	16 (59.3%)	16 (55.2%)	1

Table 2. Features of the GIST

Features of the GIST	GISTs <2 cm (n =6)	GISTs ≥2 cm (n = 19)	P
Histopathological type			
Spindle cell type	4 (66.7%)	9 (47.4%)	.771
Epithelioid type	1 (16.7%)	4 (21.1%)	
Mixed type	1 (16.7%)	6 (31.6%)	
Ki 67 (%)	2 (1-3)	5 (1-13)	.001
No risky	6 (100%)	3 (15.8%)	.0001

**Table 3.** Univariate and Multivariete Logistic Regression Analysis for Prediction of GIST

	_	Univariete Analysis		lultivariete Analysis
	P	OR (95% CI)	Р	OR (95% CI)
Age (>57.5)	.002	5.89 (1.89-18.43)	.027	4.95 (1.19-20.57)
Size of the lesion (>21.5 mm)	.007	4.12 (1.46-11.58)	.009	5.67 (1.55-20.68)
Localization of the lesion (Corpus)	<.001	7.86 (2.64-23.45)	.007	5.45 (1.60-18.58)
Diabetes Mellitus	.095	2.69 (0.84-8.60)	.577	1.50 (0.36-6.22)

(Continued)

#### Identification of Risk Factors for Alcohol Relapse in Liver Transplant Patients with Alcohol-Related Liver Disease

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**Background/Aims:** Alcohol-related liver disease (ALD) is one of the most common causes of liver transplantation (LT). This study aimed to determine risk factors for alcohol relapse after LT.

**Materials and Methods:** Patients with ALD who underwent LT from 10 different transplantation centres were assessed. Demographic and clinical features such as family support, alcohol consumption habits, whom the patient resided with, length of abstinence of alcohol before LT, marital status, age at transplantation, and smoking habits were evaluated and statistically analyzed.

**Results:** A total of 262 patients were examined in the study, and alcohol use relapse information was obtained for 185 patients. A total of 185 patients with ALD, consisting of all males (100%) with and mean age of 53.2 ± 9.5 years, were recruited for evaluation of the alcohol relapse. The mean follow-up time was 69.8 ± 58.0 months (range: 6 months-240 months). Thirty-four patients (18.5%) reported consumption of alcohol following; LT: all patients began drinking alcohol within the first 5 years of the posttransplant period (mean relapse time: 16.9 ± 14.2 months). While fifty patients (32.3%) did not adhere to the "6-month rule" of alcohol abstinence before

LT, it was found that their rate of alcohol relapse did not statistically increase after LT (P = .443). Approximately 38.3% (n = 49/128) of the patients reported strict adherence to alcohol abstinence during Ramadan time. Remarkably, marital status was related to higher rates of posttransplant alcohol abstinence success (P = 0.00).

**Conclusion:** In our study, being married, family support and were linked to a lower rate of relapsing back to drinking, and smoking and family alcohol use were associated with alcohol relapse after LT. There was no increase in the rate of relapsing back to drinking among patients who had transplants without following the 6-month rule. The results of this study indicated that multifactorial predictors strongly influenced post-transplantation alcohol consumption among patients.

**Table 1.** Risk Factors of Alcohol Relapse after LT Evaluated in Patients (n = 185)

	No relapse (n = 151)	Relapse (n = 34)	Р
Pre-LT abstinence <6	months		
No	84	21	.464
Yes	39	11	
Family support			
No or limited	14	13	< .01
Yes	101	20	
Family history of alcoh	nol use		
No	40	12	.049
Yes	55	18	
Age <50 years at Tx			
No	111	19	.060
Yes	40	15	
Smoker			
No	98	13	.001
Yes	21	19	
Marrital status			
Divorced/Single	18	14	.001
Married	110	17	
Donor			
Cadaveric	52	13	.480
Living Liver Donor	99	21	
<b>Alcohol Consumption</b>	during Ramadan		
No	57	22	.99
Yes	41	8	

#### Combined Endoscopic and Percutaneous Interventions in Living Donor Liver Recipients with Anastomotic Biliary Stricture

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**Background/Aims:** Biliary stricture is not uncommon in living donor liver recipients. Endoscopic and/or percutaneous interventions are frequently performed as these methods are less invasive compared to surgery. The aim of this study was to investigate efficacy and safety of combined endoscopic-percutaneous methods in anastomotic biliary stricture that cannot be managed with endoscopically, per se.

**Materials and Methods:** Between 15 November 2017-8 May 2023, 144 living donor liver recipients admitted due to biliary stricture. Eighty-eight patients (leak = 8, non-anastomotic stricture = 3, refuse treatment = 12, successful ERCP = 65) were excluded. Fifty-six patients (35 men) with average age of 58.96 (30-78) years, were included. All patients initially underwent percutaneous biliary drainage. Patients in whom percutaneous intervention was successful in traversing the stricture, were followed up with fully-covered metallic stent (FCMS) and/or plastic stents (PS). Magnetic compression anastomosis (MCA) was performed in case of failure. Patients with intrahepatic stones were discharged with percutaneous drains and further intervention was considered on follow-up.

Results: Major causes for transplantation were HBV (n = 17.30%), cryptogenic(n = 12, 21%) and alcoholic (n = 8.14%) cirrhosis. Biliary stricture occurred during average follow-up of 12.88 (1-60) months. Percutaneous intervention was successful in traversing the stricture in 26/56 patients (46%). Eleven and twelve patients were discharged with multiple PS and FCMS-PS, respectively. One patient with cholangitis died. Two patients with hepatolithiasis discharged with percutaneous catheters. In 30 patients (54%), percutaneous intervention was unsuccessful in traversing the stricture. MCA was performed in 26/30 patients and was successful in 24 patients (92%). Six of the 24 patients underwent re-percutaneous drainage due to restenosis that could not be managed endoscopically, despite successful MCA. No restenosis was evident in 36 patients during an average follow-up of 844 days. Nevertheless, restenosis was noticed in 13 patients during an average follow-up of 223.8 days. In 9/13 patients, re-percutaneous access was required.

**Conclusion:** Combined endoscopic and percutaneous interventions are safe and effective in the treatment of biliary stricture developed in living donor liver recipients.

GS30

#### Detailed Respiratory Assessment of Cirrhotic Patients: Six-Minute Walk Test Is an Independent Predictor of Mortality in Cirrhosis

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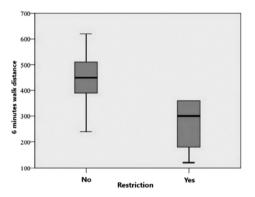
**Background/Aims:** The role of tests indicating cardiopulmonary dysfunction in predicting mortality in cirrhotic patients has not been clarified so far. In this study, we aimed to determine the type and frequency of respiratory symptoms in cirrhotic patients and to investigate the effectiveness of spirometric evaluation and six-minute walk test parameters in predicting mortality.

Materials and Methods: Between September 2022 and June 2023, 75 patients who were followed up in Hacettepe University Faculty of Medicine Gastroenterology clinic with a diagnosis of cirrhosis and over 18 years of age without moderate to severe cardiac and pulmonary disease were included. After the gastroenterologic evaluation of the patients, respiratory symptoms were questioned in the pulmonology department, spirometry and 6-minute walk test were performed in selected patients according to the respiratory examination. Walking test results were standardized according to gender, age, height and weight, and percentage values were calculated by proportioning the distances walked by the patients to the expected distances. Hospitalizations, decompensation and exitus status of the patients were recorded during the study period.

**Results:** Fifty-one patients (68%) reported dyspnea on exertion, 70 patients (93.3%) reported dyspnea on exertion at any time, and 22 patients (29.3%) had orthopnea. In the presence of decompensation, dyspnea (P < .001), exertional dyspnea (P = .001), orthopnea symptoms (P < .001) were more common and mMRC score was significantly higher (P < .001). In spirometric examination, FEV1 % (P = .003), FVC % (P < .001) were significantly lower and 6-minute walk distance was 14% shorter than expected in decompensated patients (P = .001). Patients with FVC <70% on spirometry were considered restrictive, and the 6-minute walking distance of patients with restrictive results was found to be 173 meters lower on average (P < .001). In addition, multivariate analysis of patients who could not complete the 6-minute walk test showed that failure to complete the 6-minute walk test was an independent predictor of mortality (P = .001).

**Conclusion:** In conclusion, most cirrhotic patients have respiratory symptoms and signs and failure to complete the 6-minute walk test is an independent predictor of mortality in cirrhosis. Six minute walk

test is an easily applicable and inexpensive test. More frequent use in cirrhotic patients' follow-up may be useful in determining prognosis of cirrhosis.



**Figure 1.** The presence of restriction in pulmonary function test and its relation with 6-minutes walk distance are shown in the figure.

**GS31** 

#### The Comparison of Metabolic, Renal and Biochemical Side Effects in Liver Transplant Recipients Switched from Tenofovir Disoproxil Fumarate to Tenofovir Alafenamide

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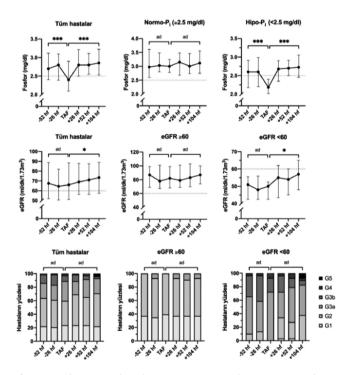
**Background/Aims:** TDF and TAF used for HBV prophylaxis in liver transplant recipients (LTRs) may have biochemical and metabolic side effects. In this study, we aimed to evaluate the renal, metabolic, and biochemical effects and the interaction with immunosuppressive drugs in LTRs who were switched to TAF because of the side effects that developed under TDF.

**Materials and Methods:** A retrospective analysis was performed on the records of LTRs who were switched to TAF while on TDF for HBV prophylaxis. Seventy-two adult LTRs who had been on TDF for at least 52 weeks and TAF for 104 consecutive weeks were included in the study.

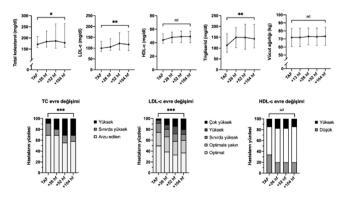
**Results:** Patient demographics and clinical characteristics are shown in Table 1. Phosphorus levels decreased under TDF in both the overall and hypophosphatemic groups and increased after switching to TAF. While no significant change in eGFR was observed under TDF, a significant increase was observed after switching to TAF in all patients and in the low eGFR group. There was no significant change in eGFR stages in all patients while receiving TDF and TAF. However,

a numerical improvement was seen with TAF, especially in the low eGFR group. Total cholesterol, LDL and triglyceride levels increased significantly after the switch to TAF, while HDL levels did not change. In the ATP-NCEP III risk assessment, a significant increase in risk was found for total cholesterol and LDL, while no change was found for HDL. There was no significant change in body weight. No increase in post-transplant diabetes was observed with TAF treatment. No need for immunosuppressive drug dose changes, loss of virologic response or TAF-related adverse events were observed.

**Conclusion:** TAF did not interact with immunosuppressive regimens, had more favorable renal outcomes than TDF, but should be used with caution in terms of lipid profile.



**Figure 1.** Change in phosphorus (Pi), eGFR and GFR stages (ad: not significant, \*P < .05, \*\*\*P ≤ .01, \*\*\*\*P ≤ .001).



**Figure 2.** Change in lipids, cardiovascular risk assessment by lipids and body weight (ad: not significant,  ${}^*P < .05$ ,  ${}^{****}P \le .01$ ,  ${}^{****}P \le .001$ ).

**Table 1.** Demographic and Clinical Characteristics of the Patients at the Onset of TAF

at the onset of TAI	
Age, years, mean ± SD	54.5 ± 11
>60 years, n (%)	21 (29.2)
Length of follow up, months, median (IQR)	42 (27-74)
Gender, male, n (%)	45 (37.5)
Cadaveric donor, n (%)	42 (58.3)
Transplant etiology, n (%)	
Chronic viral hepatitis	57 (79.2)
Acute viral hepatitis	3 (4.2)
Alcoholic hepatitis	3 (4.2)
Idiopathic	4 (5.6)
Other	5 (7)
Pre-transplant HCC, n (%)	18 (25)
Greft age, months, median (IQR)	149 (93-193)
Post-transplant malignite, n (%)	2 (2.8)
HBV-DNA ≥31.6 IU/mL, n (%)	3 (4.16)
HBsAg positive, n (%)	18 (25)
HBeAg positive, n (%)	1 (2.5)
ALT >upper range limit of normal, n (%)	11 (15.3)
Total bilirubin, mg/dL, median (IQR)	0.6 (0.35-1)
Platelet, x10³/mL, median (IQR)	157000 (128000-210000)
<90000, n (%)	7 (9.9)
Albumin, g/dL, median (IQR)	4.6 (4.4-4.8)
<3.5, n (%)	2 (2.8)
Pre-TAF anti-viral time, month, mean ± SD	174 ± 72
The reasons for medication change, n (%)	
Hypophosphatemia	45 (62.5)
eGFR <60 mL/min/1.73 m <sup>2</sup>	20 (27.8)
Osteoporosis	7 (9.7)
Proteinuria	5 (2.2)
Immunosuppressives in the time of TAF, n	(%)
CNI	52 (72.2)
MMF	41 (56.9)
	41 (00.0)
mTORi	24 (33.3)

ALT, alanine aminotransferase; CNI, calcineurin inhibitor; IQR, interquartile range; eGFR, estimated glomerular filtration rate; GK, glucocorticoid treatment; HCC, hepatocellular carcinoma; MMF, micofenolato mofetile; mTORi, mammalian target of rapamycin; n, number of patients; TAF, tenofovir alafenamid.

**GS32** 

#### The Effect of Tenofovir Disoproxil Fumarate Use on Bone Mineral Density in Liver Transplant Recipients

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**Background/Aims:** The impact of tenofovir disoproxil fumarate (TDF) on bone mineral density (BMD) is well-known, but there is a lack of sufficient data regarding its effects in liver transplant patients. We aimed to investigate the effect of TDF use on BMD in patients who underwent liver transplantation due to hepatitis B-related liver disease.

**Materials and Methods:** The results of bone densitometry [dualenergy X-ray absorptiometry (DEXA)] performed with a one-year interval were evaluated for 79 patients who underwent liver transplantation and initiated TDF between July 2009 and June 2019. Wilcoxon analysis was used to analyze research data.

Results: Seventy-nine patients who underwent liver transplantation due to hepatitis B infection were identified. The demographic characteristics of the patients are summarized in Table 1. Thirty patients who started TDF without baseline DEXA measurement were excluded from the identified 79 patients. Forty-nine patients who had baseline DEXA measurement before initiating the medication and had the first follow-up DEXA measurement within the first year after medication initiation were included into the study. Among the patients, 32 (65%) were male, and the mean age was 53. Patients were evaluated at the outpatient clinic every three months. Follow-up DEXA measurements were repeated in all 49 patients at the one year. The mean baseline FRAX major osteoporotic fracture risk and hip fracture risk were 3.98% and 0.48%, respectively. The mean baseline values (±SD) of bone mineral density for total hip and lumbar spine (L1-L4) were 0.93  $\pm$  0.15 g/cm<sup>2</sup> and 0.95  $\pm$  0.34 g/cm<sup>2</sup>, respectively. After one year, BMD values for total hip and L1-L4 were  $0.95 \pm 0.37$  g/cm<sup>2</sup> and  $0.97 \pm 0.18$  g/cm<sup>2</sup>, respectively. When comparing the two measurements, there were no significant differences in total hip (P = .54) and L1-L4 (P = .07) BMD measurements. The mean baseline T-score ( $\pm$ SD) for total hip and L1-L4 were -0.71  $\pm$  1.1 and  $-0.92 \pm 1.3$ , respectively. The T-scores for total hip and L1-L4 at the one year later were -0.86  $\pm$  1.1 and -1.04  $\pm$  1.3, respectively. The statistical analysis using Wilcoxon test for the one-year change in L1-L4 T-score revealed a significantly lower T-score measurement (P = .014).

**Conclusion:** Our study demonstrated a significant decrease in lumbar BMD after one year of TDF use in liver transplant recipients.

Table 1. Characteristics of the Patients

	Number of	
	patients (n)	Rate (%)
Sex (n = 79)		
Male	58	73,4%
Female	21	26,6%
Smoking		
Smokers	19	24%
Non-smoker	55	76%
Ex-smoker	5	
Donor (n = 79)		
Live donor	55	69%
Cadaveric donor	24	30%
HDV (n = 79)		
HDV co-infection	27	34%
HDV(-)	52	66%
Immunosuppressive agent (n = )	79)	
Tacrolimus	50	63%
Everolimus	21	27%
Tacrolimus+Everolimus	4	5%
Cyclosporine	4	5%
Mycophenolate mofetil (+)	20	25%
Mycophenolate mofetil (-)	59	75%
Comorbidities (n = 79)		
Hypertension	25	32%
Type 2 Diabetes Mellitus	19	24%
Coronary artery disease	3	4%
Hyperlipidemia	4	5%
DM and HT	4	5%
No additional comorbidities	24	30%

Table 2. DEXA Measurements

(mean ± SD)	Start at DEXA	DEXA after 12 month	Р
BMD total hip	0.93 ± 0.15 g/cm <sup>2</sup>	0.95 ± 0.37 g/cm <sup>2</sup>	.54
BMD L1-L4	$0.95 \pm 0.34  \text{g/cm}^2$	$0.97 \pm 0.18  \mathrm{g/cm^2}$	.07
T score total hip	-0.71 ± 1.1	-0.86 ± 1.1	.72
T score L1-L4	-0.92 ± 1.3	-1.04 ± 1.3	.014

## Fatty Liver and Pancreatic Steatosis in Patients with Chronic Hepatitis B and C and Wilson's Disease

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**Background/Aims:** The aim of this study is to determine the presence of fatty liver and pancreatic steatosis in individuals diagnosed with chronic hepatitis-B (CHB), chronic hepatitis-C (CHC) and Wilson's disease (WD) and to evaluate the relationship between the presence of fatty liver and pancreas and laboratory parameters.

**Materials and Methods:** The study was conducted retrospectively in the hepatology clinic of a university hospital. 48CHB, 56CHC and 35WD patients were included in the study. Pancreatic steatosis was measured by 3 methods: steatosis according to pancreas mean value, steatosis according to pancreas/spleen difference value and steatosis according to pancreas/spleen density ratio. Fatty liver and pancreatic steatosis were graded as Grade 1-2-3. Certain laboratory parameters of the patients were also retrospectively screened.

Results: 34.5% of the patients were diagnosed with CHB, 40.3% with CHC, and 25.2% with WD. In 69.1% of all patients, grade 1 fatty liver disease was present. Pancreatic steatosis was absent in 50.3% of patients according to mean pancreas value, 63.3% according to pancreas/spleen difference and 61.9% according to pancreas/ spleen density ratio. According to all three pancreatic steatosis measurement methods, the average age was significantly lower in the group without pancreatic steatosis (P < .05). Fatty liver disease was positively correlated with high ESR (r = 0.255, P = .002) and ALT (r = 0.255). 0.180, P = .034). ESR (P = .025) and urea level (P = .024) were found to be significantly higher in the group with steatosis according to the mean pancreas value. According to the group with steatosis according to pancreas/spleen density ratio, globulin level was significantly higher (P = .038). The rates of steatosis according to pancreas mean value (P = .003) and steatosis according to pancreas/spleen density ratio (P = .039) were significantly more advanced in CHC patients compared to the other patient groups. There was no statistically significant difference between the stage of fatty liver and the stage of fatty pancreas (P > .05).

**Conclusion:** Although fatty liver and pancreatic steatosis are considered to be similar pathologies, our findings support that these two diseases should not be confused. Further studies with larger samples may be more useful in terms of showing the correlation between the two conditions and the investigated parameters.

#### Evaluation of Upper Esophageal Sphincter Metrics with High-Resolution Manometry in Disorders of Esophagogastric Junction Outflow

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**Background/Aims:** Esophageal motility disorders are classified based on the integrated relaxation pressure (IRP) obtained through high-resolution manometry (HRM) studies as disorders of the esophagogastric junction (EGJ) outflow and disorders of peristalsis. Current studies have show that increase in upper esophageal sphincter (UES) basal pressures and impairment in UES relaxation in patients with achalasia. The aim of the present study is to demonstrate the changes in UES metrics in patients with high IRP values detected by esophageal HRM.

**Materials and Methods:** Data from 124 patients were retrospectively reviewed. Thirty-one patients with EGJ disorders were included in the study group, while 59 patients with normal HRM results were included in the control group. Thirty-four patients with disorders of peristalsis were excluded from the study.

**Results:** The mean age of the study group was  $50.4 \pm 16.4$  years (19 female), while the control group was  $41.3 \pm 13.5$  years (31 female). In the study group, 15 had EGJ-OO (48.3%) and 16 had achalasia (71.4: 3.2%, 72.4: 38.7%, 73.4: 9.6%) diagnosis. The mean IRP value in the study group was  $25.1 \pm 10.2$  mm Hg, whereas in the control group, it was  $6.8 \pm 4.4$  mm Hg (P < .05). Basal UES pressure was normal in both groups, and no difference was observed between the groups ( $94.7 \pm 69.3$  mm Hg vs.  $92.9 \pm 47.3$  mm Hg, P = .89). The basal UES pressure in patients with achalasia was  $108.2 \pm 85$  mm Hg. In subgroup analysis, patients diagnosed with  $72.4 \pm 94.8$  mm Hg vs.  $92.9 \pm 47.3$  mm Hg,  $92.9 \pm 47.3$ 

**Conclusion:** T2A is a condition characterized by an increase in UES pressures. In EGJ-OO characterized by high IRP, UES pressures are not significantly different from normal. This difference should be taken into consideration when evaluating the clinical presentation and treatment response in patients with T2A.

**GS35** 

#### Clinical Significance of Multiple Rapid Swallow Function in High Resolution Manometric Evaluation

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**Background/Aims:** In this study, we aimed to determine the contribution of multipl rapid swallow measurement to the evaluation of symptomatic patients with no major motility disorder and the demographic characteristics of these patients.

Materials and Methods: A total of 541 patients who underwent HRM between 2021 and 2023 in the Manometry Laboratory of the Gastroenterohepatology Department of Istanbul Medical Faculty were included in the study. 15 patients with no major motility disorder but with pathology detected in rapid multipl swallow measurements were included in the study.

Results: %60 of the patients were female and the mean age was  $51.87 \pm 11.76$  years. The mean BMI was  $26.79 \pm 3.96$  kg/m<sup>2</sup>.The symptom distribution was 83.3% dysphagia, 41.7% chest pain and 75% reflux. The rate of multiple symptoms was 53%. Mean symptom duration was 4.75 ± 3.91 years. Medications included PPi use in 9 patients (72.8%), Acei/ARB use in 3 patients (27.3%), SSRI use in 3 patients (27.3%). Gastroscopy revealed 40% hiatal hernia. In multiple rapid swallowing, aperistalsis was found in 10 cases (66.7%), distal esophageal spasm in 1 case (6.7%), fragmented peristalsis in 1 case (6.7%), hypercontractile esophagus in 1 case (6.7%), ineffective esophageal motility in 1 case (6.7%). Of the 6 patients with normal pressure measurements in supine and upright positions but pathologic measurements in multiple rapid swallow, 66% were female, mean age was 54.33 ± 12.3, median BMI was 27, 66.7% had dysphagia, 50% had reflux (pyrosis) and chest pain, and mean symptom duration was 7.4  $\pm$  4.39 years. Multiple rapid swallow measurements revealed distal esophageal spasm in 1 patient, ineffective motility disorder in 2, fragmented peristalsis in 1, hypercontractile esophagus in 1, and aperistalsis in 1.

**Conclusion:** Multiple rapid swallow test should be added to routine HRM measurement in the preoperative period, especially in patients who are planned for reflux surgery.

Table 1. Characteristics of the Patients

	n	Percentage
Gender		
Male	6	40%
Female	9	60%
Age		
30-50	7	46,2%
>50	8	53,8%
Complaint*		
Dysphagia	10	83,3%
Chest pain	5	41,7%
Reflux	9	75%
Comorbidity*		
Asthma/COPD	2	18,2%
Hypertension	3	27,3%
Cholelithiasis	4	36,4%
History of surgery*		
Sectio	2	28,6%
Tah+Bso	1	14,3%
Thyroid lobectomy	1	14,3%
Gastroscopy		
Antral Gastritis	3	30%
Hiatal Hernia	5	50%
Normal	2	20%
Supine		
Ineffective esophageal motility	9	60%
Normal	6	40%
Upright		
Ineffective esophageal motility	7	46,7%
Normal	8	53,3%
Multipl Rapid Swallow		
Aperistaltism	10	66,7%
Distal esophageal spasm	1	6,7%
Fragmented peristaltis	1	6,7%
Hypercontractile esophagus	1	6,7%
Ineffective esophageal motility	2	13,3%

**Table 2.** Characteristics of Patients with Normal HRM Measurements in Upright and Supine Position

	n (%)
Gender	
Male	4 (66.7%)
Female	2 (33.3%)
Age (year)	54.33 ± 12.3
Smoking status	
No	4 (66.7%)
Yes	2 (33.3%)
ВМІ	27 (23-27,2)
Complaint	
Reflux	3 (50%)
Dysphagia	4 (66.7%)
Chest pain	3 (50%)
Duration of complaint (years)	$7.4 \pm 4.39$
Comorbidity	
Hypertension	2 (33.3%)
Cholelithiasis	2 (33.3%)
Coronary artery disease	2 (33.3%)
History of Surgery	
No operation history	4 (66.7%)
Coronary angiography	2 (33.3%)
Medications	
Ppi	4 (66.7%)
ACEi	2 (33.3%)
SSRI	1 (16.7%)
Inhaled Steroid	2 (33.3%)
Normal	3 (50%)
Gastroscopy	
Hiatal Hernia	2 (33.3%)
Normal	1 (16.7%)
Supine	
Normal	6 (100%)
Upright	
Normal	6 (100%)
M.R.S	
Aperistaltism	1 (16.7%)
Distal esophageal spasm	1 (16.7%)
Fragmented Peristaltism	1 (16.7%)
Hypercontractile esophagus	1 (16.7%)
Ineffective esophageal motility	2 (33.3%)

#### Evaluation of the Lower Esophageal Sphincter with Pressure and Flow Parameters (PFA) in Patients with Achalasia: A New Approach

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**Background/Aims:** As a new, novel technology, Pressure-Flow Analysis (PFA) evaluates pressure and impedance metrics of the LES using high resolution esophageal manometry (HRM). This might be particularly important in Achalasia. The combination of flow and pressure measurements might be more meaningful. We evaluated the usefulness of PFA in esophageal motor functions in achalasia patients before and after therapy.

Materials and Methods: Measurements were performed on 22 treatment-naïve patients, 14 healthy volunteers. LES pressure and flow values were recorded. Pre-/post-treatment tracings were uploaded to Swallow Gateway to analyse pressure-impedance metrics and compared to healthy volunteers. Pressure Flow Index (PFI), Impedance Ratio (IR), Proximal Esophageal Contractile Integral (PCI), Distal Esophageal Contractile Integral (DCI), Distal Latency (DL), Distension Pressure Accommodation (DPA), Distension Pressure Emptying (DPE), Distal Ramp Pressure (RP) metrics were calculated.

**Results:** PCI, IRP, DPA, DPE, RP, PFI metrics were found to be statistically significant (P < .05). When we examined the pre- and post-treatment data of eight treated patients out of 21, we found the Eckardt scores, resting pressure, DCI, IRP, DPE parameters were statistically significant (P < .05).

**Conclusion:** There is no published study in the literature addressing the importance of PFA specifically in pre- and post-treatment evaluation of achalasia patients. It was observed that flow metrics were correlated with pressure metrics. DPE may be an important marker in patients whose symptoms persist after treatment. Since most of the metrics cannot be measured in type 1 and type 2 achalasia, the diagnostic and prognostic value of pressure flow analysis remains limited, but PFI, RP, DPE are thought to be meaningful. Type 3 achalasia is the most difficult group to treat, and it is thought that PFI and RP can guide the measurement of treatment success in this group. We conclude that the functions of LES can be evaluated in more details and PFA is useful for the results of therapy.

**Table 1.** Results Obtained Using the Swallow Gateway Database of Parameters That Can Be Viewed Jointly in the Patient and Healthy Groups

Metrics	Healthy (n = 14)	Patient (n = 21)	Р
PCI (mm Hg, cm, sec)	375.68 ± 196.01	134.35 ± 160.14	.00033*
DCI (mm Hg, cm, sec)	1485.10 ± 636.25	2724.15 ± 1924.70	.1
IRP (mm Hg)	19.88 ± 7.44	55.82 ± 56.58	.041*
IR	$0.36 \pm 0.06$	2.72 ± 10.95	.42
DPA (mm Hg)	-0.81 ± 6.70	12.47 ± 14.07	.0024*
DPE (mm Hg)	17.21 ± 7.21	46.72 ± 25.10	.00015*
CSI (Ohms)	687.02 ± 220.15	835.25 ± 1582.34	.73
RP (mm Hg)	6.74 ± 3.02	13.9 ± 11.6	.04*
PFI	26.41 ± 15.81	397.68 ± 676.097	.044*

\*Indicates those with statistical significance of P < .05. LES, lower esophageal sphincter.

**Table 2.** Pre-treatment and Post-treatment Data of Eight Treated Patients

Metrics	Before Treatment After Treatment (n = 8) (n = 8)		Р
Eckardt score	6.75 ± 1.28	2 ± 1.19	.0003*
LES resting pressure (mm Hg)	32.62 ± 15.47	19.1 ± 14.28	.03*
PCI (mm Hg, cm, sec)	161.77 ± 246.34	139.21 ± 138.53	.69
DCI (mm Hg, cm, sec)	2757.72 ± 2081.19	1400.35 ± 924.93	.05*
IRP (mm Hg)	49.15 ± 35.99	23.53 ± 13.87	.048*
IR	$0.30 \pm 0.25$	$0.29 \pm 0.23$	.96
DPA (mm Hg)	12.075 ± 16.14	$9.44 \pm 8.83$	.59
DPE (mm Hg)	49.29 ± 20.99	33.70 ± 13.80	.046*
CSI (Ohms)	345.83 ± 212.93	240.27 ± 202.71	.051
BPT (sec)	3.88 ± 1.54	4.57 ± 1.45	.31
BFT (sec)	1.29 ± 1.31	2.50 ± 1.51	.14

\*Those with statistical significance of P < .05 are indicated. LES, lower esophageal sphincter.

#### Comparison of Intraesophageal Impedance and High Resolution Manometer Metrics in Gastroesophageal Reflux Disease Phenotypes

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**Background/Aim:** Gastroesophageal reflux disease (GERD) is divided into different phenotypes including erosive reflux, nonerosive reflux disease, hypersensitive esophagus and functional heartburn. High-resolution manometry (HRM) is routinely performed before intraesophageal impedance-pH examination, which is also used to differentiate phenotypes. The recently described lower esophageal sphincter contraction integral (EGJ-CI) is a new metric that measures the barrier function of esophagogastric junction (EGJ). We aimed to investigate whether the EGJ-DCI values of the esophagogastric junction (DCI) and the EGJ-DCI values in GERD phenotypes, their relationship with Acid Exposure Time (AET), presence of hiatus hernia, ineffective peristalsis, PPI response, whether the EGJ-DCI value can be expressed as an indicator of the anti-reflux barrier of LES.

**Materials and Methods:** HRM data (DCI and EGJ-DCI), pH-impedance data (AET), PPI responses of 66 erosive reflux, 47 non-erosive reflux, 6 hypersensitive esophagus and 15 functional heartburn patients, 20 healthy volunteers(HV) were collected. Their relationship with DCI and EGJ-DCI values was investigated.

**Results:** The median EGJ-DCI was 34.9 mm Hg x sn x cm, the median DCI was 711 mm Hg x sn x cm and the mean AET percentage was 6.55%. Twenty-nine patients (18.8%) had hiatus hernia, 27 patients (17.5%) had ineffective peristalsis. DCI and EGJ-DCI values were higher in HV compared to the others (P = .043 and P < .001). EGJ-DCI value was negatively correlated with AET (P < .001). EGJ-DCI values were lower in the group with ineffective peristalsis compared to the group without (P < .001), in the group with hiatus hernia compared to the group without (P = .003), and in the group with PPI response below 50% compared to the group with PPI response 70% and above (P < .001).

**Conclusion:** There are significant differences in DCI and EGJ-DCI values and pH-impedance metrics between GERD phenotypes and HV. These differences were correlated with PPI response. EGJ-DCI and DCI, might be an important metric that may affect GERD-related parameters such as acid exposure time and PPI response and reflects LES anti-reflux strength.

**GS38** 

#### How Effective Is Endoscopic Full-Thickness Fundoplication Method Using a Novel Device Gerdx for Treatment of GERD?

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**Background/Aims:** Most of the population suffers from symptoms of gastroesophageal reflux disease (GERD) and proton pump inhibitors (PPI) are generally considered as treatment of choice. On the other hand, there is lack of consensus regarding treatment of choice for patients with PPI refractory GERD. The aim of this study was to evaluate whether endoscopic full-thickness plication method using a novel device GERDx is an effective treatment method in patients unresponsive to PPI therapy.

Materials and Methods: From 2019 to 2023, 54 consecutive patients, who underwent endoscopic fundoplication with GERDx, were included in this study. All the 54 patients met the GERD's diagnostic criteria's on Bravo pHmetry test, didn't have hiatal hernia (Hill Grade 2-3) and had at least grade 2 esophagitis on endoscopy despite receiving a 6-month PPI therapy. All the participants were investigated with gastroscopy, The Gastrointestinal Quality of Life Index (GIQLI), Bravo pHmetry test before operation and at the postoperative 6th month. The statistical analysis was conducted from 40 patients, and the other 14 participants who didn't have post operative pHmetry test, were excluded.

**Results:** At the onset of study, the patients GIQLI score, DeMeester score, and Hill classification score were respectively  $94 \pm 45$ ,  $49 \pm 22$  and  $2.2 \pm 0.5$ . At the post-operative  $6^{\text{th}}$  month, the scores mentioned above were respectively  $112 \pm 22$ ,  $12 \pm 54$  and  $1.2 \pm 0.6$  (P < .001). PPI therapy was able to be discontinued in 29 patients (72%) following 3 months from the operation. The mild and moderate adverse events were noted as follows, sore throat (8 patients), chest pain (12 patients) and bloating (14 patients). Nevertheless, none of those complications persisted for more than 5 days and responded completely to medical therapy. Furthermore, there were no major procedure-related adverse events such as perforation, ulcer, bleeding.

**Conclusion:** Endoscopic full-thickness plication method using a novel-device GERDx was found to be preferable in terms of adverse events ratio and found to effective at reducing GERD symptoms and improving quality of life in patient with PPI refractory GERD.

#### Single Center ESD/EMR Experience in The Esophageal Mucosal and Subepithlial lesions

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**Background/Aims:** Esophagus is a difficult area to perform endoscopic resection in the gastrointestinal system due to its histological features and narrow working space. Evaluation of the endoscopic submucosal dissection (ESD) and endoscopic mucosal resection (EMR) results in mucosal and subepithelial lesions of the esophagus.

Materials and Methods: Between 2015 and 2022, endoscopic treatment was planned for 68 patients. ESD (48 patients) and EMR (16 patients) were performed for 64 patients with esophageal lesion (36 mucosal, 28 subepithelial). The procedure could not be performed on 4 patients. The procedures were canceled due to inability to move in the endoluminal area in two patients, cardiac arrest after anesthetic medication in one patient, and large lesion size and signs of invasion in one patient.

**Results:** It was observed that stricture development in 7 out of 64 patients who underwent ESD/EMR. The strictures were observed in the distal esophagus (in 6 out of 7 patients). The occurance of long segment circumpharyngeal lesion was observed in one. Also, development of clinical dysphagia complaints in all patients within the first month. In four of these patients who developed strictures the lesion completely surrounded the lumen all around. In the remaining patients, the lesion approximately surrounded the lumen by 50%. In the case of the patient with a lesion that covered covered 100% of the lumen and was over 10 cm in size, the stricture was dilated 14 times with a bougie. In addition to boguie. Systemic steroids were administered, and thereafter, he had no clinical complaints. For other patients who developed stenosis, they underwent 2 to 6 bougie/balloon dilatations, and they had no complaints during follow-up. It was observed that patients were stayed in the hospital for an average of 2.3 days (the range of hospital stay 0-7 days) after the procedure. There was no procedure-related death. Malignancy was observed in 22 out of the evaluated cases. Among the malignant cases, adenocarcinoma was detected in 8 patients, while squamous cell carcinoma was detected in 14 patients. Leimiyoma was most commonly detected lesion, found in 20 patients. Also, pathological assesment revealed granular cell tumor in 8 patients, IgG4-related tumor in 1 patient, and hyperplastic polyp in 3 patients.

**Conclusion:** ESD/EMR has proven to be an effective and sade method for managing appropriate esophageal lesions. It's noted that dysphagia may develop in cases involving distal lesions and lesions covering more than 50% of the lumen. The dysphagia resolved with bougie, and balloon dilations is clinical outcome.

GS40

#### GastroGPT-TR: Performance Analysis of the World's First Gastroenterology-Specific Clinical Artificial Intelligence Models Turkish Translation Compared to a General-Purpose Model

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Background/Aims: While general purpose AI models like ChatGPT have great potential, their integration into clinical medicine is

limited. Our GastroGPT is the world's first AI model specific to a medical specialty and has demonstrated superior performance in English. However, advances in this field should not be limited to English only. The aim of this study is to evaluate the performance of our model translated into Turkish for the first time, GastroGPT-TR.

**Materials and Methods:** In this structured systematic analysis, GastroGPT-TR was compared to ChatGPT-TR, a general model with high usability metrics in Turkish. Ten simulated patient cases distributed in a balanced manner across complexity, frequency, age groups and acuity were used to evaluate the models across seven key domains. Blinded evaluations on a 10-point scale for usefulness, format, practicality, depth of information and fluency were done by physicians from different specialties. Comprehensive statistical analyses based on standardized scales were performed.

**Results:** A total of 960 evaluations were obtained. GastroGPT-TR demonstrated overall higher performance compared to ChatGPT-TR  $(8.0\pm2.2\text{ vs. }7.3\pm2.0;\text{ P}<.01)$ . In subgroup analyses, GastroGPT-TR was superior in: 1) History gathering, 2) Diagnostic tests, 3) Treatment and patient management, 4) Multidisciplinary approach and referral, 5) Follow-up plan. While GastroGPT-TR maintained performance with increasing case complexity and decreasing frequency, ChatGPT-TR had declines in both more complex and rarer cases. ChatGPT-TR showed superiority in language fluency  $(7.5\pm1.0\text{ vs. }6.25\pm2;\text{ P}=.04)$ . In multivariate analysis, use of GastroGPT retained its association with higher scores. Expert ratings showed acceptable consistency (Cronbach-alpha = 0.89 [0.87-0.92]).

**Conclusion:** This study demonstrates the potential of specialist AI models in clinical medicine. GastroGPT-TR performed better than ChatGPT-TR despite translation, sustaining effectiveness in more complex and rare cases. The superiority of Turkish ChatGPT-TR in language fluency suggests localized models may be more useful for certain tasks. These findings emphasize how AI can enrich clinical practice in medicine.

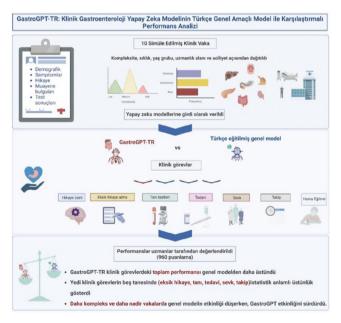


Figure 1. Visual abstract.

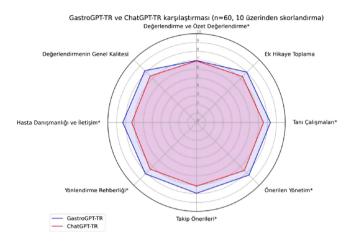


Figure 2. GastroGPT-TR vs. ChatGPT-TR comparison.

**Table 1.** Evaluation Scores for Models' Performances in Key Clinical Tasks

	GastroGPT-TR	ChatGPT-TR	Р
Average Total Point	8.0 ± 2.2*	7.3 ± 2.0	<.012
Clinical Tasks			
(1) Summarizing patient history	6.9 ± 1.7	6.9 ± 2.6	.760
(2) Complete the missing history	8.0 ± 2.2*	7.3 ± 1.7	.027
(3) Assign diagnostic tests	8.3 ± 2.4*	7.5 ± 1.8	.003
(4) Treatment and patient management	8.4 ± 2.3*	7.6 ± 2.1	.011
(5) Follow-up plan	8.0 ± 2.2*	7.3 ± 2.0	<.001
(6) Multidisciplinary approach and dispatch	7.9 ± 2.1*	7.2 ± 2.5	<.001
(7) Informing patient	7.96 ± 1.83	7.16 ± 2.73	.113
(8) Command of the Language	6.25 ± 2.5	7.5 ± 1.0*	.041
*Statistically significant values	of P > .05.		

Otatistically significant values of 1 \* .00

GS41

## The Role of Colon Capsules in the Diagnosis of Colon Polyp

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**Background/Aims:** The second-generation colon capsule endoscopy (CCE-2) is pioneered method which is clinically utilized for investigating the colon without requiring sedation and air insufflation. The aim of this study is evaluate diagnostic accuracy of CCE-2 in detection of colonic polyps and colon cancer.

**Materials and Methods:** In the study, 24 patient who presented to Yeditepe University Gastroenterology Outpatient Clinic and underwent both colonoscopy and CCE-2 within 6 months, were enrolled. The patients demographic features, as well as outcomes of CCE-2 and colonoscopy were retrospectively evaluated. Colonoscopy was the gold standard method against which CCE-2 was compared for detection success of polyps and colon cancer.

**Results:** The average age of participants was 50.45 ± 15.94. The number of male patients was 18 (75%), and there were 6 women patients (25%). According to our findings, at colonoscopy, 10 of the patients (41.6%) had at least one polyp and, at CCE-2 it was 9 (37.5%). The detected polyps were allocated two separate groups, as being <6mm and ≥6mm. At colonoscopy, excepted 3 mm polyp in 1 patient, all other 9 patients had polyps larger than 6mm. At CCE-2 all of 9 patients had polyps larger than 6 mm. The localization of polyps across bowels segments were similar in both method, as the most commonly located in ascending, transverse, sigmoid colon and rectum. In one patient, colonoscopy identified a lesion of colon cancer which was also visualized at consequent CCE-2. As a consequence of above data, independent from polyp size, the sensivity and spesifity of CCE-2 for detecting polyps were 90% and 100%, respectively. In addition, The positive predictive value and negative predictive value for the same indications, repectively were 100% and 93.3%.

**Conclusion:** This study shows that, CCE-2 has similar diagnostic accuracy with colonoscopy in detection of polyps larger than 6mm. Given the small number of patients, statistical evaluation for <6 mm polyps and colon cancer are considered inappropriate. However, the outcomes implies that CCE-2 might be a safe method for screening colon polyps.

**GS42** 

#### The Effectiveness of Vagus Nerve Stimulation for Pelvic Floor Dysfunctions

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**Background/Aims:** The vagus nerve links our autonomic nervous system to our emotions and it is a neurobiological evidence for the mind-body connection. Stress inhibits the vagus nerve and many pelvic floor dysfunction-related symptoms and diseases (constipation, incontinence, chronic pelvic pain, irritable bowel syndrome) may

be related to low (inhibited) vagal nerve tone due to different type stressors. Therefore, stimulation of the vagus nerve may be an additional complementary therapy option for pelvic floor physiotherapy and biofeedback treatments in the treatment steps of pelvic floor dysfunctions, mainly due to its relaxing, digestive and anti-inflammatory properties. Our study aimed to retrospectively evaluate the treatment effectiveness of non-invasive vagal stimulation protocols added to pelvic physiotherapy and biofeedback treatments in 100 patients with pelvic floor dysfunction.

**Materials and Methods:** A total of 100 patients with pelvic floor dysfunction who were referred to the pelvic floor unit between October 2022 and July 2023 were included in the study. In addition to a pelvic floor physiotherapy and biofeedback program specific to each patient's symptoms, non-invasive vagal protocols were given to their treatment. Turkish MYMOP2 2 questionnaires were given to the patients before the treatment session (first visit) and at the control follow-up visits (at the second month control of the treatment). The demographic data and MYMOP2 measurements used for evaluation of these 100 patients were evaluated retrospectively.

**Results:** MYMOP2 measurement values of 92% of the patients were found to be compatible with improvement in their complaints.

**Conclusion:** Non-invasive vagus nerve stimulation protocols are effective in standard pelvic physiotherapy. and adding it to biofeedback treatments has a positive contribution to pelvic floor dysfunctions.

GS43

#### The Microbiome Analyses in the Interrelationship between Ulcerative Colitis and Periodontal Diseases

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**Background/Aims:** In the pathogenesis of inflammatory bowel diseases (IBD), the inflammatory response against dysbiotic intestinal microbiota plays a crucial role similar to the etiopathogenesis of

periodontal diseases (PD). It is critical to determine the composition and dynamics of microbial communities in the gut and oral microbiota to establish the relationship between ulcerative colitis (UC), PD, and health. This study aims to evaluate the impact of common species in the gut and periodontal microbiota on the relationship between UC and periodontal health/disease through microbiome analyses.

**Materials and Methods:** Sixty patients with UC (n = 30) and NUC (n = 30) were included in the study who underwent periodontal examinations and were categorized as having periodontitis (n = 30) or healthy (n = 30). Intestinal mucosa biopsies were obtained from inflamed areas during colonoscopy before treatment. Simultaneously, subgingival plaque samples and periodontal clinical index measurements were collected. All samples were identified through next-generation DNA sequencing analysis, evaluated using bioinformatic tests, and statistical findings were interpreted.

**Results:** By analyzing the distribution of bacterial species based on their presence in the groups, common species were identified at the phylum and genus/species levels. The potential species associated with UC were determined by examining of both gut and oral microbiogenomes. According to the Microbiome Lefse analysis, Prevotella copri emerged as the prominent species in the non-UC group, while Haemophilus parainfluenza and Corynebacterium durum species were identified in the UC group. Comparative Boxplot analysis of bacterial abundance and a-diversity, as indicated by the Shannon index data, revealed that the NUC group exhibited higher bacterial abundance and diversity in subgingival plaque samples than the UC group.

**Conclusion:** Based on the results, assessing the periodontal status of individuals potentially at risk for UC and providing necessary periodontal treatment to reduce dysbiosis is recommended. Furthermore, the analysis of the periodontal microbiota may serve as a potential biomarker for predicting and diagnosing UC.

#### **GS44**

## Bibliometric Analysis of Articles Published in the Turkish Journal of Gastroenterology

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**Background/Aims:** Turkish Journal of Gastroenterology (TJG), published by the Turkish Society of Gastroenterology, is one of the leading journals in the field. Therefore, our study aimed to examine the articles published in this prestigious journal to understand the trends and contributions to the gastroenterology community.

**Materials and Methods:** On October 3, 2023, a search was conducted on the Web of Science (WoS) database using the keyword "Turkish Journal of Gastroenterology" with the "All fields" option selected, without specifying a time range. This search yielded a total of 2369 publications in the TJG journal from 2007 to 2023. Among

these, 1506 were identified as articles, 572 as letters, 176 as editorial materials, and 100 as reviews. The remaining 71 publications included conference proceedings and corrections and were excluded from the analysis. The 1506 articles were further evaluated in this study.

**Results:** When analysing the number of articles published over the vears, it was observed that the highest number of articles was published in 2014. In recent years, the annual publication rate has stabilized, ranging between 100 and 120 articles per year. The 1506 articles received a total of 9317 citations, with an average of 6.19 citations per article. TJG demonstrated an increasing trend in the number of citations per article, indicating a growing impact in the field. The most cited articles are shown in the Figure 3. When examining the countries of origin for submitted articles, Turkey was found to be in the first place, followed by China, South Korea, Iran, and the USA. Regarding the institutions from which articles were submitted. Ankara and İstanbul Universities were at the forefront with 91 publications each, followed closely by Ege University with 90 publications. The top 10 institutions also included Yüksek İhtisas Hospital, Hacettepe, Başkent, Cerrahpaşa, Gazi, Marmara, and Dokuz Eylül Universities. In terms of publication topics, articles were predominantly focused on ulcerative colitis with 88 publications, making it the most studied subject. H. pylori came second with 70 publications, followed by NAFLD with 58 publications. When conducting a layered analysis based on keywords, it was observed that previously, studies on H. pylori, GERD, and celiac disease were prominent. However, after 2018, research on obesity and liver transplantation became more popular.

**Conclusion:** TJG stands as a significant publication representing our country in the international academic community. Its international presence has increased over the years. We believe that by enhancing coordination both among institutions and authors within the Turkish gastroenterology community, we can further enhance the effectiveness and success of TJG.

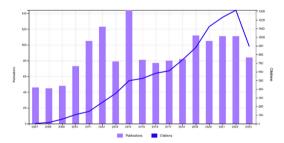
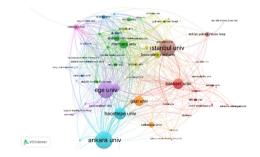


Figure 1. Graph of number of articles-number of citations.



**Figure 2.** Institutional co-authorship network map (Institutions with a minimum of 5 publications and 5 citations).



Figure 3. Articles by citation count.

#### Inflammatory Bowel Disease May Be Associated with Impaired Left Ventricular Deformation

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Background/Aims: Inflammatory bowel disease (IBD) is a chronic disorder characterized by recurrent symptoms, including fever, diarrhea, hematochezia, and systemic inflammation that can be a significant risk factor for cardiovascular complications. Understanding the relationship between IBD and cardiovascular risk is pivotal to reduce mortality and morbidity rates. Existing studies have highlighted that individuals with IBD may develop endothelial dysfunction, early atherosclerosis, and diastolic dysfunction. Nevertheless, limited data is present for the correlation between IBD and systolic function in adults. This study aims to evaluate the impact of IBD on cardiac deformation parameters in adult individuals using speckle tracking echocardiography (STE).

**Materials and Methods:** A total of 80 participants were enrolled in this study and categorized into two groups based on disease activity: those with active IBD (32 patients) and those with well-controlled IBD (48 patients). Two-dimensional echocardiography datasets were acquired and subjected to analysis, with a focus on left and right ventricular (LV/RV) function.

**Results:** No significant differences were observed for the LV ejection fraction, peak systolic velocity of the tricuspid annulus, tricuspid annular plane systolic excursion and RV fractional area change by being in the normal range for both groups (p = NS for all). The speckle

tracking measurements showed that patients with active IBD had impaired LV global longitudinal strain (GLS) (-18.8%  $\pm$  2.8 vs. -21.4%  $\pm$  3.1, P < .001) and RV GLS (-19.5%  $\pm$  3.1 vs. -22.8%  $\pm$  3.2, P < .001) in comparison to those with controlled IBD.

**Conclusion:** The results of this investigation indicate that individuals with active IBD may experience a reduction in left ventricular deformation, signifying subclinical left ventricular systolic dysfunction. Nevertheless, comprehensive validation of these findings necessitates more extensive and longitudinally designed studies.

**GS46** 

#### Epidemiological Characteristics of Inflammatory Bowel Diseases in the Last Decade: Multi-Center Türkiye Data

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**Background/Aims:** This study aims to assess the past decade's epidemiology of inflammatory bowel disease (IBD) patients in Turkey and identify year-to-year variations.

**Materials and Methods:** A total of 3463 patients diagnosed between 2010 and 2022 were included. The patients' demographic and phenotypic characteristics, smoking habits, and family histories were assessed. Differences between geographic regions and age groups were analyzed.

Results: Among patients, 1523 (44%) had Crohn's disease (CD), 1768 (51.1%) had ulcerative colitis (UC), and 23 (0.7%) had indeterminate colitis. Male proportions were higher in both CD and UC patients, with the most common age range for diagnosis being 21-30 years. Over time, newly diagnosed cases and rates per population increased according to TÜİK data. Patients were divided into two groups based on diagnosis years (2010-2016 and 2016-2022), CD initially dominated, but UC prevalence grew in the last 6 years (P ≤ .001). Recently diagnosed CD patients showed higher inflammatory involvement (78.0% vs. 63.4%;  $P \le .001$ ), and the inflammatory phenotype rose post-2016 (75.2% vs. 60.4%; P ≤ .001). CD patients had more smokers (24.2% vs.10.9%;  $P \le 0.001$ ) and family history of IBD (6.8% vs.4.5%; P = .004) than UC patients. Patients over 60 years old had a higher male gender ratio (64.4% vs. 55.9%; P ≤ .001) and UC frequency (62.2% vs. 52%;  $P \le .001$ ) compared to those under 60 years old. The inflammatory phenotype in CD patients was lower in those under 60 years old compared to those over 60 years old (70.4% vs. 85.4%; P ≤ .001). The frequency of pancolitis in UC patients was lower in those over 60 years old (31.3% vs. 41.4%; P ≤ .001).

**Conclusion:** In Turkey, IBD is more prevalent in males and is frequently diagnosed between ages 20 to 30. In CD, inflammatory and ileocolonic involvement is most common, while in UC, pancolitis is observed. The earlier diagnosis peak and increased pancolitis in UC patients might relate to tertiary centers' inclusion with transition clinics and focus on severe cases. Recently, newly diagnosed UC cases have notably surpassed CD cases.

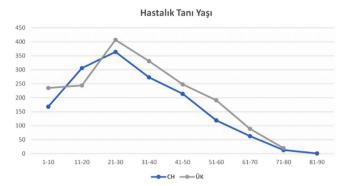
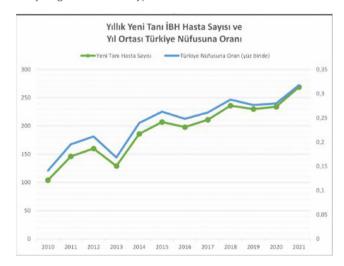


Figure 1. Age of the patients at the time of diagnose.



Figure 2. (A) Number of patients that get diagnosed yearly. (B) Newly diagnosed disease type.



**Figure 3.** Number of patients that get a inflammatory bowel disease diagnose for the first time and the rate of this to the population of Turkey in mid-year.

**Table 1.** Patients' Demographic and Phenotypic Characteristics

	Crohn Disease (n = 1523, 44%)	Ulcerative Colitis (n = 1768, 51.1%)	Indetermine Colitis (n = 23, 0.7%)	Total (n = 3463)
	Rate (%)	Rate (%)	Rate (%)	Rate (%)
Gender				
Female	632 (41.5%)	761 (43%)	9 (39.1%)	1402 (42.3%)
Male	891 (58.5%)	1007 (57%)	14 (60.9%)	1912 (57.7%)
Institution				
Private	7 (0.5%)	8 (0.5%)	0 (0%)	15 (0.5%)
Public	329 (22.9%)	443 (26.8%)	6 (26.1%)	778 (25%)
University	1099 (76.6%)	1205 (72.8%)	17 (73.9%)	2321 (74.5%)
Age (years), mean ± SD, m (range)	42 ± 15, 40 (72)	44 ± 16, 42 (72)	47 ± 15, 46 (47)	43 ± 15, 41 (72)
Follow-up time (month), mean ± SD, m (range)	54 ± 50, 37 (332)	46 ± 46, 29 (324)	58 ± 62, 33 (216)	50 ± 48, 34 (332)
Age of disease (month), mean ± SD, m (range)	68 ± 57, 60 (483)	66 ± 62, 51 (739)	73 ± 57, 60 (215)	67 ± 60, 56 (739)
Age of diagnosis (year), mean ± SD, m (range)	30 ± 16, 28 (81)	32 ± 17, 30 (76)	36 ± 19, 35 (65)	31 ± 17, 29 (81)
Phenotype				
Inflammatory	782 (55.5%)	0 (0%)	0 (0%)	782 (55.5%)
Fistulizing	358 (25.4%)	0 (0%)	0 (0%)	358 (25.4%)
Stenotic	270 (19.1%)	0 (0%)	0 (0%)	270 (19.1%)
Involvement of the disease				
Distal	0 (0%)	499 (30.4%)	3 (13.6%)	502 (16.3%)
Left colon	10 (0.7%)	475 (29%)	1 (4.5%)	488 (15.8%)
Pancolitis	0 (0%)	643 (39.3%)	2 (9.1%)	644 (20.9%)
Backwash+pancolitis	0 (0%)	22 (1.3%)	2 (9.1%)	24 (0.8%)
Ileal	503 (35.4%)	0 (0%)	1 (4.5%)	504 (16.4%)
Ileocolonic	527 (37.1%)	0 (0%)	6 (27.3%)	533 (17.3%)
Colonic	135 (9.5%)	0 (0%)	6 (27.3%)	141 (4.6%)
Ileocolonic+perianal	116 (8.2%)	0 (0%)	0 (0%)	116 (3.8%)
Colonic+perianal	34 (2.4%)	0 (0%)	1 (4.5%)	35 (1.1%)
Upper GIS	4 (0.3%)	0 (0%)	0 (0%)	4 (0.1%)
Upper GIS+ileocolonic	32 (2.3%)	0 (0%)	0 (0%)	32 (1%)
Upper GIS+ileal+perianal	4 (0.3%)	0 (0%)	0 (0%)	4 (0.1%)
Ileal+perianal	51 (3.6%)	0 (0%)	0 (0%)	52 (1.7%)
Jejunal	5 (0.4%)	0 (0%)	0 (0%)	5 (0.2%)
IBD history in family				
No	1420 (93.2%)	1689 (95.5%)	21 (91.3%)	3130 (94.1%)
Yes	103 (6.8%)	79 (4.5%)	2 (8.7%)	184 (5.6%)
Smoking				
Non-smoker	997 (65.5%)	1371 (77.5%)	16 (69.6%)	2384 (71.9%)
Active smoker	369 (24.2%)	193 (10.9%)	4 (17.4%)	566 (17.1%)
Ex-smoker	157 (10.3%)	204 (11.5%)	3 (13%)	364 (11%)

#### The Impact of Biological Era on Colectomy Rate of Ulcerative Colitis: An Assessment of the 22 Years Tertiary Referral Center Cohort from a Developing Country

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**Background/Aims:** We aimed to evaluate the effect of biologic era on patient characteristics, colectomy-related factors and colectomy rates in our 22-years old ulcerative colitis (UC) cohort.

**Materials and Methods:** Our UC cohort was retrospectively evaluated. Biologic therapy in UC was reimbursed in our country in 2009 whereas it's use was more frequent since 2012. The patients were grouped considering 2012 as a turning point of pre and post biologic era. Patients whose follow-up finished before 2012 and starting at/after 2012 were compared. Less than 6 months of follow-up were excluded.

Results: There were 1059 patients with a median follow-up of 4 years. %35 had pancolitis and half of the whole group required steroid at any point. Frequency of unresponsiveness was 4% and dependence was 28%. For the whole group: 38% received immunomodulatory therapy and 20% received biologics. Before 2012 biological therapy was less than 1%, but increased up to 26% after 2012. Total colectomy rate(including malignancy related cases) was 5.9% and disease activity related colectomy was 4.8% (n = 51). Colectomy rate before and after 2012 was 6% (n = 28) and 2.7% (n = 23) (P < .001). Both total and 1st year colectomy rates was lower in the biologic era patients. Disappearance of this significance at the 4<sup>th</sup> year of disease duration suggests that biological era delay or rescue early colectomies. Failure to achieve mucosal remission, CRP value >3 mg/L under maximal treatment, steroid dependency, steroid unresponsiveness, and an increased number of steroid-needing relapses per-year were found to be independently associated with colectomy.

**Conclusion:** Our current study discloses the colectomy decreasing effect of biologic era from a developing country for the first time. Although achievement of mucosal remission or CRP <3 mg/L under were associated with reduced colectomy risk in the whole cohort, the frequency of colectomy was particularly decreased in the biological era. Treatment modalities and cessation of smoking between each era may have influence on this result.

**Table 1.** Comparison of Clinical Features and Colectomy Rates of Two Non-Overlapping Independent Patient Sub-Groups

	Pre-2012 Patient Group (n = 205)	Post-2012 Patient Group (n = 633)	P
Gender (Female, %)	42	47	.149
Age at Diagnosis (mean ± SD, years)	37 ± 13	35 ± 13	.220
Follow-up duration (median, month) (minimum >6 months)	31	37	.08
Smoking (ever, %)	42	24	<.001
Ex-smoker	22	7	<.001
Maximum extension (Paris) E1/E2/E3/E4 (%)	11/46/9/34	13/37/15/36	.245
Steroid unresponsiveness (%)	3	2	.560
Steroid dependency (%)	19	11	.004
Steroid course/year (median)	1.1	0.6	.025
5-ASA	71	56	<.001
Immunomodulatory	28	19	.004
Biologic	-	26	-
Minimum CRP under max. treatment step (median, mg/L)	3	1.4	<.001
Mucosal CRP under max. treatment (%)	46	57	.048
Disease duration at colectomy (median, month)	46	38	.404
First year colectomy rate (%)*	5	0.3	<.001
Total colectomy rate (%)	12	2	<.001

#### GS48

#### Efficacy of Ustekinumab in Ulcerative Colitis and Crohn's Disease: Real-Life Data, Single-Center Experience

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**Background/Aims:** The aim of this study is to investigate the effectiveness of ustekinumab in treatment-resistant patients with Ulcerative Colitis (UC) and Crohn's Disease (CD).

**Materials and Methods:** The data of 48 treatment-refractory inflammatory bowel disease (IBD) patients followed in a tertiary university hospital were retrospectively investigated from patient files. Demographic data of the patients, characteristics of their IBD, treatment experiences, laboratory and endoscopic features, and disease scores were evaluated. CD clinical remission was examined with CDAI score, and UC clinical remission was examined with SCCAI scores. CDAI <150 was defined as clinical remission for CD and SCCAI <5 for UC.

Results: In total, 35 of 48 patients (73%) had CD. 26 patients (54.2%) were female. The mean age was 41.16  $\pm$  13.31 years. The mean age of disease was 130.83 ± 92 months. Eighteen (51.4%) of the CDs had colonic involvement, 15 (43%) had fistulizing, 12 (34.3%) had stenosis, and 13 (37.1%) had perianal involvement. 77% (n = 10) of UCs were pancolitis. There was previous use of biological agents in 94.3% of CD and 100% of UC. Before ustekinumab, 48.6% of CDs and 77% of UCs had used more than one biological agent. The most common reason for switching to ustekinumab in patients was lack of response to previous biologics (90%). Other reasons were side effects, especially allergy, with previous biologics and the development of malignancy. The average duration of use of ustekinumab was  $8.76 \pm 6.81$  months. Laboratory changes of the patients are given in the figures. At the end of the follow-up, 85% of the CD patients had CDAI <150 and were in complete clinical remission, while 15% had CDAI between 150-219 and were in partial clinical remission. At the end of follow-up, 50% of UC patients had SCCAI <5 and were in complete clinical remission.

**Conclusion:** Ustekinumab is an effective treatment method in achieving clinical remission in CD and UC resistant to previous treatments.

**Table 1.** Laboratory and Disease Score Changes in Crohn's Disease Patients

Crohn's Disease Patients Laboratory	Before Ustekinumab	After Ustekinumab	Р
Wbc (10 <sup>3</sup> /uL)	7.3 ± 2.98	7.4 ± 1.5	.482
Hgb (g/dL)	12.26 ± 1.42	12.94 ± 1.32	.04
Plt (10 <sup>3</sup> /uL)	339 ± 140	300 ± 73	.078
Alb (g/dL)	4.18 ± 0.41	4.34 ± 0.43	.179
CRP (mg/L)	15.12 ± 16.6	$6.7 \pm 9.7$	.011
ESR	30.6 ± 21.4	20 ± 12.4	.048
CDAI	215.95 ± 50.54	112.15 ± 45.49	0.00

**Table 2.** Laboratory and Disease Score Changes in Ulcerative Colitis Patients

Ulcerative Colitis Patients Laboratory	Before Ustekinumab	After Ustekinumab	Р
Wbc (10 <sup>3</sup> /uL)	9.3 ± 3.37	7.99 ± 3.81	.521
Hgb (g/dL)	11.48 ± 2.58	12.8 ± 1.6	.1

(Continued)

**Table 2.** Laboratory and Disease Score Changes in Ulcerative Colitis Patients (*Continued*)

Ulcerative Colitis Patients Laboratory	Before Ustekinumab	After Ustekinumab	Р
Plt (10 <sup>3</sup> /uL)	335.7 ± 906.94	313 ± 238.29	.748
Alb (g/dL)	4.19 ± 0.95	4.35 ± 0.64	.623
CRP (mg/L)	14.17 ± 15.42	7.5 ± 9.13	.128
ESR	35 ± 23.2	19.57 ± 21.79	.041
SCCAI	6.75 ± 2.18	2.5 ± 3.46	.011

**GS49** 

## The Impact of Fecal Urgency on Quality of Life in Ulcerative Colitis Patients

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**Background/Aims:** Ulcerative colitis (UC) is a chronic inflammatory disease that progresses with relapse and remission, it has negative effects on the quality of life. Among the symptoms that affect the quality of life, the most disturbing one is fecal urgency. Fecal urgency (FU) has striking negative consequences on physical health, psychological and social greas.

**Materials and Methods:** In the cross-sectional research part of the study, classifications were made as "none", "hurry", "immediate" and "incontinence" within the SCCAI to grade the severity of faecal urgency. Disease activity was evaluated using the partial Mayo score in concurrent patients. For quality of life measurement, the WHOQoI BREF questionnaire was completed by the patients. For long-term results, patients' clinical conditions, including steroid use, hospitalization, and colectomy, were questioned at the 6-month follow-up. Univariate logistic regression analysis was used to find independent factors affecting quality of life.

**Results:** A total of 154 patients diagnosed with UC were included in the study. Faecal urgency was found was found to have a negative impact in the physical health domain (OR = 5.5; 95% CI [1.9-15.8] (P = .002), in the psychology domain (OR = 5.4; 95% CI [2.5-11, 6] (P < .001), in the social relationship domain (OR = 2.2; 95% CI [1.1-4.4] (P < .001), in the environmental domain (OR = 4.7; 95% CI [2.3-9.7] (P = .015). When the number of stools and rectal bleeding, which are among the factors affecting Faecal urgency, are evaluated together, the number of stools has a statistically significant effect (P < .001), while rectal bleeding was not found to be effective (P = .997). Faecal urgency showed a statistically significant, moderate-to-strong correlation with partial mayo (P < .001) (P = .001). Faecal urgency showed steroid use in the six month period (P = .001). Faecal urgency showed steroid use in the six month period (P = .001) (P < .001). Its effect was not seen since there were no patients who underwent colectomy.

**Conclusion:** We show that faecal urgency is a factor that negatively affects quality of life in patients with UC and is independently associated with it. It has been found to be associated with an increased risk of future steroid use and hospitalization. Our findings support

that faecal urgency is a symptom that should be included in the evaluation of disease activity and measurement of quality of life in patients with UC.

Table 1. Appearance of Fecal Urgency and FU Class Quality of Life in Multivariable Adjusted Model\*

	Physical health OR1; %95 CI	Psychology OR1; %95 CI	Social relationship OR1; %95 CI	Environmental OR1; %95 CI
Fecal urgency	9.9; 4-24.9	7.6; 3.2-18	2.4; 1.2-5	5.5; 2.5-12.1
Hurry	6.5; 2.4-17.6	6.3; 2.4-16.4	2.5; 1.1-5.8	5.7; 2.3-14
Immediately	17.4; 3.4-87	12; 2.1-66.3	1.6; 0.4-5.4	3.9; 1.1-14.3
Inkontinance	-	12.2; 1.1-132	5.8; 0.9-38	11.3; 1-116

<sup>\*</sup>Logistic regression analysis. OR, odds ratio; CI, confidence interval; FU, fecal Urgency

**GS50** 

## Evaluation of Sleep Quality in Patients with Ulcerative Colitis: Is the Issue Limited to Active Disease Periods?

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**Background/Aims:** Sleep disturbances are more common in patients with ulcerative colitis compared to the general population. Sleep quality and sleep patterns can be disrupted not only during active disease but also in periods of disease remission. This study aims to evaluate sleep quality in patients with ulcerative colitis, identify potential pathologies that may cause sleep disorders, and assess the associated clinical conditions.

Materials and Methods: The study included ulcerative colitis patients who applied to the Hacettepe University Department of Gastroenterology between June and August 2023 and a healthy control group with no chronic illnesses. Ulcerative colitis patients were categorized according to the partial Mayo score, including 22 active and 28 ulcerative colitis patients in remission, along with 24 healthy controls. Participants' laboratory results, anthropometric measurements, and endoscopic data were systematically recorded. Sleep quality was assessed using a questionnaire that included the Pittsburgh Sleep Quality Index (PSQI). Participants with a Pittsburgh global sleep score of 5 or higher were considered to have poor sleep quality.

**Results:** According to the evaluation of sleep quality in the groups, it was found that both active and remission patients had worse sleep quality compared to the control group (P < .001). It was determined that 90.9% of patients in the active ulcerative colitis group and 85.7% of patients in the remission group had poor sleep quality. In the comparison of PSQI total and sub-scores between groups, daytime dysfunction (P = .004), and the PSQI global score (P < .001) were significantly higher in active patients. The ROC analysis revealed that when the PSQI global score cutoff value was set at >6.50, the PSQI was found to show disease activation in active ulcerative colitis

patients with 59.1% sensitivity and 32.7% specificity. Furthermore, a significant relationship was found between the metabolic scores of active ulcerative colitis patients and sleep quality (P < .01).

**Conclusion:** It was concluded that sleep quality is impaired in the ulcerative colitis patient group regardless of disease activation. Although this study did not fully reach the level of significance, it was observed that smartphone and social media use was more pronounced in patients with poor sleep quality.

GS51

# Early Subclinical Peripheral Neuropathy in Patients with Inflammatory Bowel Disease (IBD): A Prospective Cohort Study

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**Background and Aims:** The inflammatory bowel diseases (IBD), Crohn's disease (CD) and ulcerative colitis (UC), are chronic, relapsing inflammatory diseases of the gastrointestinal tract. One of the most commonly reported neurologic complications is peripheral neuropathy. We aimed to evaluate the necessity of neurophysiological tests to detect early subclinical peripheral neuropathy in IBD patients.

**Material and Methods:** This study is a single-center, prospective controlled cohort study conducted between February 2022 and August 2023 at Kocaeli University Hospital, Turkey. 57 consecutive IBD patients (Crohn's disease n = 29 and ulcerative colitis n = 28) with no neurological symptoms or signs and no comorbidities that may be associated with peripheral neuropathy and 58 healthy controls were included. Nerve conduction studies were performed to evaluate peripheral neuropathy. Comparison between groups were carried out using one-way analysis of variance (one-way ANOVA),

Age, gender, occupation, marital status, body mass index, medications, smoking, year of disease were included in the analysis.

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Mann-Whitney U test, and Kruskal-Wallis test. Tukey and Dunn's tests were used for the multiple comparisons.

**Results:** There was no difference in age and gender between IBD patients and the control group (P > .05). In Crohn's disease and ulcerative colitis, the sensory latencies (conduction time) of the median (P < .001) and ulnar (P = .002) nerves were significantly prolonged compared to healthy controls. Additionally, the motor conduction

velocity of the tibial nerve was slower in the ulcerative colitis group compared to the control group (P = .019).

**Conclusion:** Nerve conduction times may be longer and conduction velocities may be slower in IBD patients without neurological symptoms or signs compared to the control group. While investigating extraintestinal findings in individuals with IBD, nerve conduction studies should be performed to detect subclinical peripheral polyneuropathy that may occur later.

Table 1. Demographic and Clinical Characteristics of Crohn's Disease, Ulcerative Colitis and Control Groups

	Crohn's Disease (n = 29)	Ulcerative Colitis (n = 28)	Control $(n = 58)$	Р
Gender, n (%)				
Male	16 (55.2)	13 (46.4)	28 (48.3)	.779
Female	13 (44.8)	15 (53.6)	30 (51.7)	
Age ± SD	38 ± 9.2	40.1 ± 9	40.1 ± 11.2	.516
Body mass index (kg/m), (IQR)	23.9 (21.5-26.7)	23.2 (20.9-28.8)	24.4 (22.2-30.3)	.251
Past alcoholing, n (%)	4 (13.8)	5 (17.9)	8 (13.8)	.886
Smoking, n (%)	2 (6.9)	5 (17.9)	5 (8.6)	.299
Douleur neuropathy score (IQR)	1 (1-2)	1 (1-2)	1 (1-2)	.356
Hemoglobin, gr/dL ± SD	13.5 ± 1.8	13.2 ± 1.6	14.1 ± 1.4	.048
Vitamin B12, pg/mL (IQR)	319 (269-437)	368 (283-513)	375 (275-463)	.306
IBD duration, years (IQR)	6 (3.5-12.0)	5 (4.0-8.75)	-	.354
Weight loss, kg (IQR)	8 (7.0-10.0)	8 (6.25-9.0)	-	.552
IBD medication, n (%)				
5-ASA	15 (51.7)	14 (50)	-	.896
Anti-TNF	14 (48.3)	13 (46.4)	-	.889
*Other immunosuppressants	8 (27.6)	14 (50)	-	.143
IBH activity indexes				
Crohn's activity index	132 ± 15.6	-	-	-
Mayo score	-	7 (6-8)	-	-
Trulove and Witts	-	Mild 18 (64.3) Moderate 10 (35.7)	-	-

 $<sup>{}^{\</sup>star}\text{Azathioprine, 6-mercaptopurine. IQR, interquartile range; SD, standard deviation.}$ 

Table 2. Distal Motor Nerve Conduction Study Results for Crohn's Disease, Ulcerative Colitis, and Control Groups

	Crohn's Disease (1)	Ulcerative Colitis (2)	Control (3)	P	Post-Hoc test
Median					
Latency ms	2.94 (2.73-3.22)	3.06 (2.76-3.33)	2.86 (2.59-3.13)	.179 <sup>b</sup>	-
Amplitude uV	12.99 ± 3.91	12.75 ± 3.63	13.07 ± 2.78	.915ª	-
Conduction velocity m/s	61.90 (57.15-64.70)	60.40 (57.25-63.80)	62.50 (58.97-68.0)	.068b	-
F-wave latency	26.36 ± 1.97	26.60 ± 1.49	25.73 ± 2.27	.137ª	-
Ulnar					
Latency ms	2.25 ± 0.30	2.28 ± 0.30	2.24 ± 0.27	.771ª	-
Amplitude uV	13.66 (11.92-16.39)	13.60 (11.44-16.12)	14.18 (13.04-15.16)	.576⁵	-
Conduction velocity m/s	63.19 ± 5.57	61.46 ± 6.72	63.32 ± 5.84	.381ª	-

(Continued)

Table 2. Distal Motor Nerve Conduction Study Results for Crohn's Disease, Ulcerative Colitis, and Control Groups (Continued)

	Crohn's Disease (1)	Ulcerative Colitis (2)	Control (3)	Р	Post-Hoc test
Tribal					
Latency ms	4.10 (3.60-4.52)	4.15 (3.33-4.95)	4.00 (3.32-4.78)	.909b	-
Amplitude uV	10.81 ± 3.83	10.58 ± 3.72	10.95 ± 3.55	.907ª	-
Conduction velocity m/s	49.0 (46.35-51.15)	46.90 (45.12-50.22)	50.45 (47.67-52.80)	.019 <sup>b</sup>	2<3°
F-wave latency	50.20 (46.20-53.85)	51.00 (47.72-54.77)	48.77 (46.07-50.43)	.072 <sup>b</sup>	-
Fibular					
Latency ms	3.82 (3.52-4.14)	3.98 (3.70-4.77)	3.80 (3.46-4.40)	.243 <sup>b</sup>	-
Amplitude uV	5.12 ± 2.51	5.16 ± 2.15	5.18 ± 1.55	.992ª	-
Conduction velocity m/s	49.70 (46.80-52.80)	51.30 (47.65-54.50)	51.50 (49.40-55.52)	.168 <sup>b</sup>	-

<sup>&</sup>lt;sup>a</sup>One-way ANOVA test, mean ± standard deviation.

Table 3. Distal Sensory Nerve Conduction Study Results for Crohn's Disease, Ulcerative Colitis, and Control Groups

	Crohn's Disease (1)	Ulcerative Colitis (2)	Control (3)	Р	Post-Hoc test
Median					
Latency ms	2.41 (2.31-2.61)	2.48 (2.29-2.61)	2.13 (1.98-2.34)	<.001 <sup>b</sup>	1.2>3°
Amplitude uV	36.70 (29.20-46.45)	34.60 (29.30-40.12)	43.45 (30.17-58.37)	.051 <sup>b</sup>	-
Conduction velocity m/s	60.59 ± 5.44	60.83 ± 3.90	60.89 ± 8.23	.980ª	-
Ulnar					
Latency ms	2.02 (1.93-2.13)	2.04 (1.80-2.08)	1.90 (1.77-2.05)	.002 <sup>b</sup>	<b>1.2&gt;3</b> <sup>◦</sup>
Amplitude uV	31.70 (26.65-49.0)	35.55 (26.10-38.75)	41.15 (27.27-55.22)	.079 <sup>b</sup>	-
Conduction velocity m/s	59.10 (56.40-62.80)	58.30 (57.10-60.05)	59.30 (55.10-62.30)	.787 <sup>b</sup>	-
Sural					
Latency ms	2.56 (2.32-3.0)	2.53 (2.28-2.71)	2.46 (2.21-3.06)	.705 <sup>b</sup>	-
Amplitude uV	12.30 (8.80-16.45)	12.25 (8.62-16.95)	12.81 (9.67-18.45)	.637b	-
Conduction velocity m/s	50.02 ± 7.13	52.81 ± 6.62	52.85 ± 5.47	.113ª	-

<sup>&</sup>lt;sup>a</sup>One-way ANOVA test, mean ± standard deviation.

#### Is It Possible to Minimize Liver Ischemia/ Reperfusion (I/R) Damage and Increase Regeneration Capacity?

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**Materials and Methods:** Rats of equal age and approximately equal weight were grouped into 6 groups: Group 1 = Sham group; Group 2 = Silymarin-curcumin; Group 3 = Silymarin-glucosamine; Group 4 = Ganoderma lucidum; Group 5 = Mixture of group B vitamins,

<sup>&</sup>lt;sup>b</sup>Kruskal-Wallis test, median (interquartile range).

<sup>°</sup>Multiple comparisons of Tukey and Dunn tests.

ms, millisecond; m/s, meter per second; uV, microvolt.

<sup>&</sup>lt;sup>b</sup>Kruskal-Wallis test, median (interquartile range).

<sup>°</sup>Multiple comparisons of Tukey and Dunn tests.

ms, millisecond; m/s, meter per second; uV, microvolt.

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amino acids, I-carnitine and sugar; Group 6 = Phenoxy-2-methyl-2-propionic acid. Liver ischemia was achieved by ligating the hepatic artery under anesthesia for 45 minutes. mTOR, insulin, nesfatin, and leptin levels were checked in all subjects in the 2nd postoperative week. In order to evaluate apoptosis, it was examined with the TUNNEL method, and for regeneration control, PCNA was performed and evaluated under a light microscope. In addition, immunohistochemical liver staining for Ki67, mTOR, VGEF, FGF, HGF, Calpain 10, and C3 was performed.

**Results:** Insulin levels were found to be low in the silymarin-curcumin group. Regarding blood nesfatin level, it was significantly higher in the 3rd group compared to the control group (P = .002), and significantly lower in the 2<sup>nd</sup> group (P = .015). The blood mTOR level was significantly lower in the 3<sup>rd</sup> group compared to the control group (P = .051). Other parameters were similar. C3, PCNA, Ki67, mTOR, HGF, and Calpain 10 were found to be higher in all groups compared to the control group. VGEF and FGF were found to be higher in all groups except group 4 compared to the control group. In immunostaining, more necrosis, vacuolization, and sinusoidal obstruction areas were seen in the 3rd and 4th groups compared to the other groups.

**Conclusion:** Although all substances applied after I/R injury have been shown to positively affect the regeneration capacity of the liver, silymarin-glucosamine, and ganoderma lucidum have been shown to cause deterioration in the quality of regenerating liver tissue.

#### **GS53**

### Prognosis in Portal Vein Thrombosis: Real-Life Data, Single-Center Experience

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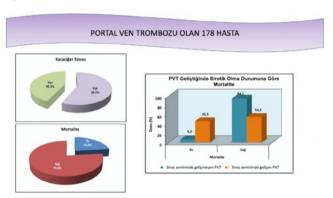
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**Background/Aims:** The prognosis of portal vein thrombosis (PVT) varies depending on the underlying etiology, the presence of cirrhosis, and whether there is thrombosis associated with malignancy. We aimed to investigate the effects of etiology, presence of cirrhosis, and recanalization of the portal vein (PV) on mortality.

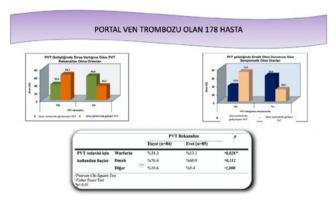
**Materials and Methods:** In our study, the files of PVT patients followed at the tertiary university hospital outpatient clinic were evaluated retrospectively. Imaging programs in the hospital computer system were used to image the vascular structures of the patients. Student's t-test was used for quantitative evaluations of two normally distributed groups. The chi-square test and Fisher's Exact test were used to compare qualitative data.

Results: Our study was conducted with a total of 178 cases, 57.9% (n = 103) of them were male. The mean age is  $54.03 \pm 13.90$  years. The mean body mass index (BMI) is  $26.79 \pm 4.88 \text{ kg/m}^2$ . The mean age of the patients at the time of PVT was  $46.93 \pm 16.62$  years. 47.8%(n = 85) of them were symptomatic when PVT developed. Abdominal swelling in 8.2% (n = 7), abdominal pain in 64.7% (n = 55), varicose bleeding in 7.1% (n = 6), and other symptoms in 25.9% (n = 22) were observed. PVT was diagnosed by incidental imaging in 45.5% (n = 81) of the patients. 41.3% (n = 71) of them had SMV. 43.3% (n = 77) of them participating in the study were cirrhotic when PVT occurred. The rate of PV recanalization in patients with PVT due to cirrhosis was lower than in those without cirrhosis (P = .001; P < .01). The rate of using Warfarin for PVT treatment in patients with recanalized PV was higher than in patients without recanalization (P = .026; P < .05). The mortality rate of patients with PVT due to cirrhosis was higher than that of non-cirrhotic patients (P = .001; P < .01).

**Conclusion:** In PVT occurring on the basis of cirrhosis, the rate of PV recanalization was found to be lower and the mortality rate was higher.



**Figure 1.** The mortality rate of patients with PVT due to cirrhosis was found to be statistically significantly higher than those without cirrhosis (P = .001; P < .01).



**Figure 2.** The rate of using Warfarin for PVT treatment in cases with recanalized PV was found to be statistically significantly higher than in cases without recanalization (P = .026; P < .05).

#### **GS54**

# Comparison of the Recommendation of International Autoimmune Hepatitis Pathology Group 2022 and the Simplified Criteria for Autoimmune Hepatitis 2008

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**Background/Aims:** The histological diagnosis of autoimmune hepatitis (AIH) is challenging. A new consensus recommendation was provided by the International AIH Pathology Group to ease the problems in the histological diagnosis. This studies aim is to compare the 2008 'simplified' criteria for AIH with the 'consensus recommendation' of 2022 in terms of diagnostic accurancy.

**Materials and Methods:** Pathological specimens of patients diagnosed as AIH at Gazi University Hospital between the years of 2010

and 2022 were analyzed retrospectively. A total of 188 patients were enlisted of whom 88 were selected due to exclusion criteria. The pathological specimen were analyzed by two senior hepatopathologist and a resident pathologist. All specimens were analyzed both according to the 'simplifed' criteria and the new consensus recommendation.

**Results:** Six patients with "atypical" diagnosis according to the 2008 criteria were raised to "possible AIH" due to the 2022 consensus recommendations, and 10 patients with "compatible" diagnosis were elevated to "likely AIH" category consecutevily. A total of 16 patients (n = 78) (20.5%) were elevated to the upper category according to the 2022 consensus recommendations, while none were found to fall into the lower category regarding the diagnostic grading. There was statistically significant difference between the 2008 criteria and 2022 consensus report regarding diagnostic accuracy (P < .001).

**Conclusion:** Our study shows that the new consensus recommendations for histological criteria of autoimmune hepatitis from the International AIH Pathology Group seemed to be more accurate in the diagnosis of both acute and chronic types of AIH. Further meta-analyses and prospective studies are needed in order to validate and enhance the new classification to increase the specificity and sensitivity of the new statement

**Table 1.** Comparison of the Biopsies Regarding the Diagnostic Staging and the Compliance Level Between the 2008 Criteria and 2022 Consensus Recommendation

				2022 C	onsensus De	efinition				
•		Unlikely			Possible			Likely		-
2008 Criteria definition	Portal	Lobular	Total	Portal	Lobular	Total	Portal	Lobular	Total	Total
"0" Atypical	3	0	3	5	1	6	0	0	0	9
"1" Compatible	0	0	0	18	5	23	6	4	10	33
"2" Typical	0	0	0	0	0	0	28	8	36	36
Total	3	0	3	23	6	29	34	12	46	78
Mc Nemar Bowker (Tota	<b>l</b> )					P < .001				
Kappa Test										
Lobular		(Kappa value = 0.483)			e 0.483) P = .016					
Portal	(Kappa value = $0.681$ ) $P < .001$			(Kappa value = 0.681)						
Total		(Карр	ppa value = 0.638)							

There was a mediocre statistical conformity (kappa = 0.638) between the two histological staging systems (P < .001). Regarding lobular hepatitis, there was a low to mediocre conformity between the 2008 and 2022 classifications (kappa = 0.483, P = .016), while there was a moderate conformity regarding portal hepatitis (kappa = 0.681, P < .001).

**GS55** 

### Clinical Course in Patients with Primary Biliary Cholangitis: The Role of Immunoglobulins in Primary Biliary Cholangitis

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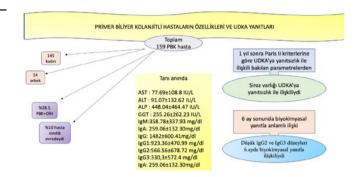
<sup>2</sup>Division of Internal Medicine, İstanbul University Faculty of Medicine, İstanbul, Turkey

**Background/Aims:** Primary biliary cholangitis (PBK) is a chronic, cholestatic, autoimmune liver disease that mostly affects women. The response rate with UDKA is accepted as 60%. In our study, we aimed to reveal the response rates, clinical course of patients using UDKA according to gender, association with overlap syndrome, and to evaluate the effect of immunoalobulins on UDKA response.

**Materials and Methods:** A total of 159 patients followed in tertiary university hospital were included in study. UDKA responses of patients were determined according to Paris II criteria. "Independent T-test" and "One-Way Analysis of Variance (ANOVA)" were calculated to compare continuous measurements according to categorical groups.

Results: A total of 159 patients, 145 of whom (91.8%) were women, were included in the study. At the time of diagnosis, 10% of patients were cirrhotic, 21 patients developed cirrhosis during follow-up. The immunoglobulin levels at diagnosis; IgM: 358.78 ± 337.93 mg/dL, IgG: 1482 ± 600.41 mg/dL, IgA: 259.06 ± 132.30 mg/dL. The subgroups were IgG1: 923.36 ± 470.99 mg/dL, IgG2: 566.56 ± 678.72 mg/dL,  $lgG3: 330.3 \pm 572.4 \text{ mg/dL}$ . When response rates of patients at the end of 1 year were evaluated on a gender basis, all men were found to be responsive and the non-response rate in women was evaluated as 10%. The rate of non-response to UDKA treatment in cirrhotic patients was 15.4% (P < .05). The non-response rate was found 7% in AMA-positive patients and 5% in AMA-negative patients (P > .05). At the end of 6 months, IgG2 and IgG3 levels were found to be lower in patients with AST levels <1.5 times ULN, that is, in patients thought to have better response rates, compared to those with AST levels >1.5 times ULN (P < .05).

**Conclusion:** Significant lack of response to one-year UDKA treatment was observed in PBC patients in the cirrhotic stage. At 6 months, IgG2 and IgG3 levels were lower in patients with a biochemical response to UDKA.



**Figure 1.** The characteristics of patients with primary biliary cholangitis and responses to UDCA.

**GS56** 

### Comparison of Indices Used to Determine Obesity-Related Fatty Liver in Adolescents

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**Background/Aims:** The prevalence of non-alcoholic fatty liver disease (NAFLD) in obese children and adolescents is an increasing health problem. NAFLD does not occur in every obese patient, and ultrasonography is insufficient for diagnosis in some cases. Therefore, warning findings for the diagnosis of NAFLD in obese patients are an important research topic. In the literature, indices to determine NAFLD have been examined separately, but there is no study examining all of them together. In this study, some indices evaluated for the diagnosis of NAFLD were examined together.

**Materials and Methods:** Eighty exogenous obese patients (9-18 years old) who applied to a pediatric clinic between February and August 2022 were included in the study. The presence of NAFLD in these patients was evaluated with both ultrasonography and MRI. Laboratory findings were obtained retrospectively from system records. In the logistic regression analysis, gender, age, body mass index (BMI), BMI SDS, triponderal mass index, aminotransferaz index, HbA1c, lipid accumulation index (LAP) and triglyceride (TG)-glucose index were evaluated.

**Results:** In the comparison between NAFLD(+) and NAFLD(-) groups, HbA1c, aminotransferase index and TG-glucose index were higher in NAFLD (+) group (P = .012, P = .009, P = .001, respectively). According to the regression analysis, male gender, high HbA1c and TG-glucose index were determined as significant risk factors for NAFLD.

**Conclusion:** This is the first study in which some body measurement and laboratory indexes were evaluated together in the differential diagnosis of NAFLD in exogenous obese children. High HbA1c and TG-glucose index are significant warning signs for the development of NAFLD in obese children.

**GS57** 

#### Significant Contributions of Intrafamilial Genetic Screening to the Clinic in Wilson's Disease

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**Background/Aims:** Wilson's disease is an Autosomal Recessive genetic disease that is characterized by the accumulation of excess copper in the body and presents mainly with hepatic and neurological findings. Pathogenic mutations in the ATP7B gene cause the disease. The diagnosis of Wilson Disease depends on a combination of clinical, biochemical analysis, and genetic testing. It is aimed to perform intra-familial segregation of ATP7B gene mutations with Sanger sequencing in relatives of Wilson's patient and thereby ensure a good prognosis by making a presymptomatic diagnosis.

Materials and Methods: Segregation analysis with Sanger sequencing was performed on 58 family members of 17 cases diagnosed with Wilson's disease who have bi-allelic pathogenic variants in the ATP7B gene. Four cases with non-detected variants by NGS (Next Generation Sequencing) analysis and one case with only one variant, were applied with the MLPA technique to investigate the deletion/duplication.

**Results:** Disease-causing pathogenic variants were detected in 18 of 22 index cases (82%). No deletion/duplication was detected in the MLPA analysis of five cases. It was understood that 45 family members who underwent segregation analysis were carriers. A bi-allelic pathogenic variant was detected in the ATP7B gene in six symptomatic Wilson patients from family members, and the clinical diagnosis was also supported molecularly. It was observed that one person was genetically diagnosed with Wilson's disease but was asymptomatic, and two individuals were symptomatic despite carrying a single heterozygous variant in the ATP7B gene. One of them also suffered from Phenylketonuria.

**Conclusion:** Molecular analysis is of great importance in the diagnosis of Wilson disease and in identifying family members at risk. Early diagnosis at a young age, before exposure to the harmful effects of copper, is the most important factor for good prognosis. Detection

of asymptomatic patients can only be achieved by expanding family screenings. While disease symptoms may be seen in heterozygous carriers, the disease may also occur in people for whom no pathogenic variant has been detected. There are genetically various explanations for this situation (such as deep intronic and regulatory regions of the gene, modifier genes). In societies where the frequency of consanguineous marriages is high, such as our country, it should also be taken into consideration that there may be a second comorbid genetic disease.

**GS58** 

### **Evaluating The Risk Factors for Surgery in Stricturing Crohn's Disease**

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**Background/Aims:** Almost half of the Crohn's disease (CD) patients develop strictures in course of the disease. Medical, endoscopic, and surgical treatment options are available for structuring CD (sCD). We evaluated the risk factors for surgery in sCD patients.

**Materials and Methods:** The patients who were following up with a sCD diagnosis at our IBD-specific outpatient clinic between 1989 and 2023 were enrolled to the study. Based on sCD related surgery, we divided our cohort into two groups: surgery and non-surgery. Demographic and clinical data were recorded retrospectively from the hardcopy and electronic patient files. We compared two groups, also, we performed a multivariate analysis to evaluate the impact of the factors on the need of surgery.

**Results:** A total of 106 patients were recorded. The mean age was  $42.07 \pm 14.06$  years and 52 (49.1%) was female. Fifty (47.2%) patients had tobacco exposure. Nine (8.5%) patients had multiple strictures. In surgery group, 35 (57.4%) patients had fistula and 19 (79.1%) patients had abscess, this was significantly higher than non-surgery group (P = .046 and P = .005 respectively). In surgery group, 39 (60%) patients had biologic exposure and in non-surgery group 26 (40.0%) had biologic exposure (P = .005). In multivariate analysis biologic use and abscess were found as risk factors for surgery (P = .01, OR: 3.96 and .03, OR: 4.23 respectively).

**Conclusion:** We found fistula, abscess, and biologic use higher in surgery group. In the light of the current literature, we found biologic use as a risk factor for surgery. Also, in our study abscess presentation was also a risk factor for surgery.

**Table 1.** Comparison of The Patients with Disease Related Surgery and without Surgery.

Table 1: Comparison of the patients with disease related surgery and without surgery.

	Surgery	Non-Surgery	p
Age (years), mean ± SD	$45.48 \pm 15.56$	$38.78 \pm 11.67$	0.01*
Age of Diagnosis (months), median (range)	31 (16 – 70)	31 (15 – 57)	0.64
Sex, n (%)			0.33
Female	28 (53.8%)	24 (44.4%)	
Male	24 (46.2%)	30 (55.6%)	
Tobacco use, n (%)	23 (46.0%)	27 (54.0%)	0.40
Time to biologic exposure (months), median (range)	15 (0 – 384)	24 (0 – 166)	0.51
Time from diagnosis to stricture presentation (months), median (range)	7 (0 – 336)	1 (0 – 180)	0.97
Fistula, n (%)	35 (67.3%)	26 (48.1%)	0.04*
Perianal Fistula, n (%)	21 (40.4%)	18 (34.0%)	0.49
Intestinal Fistula	27 (65.9%)	14 (34.1%)	0.007*
Abscess, n (%)	19 (36.5%)	7 (13.0%)	0.005*
Stricture Number, n (%)			0.09
Single	44 (86.3%)	50 (96.2%)	
Multiple	7 (13.7%)	2 (3.8%)	
Biologic use, n (%)	39 (60.0%)	26 (40.0%)	0.005*

p < 0.05 accepted as statistically significant.

SD: Standard deviation

#### **GS59**

# Symptomatic Improvement Observed within 2 Days of Etrasimod Induction Therapy: Results from ELEVATE UC 52 and ELEVATE UC 12 Studies in Patients with Ulcerative Colitis

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**Background/Aims:** Time from treatment initiation to symptom relief, including rectal bleeding (RB) and stool frequency (SF), is key for patients with ulcerative colitis (UC) and can help guide therapy

decisions. Etrasimod is an investigational, oral, once-daily, selective sphingosine 1 phosphate (S1P)<sub>1,4,5</sub> receptor modulator in development for the treatment of moderately to severely active UC. Data from patient e-diaries can help inform on symptoms in patients with UC. We present a post hoc analysis of daily e-diary data collected on RB and SF from patients enrolled in the ELEVATE UC 52 (NCT03945188) and ELEVATE UC 12 (NCT03996369) phase 3 clinical trials.

**Materials and Methods:** Data were pooled from the ELEVATE UC 52 and ELEVATE UC 12 studies, which randomised patients with moderately to severely active UC 2:1 to receive etrasimod 2 mg once daily or placebo. The Mantel–Haenszel weighted test was used to assess adjusted risk differences in proportions of responders between treatment groups.

**Results:** At baseline, patients receiving etrasimod and placebo had a mean (SD) RB subscore of 1.6 (0.69) and 1.6 (0.68), SF subscore of 2.4 (0.74) and 2.4 (0.74), and pMMS of 4.0 (1.07) and 4.0 (1.07), respectively. Adjusted differences in symptomatic response and symptomatic remission in patients receiving etrasimod vs placebo became significant from Day 2 (5.56 [0.79, 10.33]) and Day 11 (4.69 [0.36, 9.03]), respectively. Adjusted differences (95% confidence interval) in RB remission and SF normalisation in patients receiving etrasimod vs placebo reached significance from Day 15 (6.33 [0.14, 12.51]) and Day 3 (3.51 [0.87, 6.14]), respectively (all P < .05).

**Conclusion:** In this post hoc analysis, we found significant, early improvements in UC symptoms in patients receiving etrasimod vs placebo beginning within 2 days. These findings indicate a potentially rapid onset of symptomatic effect with etrasimod treatment.

**Table 1.** Responses in Patients Receiving Etrasimod Compared with Placebo on the First Day of a Significant Adjusted Difference in Daily Symptomatic Response, Symptomatic Remission, RB remission and SE Normalization

Endpoint	First day of significant	Pooled data from ELEVATE UC 52 and ELEVATE UC 12				Adjusted	2-sided p value at first day of
	difference from placebo	Placebo (N=260), n (%)	N1 <sup>b</sup>	Etrasimod 2 mg QD (N=527), n (%)	N1 <sup>b</sup>	difference (95% CI) <sup>c</sup>	significant difference from Placebo <sup>d</sup>
Daily symptomatic response*	2	27 (11.16)	242	84 (16.83)	499	5.56 (0.79, 10.33)	0.022
Daily symptomatic remission <sup>f</sup>	11	21 (8.71)	241	67 (13.59)	493	4.69 (0.36, 9.03)	0.034
Daily RB remission <sup>a</sup>	15	59 (25.21)	234	153 (31.35)	488	6.33 (0.14, 12.51)	0.045
Daily SF normalisation <sup>k</sup>	3	6 (2.45)	245	31 (6.19)	501	3.51 (0.87, 6.14)	0.009

Daily Mayo RBS and SFS and pMMS (RBS + SFS) were calculated from patient e-diary responses, as well as CFB during the first 28 days of therapy.

\*Adjusted differences with nominal p values <0.05 were considered significant

<sup>b</sup>N1 was the actual number of patients on each day (responders and nonresponders)

\*Adjusted differences were based on estimated common risk difference using Mantel-Haenszel weights and stratified by actual naive to biologie/JAKi therapy at study entry (Yes/No), actual baseline corticosteroid use (Yes/No) and actual baseline disease activity (MMS: 4-6 or 7-9)

<sup>6</sup>The Mantel-Haenszel weighted test was used to assess the adjusted risk differences in proportions of responders between treatment groups

\*Patients with ≥ 30% CFB (decrease) in pMMS

 $^{f}$ Patients with RBS = 0 plus SFS = 0 or 1 (with  $\geq$  1-point improvement from baseline)

Patients with RBS = 0

Patients with SFS = 0

Data were pooled from NCT03945188 and NCT03996369. Patients missing an assessment at the specified day were considered nonresponders

CFB, change from baseline; CI, confidence interval; JAKi, Janus kinase inhibitor; n, number of patients with characteristic; MMS, modified Mayo score; N, number of patients; pMMS, partial modified Mayo score; QD, once daily; RB, rectal bleeding; RBS, rectal bleeding subscore; SF, stool frequency; SFS, stool frequency subscore; UC, ulcerative colitis

GS60

#### Evaluation of Gastroenterologist's Awareness of Pancreatic Steatosis

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**Background/Aims:** The clinical importance of pancreatic steatosis (PS), which is actually not a very new entity, has been revealed by studies conducted in recent years. In this trial, we aimed to see gastroenterologist's awareness of PS and its relevance in clinical practice.

**Materials and Methods:** Questionnaire consisted of two parts with a total of 20 questions. First part of questionnaire includes participants' age, gender, working time as a gastroenterologist, the number of patients they see per week, the center they work in. The second part included whether they were familiar with the concept of PS, whether they care about PS, who is at risk for PS, the use of abdominal ultrasonography (USG), how PS is diagnosed and how they manage PS in clinical practice. The questionnaire was sent via e-mail and the answers were collected.

**Results:** A total of 128 physicians responded to the e-mail sent with an interval of 2 weeks. 38 (30.6%) of the participants were women and 86 (69.4%) were men. Sixty nine (53.9%) stated that they were interested in the pancreas. Forty six people (35.9%) worked as gastroenterologists for 11-20 years, mostly in tertiary centers such as university hospitals and training and research hospitals (39.1% and 28.9%,). The 98.4% of the participants had heard of the term of PS before. Ninety one people (72.2%) cared about pancreatic fat. Of those who care, 57 (62.6%) stated that they evaluated metabolic syndrome and cardiovascular risk, and 47 (51.6%) stated that they thought it was of clinical importance even if metabolic syndrome was not accompanied and that they followed up at regular intervals. When diseases that may be associated with PS are questioned; The most common answers are; diabetes (96.7%), hepatosteatosis (89%), obesity (89%), alcohol use (85.7%), hyperlipidemia (81.7%). Although the preferred method for the diagnosis of PS was the use of USG with 71.4%, magnetic resonance imaging and endoscopic ultrasonography were 47.3% and 45.1%, respectively. 47.3% of the participants thought that the pancreas could be seen clearly, and 48.4% thought that it could be seen clearly in some cases. In the center where only 45.1% worked, pancratic steatosis was routinely included in the report of USG or other imaging methods.

**Conclusion:** The results are preliminary results from an ongoing study. Currently, although almost all of the participants have heard of the term of PS, it seems that a clear-cut attitude regarding its clinical meaning has not yet been established. We think that this confusion will be resolved with current studies and guidelines.

GS61

### Sit or Squat: Toilet Type Is a Determinant of Diverticulosis Development

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Diverticulosis coli is the most common benign disease of the colon. Luminal pressure increase in the colon secondary to straining during defecation is a proposed mechanism in disease pathogenesis. Defecation is a complex physiological function. Contraction of the abdominal muscles along with relaxation of external anal sphincter and puborectalis muscle will lead to expulsion of feces due to the pressure gradient between anal canal and the rectum. Different toilet types are used around the world but fundamentally they can be categorized into two main headings: sitting toilets and squatting toilets. Squatting toilets are shown to lead to a better puborectalis muscle relaxation, wider anorectal angle and require less straining which all lead to an easier, prompt and complete fecal evacuation compared to sitting toilets. Less straining translates to a relatively lower increase in abdominal pressure during defecation. Stemming from these knowledge, we hypothesized that toilet type would play a role in the complex pathogenesis of diverticulosis and squatting toilets would lower the risk of diverticula formation. This study was conducted at Antalya Training and Research Hospital between January 2023 and July 2023. 929 patients were enrolled in the study and a one-page questionnaire was prepared to gather the study data. Questionnaires were handed out and collected from the patients before the procedure. Colonoscopy results of patients were matched with corresponding questionnaires at the end of each day. As expected by our hypothesis, sitting toilet was found to be a risk factor for diverticulosis in multivariate logistic regression analysis with an odds ratio of 3,36 (95% CI: 1,684-6,705) (P = .001). Based on this data, future studies focusing on not only diverticulosis but also other bowel disorders and their relationship with the type of toilets used can impact the social life and possibly open a new perspective on public health.

GS62

### The Effectiveness of Non-Standard Triple Therapeutic Regimens Used in Primary Care in the Eradication of Helicobacter Pylori in Turkey: Systematic Evaluation and Meta-Analysis Results

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<sup>2</sup>Department of Biostatistics, Selçuk University Faculty of Medicine, Konya, Turkey

<sup>3</sup>Department of Biostatistics, Mersin University Faculty of Medicine, Mersin, Turkey **Background/Aims:** In the eradication treatment of Helicobacter pylori (H. pylori), effective treatment searches continues worldwide due to the insufficiency of standard triple therapies (STT) in primary treatment, and many treatment regimens are being tried. In our previous meta-analysis, we showed that the eradication success of STT which used in primary treatment in Turkey (PPIs, Amoixycillin, Clarithromycin) is very low. For this purpose, we conducted this systematic review meta-analysis to evaluate the effectiveness of non-STT eradication regimens that used in primary treatment in our country.

Materials and Methods: Randomized controlled trials that involving non-STT first-line eradication treatments conducted in Turkey between 2002-2018 were evaluated. The number of the centers included (uni/multicenter), the year of publication, the number of patients included, their age, gender, in which population they were studied (adult or child), treatment duration (7, 10, 14 days, consecutive) were evaluated. The eradication rates of cumulative and subgroup studies were evaluated in detail. Proportions were used as the Eradication Effect size. In determining whether there is publication bias of the studies included in the meta-analysis, the funnel graph was used first, and then Begg and Mazumdar rank correlations statistics were calculated. Chi-Square heterogeneity test with (k-1) degree of free, known as Cochrane Q statistic, was used to evaluate heterogeneity. The heterogeneity was evaluated with the I2 statistic. MedicReS E-PICOS AI Smart Biostatistics Software version 21.3 (NY. USA) biostatistics package program was used for the evaluation of the data.

**Results:** The trial consisting of 35 different regimens in a total of 138 trials, involving 11098 participants, were found suitable for analysis. The overall eradication rate of all regimens was 77% according to the random effect model, while the 95% confidence interval was 74.7 to 79.4. Bismuth-based 10-14 day consecutive treatment (95% CI: 86-96), 10-14 day bismuth-based quadruple therapy (95% CI: 91-98), 10-14 day bismuth-based triple therapy and hybrid therapy were significantly superior to % CI: 77-97) regimens.

**Conclusion:** All the trials evaluated showed that the overall eradication rate was below 80%, which is considered sufficient, and it is necessary to develop new treatment options to increase the rate to higher levels. It was concluded that the treatment regimens containing bismuth and metronidazole were better than the non-STT regimens used in the meta-analysis.

**GS63** 

### Endoscopic Treatment of Duodenal Polyps in Patients with Familial Adenomatous Polyposis May Spare Patients from Major Surgical Intervention

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**Background/Aims:** Duodenal adenomas are the most common extracolonic manifestation in patients with familial adenomatous polyposis (FAP). Duodenal malignancies are the leading cause of

mortality in FAP patients undergoing colectomy. However, endoscopic treatment and follow-up of duodenal adenomas may reduce the need for a second major operation. In our study, we evaluated FAP patients with colectomy who underwent ampullectomy for ampullary adenoma and underwent endoscopic treatment and follow-up for duodenal polyposis in our unit.

**Materials and Methods:** All patients underwent endoscopic ampullectomy. Duodenal polyps were staged according to the Spigelman classification. APC (argon plasma coagulation) was used for polyps smaller than 5 mm, biopsy for polyps between 5-10 mm and polypectomy for polyps larger than 1 cm. Patients were evaluated regularly to assess changes in Spigelman classification and to determine the need for surgery.

**Results:** A total of 13 patients (male/female: 2/11; mean age: 35.3 years) were included in the study between 2008 and 2023. Five patients had only initial evaluation yet. The median follow-up period of the remaining 8 patients was 28 (3-168) months and Spigelman scores were between 5 and 8 at the first procedure. Thus, 2 patients were evaluated as stage 2 and 6 patients as stage 3. At the last follow-up of the patients, it was observed that the stage remained the same in 3 patients, regressed from 3 to 2 in 3 patients and from 3 to 1 in 2 patients. In the follow-up of ampullary adenomas, only one patient had recurrence. Spigelman score was kept below stage 4 in all patients and no patient required surgical treatment for duodenal polyposis.

**Conclusion:** Regular follow-up and endoscopic treatment of duodenal adenomas in patients with FAP using Spigelman scoring may protect patients from the need for a second surgery with high morbidity and mortality such as Whipple.

CS1

### Stomach Gastrointestinal Stromal Tumor Surgery, Our Clinical Experience With 26 Case Series

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**Background/Aims:** Gastrointestinal Stromal Tumors (GIST) are the most common mesenchymal neoplasms of the gastrointestinal tract. It is commonly seen in the stomach, less frequently in the extraduodenal small intestine, colon and rectum. In our study, we aimed to present the clinical and pathological features of patients who were operated for gastric GIST.

**Materials and Methods:** Demographic and clinicopathological data of 22 gastric GIST cases diagnosed and surgically treated between January 2016-June 2021 were retrospectively analyzed and recorded through the hospital information system.

**Results:** Of the 22 patients included in the study, 9 (40.9%) were female and 13 were male (59.1%), and the mean age was 64.95  $\pm$  9.3 years. One patient had total gastrectomy (4.5%), 11 patients had subtotal gastrectomy (50%), 10 patients had wedge resection (45.5%). One patient diagnosed incidentally from sleeve gastrectomy

specimen was also included in the subtotal gastrectomy group. When pathology reports were examined, 14 patients (63.6%) had a tumor diameter of less than 5 cm, and 8 patients (36.4%) had a diameter of 5 cm or more. According to Miettinen risk scoring, 6 had very low (27.3%), 13 low (59.1%) and 3 high (13.6%) scores. CD117 antigen was positive in 20 patients (90.9%), while CD34 antigen was positive in 21 patients (95.5%).

**Conclusion:** With the increase in endoscopic and radiological imaging tests performed for diagnosis and screening in daily practice, the possibility of early diagnosis has increased, and surgical and oncological treatments of patients can be performed earlier.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	11	42,3	42,3	42,3
	HT	3	11,5	11,5	53,8
	DM	1	3,8	3,8	57,7
	KAH	8	30,8	30,8	88,5
	PULMONER	3	11,5	11,5	100,0
	Total	26	100,0	100,0	

Figure 1. Comorbidity status.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fundus	3	11,5	11,5	
	Kardiya	2	7.7	7.7	11,5
	Corpus	12	46,2	46,2	19,2
	Antrum	9	34,6	34.6	65,4
Tot	Total	26	100,0	100.0	100,0

Figure 2. Tumor location in the stomach.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	1	3,8	3,8	3,8
	çok düşük	11	42,3	42,3	46.2
	düşük	4	15,4	15,4	61,5
	orta	7	26,9	26,9	88,5
	yüksek	3	11,5	11,5	100,0
	Total	26	100,0	100,0	

Figure 3. Risk sssessment.

CS2

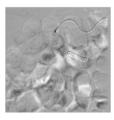
### Bleeding into the Gallbladder: A Rare Type of Hemobilia

<u>Gizem Fırtına</u>1, Arda Bilgili<sup>2</sup>, Emre Gönüllü<sup>1</sup>, Mustafa Özdemir<sup>3</sup>, Ahmet Tarık Eminler<sup>2</sup>, Kerem Karaman<sup>1</sup> **Background/Aims:** Hemobilia is a rare cause of gastrointestinal bleeding. latrogenic causes are the most common etiology. Spontaneous rupture of the cystic artery into the gallbladder is a very rare cause of hemobilia. The aim of this oral presentation is to present a case of spontaneous rupture of the cystic artery into the gallbladder in a patient admitted to the emergency department with acute gastrointestinal bleeding.

**Materials and Methods:** Demographic data, imaging results, blood parameters, medical and surgical treatment were extracted from the patient file of the patient who presented to the emergency department with acute gastrointestinal bleeding and diagnosed with spontaneous rupture of the cystic artery into the gallbladder.

**Results:** Eighty-one-year-old male was admitted to the emergency department with complaints of weakness and hematochezia. On admission, arterial blood pressure was 100/60 mmHg and pulse rate was 110 beats/minute. The hemoglobin value at admission was 5.2 g/dL (normal range: 11.0-16.0). The patient was hospitalized by the gastroenterology department, proton pump inhibitor infusion was started and 3 units of erythrocyte suspension were given. Hemoglobin value was found to be 8.5 dr/dL. Sclerotherapy was performed at the site of coagulum in the bulbus. In the follow-up of the patient, hemoglobin value decreased to 5.3 g/dL, for this reason angiography was performed by interventional radiology. Angiography revealed that the cystic artery fistulized into the gallbladder lümen. The patient was urgently operated. Bleeding into gallbladder was confirmed and laparoscopic cholecystectomy was performed.

**Conclusion:** Spontaneous rupture of the cystic artery into the gall-bladder is a rare type of hemobilia and should be considered in patients presenting with acute gastrointestinal bleeding in whom the etiology cannot be determined. In tertiary care centers with interventional radiology, gastroenterologists and experienced gastroenterology surgeons, these cases can be detected without delay and treated successfully using minimally invasive methods.



**Figure 1.** Visualization of rupture of the cystic artery into the gallbladder by angiography.



**Figure 2.** Confirmation of bleeding into the gallbladder at the beginning of surgery.

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CS3

## The Prognostic Importance of the Count and Percentage of Immature Granulocytes in the Determination of the Severity of Acute Pancreatitis

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**Background/Aims:** Acute pancreatitis (AP) is a disease with high rates of morbidity and mortality. As the severity of pancreatitis increases, so the risk of mortality increases but as yet there is no definitive marker for the early determination of pancreatitis severity. The aim of this study was to investigate the value of immature granulocytes (IG) count and percentage (IG%) in diagnosing the disease, determining the severity, and predicting mortality in AP patients.

**Materials and Methods:** The records were retrospectively scanned of patients admitted to our hospital because of AP between January 2022 and March 2023. The patients were analyzed by classisication into 3 groups of mild, moderate, and severe pancreatitis according to the modified Atlanta criteria.

**Results:** Evaluation was made of a total of 163 patients, comprising 93 females and 70 males with a mean age of  $55.78 \pm 20.11$  years. In the ROC analysis performed to determine disease severity, a cutoff value of 0.65% for IG% was found to have AUC: 0.975, 100% sensitivity, 87.5% specificity, 36.5% PPV, and 100% NPV (P < .001). The capacity of IG% to determine the disease was more effective than that of LDH aand CRP (P = .001, P = .012, respectively). In the ROC analysis performed to determine mortality, a cutoff value of 0.55% for IG% was found to have AUC = 0.945, 100% sensitivity, 78.3% specificity, 14.6% PPV, and 100% NPV (P < .001).

**Conclusion:** The amount and percentage of immature granulocytes is an effective predictive marker in the diagnosis of acute pancreatitis, determination of disease severity, and prediction of mortality.

CS4

### The Diagnostic Role of Preoperative Blood Tests in Complicated Appendicitis: A Feasible Approach to Surgical Decision

Erkan Oymacı, Nurettin Kahramansoy, Sedat Tan, <u>Ahmet Can Yaşar,</u> Serdar Aydoğan, Mehmet Yıldırım

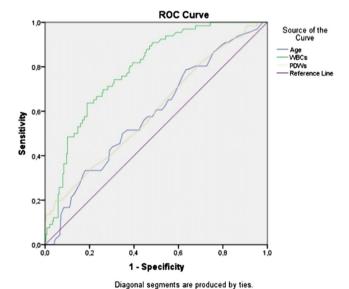
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**Background/Aims:** An accurate diagnosis and timely surgical intervention have significant importance in noncomplicated appendicitis (NCA) and complicated appendicitis (CA). Therefore, any factor that helps in the prediction of CA also contributes to suitable treatment options. This retrospective study aimed to identify any relationship between acute appendicitis (AA) and preoperative blood test levels and whether these parameters can differentiate between NCA and CA patients.

**Materials and Methods:** A database of 201 appendectomies and 100 control healthy patients were analyzed between 2019 and 2022. Patients were divided into three groups: NCA without peritonitis or phlegmonous appendicitis as group 1; CA with perforated, necrotizing appendicitis with peritonitis as group 2; and the healthy control group (CG) as group 3. White blood cell (WBC), platelet distribution width (PDW), mean platelet volume (MPV), red cell distribution width (RDW), creatine kinase (CK), and bilirubin levels were collected from the patients and compared statistically between the groups.

**Results:** Age, WBC, and PDW levels were set as predictive in the differential diagnosis of CA as a result of receiver operating characteristic (ROC) analysis. The multivariate analysis demonstrated that age (OR: 1.023; 95% CI: 1.000–1.045; P = .04), male sex (OR: 3.718; 95% CI: 1.501–9.213; P = .005), WBC levels (OR: 1.000; 95% CI: 1.000–1.000; P = .002), and PDW levels (OR: 2.129; 95% CI: 1.301–3.484; P = .003) were independently associated with CA.

**Conclusion:** Age, higher WBC count, and PDW levels are valuable in differentiating the diagnosis of CA from NCA, and this could be a feasible approach for surgical decisions.



**Figure 1.** Receiver operating characteristic (ROC) curve analyses for the predictors of CA.

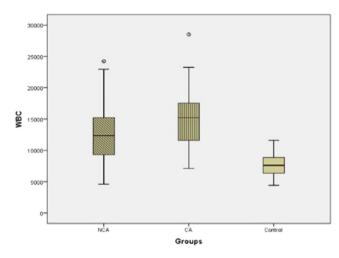


Figure 2. WBC variation analyses between the groups.

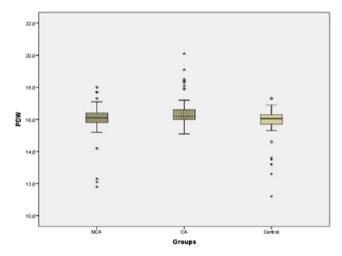


Figure 3. PDW variation analyses between the groups.

CS5

### A Rare Cause of Urinary Leakage After Ileal Conduit: Drain Migration

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**Background/Aims:** The purpose of the urinary stoma, which is made using the ileal segment, is to provide a better quality of life for the patient by creating a reservoir area. We aimed to present a case in which an intestinal conduit was created by our clinic after cystectomy and a successful management of urinary leakage that developed after the penetration of the intra-abdominal drain into the conduit during the follow-up.

**Materials and Methods:** A urostomy was created with an ileal conduit over the ans prepared from the terminal ileum in a 70-year-old male patient who was operated for bladder cancer with rectal invasion, together with the physicians of the urology clinic. In the post-operative follow-up of the patient, due to the increase in the flow of fluid from the abdominal drain, the biochemistry of the drain was studied and abdominal tomography was taken.

**Results:** The patient's drain biochemistry was compatible with urinary leakage. In his tomography, the abdominal drain was in close contact with the lumen at the posterior level of the conduit. In order to evaluate the integrity of the conduit lumen, the patient underwent endoscopy and it was observed that the abdominal drain migrated into the conduit lumen. In the follow-up, the patient was followed up with the drain that was withdrawn intermittently, and the urinary leak regressed and he was discharged with recovery.

**Conclusion:** We think that endoscopic procedures to be performed through stomatal openings can be used for both diagnosis and treatment purposes in the evaluation of leaks that occur after intestinal diversions to ensure the continuity of the urinary tract

CS6

### Jaundice Due to Duodenal Diverticulum; Lemmel's Syndrome Case Report

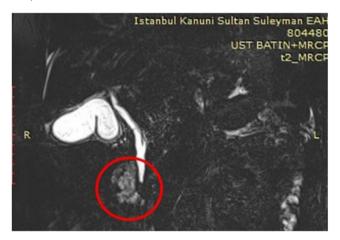
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The duodenum is the second most common site of intestinal diverticula. Periampullary duodenal diverticula rarely cause obstructive jaundice and this condition was first described by German surgeon Gerhard Lemmel in 1934. Lemmel syndrome is defined as obstructive jaundice due to periampullary duodenal diverticulum without choledocholithiasis or neoplasm. We present our diagnostic and therapeutic approach to this rare and difficult to diagnose syndrome. A 92-year-old male patient presented with abdominal pain and jaundice. He had no history of hepatopancreaticobiliary pathology and no comorbidities. Total billirubin was 4 mg/dL and direct billirubin was 2.3 mg/dL at presentation. Abdominal tomography and magnetic resonance imaging showed dilated choledochal and pancreatic ducts and diverticular appearance in the second duodenal continent. Gastroscopy was performed and findings compatible with Lemmel's syndrome were found in the duodenal 2<sup>nd</sup> continent diverticulum and the diverticulum was filled with bile food residues. Endoscopic diverticular lavage and food residues were removed with a basket catheter. In the follow-up of the patient, total billirubin decreased to 1 mg/dL and direct billirubin decreased to 0.43 mg/dL. The patient's symptoms improved rapidly and he was discharged on the 3rd day of follow-up. Abdominal CT examinations lack specificity and a duodenal diverticulum may be incorrectly interpreted as a possible pancreatic neoplasm or pseudocyst. Therefore, a suspected case of Lemmel syndrome seen on a CT scan may require a more definitive study such as MRCP or endoscopy. Examination with a side-facing duodenoscope may allow better visualization of the periampullary duodenal diverticulum and immediate endoscopic intervention. ERCP is recommended as the gold standard. As a potential bridge to definitive diverticulectomy, less invasive endoscopic techniques, including simple tap water lavage, may provide adequate symptomatic relief and should be considered as a first step. In more severe cases, endoscopic biliary cannulation and sphincterotomy may provide adequate relief.



**Figure 1.** Duodenal diverticulum-MRCP. Food residues in the diverticulum are visible.

CS7

### Laparoscopic Rectal Cancer Surgery: What We Learned After 600 Cases?

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**Background/Aims:** Despite advances in technology and surgical experience, laparoscopic rectal cancer surgery is still a debate because of concerns about oncological principles. In this study, we presented the long-term results of our consecutive 600 cases and discussed the feasibility of laparoscopic surgery in rectum cancer.

**Materials and Methods:** Between October 2015 and May 2023. The data of 938 consecutive rectal cancer patients were prospectively recorded, of 600 patients undergoing laparoscopic surgery were included. The demographic data of the patients, preoperative imaging methods, treatments, perioperative complications, follow-up results regarding metastasis were recorded.

**Results:** This study included 253 female and 347 male patients with a median age of  $57.2 \pm 18.4$  years. A total of 525 patients received

neoadjuvant chemoradiotherapy. Of these, 201 (33.5%) patients underwent anterior resection, 312 (52%) patients underwent low anterior resection (LAR) and 87 (14.5%) patients underwent ultra-LAR resection. Conversion surgery was performed in 89 (14.8%) patients. Median operative time 143.5 ± 117.4 minutes. Anastomotic leakage was observed in 12 (2%) patients, all patients were treated conservatively, whereas 2 patients underwent re-operation. One patient was died in the early period because of anastomotic leakage. Mean hospital stay time was 7,4 days. Median follow-up time was 74.7 ± 11.8 months. Distant metastasis occurred in 47 (7.8%) patients while local recurrence was observed in 7 (1.1%) patients.

**Conclusion:** Laparoscopic surgery can be safely performed in line with oncological principles in patients with early and locally advanced (T3, N0-2) rectal cancer when sufficient surgical experience and laparoscopic equipment exist. However, patients with bulky T4 tumor and male patients with narrow pelvis are still challenging problems for the surgeons. The lack of sufficient traction ability and straight angle of laparoscopic equipment's and 2-dimensional vision may lead to wrong dissection plans, particularly in patients with distally located tumors, thus resulting in compromising oncological principles. Therefore, preoperative imaging of such patients should be evaluated carefully. Conventional or robotic surgery should be the first option when such risk factors exist.

CS8

#### The Impact of Ileocecal Resection in the Patients With Crohn's Disease: Long-Term Results of a Referral Center

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**Background/Aims:** Despite advances in medicine, the pathophysiology of Chron disease is still not be clarified. Anti-inflammatory drugs and biological agents still seem to be the best option to control the severity of the disease, whereas with serious side effects leading to reduce the quality of the patient. Recent studies revealed that surgery significantly reduces the use of these drugs in patients with solely ileocecal involvement. We aimed to present the long-term results of the patients undergoing ileocecal resection for Chron's disease (CD).

**Materials and Methods:** The data of 24 consecutive CD patients with ileocecal involvement were prospectively recorded, between May 2015 and March 2023. The demographic data of the patients, preoperative imaging methods, treatments, performed surgery, postoperative complications, follow-up period, need of postoperative treatment and recurrence were recorded.

**Results:** This study included 17 female and 7 male patients with a median age of  $34.2 \pm 7.5$  years. Ten patients were previously received azathioprine while 14 patients received plus anti-TNF therapy, with a median of  $14.1 \pm 8.1$  months before surgery. All patients underwent ileocecal resection+ side to side ileocolic anastomosis with wide mesenteric excision. 18 patients underwent laparoscopy while the rest underwent conventional surgery. The postoperative course was uneventful of all patients and were discharged with a

mean of 5.2 days. Median follow-up time was 54.7 ± 11.8 months. Re-resection was performed in 3 patients due to recurrence.

**Conclusion:** Despite the exact curative treatment for CD is not clear, ileocecal resection significantly reduces the need of medication, thereby improving the quality of life in CD patients with solely ileocecal involvement. Large studies with long-term follow-up are needed to obtain exact results on this subject.

CS9

### Is Revisional Roux En Y Gastric Bypass after Sleeve Gastrectomy A Safer Method than Primary Roux En Y Gastric Bypass?

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**Background/Aims:** Surgery remains the sole long-term effective approach in treating morbid obesity and its associated conditions. Sleeve gastrectomy (SG) is commonly the initial choice due to its simplicity. However, instances arise where patients necessitate revision surgery due to treatment failure or various complications. In such cases, Roux-en-Y gastric bypass (RYGB) emerges as a prevalent choice. Yet, concerns about increased complexity and risks during revisional RYGB persist in comparison to the primary procedure. This study aims to compare the initial outcomes for primary RYGB and RYGB after sleeve gastrectomy.

Materials and Methods: Medical records of patients who underwent primary or revision RYGB following laparoscopic SG for morbid obesity at Sakarya University Training and Research Hospital Gastroenterology Surgery Clinic between 2017 and 2023 were retrospectively reviewed. Demographic data, comorbidities, ASA scores, operative times, and both intraoperative and postoperative complications were documented. Patients were categorized into two groups: primary RYGB and revision RYGB, which were subsequently subjected to a comparative analysis based on the specified parameters.

**Results:** The study included 52 RYGB patients, with 48.1% (25/52) undergoing revision and 51.9% (27/52) opting for primary RYGB. The mean patient age was  $40.3 \pm 9.3$  years, with no notable demographic or ASA score differences between the groups (P > .05). Operative times were similar in both groups (revision vs. primary, 130 (120-160) vs. 140 (120-165), P = .084). The overall complication rate was 22.2% (6/27) for primary RYGB and 20% (5/25) for revision RYGB (P = .558). While the incidence of grade ≥3 complications, according to the Clavien–Dindo classification, was higher in the primary RYGB group, no statistically significant difference was observed (primary vs. revision; 11.1% (3/27) vs. 4% (1/25), P = .611). Importantly, no fatalities occurred among any of the patients.

**Conclusion:** Revisional RYGB is a viable option, offering comparable operative times and complication rates, both early and late, to primary RYGB.

CS10

### Bariatric Surgery Alleviates Non-Alcoholic Fatty Liver Disease: A Study Conducted with Transient Elastography

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**Background/Aims:** In this study, it was aimed to investigate the possible positive changes (regression of fibrosis and steatosis) in liver tissue following bariatric surgery performed on morbid obese patients by using Transient Elastography (TE). In addition, it was aimed to examine if there is any alteration in TE measurements according to the selected surgical method in the treatment of morbid obesity.

**Materials and Methods:** 302 patients who had bariatric surgery due to morbid obesity between November 1, 2016 and December 31, 2019 in General Surgery Clinic of Marmara University Pendik Training and Research Hospital were examined. 112 patients, with preoperative and postoperative 12<sup>th</sup> month follow-up Fibroscan (F/S) examinations, were included in the study. Patients were divided into two groups: Sleeve Gastrectomy (SG) (n = 39) and RnY Gastric Bypass (RYGB) (n = 73). Liver tissue was evaluated by FS. Weight loss was measured by BMI and% EWL. The evaluation of comorbidities was done clinically (drug use) and biochemical (lipid profile, glycemic profile). F/S, E and CAP measurement values and the fibrosis and steatosis status of the patients, according to the determined threshold values were used as the primary measurement value. All data were prospectively collected and analyzed retrospectively.

**Results:** When the mean values of preop and postop E and CAP were compared, a significant decrease was observed in both values in the postop 12<sup>th</sup> month (P < .001). In the stages of fibrosis and steatosis, a significant regression and improvement was observed in the 12<sup>th</sup> postoperative month. There was no significant difference between the groups.

**Conclusion:** Bariatric surgery improves fatty liver disease in morbidly obese patients. This improvement can be demonstrated reliably with the TE method. SG and RYGB have also been shown by this method to be equally effective in improving non-alcoholic fatty liver disease.

CS11

#### **Rectal Cancer: Our Watch and Wait Results**

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**Background/Aims:** The aim is to report the outcomes of patients with rectal cancer who received neoadjuvant chemotherapy and radiotherapy and showed complete clinical response.

**Materials and Methods:** Patients who presented to the Ankara Bilkent City Hospital Gastroenterology Surgery Clinic between January 2018 and October 2023, received neoadjuvant chemotherapy and radiotherapy, and accepted the wait-and-see approach after achieving a complete response were included in the study. Patients were treated with either total neoadjuvant or standard CT+RT protocols. Patients were followed up with rectal examination and rectoscopy every 2-3 months, pelvic MRI every 4-6 months, and thoracic and abdominal tomography annually. PET-CT was performed when a suspicious area was observed or based on the decision of the attending physician.

**Results:** There were 14 patients who achieved a complete response (6 males and 8 females). The median age of the patients was 61 (range 41-80). The mean follow-up duration was 21 months. During follow-up, recurrence was detected in 7 patients, with local recurrence in 6 and distant metastasis in 1. Recurrences were observed as early as the 5th month and as late as the 5th year. Liver metastasis was observed in the 2<sup>nd</sup> year. Abdominoperineal resection was performed in 5 of the patients with local recurrence, and low anterior resection was performed in 1. The patient with liver metastasis underwent metastasectomy.

**Conclusion:** In patients with rectal cancer who achieved a complete clinical response after neoadjuvant treatment, recurrence was observed in 7 out of 14 patients (50%). This is a relatively high rate, and the reasons for this high rate should be investigated.

CS12

### **Periampullary Region Tumors: Rare Cases**

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Neuroendocrine tumors (NETs) are rare neoplasms, and in this article, we aimed to discuss two separate rare cases of NETs. First patient was a 66-year-old male. The patient was investigated by the endocrine clinic due to resistant hypokalemia, and his ACTH level was found to be 83 pg/mL, and cortisol level was 1021 µg/day. An MRI revealed a 46 mm mass in the tail of the pancreas. Ga68 DOTA PET scan showed two separate foci, one 46 mm in the tail and another 16 mm in the head of the pancreas.

After discussion in a multidisciplinary endocrine council, a decision was made for a total pancreatectomy. Following a successful total pancreatectomy in our clinic, the patient's cortisol levels returned to normal during postoperative follow-up, and pathology results revealed grade 1 NETs in two separate foci in the pancreas. Second patient was a 60-year-old female presented with abdominal pain and was found to have a 2 cm subepithelial lesion at the papilla level during gastroscopy, leading to an EUS. The EUS revealed a 2 cm mass originating from the ampulla of Vater. After an MR examination raised suspicion of NET, a GA68 PET scan was performed, confirming the involvement. The patient underwent a Whipple procedure without any postoperative complications and was discharged. Pathology results indicated a malignant paraganglioma originating from the ampulla of Vater, with only 1 metastasis detected out of 37 removed lymph nodes. The patient has been undergoing medication-free follow-up with the medical oncology clinic and has had no recurrence detected during the 2-year follow-up visits performed every 3 months. Hormone-active NETs originating from the periampullary region are quite rare. If curative surgery is possible, it is an effective treatment.

CS13

### Retrospective Analysis of Endoscopy Procedures Performed in the Emergency Endoscopy Unit of Başakşehir Çam and Sakura City Hospital in Adult Patients Who Swallowed Foreign Bodies Under Shift Conditions

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**Background/Aims:** Retrospective analysis of endoscopy procedures performed on adult patients who swallowed foreign objects during emergency endoscopy duty at Başakşehir Çam and Sakura City Hospital.

**Materials and Methods:** Data were obtained from the electronic health records and emergency endoscopy unit records of patients who applied to the emergency department endoscopy department with complaints of foreign body ingestion and underwent gastroscopy between April 2021 and September 2023.

**Results:** Endoscopy was planned for 40 patients. 2 patients gave up on the procedure. Esophagogastroduodenoscopy (ODD) was performed in 38 patients. All of these patients had x-rays taken. The detection rate by x-ray was 9 in 38 patients (23%). CT was performed in 25 of the patients (65%). Among patients who underwent CT, diagnostic findings were detected in 12 patients (55%). The majority of foreign bodies detected were in the esophagus, 16 out of 38 patients (42%). It was in the stomach in 11 patients (29%), and a foreign body was observed in the oropharynx line in 1 patient (2.6%) and in the duodenum line in 1 patient (2.6%). In the remaining 9 patients, no foreign

body was detected during the procedure. Among the 29 foreign bodies removed by endoscopy; Chicken bones were prominent in 9 patients (31%) and food residues were prominent in 10 patients (34%). Following this, the dental prosthesis was removed in 7 patients (24%) and the needle was removed in 2 patients (7%). The process was terminated by pushing 4 of the food residues into the stomach. The location of foreign bodies removed by endoscopy was in the esophagus in 14 of 29 patients (48%). It was in the stomach in 13 patients (44%).

**Conclusion:** While radiological examinations help in the detection of radiopaque foreign bodies, the endoscopic method provides both diagnosis and treatment opportunities, regardless of radiopacity.



Figure 1. Chicken bone in the esophagus.



Figure 2. Chicken bone removed from the esophagus.

CS14

### How Does Simultaneous Colon and Liver Resection for Colon Cancer Liver Metastases Affect Postoperative Complication and Survival Rates?

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**Background/Aims:** We aimed to examine the effect of simultaneous colon and liver resection on postoperative complications and overall survival for colon cancer liver metastases.

**Materials and Methods:** The data of 141 patients who underwent liver resection for colon cancer liver metastases at a single institution between May 2010 and October 2020 were retrospectively reviewed.

**Results:** Simultaneous liver and colon resection was performed in 43.3% of the patients for colon cancer liver metastasis. The postoperative complication rate was higher in the simultaneous resection group (54.1% vs. 31.2%, P = .007). In addition, operation time and duration of hospital stay were higher in the simultaneous resection group (P = .001 and P = .015, respectively). Amount of intraoperative bleeding, distribution of metastatic tumors in the liver, number of metastatic tumors in the liver, tumor localization in the colon and overall survival rates of both groups were similar.

**Conclusion:** For colon cancer liver metastases, simultaneous colon and liver resections increase the postoperative complication but do not decrease overall survival rate. For a simultaneous resection, a patient-based decision can be made and curative resection can be achieved with a single operation.

**CS15** 

### Does the Number of Pringle Maneuvers Affect the Complications After Liver Metastasectomies?

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**Background/Aims:** We aimed to examine the effect of the number of pringle maneuvers on postoperative complications following liver surgeries for colorectal cancer liver metastases.

**Materials and Methods:** The data of 220 patients who underwent liver resection for colorectal cancer liver metastases at a single

institution between May 2010 and October 2020 were retrospectively reviewed.

**Results:** Between 1 and 8 pringle maneuvers were performed in 66.7% of the patients. The most frequently performed pringle maneuvers were 3 and 4 times (28.2% and 24.4%), respectively. The postoperative complication rates of the groups with and without the Pringle maneuver were similar (39.4% and 43.8%). In addition, the increase in the number of pringle maneuvers did not cause a significant change in postoperative complications (P = .619).

**Conclusion:** Performing multiple pringle maneuvers when properly performed does not lead to a significant increase in postoperative complications following liver surgeries for colorectal cancer liver metastases.

CS16

### Effect of Sarcopenia on Morbidity Following Pancreaticoduodenectomy

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**Background/Aims:** In this study, the effect of sarcopenia on postoperative morbidity in patients undergoing pancreaticoduodenectomy was examined.

**Materials and Methods:** The data of 159 patients over the gae of 18 who underwent elective open pancreaticoduodenectomy in a single center between 2012 and 2020 due to a mass in the periampullary region were retrospectively examined. Cases that were performed with emergent indication or laparoscopic surgery, and without pancreatic anastomosis, and cases that did not have a computed tomography scan in the patient image archive within the last two months before the operation were excluded from the study. Skeletal muscle area was calculated from the L3 vertebra sections of the patients' computed tomography scans taken within two months before the operation. Total skeletal muscle area was calculated by using the Analis ASAN J morphometry program. Skeletal muscle index (SMI) calculated for use in the analysis was obtained by dividing the total cross-sectional muscle area in cm<sup>2</sup> by the square of the height in meters. The cutoff value for SMI was determined using the ROC curve. The effect of this index on total postoperative complications, bleeding, pancreatic fistula, reoperation rates and length of stay was examined.

**Results:** A total of 66 patients (45 men, 21 women) were included in the study. SMI cutoff value was calculated as 45. In comparative

analyzes using this cutoff, no difference was detected in terms of total postoperative complications, bleeding, pancreatic fistula rates and length of stay. However, it was observed that grade-C pancreatic fistula (21.1% vs. 2.1%, P = .07) and reoperation rates (21.1% vs. 4.3%, P = .03) were significantly increased in the group with SMI <45.

**Conclusion:** Sarcopenia increases the rates of severe pancreatic fistula and reoperation following pancreaticoduodenectomy. This patient group should also be considered in terms of this feature during the preoperative preparation period.

CS17

#### Mesenteric Leiomyosarcoma: Report of Two Cases and Compherensive Review of the Literature

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The mesentery is a common site of metastasis from gastrointestinal cancers. Primary mesenteric cancers are rare and usually mesenchymal and benign. Mesenteric leiomyosarcoma is a rare, malignant smooth muscle sarcoma with an incidence of 1:350000. Due to its low incidence, preoperative diagnosis is difficult. We aimed to present the results of 2 mesenteric leimyosarcoma cases. A 55-year-old female patient, with no comorbidities, was admitted to our emergency department due to sudden onset cramp-like lower abdominal pain and rectal bleeding. No weight gain or weight loss. A computed tomography (CT) scan of the abdominopelvic revealed lesion in the intraabdominal midline. A colonoscopy performed was unremarkable. The patient underwent a midline laparotomy. Distal small bowel mesenteric mass was resected. There were no postoperative complications. No recurrence occurred during 30-month follow-up. The patient did not receive any postoperative chemotherapy or radiation. A 41-yearold female patient, with no comorbidities, was admitted to our emergency department due to periumblical abdominal pain and rectal bleeding. No weight gain or weight loss. Abdominopelvic CT revealed lesion in the intra-abdominal pelvic region. A colonoscopy performed was unremarkable. The patient underwent a midline laparotomy. Sigmoid mesenteric mass was resected. There were no postoperative complications. No recurrence occurred during 25-month follow-up. The patient did not receive any postoperative chemotherapy or radiation. The late presentation of LMS and its aggressive mitotic activity leads to a high malignant potential and a poor prognosis. Effective treatment strategies for intestinal LMS are unavailable due to its rarity. Surgical resection with a wide margin of normal surrounding tissue is the mainstay of therapy. LMS responds poorly to chemoradiation therapy, but new therapies are currently being investigated. Leimyosarcoma should be considered in the differential diagnosis in patients who present with rectal bleeding and whose CT scan reveals an intraabdominal lesion.

HS<sub>1</sub>

### An Example of a University Hospital: Evaluation of Patients' Awareness of the Procedure Before the Endoscopy Procedure

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**Background/Aims:** The study was conducted in patients who will undergo endoscopy; it was done to determine the effect of education level, age, gender and working status on the pre-procedure awareness level.

**Materials and Methods:** Descriptive type research was conducted between May 2023 and August 2023. A total of 283 volunteers who underwent endoscopy in the endoscopy unit of a university hospital were included in the study. The data of the study were collected with a personal information form prepared by the researcher and a preprocedure patient preparation form.

**Results:** The average age of the individuals participating in the study was  $43.5 \pm 13$  years and 56.5% were women. 45.9% were primary school graduates and 66.4% were not working. It was determined that 79.9% of the research group underwent endoscopy for the first time and 85.9% of the 57 people who had the procedure before did not have their old reports with them. It was observed that 92.6% of 283 people fasted for a sufficient period of time. 71.7% of them were non-smokers, and 61.3% of those who did smoked within 48 hours before the procedure. 80.9% of them do not use blood thinners, and it was observed that 48.1% of those who used them did not stop using blood thinners at the right time before the procedure. 65.3% of those who did not stop blood thinners at the right time were women.

**Conclusion:** It has been observed that the awareness levels of patients applying for endoscopy procedures are low. To increase awareness levels before the procedure, it is considered that informing patients who have previously undergone endoscopy about their past reports and providing more careful information regarding smoking, blood thinners, and bowel preparation medications could help address the issue.

## Proceedings of the 40<sup>th</sup> National Gastroenterology Week and 11<sup>th</sup> Congress of Gastrointestinal Surgery

**Poster Presentations** 

#### Diagnosis of Hiatal Hernia in Patients with Gastroesophageal Reflux Disease

#### <u>Govhar Imanli</u>, Inara Alikhanova

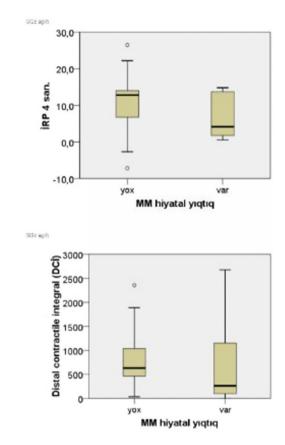
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**Background/Aims:** Studies show that hiatal hernia (HH) significantly increases the risk of gastroesophageal reflux disease (GERD). Low esophageal sphincter pressure in patients with HH leads to more serious esophageal injuries. The aim of the study is to assess the diagnostic significance (sensitivity and specificity) of HH detected by esophageal manometry (EM) and relationship between HH and EM and impedance pH-metry indices in patients main group with gastroesophageal reflux(GER)complaints and in patients control group.

**Materials and Methods:** A total of 60 GERD patients who applied with complaints of GER (main group) and 35 patients who applied for the purpose of "check up" without complaints (control group) that we select from among people were included in our study. In 95 patients who underwent esophagogastroduodenoscopy (EGD) additional EM and pH-metry were performed. Of these, 60 of them (63.1%) were men, 35 (36,9%) were women. The mean age of the patients was 41.1 ± 1.6 years (20-70). The indices of EM and HH were evaluated by EM. De-Meester score and other indices were evaluated by pH-metry. Relationship between HH andEM and pH-metry indices were determined statistically. At the same time calculated ROC curve.

**Results:** HH was detected in 40 out of 95 patients (42%) by EM. Significant relationships were found between HH (EM) and pH-metry indices; total reflux time, standing reflux time, number of reflux periods and number of reflux periods lasting more than 5 min (P = .043, P = .014, P = .014 and P = .047). Thus these indicators were significantly higher in patients with HH. A significant relationship was found between DCI and IRP from EM indicators and HH revealed on EM (P = .032 and P = .018). Thus, the DCI in these patients was significantly less compared to patients without HH, that is, peristalsis disorder in the distal part of the esophagus was seen significantly more (P < .001). Also, the IRP in these patients was significantly lower than in patients without HH. The sensitivity for endoscopic HH in the diagnosis of HH on EM 87.5  $\pm$  5.2%, and the specificity 70.9  $\pm$  6.1%, sensitivity for IRP in the diagnosis of HH 62.5  $\pm$  7.7%, and the specificity 75.5  $\pm$  5.9%.

**Conclusion:** A significant correlation was found between HH and pH-metry. Statistic analysis revealed high sensitivity and high specificity of EM in diagnosing HH.



**Figure 1.** Relationship between indices of esophageal manometry and hiatal herni.

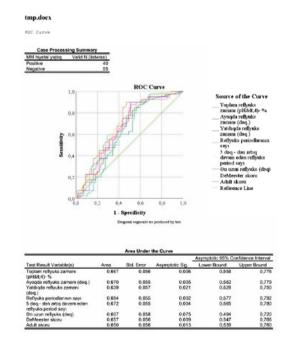


Figure 2. ROC-curve.

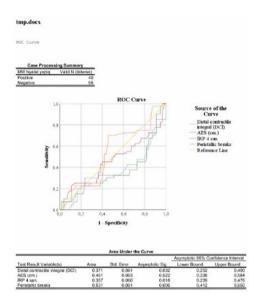


Figure 3. ROC-curve.

### Diagnostic Delay and Physician Visits Before the Definitive Diagnosis in Achalasia

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**Background/Aims:** Despite recent advancements in the diagnosis and treatment of esophageal motility disorders specifically Achalasia, diagnosis is still delayed by an average of five years. There is no data from Turkiye. This study aims to examine the different aspects of social and medical factors in patients.

**Materials and Methods:** We evaluated 100 achalasia patients in Ege University, Department of Gastroenterology diagnosed with upper Gl endoscopy, high-resolution manometry, and timed barium esophagogram. Data extracted regarding demographics, Eckard score, diagnostic methods, number and specializations of physician consultations before the definitive diagnosis, areas of expertise of physicians, delay of the diagnosis, patient pale of live and distance to our institution.

**Results:** The average age was 51.6  $\pm$  14.8 years (males = 46), with 36 in İzmir and 64 from outside the province. On average, patients consulted a doctor  $4.3 \pm 1.4$  times since symptom onset. Each saw a gastroenterology specialist at least once, with an average of 2.31  $\pm$  1.06 visits. Internal medicine was the second most consulted specialty. Before the diagnosis, 17 of 100 patients sought psychiatric consultation. The average number of EGD was 1.98  $\pm$  1.10 (1-5). Time to diagnosis averaged 3.9  $\pm$  2.8 years. The mean Eckard Score was 8.2  $\pm$  1.8, with no correlation with time frame until the diagnosis. 20 patients reported no weight loss, 18 lost less than 5 kg, 32 lost 5-10 kg, and 30 lost over 10 kg.

**Conclusion:** The time until the first diagnosis of achalasia is up to 4 years in our country. None of the factors we examined regarding delayed diagnosis were statistically significant. Although patients frequently consult Gastroenterology, the diagnosis may be missed. Unnecessary psychiatric consultation is common. Large-scale studies are needed on this subject in order not to increase the costs on the healthcare sector and to prevent the decrease in patient quality of life.

GP3

### Evaluation of Endoscopic Ultrasonography Results in Esophageal Dysphagia Patients

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**Background/Aims:** In this study, we aimed to evaluate the contribution of endoscopic ultrasonography (EUS) in the differential diagnosis of patients presenting with complaints of dysphagia and to compare EUS and esophageal wall thickness values in achalasia patients with the control group.

**Materials and Methods:** A total of 77 patients who applied with dysphagia complaints were included in the study. High Resolution manometry (HRM) was performed with a 22-channel aqueous system manometry catheter. Eckardt scoring was calculated to determine disease symptom severity in achalasia patients. In 54 patients, EUS was performed with a Fujinon brand device using a radial probe. The esophageal muscularis mucosa, muscularis propia and esophageal total wall thicknesses on EUS were compared between 27 achalasia patients and 16 control groups in whom no motility disorder was detected in the HRM examination.

**Results:** 41 of the patients were male and 36 were female. The average age of the patients was 50 years. A cardia tumor was detected on EUS in 1 patient diagnosed with achalasia on HRM. Esophageal tumor was detected in 1 patient with normal HRM. EUS muscularis mucosa, muscularis propria and total wall thickness values of achalasia patients were significantly higher than the healthy control group (P < .05, P < .01). No significant relationship was detected between age, body mass index, disease duration, Eckardt scoring and integrated relaxant pressure (IRP) values and EUS muscularis mucosa, muscularis propria and total wall thickness values in achalasia patients (P > .05).

**Conclusion:** In this study, EUS made an additional contribution to the diagnosis of HRM in the differential diagnosis of dysphagia and the detection of malignancy. In addition, EUS esophageal wall thickness values were found to be significantly higher in achalasia patients than in the control group. Prospective studies on more patients are needed before EUS can be used in the diagnosis of esophageal motility disorders.

### Endoscopic Findings in Corrosive Material Damage: Two-Center Observational Study

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**Background/Aims:** Damage to the upper GI tract due to ingestion of corrosive substances is a common problem. Endoscopy has an important role in diagnosis of corrosive material damage and choice of treatment.

**Materials and Methods:** A total of 55 patients who received corrosive substances were included in the study. The type and amount of the substance, duration of admission to the emergency department, the time between admission and endoscopy, and the duration of outpatient or inpatient treatment of the patients were examined.

**Results:** The average age was 37.7; male/female: 32/23.80% had taken the corrosive substance by mistake, and 20% for suicide. 52% of the patients received acidic substances and 48% received alkaline substances. 67% of the patients received <50 ml of the substance, and 33% received >50 mL. The average time to visit the emergency department was 2.8 hours. Endoscopy was performed in 55% of the patients in the first 6 hours, 16% in 6-12 hours, 25% in 12-24 hours, and 5% after 24 hours. All CT scans had normal findings. Zargar grade 0 was detected in 75% of the patients, grade 1 in 15%, grade 2a in 7%, and grade 2b in 3%. While 80% of the patients were discharged, 15% were monitored in the ward and 5% were monitored in intensive care. The average hospital stay was 4.8 days. One patient died.

**Conclusion:** The amount of corrosive and its pH determine the damage. No endoscopic damage was detected in <50 ml of acidic substances group; %27 of patients had damage who <50 mL of basic substances. While damage was detected in 13% of patients who were exposed <50 mL, regardless of acid-base, this rate was found to be 9 of 18 patients (50%) in those with >50mL. Our study reported all tomographies, including those showing endoscopic damage, as normal. Intake of corrosive substances causes different levels of damage in the upper GI tract depending on the type and amount of the substance. Endoscopy maintains its importance in showing corrosive substance damage.



Figure 1. Endoscopic images of corrosive damage.



Figure 2. Endoscopic images of corrosive damage.

GP5

### Prognostic Factors Related with Survival in Patients with Pancreatic Adenocarcinoma: A Retrospective Cohort Study

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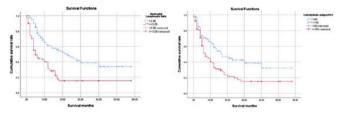
**Background/Aims:** Pancreatic cancer is a highly aggressive disease with 5-year survival rates (6%). Patients who may have a good prognosis should be directed to appropriate treatment options early. We aimed to determine the prognostic value of tumor markers and inflammation-based scores, which are quickly and easily obtained during the diagnostic process of pancreatic adenocarcinoma.

Materials and Methods: Data were collected retrospectively for pancreatic cancer patients diagnosed between October 2017 and January 2023 at the Kocaeli University Hospital, Kocaeli, Turkey. Laboratory tests at the first examination of 179 consecutive patients diagnosed with adenocarcinoma were recorded and overall survival times were calculated. Neutrophil-to-lymphocyte ratio (NLR) and Platelet-to-lymphocyte ratio (PLR) were obtained by dividing absolute neutrophil and platelet values by lymphocyte. Cancer-specific survival cumulative curves were constructed using the Kaplan-Meier method, and statistical significance was evaluated using the log-rank test. Multivariable Cox regression model was performed to determine the prognostic value of the parameters.

**Results:** Of all patients, 94 (52.5%) of the them were male and the mean age was 62.2 ± 12.6 years. The mean follow-up period was calculated as 12.1 (min-max 1-58) months. In pancreas adenocarcinoma; age (HR: 1.026; 95% CI: 1.009-1.043; P = .002), cancer stage (HR: 5.475; 95% CI: 3.283-9.132; P < .001), NLR (HR: 2.122; 95% CI: 1.413-3.186; P < .001), CA19-9 (HR: 1.505; 95% CI: 1.011-2.241; P = .044), mean platelet volume (MPV) (HR: 1.184; 95% CI: 1.030-1.361; P = .017) are independent predictors

of prognosis. Kaplan-Meier survival analysis also showed that high (≥180) NLR (mean survival 14.7 ± 2.4 months, log-rank = 22.593, P < .001) and high (≥180) CA19-9 (mean survival 15.9 ± 2.3 months, log-rank = 9.722, P = .002) was associated with a shorter survival.

**Conclusion:** Our findings suggest that CA19-9, NLR, and MPV can be used to predict the prognosis of pancreatic cancer. These parameters can support the clinician in providing early optimal treatment for the individual patient.



**Figure 1.** Overall survival according to CA19-9 and NLR values. The overall survival of patients with CA19-9 <180 U/mL was significantly better than that of patients with CA19-9 ≥180 U/mL (logrank = 9.722, P = .002). The overall survival of patients with NLR <3.08 was significantly better than that of patients with NLR ≥3.08 (log-rank = 22.593, P < .001).

**Table 1.** Univariate Analysis of Characteristics and Laboratory Parameters (n = 179)

	Alive (n=73)	Exitus (n=106)	p-value
Gender			
Male, %	36 (49,3)	58 (54,7)	0,543
Female, %	37 (50,7)	48 (45,3)	
Age, years (SD)	59 (13,6)	64 (11,5)	0,005
Cancer stage			
Early, %	48 (65,8)	20 (18,9)	<0,001
Advanced, %	25 (34,2)	86 (82,1)	
Tumor size cm <sup>2</sup> , (IQR)	8,4 (3,7-15,9)	11,3 (7,5-17,4)	0.010
WBC x 1,000/μL (IQR)	7,91 (6,52-9,20)	8,23 (6,67-10,32)	0,434
Neutrophil x 1,000/μL	4,65 (3,76-6,20)	5,61 (4,20-7,47)	0,047
Lymphocyte x 1,000/μL	1,86 (1,40-2,38)	1,56 (1,13-2,12)	0,027
Platelet x 1,000/μL	251 (214-302)	226 (191-300)	0,111
MPV, fL (SD)	9,84 (1,31)	9,78 (1,45)	0,788
CEA			0.046
Low (<4,70), (%)	38 (52,1)	48 (45,3)	0,447
High (≥4,70), (%)	35 (47,9)	58 (54,7)	
CA 19-9			
Low (<180), (%)	45 (61,6)	44 (41,5)	0,010
High (≥180), (%)	28 (38,4)	62 (58,5)	
NLR			
Low (<3,08), (%)	48 (65,8)	41 (38,7)	<0,001
High (≥3,08), (%)	25 (34,2)	65 (61,3)	
PLR			
Low (<140,8), (%)	38 (52,1)	50 (47,2)	0,546
High (≥140,8), (%)	35 (47,9)	56 (52,8)	
ESR, mm/h	23,0 (9,5-39,5)	35,0 (17,0-61,0)	0,008
CRP	7,0 (2,5-20,0)	12,5 (4,0-34,0)	0,540
Albumin, g/L, (IQR)	38,6 (32,3-41,2)	34,5 (29,1-38,7)	0.001

Data are expressed as mean (SD-standard deviation) or median (IQR-interquartile range). \*Chi-square test.

<sup>b</sup>Mann–Whitney U test.

WBC, white blood cell; MPV, mean platelet volume; NLR, neutrophil-lymphocyte ratio; PLR, platelet-lymphocyte ratio; ESR, Sedimentation; CRP, C-reactive protein.

**Table 2.** Multivariate Logistic Regression Analysis of Characteristics and Laboratory Parameters (n = 179)

	HR (95% CI)	p-değeri	
Gender			
Male	0.770 (0.520-1.139)	0.190	
Female, (R)	1.0		
Age	1.026 (1.009-1.043)	0.002	
Cancer stage			
Early	5.475 (3.283-9.132)	<0.001	
Advanced, (R)	1.0		
CA 19-9			
Low (<180)	1.505 (1.011-2.241)	0.044	
High (≥180), (R)	1.0		
NLR			
Low (<3,08)	2.122 (1.413-3.186)	<0.001	
High (≥3,08), (R)	1.0		
MPV	1.184 (1.030-1.361)	0.017	

HR, hazard ratio; CI, confidence interval; R, reference; CA19-9, carbohydrate antigen 19-9; NLR, neutrophil-to-lymphocyte ratio; MPV, mean platelet volume.

GP6

### Diagnostic Efficacy of Magnetic Resonance Cholangiopancreatography for Pancreas Divisum in the Pediatric Age Group

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**Background/Aims:** It is important to diagnose pancreas divisum (PD) with magnetic resonance imaging (MRI) and magnetic resonance cholangiopancreatography (MRCP), which are non-invasive methods, for two rationales. 1) PD may be the underlying cause of a patient's clinical presentation. 2) Intervention can directly be performed through the minor papilla when endoscopic retrograde pancreatography (ERP) or other endoscopic procedures are required. Although there is an abundance of literature discussing the diagnostic efficacy of MRI/MRCP in diagnosing PD among adult patients, this issue in the pediatric population remains unclear. This study aims to determine diagnostic accuracy of MRI/MRCP in the pediatric group.

Materials and Methods: The data of pediatric patients (≤17 years old) who underwent secretin-free MRI/MRCP and subsequently underwent ERP for pancreatic duct intervention between 2017 and 2023, were evaluated. MRCP were evaluated by radiologists blinded to the ERP findings, via consensus. The sensitivity and specificity, positive/negative predictive values and diagnostic accuracy of MRI/MRCP versus ERP considered the gold standard in PD, were calculated. Clinicopathological factors affecting diagnostic accuracy were evaluated

**Results:** Of the 44 patients [27 (61.4%) females, median age 12], 15 (34.1%) had PD in pancreatography. In the diagnosis of PD, the sensitivity of MRCP was 53.3% (CI 29.1%-76.5%), specificity 93.1% (CI 80.2%-98.8%), positive predictive value 80% (CI 50.1%-96.4%), and negative predictive value was 79.4% (CI 64%-90%). Diagnostic accuracy of MRI/MRCP was 81.3%. The effects of age, gender, pancreaticobiliary maljunction, pancreatic duct dilatation, presence of stones in the pancreatic duct, presence of cystic/solid mass in the pancreas and clinical presentation (chronic pancreatitis, recurrent acute pancreatitis, pancreatic fistula) on diagnostic accuracy were evaluated, and no factor was found to be significant (P > .05).

**Conclusion:** MRI/MRCP may not characterize PD in a significant portion of patients. Therefore, endoscopists should consider that PD may be present even when pancreas divisum is not reported on MRCP. ERP is still the gold standard for PD diagnosis.

GP7

### Is Biliary Cystic Dilatation Prognostic in Primary Sclerosing Cholangitis?

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**Background/Aims:** Primary sclerosing cholangitis (PSC) is a chronic progressive disease characterized by inflammatory-fibrotic strictures in the intrahepatic and/or extrahepatic bile ducts. The typical cholangiographic finding is multifocal, annular, short strictures in the bile ducts with less biliary dilatation than expected proximal to such a stricture. However, in some patients, this dilatation can reach cystic dimensions. This study investigated whether the clinical manifestations and prognosis of patients with cystic dilatation in the bile ducts differ from those with classic cholangiographic PSC.

Materials and Methods: Demographic data, laboratory and clinical findings, as well as prognoses of patients with cystic dilated bile ducts among those undergoing Endoscopic Retrograde Cholangiopancreatography (ERCP) and/or Percutaneous Transhepatic Biliary Drainage (PTBD) procedures for PSC between 2017 and 2023 were compared with data from patients without cystic dilatation.

**Results:** Among the 37 patients who underwent ERCP during this period, cystic dilatation in the bile ducts was observed in 5 (13.5%) patients. As shown in Table 1, these patients had a higher average number of cholangitis episodes per patient during the follow-up period (1.6 vs. 0.3, P = .000), a higher incidence of patients requiring repeated ERCP (80% vs. 50%, P = .038), an increased risk of end-stage liver disease (40% vs. 15.6%, P = .028), and a higher risk of death (20% vs. 6.25%, P = .045).

**Conclusion:** Cystic dilatation appears to be a clinically significant and prognostic factor in patients with PSC.



Figure 1. Cystic bile duct dilatation in a patient with PSC.

GP8

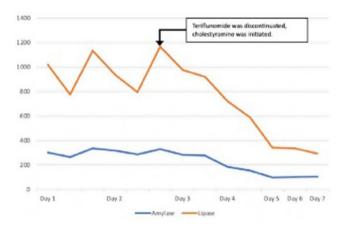
### A Rare Acute Pancreatitis Case: Teriflunomide Associated Acute Pancreatitis

<u>Gizem Yıldız</u><sup>1</sup>, Bengi Öztürk<sup>2</sup>, Yavuz Emre Parlar<sup>2</sup>, Ege Ulusoydan<sup>1</sup>, Erkan Parlak<sup>2</sup>

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Teriflunomide an immunomodulatory drug used in multiple sclerosis, is an active metabolite of leflunomide inhibiting pyrimidine synthesis. Alopecia, nausea, vomiting, hepatotoxicity are frequent side effects but pancreatitis is very rare. Fifty-nine year-old male patient with multiple sclerosis presented to the emergency department with fatigue, lethargy, nausea, vomiting, sweating, and mild abdominal pain (which had been present for a week but got severe in the last 48 hours). On admission his vital signs were stable, physical examination was insignificant. Complete blood count and liver enzymes were normal. There was 10 times elevation of pancreatic enzymes (amylase 300 U/L, lipase 1018 U/L). The patient was evaluated as mild acute pancreatitis without local or systemic complications, and organ disfunction. Intravenous hydration was given while fasting, early enteral nutrition at 24th hour was initiated as the patient tolerated oral refeeding. The patient had no history of alcohol and acute pancreatitis. With ultrasound and MRCP, gallbladder and pancreas abnormalites were excluded. Triglyceride and calcium levels were normal. Viral serologies for HBV, HIV, CMV and HSV were negative. Serum IgG4 level was normal. At 48 hours pancreatic enzyme levels didn't decrease and were undulating. He had been using teriflunomide 14 mg q24h for the past ten months and drug-induced pancreatitis was suspected. After discontuniation of teriflunomide and iniation of cholestyramine PO 4 mg q12h for teriflunomide elimination, pancreatic enzyme levels decreased. Excluding all other causes of pancreatitis, teriflunomide was thought as the etiology of acute pancreatitis. His complaints were resolved with treatment and he was discharged after 7 days of hospitalization. Drug-induced pancreatitis is a well known cause of non-biliary, non-alcoholic pancreatitis, but it is a rare side effect of teriflunomide. This side effect should be kept in mind in cases using teriflunomide, and care should be taken in this respect during follow-up.



**Figure 1.** Amylase-lipase levels. Amylase and lipase levels during 7 days of admission.

GP9

### Thrombotic Microangiopathy Induced by Acute Pancreatitis: A Case Report

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Thrombotic microangiopathies (TMA) are a group of disorders characterised by microangiopathic haemolytic anaemia, thrombocytopenia and target organ damage. It's rarely reported as a complication of acute pancreatitis. We report a case of thrombotic microangiopathy induced by acute pancreatitis. A 29-year-old female patient was admitted to an external centre with complaints of acute onset abdominal pain, nausea and vomiting. She was referred to our hospital with a diagnosis of acute biliary pancreatitis due to elevated amylase-lipase values and a stony sac on USG. The patient had hypothyroidism and given birth 2 months ago. No history of alcohol use or trauma, and calcium and triglyceride values were normal. The patient had no findings of extrahepatic cholestasis. A sudden decrease in haemoglobin (12.6 > 9.8 > 6.3), thrombocytopenia (339000 > 31000 > 19000) and elevated LDH (282 > 1201 > 2115) were observed in the 24th hour of hospitalisation. The creatinine

level was 2 times higher than the basal value (0.59 >1.03 >2.8) and schistocytes were detected in the peripheral smear. ADAMTS 13 activity was 72.41% (reference range 40%-130%), Shigatoxin was negative, direct and indirect Coombs tests were negative, reticulocyte was 4.91%, and haptoglobulin was 0.265 g/L. Plasmapheresis with TDP for 5 days was planned with the diagnosis of thrombotic microangiopathy, but plasmapheresis was terminated because of allergic reaction in the second session and methylprednisolone 1 mg/ kg/day was started. On the seventh day of follow-up, platelet value increased above 150000/mm<sup>3</sup> and renal function tests regressed to normal range. After 10 days of 60 mg/day methylprednisolone treatment, the patient was discharged with steroid taper. Thrombotic microangiopathy triggered by acute pancreatitis is a very rare condition. Treatment may vary depending on the etiological cause. In TMA, which causes high mortality and morbidity when diagnosis and treatment are delayed, the results of therapeutic plasma exchange initiated in the early period may be favourable.

#### GP10

#### A Rare Tumour in the Pancreas: Lipoma

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Lipomas are benign tumours of fatty tissue. Although they are mostly located in the subcutaneous tissue, they can also be seen in other tissues and organs. We would like to present our patient who was referred to our clinic with the thought of a cystic lesion or mass in the pancreas and who was found to have a lipoma in the pancreas after the examinations we performed. A 69-year-old woman was referred to our clinic because of a mass or cystic lesion in the pancreas on CT scan of the abdomen performed for other reasons at an external centre without a specific complaint. CT and MRI images showed a non-contrast enhancing, well circumscribed, outwardly partially exophytic lesion in the neck-body part of the pancreas. endoscopic ultrasonography (EUS) did not reveal any obvious cystic or mass lesion in the pancreas. However, the area identified on CT was minimally hypoechoic compared to the pancreas and hyperechoic compared to the surrounding tissues on EUS. Biopsies were taken from this area with a 22G FNB. The biopsies were compatible with lipoma. Our patient did not have any complaints and no pathological findings were observed in the laboratory. Annual follow-up of radiological and biochemical parameters was planned and our patient was followed up by our clinic. When examined with EUS, lipomas may not be identified because they are mostly isoechoic with the tissue in which they are located. However, when examined in an experienced center, the echo difference in the tissues can be understood with careful examination. EUS can provide better results than CT and MRI in examining the pancreas. Both close visualization of the tissue and the ability to take a biopsy for diagnostic purposes make the procedure even more useful. Even millimetric lesions can be examined in this way.

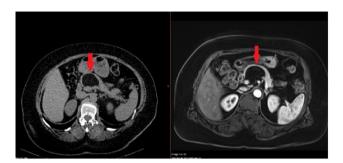


Figure 1. Computed tomography and MRI.

### Detection of Splenic Artery Bleeding in a Case Presenting with Melena

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An 81-year-old male patient presented to the Emergency Department with a complaint of black stool for the past 2 days. Apart from a known history of Diabetes Mellitus, he had no other chronic illnesses. He was regularly taking Metformin as his only medication. Upon admission, his vital signs were recorded as follows: Blood pressure: 110/60 mm Hg, Heart rate: 89 beats per minute, and Oxygen saturation: 96%. During the physical examination, the patient appeared pale, and a rectal examination revealed melena (black, tarry stool) consistent with his complaint. His hemoglobin level was measured at 5.2 g/dL. Considering the gastrointestinal bleeding, the patient was admitted to the hospital. Proton Pump Inhibitor infusion was initiated, and oral intake was stopped. Hydration and erythrocyte suspension replacement were also planned. An esophagogastroduodenoscopy (EGD) showed fresh blood within the stomach, along with an apical stricture in the bulb, and a clot nearby. After removing the clot with sclerotherapy, bile flow was observed. An abnormal opening was suspected in the patient. Endoscopic Retrograde Cholangiopancreatography (ERCP) revealed an opening anomaly. Balloon dilation of the common bile duct was performed, and no bleeding was observed inside the duct. A stent was placed. Despite follow-up, the patient continued to experience melena and a drop in hemoglobin levels. Interventional Radiology was consulted. An angiogram revealed active extravasation from the middle segment of the cystic artery into the lumen of the gallbladder. It was observed that the entire gallbladder wall was supplied by the cystic artery. Due to the high risk of necrotizing cholecystitis, embolization was not performed. Subsequently, the patient was transferred to the Gastroenterological Surgery clinic for a cholecystectomy operation. We considered it important to keep in mind the possibility of cystic artery bleeding, which can be a rare cause of upper gastrointestinal bleeding.



Figure 1. Endoscopic image.



Figure 2. Endoscopic image.



Figure 3. Endoscopic image.

### Two Genetic Causes Underlying Recurrent Pancreatitis, Congenital Cataracts, Progressive Neurological Disorders and History of Bone Fractures

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Biliary pathologies, alcohol, hyperlipidemia, pancreaticobiliary malformations, iatrogenic and idiopathic causes are the common etiologies of acute pancreatitis. In this case, we aimed to present a patient with recurrent pancreatitis, congenital cataracts, progressive neurological disease and history of bone fracture. A 26 year old male patient with a diagnosis of recurrent pancreatitis who has no history of smoking, alcohol and herbal consumption came to our outpatient clinic. Congenital bilateral cataract, movement disorders, osteoporosis, and history of bone fractures were present. The parents were consagenious but there was no family history of pancreatitis or hyperlipidemia. The lipid panel, electrolytes and IgG4 were normal. Abdominal imaging was consistent with chronic pancreatitis with no evidence of autoimmune pancreatitis. Genetic analysis revealed a heterozygous c.3038C>T variant in the CFTR gene. Additionally, homozygous c.808C>T variant in the CYP27A1 gene pathogenic for cerebrotendinous xanthomatosis was also identified. A review reported a positive genetic test rate of 68%-70% in the pediatric chronic pancreatitis patient group. In reported cases, mutations were generally found in PRSS1, SPINK1, CFTR, CLDN2, CPA1 and ATP8B1 genes and our case also had a mutation in the CFTR gene. Cerebrotendinous xanthomatosis is a autosomal recessive disease due to deficiency of mitochondrial sterol 27-hydroxylase enzyme. Accumulation of "cholesterol" and "cholestanone" occurs in various regions including the central nervous system, tendons, eyes, and skin, resulting in progressive neurological dysfunction, tendon xanthomas, childhood cataracts, neonatal cholestasis, infantile diarrhea, musculoskeletal abnormalities, and osteoporosis. Two simultaneous gene mutations were detected in this patient, explaining both pancreatitis and other multisystemic findings.

GP13

### The Role Of IL-6 Gene Polymorphisms in the Development of Acute Pancreatitis

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**Background/Aims:** Recent studies have shown that chemokines contribute to the occurrence and development of acute pancreatitis. We evaluated the relationship between IL-6 (C-174G) gene

polymorphisms and the development of acute pancreatitis in the Uzbek population to provide data for screening of high-risk Uzbek individuals.

Materials and Methods: In total, 88 patients with confirmed cases of acute pancreatitis and 81 control patients were recruited between January 2022 and February 2023. IL-6 gene polymorphisms at C-174G positions/C was investigated using the method of polymerase chain reaction - restriction fragment length polymorphism. The groups studied corresponded to the Hardy-Weinberg law.

**Results:** Using multiple logistic regression analysis, genotype C [main group: C-127 (72.7%), G-49 (27.3%); control group: C-99 (61.1%), G-63 (38.9%)] in IL-6 C-174G could influence susceptibility to acute pancreatitis compared to the G allele, and was  $\chi 2=4.65$ ; P=.031; OR (95%CI) 1.65 (1.04-2.6). Individuals carrying the IL-6 C-174G genotype were associated with a risk of developing acute pancreatitis compared to the control group -  $\chi 2=4.63$ ; df = 2, P=.099 [main group: C/C-48 (54.5%), C/G-31 (35.2%), G/G-9 (10.2%); control group: S/S-31 (38.3%), S/G-37 (45.7%), G/G-13 (16%)].

**Conclusion:** This study demonstrates that polymorphism of the IL-6 C-174G gene significantly contributes to the development of acute pancreatitis ( $\chi$ 2 = 4.65; P = .031).

GP14

#### Ectopically Located Ampulla Vateri in Two Cases Undergoing ERCP

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Ectopic opening of the CBD is predominantly into the third and fourth parts of the duodenum. Less frequently, it can be into the duodenal bulb, pyloric canal and stomach. In this study, we aimed to present two cases of cholangitis with CBD opening into the bulbus. A 63-year-old man presented to our hospital with fever, yellowing and pain in the right upper quadrant. The patient had marked cholestasis and leukocytosis. Magnetic resonance cholangiopancreatography (MRCP) showed dilated intrahepatic bile ducts and CBD dilatation with hook-shape and stone at the lower end. On endoscopic retrograde cholangiopancreatography (ERCP), the biliary orifice was ectopically opening to the bulb as a papilla protruding into the lumen. Stone extraction was performed. The second patient, a 66-year-old male, was hospitalized with cholangitis. On MRCP, the intrahepatic bile ducts and CBD were extremely dilated. CBD was also hookshaped and there was a stone at the lower end. On ERCP, the papilla was observed in the bulbus. Unlike the first case, the bile and pancreatic ducts opened separately and were slit-shaped. Because of difficult positioning and inadvertent cannulation of the pancreatic duct, a plastic stent was placed in the pancreatic duct. After stone extraction, procedure was ended. In our cases, ectopic papillae were located in the bulbus. In over fifty percent of the cases described in the medical literature, choledocholithiasis and cholangitis were present. A biliary duct aperture in one patient was characterized by a slit-shaped opening into the duodenum, a configuration that has been frequently described in the medical literature. The presence of a hook-shaped common bile duct (CBD) was noted in both individuals.

If the papilla is not seen in the examination, it is imperative to prioritize the examination of the distal portions followed by a thorough evaluation of the bulbus.

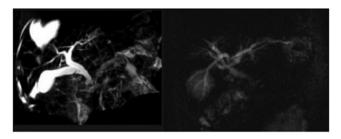
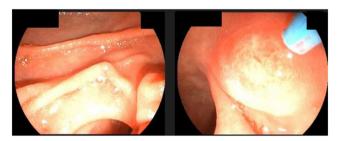
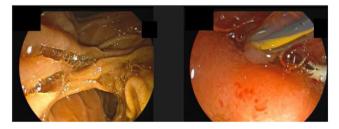


Figure 1. Hook-shaped common bile duct structures on MRCP (first case on the left, second case on the right).



**Figure 2.** Classical papilla localisation in the second part of the duodenum with absence of ampulla on endoscopy (on the left) and ectopic, papilla-like biliary orifice in the bulb (on the right).



**Figure 3.** Classical papilla localisation in the second part of the duodenum with absence of ampulla on endoscopy (on the left) and a slit-shaped biliary orifice opening separately from the pancreatic orifice localized in the bulb (on the right).

GP15

### The Relationship of Salusin Beta Level with the Severity of the Disease in Patients with Acute Pancreatitis

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**Background/Aims:** The aim of this study was to evaluate the importance of serum salusin beta level in predicting the severity of acute pancreatitis and its relationship with the prognosis of the disease in patients with acute pancreatitis.

**Materials and Methods:** Our study included 64 patients with acute pancreatitis between the ages of 18 and 90. The patients included in the study were divided into 3 groups as mild, moderate and severe acute pancreatitis according to the Revised Atlanta Score. As the control group; Eighteen healthy adult individuals were included in the study. Salusin beta level measured on the third day of hospitalization and recorded.

**Results:** The mean age of the patients included in the study was  $62.66 \pm 17.67$ . According to the, and the difference in salusin beta averages was statistically significant according to the on both day 1 and day 3 (P < .05). In the further analysis to determine which group the difference is due to, it was determined that the salusin beta averages of those with severe atalanta score on the 1<sup>st</sup> day were higher than those with mild and moderate Atalanta severity. On the third day, salusin beta averages of those with severe Atalanta score were found to be higher than those with mild and moderate Atlanta severity. According to the Roc Analysis, using the Youden index, the cut-off value of salusin beta 1st day was 178.8 the cut-off value of salusin beta 3rd day was 207.5 pg/mL.

**Conclusion:** Severe serum salusin beta level was found to be significantly higher on the first and third days in severe pancreatitis. No statistically significant difference was found in cases with mild and moderate pancreatitis. Salusin beta can be used as a parameter in the detection and follow-up of severe pancreatitis. More clinical studies with larger case series are needed on this subject.

GP16

### Pancreatitis Secondary to Azathioprine in Chronic Inflammatory Bowel Disease

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**Background/Aims:** Azathioprine remains the treatment of choice in the management of chronic inflammatory bowel disease (IBD). The occurrence of acute pancreatitis associated with its use is recognised, but the incidence remains low. The aim of our work is to report the prevalence of acute pancreatitis in patients treated for IBD.

**Materials and Methods:** It is a cross-sectional, descriptive study conducted over 3 years (January 2019-December 2023), including all patients followed for IBD, put on azathioprine and who developed acute pancreatitis, selected on clinical, biological (lipasemia) and radiological (abdominal CT scan) grounds.

**Results:** A total of 375 patients treated for IBD on azathioprine were identified. The prevalence of acute pancreatitis was 37.5%.

The average age was 28.7 years, with a sex ratio of 1. In this series, 7 patients were being followed for crohn's disease, 57.14% of whom had ileocolic involvement. The phenotype of crohn's disease was fistulising in 83.3%. Three patients were being treated for haemorrhagic rectocolitis, predominantly pancolic (mayo score >6). Symptoms appeared on average within 7 days of treatment. 70% of patients had transfixing epigastralgia and vomiting. Lipasemia was, on average, greater than 6 times the upper limit. Injected abdominal scans in all patients revealed an oedematous pancreas (Balthazar stage B pancreatitis) in 75%. After an exhaustive aetiological work-up, which ruled out alcoholic, biliary and autoimmune aetiology, azathioprine was identified as the sole cause of these pancreatitis and its discontinuation has led to a favourable outcome. Azathioprine was replaced by a biotherapy in 70% of patients, 20% received treatment with amino-salicylates and 10% an immunosuppressant.

**Conclusion:** Immunosuppressive treatment in IBD with azathioprine has the capacity to indure acute pancreatitis although rare, the evolution is most often favourable when treatment is stopped.

GP17

#### Action Mechanisms of TNF-alpha on the Cell Death of Pancreatic Cancer in Vitro

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**Background/Aims:** Purpose of proposed research is to investigate growth character of MIA PaCa2 cells and action of TNF-alpha on the cell death MIA PaCa2 cells in vitro.

Materials and Methods: For in vitro experiments of pancreatic cancer cells was chosen MIA PaCa 2 cells. Cell Line description: An established cell line from an undifferentiated human pancreatic carcinoma. The tumor was taken from a 65 year old Caucasian male. Sensitive to L-Asparaginase. Culture medium: DMEM+2mM Glutamine+10% Fetal Bovine Serum (FBS). MIA PaCa 2 cells passaging technique performed in following steps. At the beginning of cell culture was prepared medium; into 500 mL DMEM added 50 mL inactivated FBS in the cell hood. Into 100 mm well took out 20 mL medium. Frozen MIA PaCa2 cell thawed in water bath at 37 degree and these cells added into medium. Cell culture checked by microscope. Cell culture was kept in incubator at 37 degree 5% CO2. Number of cells was counted in chamber stained with trypan blue. Cell Cultured cells checked by KEYENCE microscope and did photos in regular. For investigate action mechanisms of TNF-alpha on the cell death of pancreatic cancer in vitro we used 10, 20, 50, 100, 150 and 200 ng/mL concentration of the TNF-alpha. Viability of cells investigated by the method MTT assay. Cell death type determined by the used Annexin-V.

**Results:** Doubling time MIA PaCa 2 cells are 40h. Incubation time are 48h. Number of cells 5,000 cells/well. MMT assay confirmed that, improving of TNF-alpha concentration led to decrease MIA Pa Ca 2

cells viability. Action of TNF-alpha between 20 and 100 ng/mL concentration showed almost same results. After increase TNF-alpha concentration we have observed a gradual decrease of viability of cells.

GP18

## Gastroesophageal Junction, Esophagitis and Helicobacer Pylori: Is There any Relationship Between Each Other?

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**Background/Aims:** The anatomical structure of the gastroesophageal junction is one of the important protective mechanisms for gastroosephagial reflux disease. In our study, we aimed to reveal the relationship between the Hill classification of the cardia, and H. pylori and esophagitis.

Materials and Methods: In our study, data from the endoscopy unit of a tertiary university hospital were evaluated retrospectively. The cardia Hill classification of 129 patients who underwent gastroscopy for various reasons between 2016-2022 and were reported as esophagitis was determined using endoscopy reports and imaging. H.pylori results were recorded from antrum biopsy reports. "Chisquare test" was calculated to determine the relationships between variables.

**Results:** Out of 129 patients, 75 were male (58%), with an average age of 52.1 ± 8.5 years and who were diagnosed with esophagitis during gastroscopic evaluation. BMI was >25 kg/m² in 23% of the patients. When classified with Cardia Hill score: 58.4% patients were classified as Hill I, 24.8% patients were classified as Hill II, 5.3% patients were classified as Hill III, and 11.5% patients were classified as Hill IV. When the esophagitis stage was classified with the Los Angeles classification: 55.8% was classified as LA-A, 34.1% as LA-B, 8.5% as LA-C, 1.6% as LA-D. When the gastroscopic procedure was performed, 44 patients (34%) were under PPI treatment. H. pylori positivity rate was found to be 26.4%. No statistically significant relationship was found between the presence of H.pylori and esophagitis (P > .05). While H. pylori positivity was more common in Grade A esophagitis, the H. pylori positivity rate was lower in Grade B,C and D esophagitis (55.9%, 32.4%, 11.8%, 0.0%, respectively).

**Conclusion:** In the gastroscopic evaluation; both Hill I is the most common stage and LA-A is the most common esophagitis stage in the cardia. As the severity of esophagitis increases, the H. pylori positivity rate decreases.



Figure 1. Esophagitis stages and Hill classification.



Figure 2. H. Pylori positivity rate in esophagitis and demographic characteristics.

### Similarities and Differences between Seronegative and Seropositive Patients with Autoimmune Gastritis

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**Background/Aims:** The primary purpose of this study is to investigate the similarities and differences between (APCA+) and (APCA-) patients diagnosed with (AIG) and to analyze the similarities and differences between APCA+ and APCA- patients in terms of patients' demographic data, symptoms, concomitant autoimmune diseases, serum gastrin level, serum anti-TPO level, Hb levels, ferritin, vitamin B12 and vitamin D levels. Besides, the secondary aim of the study is; to examine the relationship between APCA positivity with other autoimmune diseases and gastric carcinoid tumor in patients diagnosed with AIG.

**Materials and Methods:** The patient group includes 330 histopathologically diagnosed autoimmune gastritis patients who applied to Ankara University. Scope of work; symptoms, demographic data, gastrin, anti-TPO, Hb, ferritin, B12, vitamin D levels and development of carcinoid tumors of APCA+ and APCA- patients diagnosed with OIG tumors were compared.

**Results:** APCA positivity was detected in 275 of the patients and the prevalence of APCA positivity was 83.3%. The mean gastrin level of APCA+ patients was significantly higher than the mean gastrin level of APCA- patients (1132 pg/mL vs 3057 pg/mL, P = .002), and

likewise, it was determined that the mean serum anti-TPO level of patients with APCA+ was significantly higher than the mean serum anti-TPO level of patients with APCA– (251 IU/ml vs 182 IU/ms, P = .046). On the other hand, no significant difference was found in Hb level in APCA– and APCA+ patients.

**Conclusion:** It was determined that there was no difference between APCA+ and APCA- patients with AIG in terms of ferritin, vitamin B12, vitamin D deficiency, symptoms, Hb level and the presence of concomitant autoimmune diseases. However, APCA positivity in patients with AIG; It has been shown that it increases gastrin level and serum anti-TPO level.

GP20

### Relationship of Gastric Fundic Gland Polyps with Helicobacter Pylori and Proton Pump Inhibitor Treatment

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**Background/Aims:** Fundic gland polyps (FGP) have been encountered more frequently in upper gastrointestinal endoscopy examinations in recent years. FGPs are more commonly detected among people who regularly take proton pump inhibitors. Fundic gland defined as benign, cystic, hyperplastic, proliferation occuring in the oxyntic glands. These polyps are usually small and and are not a cause for concern. Recent publications in the literature reporting cancer cases resulting from FGP in cases without a diagnosis of familial adenomatosis polyposis have increased interest and attention on the subject. Especially in the literature, there are some case reports indicating that FGPs larger than 10 mm have a cancer risk, even if it is low. Are FGPs related to the presence of H.Pylori and what is its clinical significance? Qur study aimed to investigate this issue.

**Materials and Methods:** Of the 1892 patients who underwent upper gastrointestinal endoscopy in our department between 2021 and 2023, 258 cases diagnosed by FGP as a result of polypectomy and histopathological examination were included in the study. In the anamnesis of these cases, previous PPI use (at least 4 weeks) and H. pylori treatment were questioned. All cases, the diagnosis of H. pylori was made histopathologically.

**Results:** Of the 258 cases diagnosed with FGP, 217 (82%) had a history of PPI use and 39 (15%) H. pylori treatment. The average age of our cases with FGP is 60 (39-82) in men and 64 (23-83) in women. 18% of cases diagnosed with FGP do not have a history of PPI use. H. pylori is mostly negative (87%) in cases that develop FGP.

**Conclusion:** The relationship between PPI use and FGP formation is clear. H.pylori positivity is significantly lower in cases with FGP. There is a need for studies with large cases to explain the very low detection rate of H.pylori in cases with FGP.

### The Simultaneous Development of Pembrolizumab-Associated Pancreatitis and Hemorrhagic Gastritis: A Case Report

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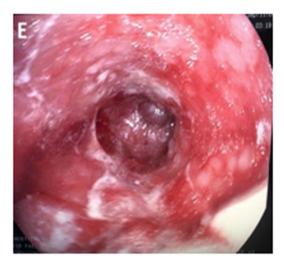
Pembrolizumab is a humanized monoclonal antibody targeting programmed cell death protein-1 receptor (PD-1), enhancing the anti-tumor ability of the immune system through T-cell modulation. It is widely used in various malignancies. Pembrolizumab use is known to cause immune-mediated adverse effects in the gastrohepatopancreatic system, among other organ systems, responding to corticosteroids. We aim to present a case of pancreatitis and hemorrhagic gastritis in a patient treated with pembrolizumab due to lung adenocarcinoma in our clinic. A 56-year-old female patient diagnosed with lung adenocarcinoma 13 months ago started pembrolizumab immunotherapy (200 mg/3 weeks). Throughout the disease course, her primary malignancy responded well to the treatment. No gastrointestinal symptoms were observed during the initial treatment courses. However, after the 13th cycle, she presented to the emergency department with epigastric pain, nausea, vomiting, and decreased oral intake. Her amylase was 450 U/L, and lipase was 1200 U/L. Computed tomography revealed edematous pancreatitis and diffuse thickening of the gastric wall. Gastroscopy showed edematous, fragile, and spontaneously hemorrhagic mucosa covering the entire gastric wall; multiple ulcers were observed in the bulb, antrum, and corpus, and the esophagus was normal. Endoscopic ultrasound revealed thickening of the gastric wall in the antrum (9 mm) and corpus (15 mm). Tests conducted to determine the etiology of pancreatitis yielded no pathology. The patient was effectively treated with 60 mg methylprednisolone (1 mg/kg) for pembrolizumab-induced immune-related pancreatitis and hemorrhagic gastritis. Pembrolizumab treatment was permanently discontinued. Due to its promising results, pembrolizumab is increasingly used in oncological therapy. Therefore, clinicians must exercise caution regarding potential immune-related adverse effects.



**Figure 1.** Computed tomography imaging: Increased gastric wall thickness and peripancreatic edema.



**Figure 2.** Endoscopic ultrasonography image: Prominence in the submucosa of the antrum (9 mm).



**Figure 3.** Fragile mucosa with spontaneous hemorrhage in the distal corpus.

GP22

### How Well Are We Using Proton Pump Inhibitors: Single Center Experience

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**Background/Aims:** Proton pump inhibitors (PPIs) are the most potent gastric acid inhibitors available. Therefore, they are widely used for the treatment and prevention of acid-related diseases. Their low side effect profile and frequent use of antiplatelet therapy or non-steroidal anti-inflammatory drugs (NSAIDs) is also a factor

in this increase. The unnecessary use of PPIs has increased significantly. Therefore, we planned this study to assess the extent to which indications are followed when prescribing PPIs in both out-of-hospital and hospitalized patients.

Materials and Methods: This was a single-center, cross-sectional observational study and patients who were hospitalized in the Gastroenterology Clinic of Mersin University Faculty of Medicine during the between March 10, 2022-April 10, 2022 were evaluated reasons for hospitalization, other diseases, demographic data, medications used before hospitalization and treatments given after hospitalization were recorded by a physician outside the Gastroenterology clinic. Indications for PPI use: Peptic Ulcer Disease, GI Bleeding, H.Pylori Eradication, Zollinger Ellison syndrome, Gastroesophageal Reflux Disease (Erosive esophagitis, Non erosive reflux disease), Functional dyspepsia, NSAIDs in patients with high risk of GI bleeding, gastroprotection in aspirin/antiplate-let use.

**Results:** Of the 106 patients in this period, 53% were male and the mean age was 65.8 years. When PPI use was evaluated: The number of patients with indication for home use was 24 (22.6%), while the number of patients using PPIs was 45 (42.4%). While there were 43 (40.5%) patients with indication for use in the hospital, the number of patients using PPIs in the hospital was 92 (86.7%).

**Conclusion:** PPIs are valuable drugs in the treatment of acid-related diseases and have a low side effect profile. This leads to frequent and unnecessary use of PPIs. This study found that 20% of patients used unnecessary PPIs at home and nearly half used unnecessary PPIs even while in the gastroenterology clinic.

GP23

#### Trichobezoar Associated Pancreatitis: Review for a Case

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Gastric bezoars are masses that form in the stomach, often leading to non-specific digestive complaints and incidental discovery during upper gastrointestinal endoscopy. They can be categorized based on their composition, with phytobezoars, comprised of undigested food remnants, being the most common type. Trichobezoars, composed of accumulated hair, are rarer and typically found in individuals, primarily young girls, with behavioural disorders like trichotillomania and trichophagia. A 19-year-old female patient presented to the emergency department with complaints of abdominal pain, nausea, and vomiting that had begun just one day prior. During the physical examination, the patient's vital signs were stable, with a body temperature of 36°C, a heart rate of 91 beats per minute, and a blood pressure reading of 114/76 mm Hg. No significant findings were noted during

the systemic examination, except for tenderness in the right upper quadrant of the abdomen. The patient had passed gas but had not had a bowel movement for two days, and bowel sounds were normal. Both the BISAP and RANSON scores were calculated as 0. Subsequent Abdominal Computed Tomography (CT) revealed a bezoar-like appearance within the stomach, extending through to the duodenum. The pancreas exhibited thickening, accompanied by minimal peripancreatic fluid accumulation. After the detection of a bezoar within the stomach lumen, The gastroscopy revealed an extensive bezoar consisting of a combination of hair and other materials. It extended from the corpus to the antrum, continued into the bulb, and reached the second part of the duodenum, completely occupying the entire stomach. Following the successful treatment and resolution of pancreatitis, the patient was transferred to the general surgery department, where a laparotomic gastrotomy was performed to extract the bezoar. Gastric bezoar treatment typically centres on dissolving or removing the mass and can be approached medically, endoscopically, or surgically.



Figure 1. Patient's CT imaging.



Figure 2. Endoscopic image.



Figure 3. Operation stomach extract material

### Gartric Myeloid Sarcoma: An Unusual Presentation of Gastric Outlet Obstruction

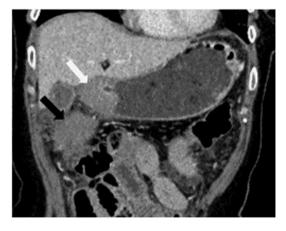
<u>Halit Kandemir</u>, Ali Karataş, Serkan Dumanlı, Gülden Bilican, Kenan Moral, Beril Demir, Enes Cömert, Murat Kekilli, Mehmet İbiş, Tarkan Karakan, Mehmet Cindoruk

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Myeloid sarcoma is rare extramedullary disease form of acute myeloid leukemia. One of these extramedullary organs is the stomach. Different clinical presentation may occur depending on the organ where the myeloid sarcoma is located. In this case, patient who complained of long-time nausea and vomiting will be discussed. A 49-year-old female patient presented with complaints of diarrhea that had been going on for 2 months, 5 kgs weight loss, nausea and vomiting accompanied by pain in the epigastric region in the last two weeks. From her medical history she had Type 2 diabetes. On physical examination, vital signs were stable, there was tenderness in the epigastric region. Stool infection investigation for Clostridium difficile, parasite, cytomegalovirus, adenovirus, herpes simplex virus was negative. Complete blood count, urine tests and tumor markers were evaluated as normal, elevated lactate dehydrogenase (809 U/L)[120-246 U/L]. Esophagogastroduodenoscopy study, mass lesion causing gastric outlet obstruction was observed, starting from the antrum, extending towards the pylorus and continuing to the bulbus. On abdominal CT images, an area of massive wall thickening with a diameter of approximately 4 cm was detected in the distal stomach and proximal duodenum, causing gastric outlet obstruction. Additionally, a mass lesion was observed below this mass, infiltrated into the omental fat tissues, approximately 5 cm in diameter, with irregular borders, indistinguishable from the hepatic flexure wall of the colon. In pathological study: Tumoral infiltration accompanied by cells of immature blastoid morphology and immature eosinophils was observed in the gastric submucosa. Immunohistochemistry indicated that immature blastoid cells expressed myeloperoxidase (MPO)(+), CD117(+), CD34(+), CD43(+), lizozime (-), pankreatine(-), CD20(-), p53(-). In bone marrow biopsy analysis; the cellularity rate was 40%-50%, there was maturation in the myeloid and erythroid series, the megakaryocyte series was normal, and no infiltration with CD34 and CD117 was detected in the immunohistochemical study. Thus, the patient was diagnosed with primary gastric myeloid sarcoma. Gastric myeloid sarcoma is a rare and aggressive form of extramedullary myeloid leukemia. It may present with pain in the epigastric region, upper gastrointestinal bleeding, diarrhea, nausea and vomiting due to gastric outlet obstruction.



**Figure 1.** Mass narrowing the lumen in the pylorus and bulbus (white arrow).



**Figure 2.** Stenosis causing obstruction in the distal stomach (White arrow) and Invasion of the hepatic flexure wall (black arrow).

### Pheochromocytoma and Gastrointestinal Stromal Tumors in a Patient with Neurofibromatosis Type 1: A Rare Triple Malignancy

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Neurofibromatosis type 1, or Von Recklinghausen disease, is a rare autosomal dominant genetic disorder that can lead to the development of benign or malignant tumors. Although pheochromocytoma and gastrointestinal stromal tumors (GIST) are the most common, their concomitant occurrence is considered unusual. We report the case of a man with neurofibromatosis type 1 coinciding with GIST and pheochromocytoma. This was a 57-year-old patient, followed for neurofibromatosis type 1 for 26 years and operated for a pheochromocytoma 1 year ago, admitted for chronic rectal bleeding associated with an anemic syndrome. Physical examination revealed a stable patient with multiple café-au-lait spots all over his body. His neurological examination was normal, while abdominal examination revealed epigastric tenderness with rectal rectorrhagia. An oesogastro-duodenal fibroscopy revealed an ulcer-burgeoning process suspicious of malignancy at D3. Biopsy results confirmed the diagnosis of gastrointestinal stromal tumor (GIST). Enteroscan showed two tumour processes at D4 and Treiz angle of 80×74 mm extended over 93mm and 77×64 extended over 84 mm with exophytic development heterogeneously enhanced after PDC injection in favour of GIST. The patient was referred for surgery after a multidisciplinary consultation. The development of tumours in patients with neurofibromatosis type 1 could be explained by overexpression of p21-ras, or neurofibromin, a tumour suppressor gene. Even in the absence of digestive complaints or arterial hypertension, pheochromocytoma or GIST may occur in these patients. In such cases, further evaluation is warranted. The occurrence of pheochromocytoma and gastrointestinal stromal tumor (GIST) in patients with neurofibromatosis remains a rare entity. Further studies are needed to clarify the association of gastrointestinal tumours, particularly GIST, with neurofibromatosis.

GP26

### Correlation between Helicobacter Pylori Colonization Density and Gastritis Severity

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**Background/Aims:** Helicobacter pylori (HP) is a common pathogenic bacterium, identified as the main causative factor of chronic gastritis. If this inflammatory state persists, epithelial alterations may progress to intestinal atrophy and/or metaplasia and/or dysplasia. The aim of our work is to analyze the relationship between the density of colonization of the gastric mucosa by HP and the severity of certain histological parameters of gastritis (inflammation activity, glandular atrophy, intestinal metaplasia and dysplasia).

**Materials and Methods:** This is a retrospective study of 400 patients with histologically documented HP infection from the gastroenterology department.

**Results:** The mean age of patients was 41.3 years, with a sex-ratio (M/F) of 2.23. Oeso-gastro-duodenal fibroscopy revealed abnormalities in 92% of patients, while in 8% it was normal. Gastritis was antrofundial in 86% of cases and antral only in 14%. HP colonization density was mild(+) in 33.4% of patients, moderate(++) in 51% and severe(+++) in 15.6%. Gastric activity was significantly related to HP density (P < .001): there was more gastritis with severe activity in the HP(+++) vs HP(+) group (93% vs. 12%). The relationship between HP density and glandular atrophy as well as intestinal metaplasia and dysplasia was not significant. Concerning glandular atrophy, it was more frequent in the HP(+++) group than in the HP(+) group (44% vs. 11.4%), with a P = .17. Similarly, intestinal metaplasia was more frequent in the HP(+++) group than in the HP(+) group (11.6% vs. 6.3%), with a P = .11. Likewise, dysplasia was more prevalent in the HP(+++) group than in the HP(+) group (5.6% vs. 2%), with a P = .6.

**Conclusion:** Gastritis activity was significantly associated with Helicobacter pylori gastric colonization density. Although the presence of atrophic lesions, intestinal metaplasia and dysplasia was higher in cases of higher HP density, this association was not statistically significant.

GP27

### Unusual Cause of Gastrointestinal Bleeding in an Elderly Adult: Gastric Kissing Ulcers

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A 84-year-old man was admitted to hospital suffering from abdominal pain and melena. The patient was under anticoagulation with 5 mg/day warfarin because of mitral valve replacement that performed nine years earlier. On examination, he was comfortable and vitals were stable. Abnormal laboratory results were as follows: hemoglobin 8.4 g/dL, hematocrit 26 and INR was 2.4. An upper gastrointestinal endoscopy showed two circular, approximately 10-20 mm in size, kissing ulcers located in the anterior and posterior walls of the distal corpus. Biopsy samples from the margin and base of the ulcers did not reveal malignancy and helicobacter pylori was negative. He was treated with a proton pump inhibitor and discharged fourdays after admission with out any complications. This is a very rare cause of GI as there is only few cases of kissing gastric ulcers have been described. In previous reports, gastric kissing ulcers were regarded as complication of abdominal blunt trauma and portal hypertensive

gastropathy. Our patient did not have any history of trauma or portal hypertension. Only use of warfarin may be risk for gastric ulcers. Though rare, gastric kissing ulcers should be considered in the differential diagnosis GI bleeding.



Figure 1. Gastric ulcers.

GP28

### Prevalence of Helicobacter Pylori Infection in Celiac Disease

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**Background/Aims:** Helicobacter pylori (HP) infection is highly endemic and may be associated with autoimmune diseases, iron deficiency anemia. Celiac disease (CD) is an autoimmune enteropathy leading to villous atrophy. The relationship between HP infection and CD is controversial. The aim of this study was to establish the prevalence of HP infection in patients with celiac disease.

**Materials and Methods:** This is a retrospective descriptive study of 78 patients with CD in whom gastric biopsies were performed.

**Results:** The mean age of patients was 25 years. The sex ratio F/H was 2.84. The main indications for fibroscopy were chronic diarrhea (86%) and iron-deficiency anemia (81%). The abnormalities found during fibroscopy indicating gastric biopsy were: erythematous gastric mucosa in 39 patients, atrophic in 16 patients, erythematous and atrophic in 12 patients, nodular in 7 patients and erosive in 4 patients. According to Marsh's classification, duodenal lesions were classified as stage IIIC in 47 patients, stage IIIB in 21 patients and stage IIIA in 10 patients. HP infection was found in 80.7% of cases. The density of HP colonization was mild (+) in 31% of patients,

moderate (++) in 47% and severe (+++) in 22%. Villous atrophy was greater in the HP (+++) vs HP (+) group. Thus, in the HP (+++) group, 82% of patients had total atrophy, 12% subtotal atrophy and 6% partial atrophy. In the HP (+) group, villous atrophy was partial in 54% of cases, subtotal in 44% of and total in 2%. The relationship between HP density and the degree of villous atrophy was not significant (P = .67).

**Conclusion:** In our series, HP infection was detected in 80.7% of patients with celiac disease. It should therefore be investigated systematically. Although the degree of villous atrophy was greater with higher HP density, this association was not statistically significant.

GP29

### Pyloric Gland Adenoma Presenting with a Huge Lobular Mass

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Stomach polyps are usually found incidentally during upper gastrointestinal endoscopy and rarely cause symptoms. We aimed to present pyloric gland adenoma, which presented as a huge lobular lesion in a patient who underwent endoscopy with findings of anemia. Iron deficiency anemia was detected in a 56-year-old female patient who was admitted to the hospital due to fatigue and exertional dyspnea. In the endoscopy of the patient performed for etiology, a polypoid lesion of approximately 10 cm in size was observed, starting from the saugmocolumnar junction. cardia, fundus and covering 2/3 of the corpus. The results of biopsies taken from different parts of this lesion were reported as pyloric gland adenoma accompanied by high-grade dysplasia and extensive low-grade dysplasia. Biopsy results taken from the lesion-free, atrophic-looking mucosa in the antrum and corpus were reported as compatible with atrophic gastritis and moderate H. pylori. The patient was treated for H. pylori and referred to surgery for surgery. Stomach polyps are less common and do not cause symptoms compared to colon polyps. There are different types of stomach polyps. Adenomas, the least common among stomach polyps, have different types. Among these, the intestinal type is the most common. Pyloric gland adenoma type is very rare. Although it is usually detected in the stomach fundus, it has also been reported to be seen in the duodenum and gallbladder, although rarely. Pyloric gland adenoma has malignant potential. Given the increased risk of gastric cancer, all gastric adenomas need to be resected. This can usually be accomplished endoscopically, but in lesions that are difficult to remove endoscopically, as in this case, surgery should be considered. It is also recommended to perform upper GI endoscopy one year after the initial resection to evaluate recurrence at the excision site or to detect an early carcinoma.

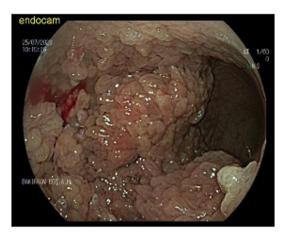


Figure 1. Endoscopic view of the mass.

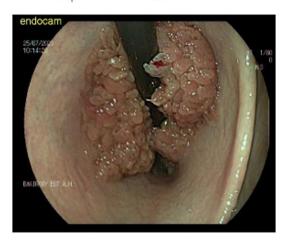


Figure 2. Endoscopic view of the mass (Retroflexion).

#### Gastroscopy Indications and Findings in Older Adults

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**Background/Aims:** The share of older population is increasing globally. Diagnostic/therapeutic gastroscopy is frequently used, no study comprehensively examines the indications and findings of gastroscopy in elderly. We aimed to reveal these in older adults.

**Materials and Methods:** Gastroscopy procedures (2017-2022) performed in older adults (≥65 years) were analyzed retrospectively. Indications and findings of gastroscopies were assessed.

Results: In the study, 3423 gastroscopy procedures were examined. 22.3% of those were performed in very old (≥ 75 years) patients. Esophageal varices, gastrointestinal (GI) bleeding, polyp or neuroendocrine tumor follow-up, and dysphagia were the main indications of repetitive gastroscopy. Dyspepsia and iron deficiency anemia (IDA) constituted the main two indications in nearly half and were often associated with gastritis. Clinically suspected malignancy, GI bleeding, or dysphagia were other common indications. The most common findings in the gastroscopies were antral and pangastritis. Apart these, hiatal hernia, gastro-esophageal reflux disease, loose lower esophageal sphincter and bulbitis were the main findings. Among indications dyspepsia and IDA were not related to GI tract tumor; however, bleeding, dysphagia, nausea and vomiting were independently associated with upper GI tract tumor. Also, findings revealed by different imaging methods may be related to the upper GI tract tumor.

**Conclusion:** We presented the indications and results of gastroscopy in a large number of patients. IDA and dyspepsia were the common indications; gastritis, GERD and structural deformations were the common findings. IDA and dyspepsia were not associated with malignancy, while the strongest association with an upper GI tract tumor was with dysphagia, which is also a geriatric syndrome.

**Table 1.** Main Indications of Gastroscopy in Elderly

Indication	%	Indication	%	Indication	%
- Dyspepsia	26.8	- Varices surveillance	5.4	- D. papillary pathology?	2
- Iron deficiency anemia	25.6	<ul> <li>Secondary to imaging findings</li> </ul>	4.3	- Reflux symptoms	1.9
- Malignancy screening	8.9	- Polyp control	2.4	- Ulcer control	1.6
- GIS bemorrhage	7.5	- Gastric tumor control	2.4	- Nausea - vomiting	1.7
- Dysphagia	5.6	- PPI resistant dyspepsia	2.1	- Occult blood positivity	1.7
<ul> <li>Varices suspicion</li> </ul>	2.7	- Int. metaplasia control	2.1	- Gastric atrophy assessment	1

Table 2. Main Findings of Gastroscopy in Elderly

Esophagus		Stomach		Duodenum	
Findings	%	Findings	%	Findings	%
Hiatal hernia	11.8	Loose lower sphincter	16.1	Bulbit	6.9
Reflux LAA	4.8	Antral gastritis	26.4	Ulcer	2.8
LA B	1.7	Pangastritis	18.6	Tumor infiltration	0.5
LAC	0.9	Fundic polyp	1.6	External compression	0.4
Barrett	0.9	Corpus polyp	2.3	Polyp	0.7
Varices F1	3.4	Antral Polyp	3.6	Submucosal Icsion	0.3
F2	3.1	Fundic Varices	1.5	Coeliac	0.6
F3	2.7	Portal HT gastropathy	5.5	Obstruction	1
Band ligation	1.2	Full stomach	3.2		
Obstruction	2.5	Obstruction	1.3		
Mass - Tumor	1.4	Mass- tumor	2.5		
Submucosal lesion	0.3	Submucosal lesion	1.6		
Schatzki web	0.5	Ulcer	5.3		
Candida	0.6	Atrophy	6.5		
External compression	0.6	Gastric operation	3.3		

**Table 3.** Multivariate Analysis of Parameters Related to Upper GIS Tumor on Gastroscopy in Elderly

Parameter	OR (C1)	, p
Age	1.009 (0.985 -1.035)	0.459
Sex (M)	3.199 (2.116 - 4.834)	< 0.001
Iron deficiency	0.501 (0.242 - 1.036)	0.07
Occult blood positivity	0.823 (0.745 - 2.164)	0.997
GIS hemorrhage	3.148 (1.764 - 5.617)	< 0.001
Dyspepsia	0.684 (0.353 - 1.325)	0.260
PPI resistant dyspepsia	1.553 (0.36 - 6.682)	0.554
Dysphagia	10.791 (6.531 - 17.830)	< 0.001
Nausea - vomiting	4.706 (1.916 - 11.559)	100.00>
Secondary to imaging findings	6.599 (3.703 - 11.759)	< 0.001

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### A Case Report of Recurring Upper Gastrointestinal Bleeding Associated with a Vascular Conglomerate at Gastric Fundus

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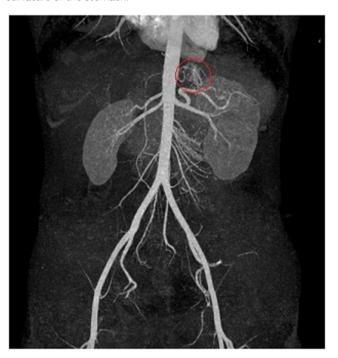
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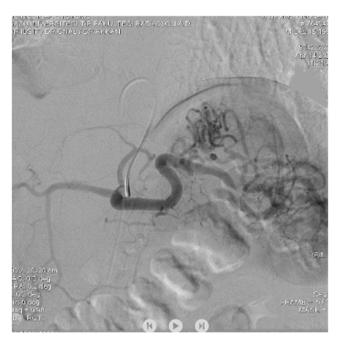
A 26-year-old male patient was admitted to the emergency department with severe epigastric pain, hematemesis, and melena followed by syncope. Apart from epigastric sensitivity, no significant features were found during the physical examination, and the patient had no history of surgery, chronic disease, smoking, or alcohol use. Laboratory values indicated 10.2 g/dL hemoglobin, other results and direct radiograph were normal. The patient was initially hospitalized in another hospital with a suspected case of upper gastrointestinal (GI) bleeding. Immediately after hospitalization, intravenous treatments of pantoprazole and octreotide were administered. Endoscopy revealed isolated gastric fundic varices and hematoma, but no active bleeding. Based on the endoscopic findings, CT angiography was scheduled, which indicated hyper vascularization at the gastric fundus. Repeated endoscopy yielded similar results. Due to life-threatening upper GI bleeding, erythrocyte suspension replacement was necessary. Subsequently, the patient was admitted to the intensive care unit (ICU) for a few days due to further complications. Then, the patient was transferred to our gastroenterology clinic for further examination and treatment. After the patient's admission, treatments were continued and endoscopy was performed. Endoscopy was revealing gastric varices measuring about 5×5 cm at the greater curvature of the stomach. No acute bleeding was reported. CT angiography was performed the next day. The CT angiography showed atypical and conglomerated structures from branches of the splenic artery at the stomach fundus. Additionally, early venous drainage was not present. Subsequently, the patient's case was discussed with vascular and interventional radiology specialists. The decision was made to embolize the branches causing the varices and vascular conglomerate using digital subtraction angiography (DSA). Selective catheterization and angiography were performed, and the distal splenic arterial branches causing the vascular conglomerate were successfully embolized. In the follow-up, the patient's melena, hematemesis, syncope, and other symptoms didn't evolve.



**Figure 1.** Endoscopy. In endoscopy, gastric varices at the greater curvature of the stomach.



**Figure 2.** Computed tomography (CT) angiography. In CT angiography, vascular conglomerate at the gastric fundus.



**Figure 3.** Embolization. Hypervascularity and vascular conglomerate during branches of splenic arterial embolization.

### Evaluation of the Risk of Gastric Cancer Development During Follow-Up in Patients Who Underwent Esophagogastroduodenoscopy and Were Diagnosed with Intestinal Metaplasia in the Pathological Diagnosis

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**Background/Aims:** Gastric cancer, especially intestinal-type adenocarcinoma, is associated with chronic superficial gastritis, atrophic gastritis, intestinal metaplasia (IM), and gastric epithelial dysplasia, which are premalignant lesions related to Helicobacter pylori (H. pylori) infection. The literature has not clearly defined the follow-up period for these premalignant lesions. We aimed to examine the long-term follow-up results of IM and identify facilitating factors for its progression to gastric cancer at Gazi University Faculty of Medicine Hospital.

Materials and Methods: Between 2013 and 2021, we examined the results of 25 130 people over 18 who underwent esophagogastroduodenoscopy and biopsied for any reason. Esophagogastroduodenoscopy was performed, and 3368 patients aged 18 years and older were diagnosed with IM by pathological examination from the biopsy material taken. To evaluate the risk of gastric cancer development in patients with pathological diagnosis of IM, 1454 patients with control esophagogastroduodenoscopy and biopsy results and control esophagogastroduodenoscopy available at least one year later were included in the study, and the results of the cases were evaluated retrospectively.

**Results:** IM was detected in 13.4% of the patients. Of the 3368 patients diagnosed with IM, only 1454 were followed up. It was determined that 56.9% of them did not / could not come for follow-up. Patients with IM: There was no change in 49.2% of the patients, no IM was detected in 47.2%, and it progressed in 3.5%. Patients with progress in follow-up: 42.0% progressed to adenocarcinoma, 36.0% to NET, 20.0% to dysplasia, 6.0% to GIST, and 2.0% to lymphoma. The rate of progression of IM to adenocarcinoma was found to be 0.01%. In our study, a statistically significant difference was found between the gender, site of involvement, ECL hyperplasia status, presence of H.pylori, and the end status of the patients (no IM detection, IM change, and IM progression) of the patients followed up with IM (P < .05). In the male gender, the progression frequency was significantly higher in patients with corpus involvement, ECL hyperplasia, and no H.pylori compared to other groups.

**Conclusion:** In line with the ESGE recommendation, metaplasia in the antrum does not increase the risk of malignancy. Still, if there is diffuse intestinal metaplasia, it should be followed up for malignancy. The decision to perform upper GIS endoscopy again in patients with IM incidentally without a comprehensive mapping technique and the timing of the procedure should be individualized.

GP33

## Clostridium Difficile Infection in Chronic Inflammatory Bowel Disease: A Complex Coexistence

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**Background/Aims:** Patients with chronic inflammatory bowel disease (IBD) are at increased risk of contracting Clostridium difficile (CD) infection. The aim of our study was to report the prevalence of this infection and the predisposing factors in patients with severe IBD.

**Materials and Methods:** This was a retrospective, descriptive and analytical study conducted over a four-year period, from January 2019 to July 2023. The study included all patients admitted to our department for acute severe colitis. All patients were tested for clostridium difficile toxin A and B. Calculations were performed using SPSS. P < .05 were considered statistically significant. Data entry was done using Microsoft Excel 2019.

**Results:** During the study period, one hundred and two patients were admitted with acute severe colitis. The mean age was  $31 \pm 11$  years, with a sex ratio = 1. 85.3% of patients had ulcerative colitis (UC), 8.9% had Crohn's disease and the remainder had unclassified IBD. CD infection was diagnosed in five patients (4.9%), including three men and two women, with a median age of 25 years [24–53]. Analysis of factors predisposing to Clostridium difficile infection revealed a statistically significant association between the presence of a history of hospitalization (P = .006), the use of corticosteroid therapy (P = .026) and the use of antibiotics (P < .001). All our patients were treated with oral vancomycin. Three of these patients improved after two weeks of antibiotic therapy, while one patient required a subtotal colectomy and the last patient died following severe rectal discharge.

**Conclusion:** Given the clinical similarity between the manifestations of a severe IBD attack and Clostridium difficile infection, it is imperative to consider stool testing for toxins A and B during severe attacks. This is particularly relevant in the presence of risk factors such as a history of hospitalization, previous use of corticosteroid therapy and antibiotics.

GP34

#### Fecal Calprotectin, CRP, and Their Correlation with the Endoscopic SES-CD Score in Patients with Crohn's Disease from Morocco

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**Background/Aims:** Evaluating the activity of Crohn's disease (CD) is crucial for proper management. It involves clinical, endoscopic, and biological assessments. While many studies have explored the use of fecal calprotectin as a marker to monitor inflammatory activity in inflammatory bowel diseases (IBD), few have analyzed its correlation with the SES-CD score. The aim of our study to assess the correlation between the endoscopic SES-CD score and two biological markers, fecal calprotectin, and C-reactive protein (CRP).

Materials and Methods: This was a retrospective, descriptive, and analytical study conducted over a two-year period [January 2021-July 2023], including all patients with CD followed in our department. These patients underwent ileocolonoscopy and a biological assessment including CRP and fecal calprotectin measurement. The SES-CD score was defined as follows: inactive 0-2; mild 3-6; moderate 7-15; severe ≥15.

**Results:** A total of 84 patients were included in our study. The sex ratio was 0.75. The median age was 26 years ± 14.8. For the disease location, 9.5% had isolated ileal involvement (L1), 16.5% had colonic disease (L2) and 50.7% had ileocolic involvement (L3). Furthermore, 34.2% had a non-penetrating phenotype (B1), while 29% had stenotic disease (B3), and 31% had fistulising complications (B2). Clinical activity, assessed by the Harvey Bradshaw

score, had an average score of 7. The mean CRP level was 87.4 mg/L  $\pm$  70, while that of fecal calprotectin was 471 µg/g  $\pm$  562. Patients were divided into three groups based on the SES-CD score:mild activity (n = 25), moderate activity (n = 28), and severe activity (n = 17). After in-depth analysis, it was found that fecal calprotectin and CRP showed a significant correlation with the SES-CD score, with values of (r = 0.867, P < .001) and (r = 0.733, P < .001), respectively.

**Conclusion:** While colonoscopy is considered the gold standard for monitoring CD, it remains invasive, expensive, and sometimes uncomfortable for patients. Our study highlights the importance of finding less invasive and more affordable alternatives. We have demonstrated that fecal calprotectin is a reliable marker to distinguish between inactive, mild, moderate, and severe endoscopic activity.

GP35

#### CRP/Albumin Ratio in Predicting Response to Steroids in Acute Severe Ulcerative Colitis

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**Background/Aims:** The first-line treatment for patients hospitalized with ASUC is intravenous corticosteroid therapy, but 30% require second-line 'rescue' therapy or colon resection due to incomplete response. This study aims to investigate whether the CRP/albumin ratio on days 1 and 3 of hospitalization could predict early response to intravenous steroids.

Materials and Methods: Data from all admissions for ASUC over 4 years from January 2019 to December 2022 were retrospectively collected. All patients initially received intravenous corticosteroids. Demographic, clinical, biological, and endoscopic data were collected; C-reactive protein (CRP) and albumin levels were recorded at baseline and during hospitalization. Receiver operating characteristic statistics were used to determine the optimal stool frequency, Lichtiger index, CRP, albumin, and CRP/albumin ratio (CAR) to predict steroid response.

**Results:** A total of 81 ASUC patients were admitted. Sixty-six patients (81.5%) were steroid responsive, 8 patients (10%) received rescue IFX and 7 patients (8.6%) required colectomy. By comparing two groups of patients (steroid-responsive and steroid-refractory), baseline stool frequency, Lichtiger index, CRP and UCEIS data didn't show any significant difference between the two groups. While baseline albumin was lower in the steroid-refractory group (Median 26, IQR 18-36, P = .041). Day 3 stool frequency and Lichtiger index were significantly higher in the steroid refractory group (P < .001). By receiver operating characteristic statistics, day 3 CAR was a more accurate marker of steroid responsiveness than day 3 CRP or day 3 albumin alone [area under curve = 0.911 (P < .001)]. The optimal CAR to predict response to steroids on day 3 was 2.67 (Se = 80%, Sp = 91%).

Conclusion: Raised day 3 CRP and albumin are early predictors of steroid-refractory ASUC. When combined in a ratio, their predictive ability improves. In patients with predicted steroid nonresponse, early introduction of rescue IFX at this stage may be more effective, before serum albumin falls profoundly.

GP36

#### The Relationship of H.pylori in Inflammatory **Bowel Disease**

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**Background/Aims:** The relationship between H. pylori and IBD is not clear. In this study, we tried to reveal the relationship between H. pylori positivity and IBD.

Materials and Methods: Independent T-test was used to compare continuous measurement values according to categorical groups. Chi-square test was used to determine the relationships between categorical variables.SPSS (IBM SPSS for Windows, version 26.0) statistical package program was used for analysis.

Results: A total of 105 IBD patients, 60 of whom were men, and 28 healthy volunteers were included in our study. Of the patients, 81 had Crohn's disease and 24 had UC, and the mean age of the patients was 44.34 ± 16.16 years. When the bowel activities of the patients were examined, 15% of them were in remission, while the disease was active in the others. While H. pylori positivity was not detected in IBD patients who were in remission, the positivity rate was 23% in patients with active disease (P = .016). The H. pylori positivity rate of the patients was 21.1%, and there was no statistical difference between the control group (P = .272). The H. pylori positivity rate in UC patients was 38.1%, while it was 14.3% in Crohn's patients (P = .032). There was no statistically significant difference in the use of biological agents and immunomodulators in UC and Crohn's patients. Measurements of acute phase reactants of IBD are shown in Table 1.

Conclusion: Although the H. pylori positivity rate in IBD did not differ compared to the healthy group, the H. pylori positivity rate was significantly higher in the case of active disease.

Table 1. Measurements of Acute Phase Reactants in IBD Patients

	Mean	Standard Deviation	Minimum	Maximum
Age (year)	44.34	16.16	18.00	84.00
WBC	7612.62	2630.65	1400.00	13900.00
NEUT/LYMP	3.31	2.59	.59	14.22
CRP	15.45	28.62	.10	170.00

GP37

#### Maintenance of Week 12 Responses Through Week 52 With Etrasimod in Patients With **Moderately to Severely Active Ulcerative Colitis: Post Hoc Analysis of the Phase 3 ELEVATE UC 52 Trial**

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Background/Aims: Etrasimod is an investigational, oral, once-daily, selective sphingosine 1 phosphate (S1P)<sub>1,4,5</sub> receptor modulator in development for the treatment of moderately to severely active ulcerative colitis (UC). The ELEVATE UC 52 clinical trial comprised a 12-week induction period followed by a 40-week maintenance period with a treat-through design, with primary and key secondary efficacy endpoints at Week 52 evaluated among all randomised patients. To further characterise the efficacy of etrasimod by evaluating efficacy endpoints at Week 52 among the subset of patients who met efficacy endpoints at Week 12. We report proportions of patients receiving etrasimod that sustained induction efficacy endpoints at Week 52.

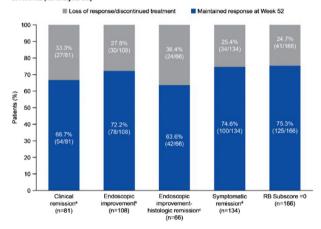
Materials and Methods: In ELEVATE UC 52 (NCT03945188), patients (16–80 years) with moderately to severely active UC were randomised 2:1 to once-daily etrasimod 2 mg or placebo. This post hoc analysis assessed efficacy endpoints at Week 52 among the subset of patients who met pre-specified efficacy endpoints at

Results: In ELEVATE UC 52, 81/289 (28.0%) patients treated with etrasimod achieved clinical remission at Week 12; of these, 66.7%

(54/81) sustained clinical remission at Week 52. Among the 108/289 (37.4%) patients who achieved endoscopic improvement at Week 12, 72.2% (78/108) sustained the endpoint at Week 52; of 66/289 (22.8%) who achieved endoscopic improvement-histologic remission at Week 12, 63.6% (42/66) sustained the endpoint at Week 52; of 134/289 (46.4%) patients who achieved symptomatic remission at Week 12, 74.6% (100/134) sustained the endpoint at Week 52; of 166/289 (57.4%) patients who achieved an RB subscore of 0 at Week 12, 75.3% (125/166) sustained the endpoint at Week 52.

**Conclusion:** These findings suggest efficacy endpoints achieved at Week 12 were sustained by large proportions of etrasimod-treated patients at Week 52 based on both subjective and objective measures including clinical, endoscopic and histologic efficacy responses.

Figure. Proportions of patients receiving etrasimod who sustained Week 12 induction efficacy endpoints at Week 52 (full analysis set)



"Clinical remission is defined as an SF subscore =0 (or =1 with a ≥1-point decrease from baseline), RB subscore =0, and ES ≤1 (excluding friability).

\*Endoscopic improvement is defined as an ES of ≤1 (excluding friability).

Emoiscopic migrovement is centred as an i.c. or s.+ (αντουνής instancy).

Emoiscopic migrovement-histogic remission is defined as an ES of (excluding friability) with histologic remission measured by a Geboes Index score (Symptomatic remission is defined as an SF subscore =0 (or =1 with a ≥1-point decrease from baseline) and RB subscore =0.

**Figure 1.** Proportions of patients receiving etrasimod who sustained week 12 induction efficacy endpoints at week 52 (full analysis set).

GP38

# Risk Factors Associated with Sleep Disorders in Patients Treated for Inflammatory Bowel Disease

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**Background/Aims:** The aim of this study is to highlight the various factors that can influence sleep quality in inflammatory bowel disease (IBD) patients.

**Materials and Methods:** This prospective analytical study enrolled patients with IBD who attended outpatient clinics and/or day hospitals during the two months preceding the study. Sleep quality was assessed using the Pittsburgh Sleep Quality Score (PSQI). Sleep quality was impaired when the PSQI score was >5. Crohn's disease (CD)

activity was assessed by the Crohn's Disease Activity Index (CDAI) and ulcerative colitis (UC) by the Mayo Clinical Score. The data were collected and analyzed using JAMOVI 2.4.6 software.

**Results:** One hundred patients were included with an average age of  $36.2 \pm 14.3$ , and a male-to-female ratio of 1.22. Sixty percent of patients were being followed for CD. Ileocolonic location was dominant in 45% of patients followed for CD and distal location was dominant in 35% of patients followed for UC. Among the patients followed up for Crohn's disease, 25 (41.7%) were in remission and 22 (36.7%) in moderate to severe flare-up. Among those treated for UC, 16 (40%) were in clinical remission and 16 (17.5%) in moderate to severe flare-up. The factors significantly associated with poor sleep quality were, pancolic location in patients followed for UC (16 (9 < .001), disease activity (16 < .001), extra-intestinal manifestations (16 = .004), and the presence of a stoma (16 = .019). Meanwhile, age, sex and type of IBD were not significantly associated with the occurrence of sleep disturbance, with 16 P values of 0.533, 0.643, and 0.191 respectively.

**Conclusion:** According to the results of our study, poor sleep quality is significantly associated with disease activity, the presence of extra-gastrointestinal manifestations, the existence of a stoma, and pancolic location in patients with UC. Appropriate management of the disease could improve sleep quality in these patients and thereby their overall quality of life.

GP39

#### Assessment of Sleep Quality in Patients with Inflammatory Bowel Disease

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**Background/Aims:** The aim of this study was to assess the prevalence of sleep disorders in IBD patients and to define the correlation between the clinical activity of the disease and the severity of the sleep disorder.

Materials and Methods: This prospective, cross-sectional study included patients with Inflammatory Bowel Disease (IBD) seen in outpatient clinics and/or day hospitals during the two months preceding the study. Sleep quality was assessed using the Pittsburgh Sleep Quality Index (PSQI). Sleep quality was impaired if the PSQI score was >5. Crohn's disease (CD) activity was assessed by the Crohn's Disease Activity Index (CDAI) and ulcerative colitis (UC) by the Mayo Clinical Score. Data were collected and analyzed using JAMOVI 2.4.6 software.

**Results:** One hundred patients were included with an average age of  $36.2 \pm 14.3$  with a M/F sex ratio of 1.22. Sixty percent of the patients were under treatment for Crohn's disease. Among those with Crohn's disease, 25 (41.7%) were in remission and 22 (36.7%) in moderate to severe flare-up. Among patients treated for UC, 16 (40%) were in remission and 7 (17.5%) in moderate to severe flare-up. The mean PSQI score was 6.14  $\pm$  3.26, with over half of the patients (53%) scoring >5.). Sleep quality was compromised in 26.8% of patients in clinical remission, compared to 71.2% of patients experiencing a

relapse. A statistically significant positive correlation (r = 0.764, P < .001) was found between the CDAI score, and therefore disease activity, and the PSQI score in Crohn's disease patients. Additionally, a strong correlation was noted between the Mayo score and the PSQI score (r = 0.708, P < .001).

**Conclusion:** This study underscores that sleep disorders are prevalent in nearly half of the IBD patients studied, demonstrating a substantial correlation with the clinical activity of the disease.

**GP40** 

#### Mesalazine-Induced Pleuropericarditis: Case Report

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Mesalazine, a 5-aminosalicylic acid derivative, is a safe treatment widely used in inflammatory bowel disease (IBD). However, cardiopulmonary hypersensitivity due to mesalazine use may rarely occur and clinicians should be careful about this issue. Here, we report a case of cardiopulmonary hypersensitivity due to mesalazine use. A 32-year-old female patient with a diagnosis of ulcerative colitis was in clinical remission 3 months ago under mesalazine tablets 3 g/day and mesalazine enema 4 g/day. She was admitted to the cardiology outpatient clinic with complaints of cough, pleuretic chest pain and weakness that started 20 days ago. Pleuropericarditis was considered in the patient, and colchicine 0.5 ma, levofloxacin 500 ma. ibuprofen 400 mg treatment was given. After two weeks of treatment, The complaints did not regress and the patient was admitted to the gastroenterology outpatient clinic and was hospitalised in the internal medicine service due to pleuropericarditis and malaise. Laboratory Results: WBC: 12,7 10<sup>3</sup>/µL, HGB: 134 g/L, AST: 15U/L, ALT: 13U/L ,Total Protein: 73 g/L, Albumin: 43 g/L, Amylase: 45 U/L, Lipase: 30 U/L, GGT: 36: U/L, Calcium: 8,82 mg/dL, Sodium: 139 mmol/L, Potassium: 4,29 mmol/L, CRP: 347 mg/L, Sedimentation: 3 mm/h, INR: 1.1 sec. Cardiovascular examination was normal, bibasilar rales were heard in respiratory system examination, abdominal examination was normal, he had normal defecation once a day, bilateral pretibial oedema was absent. Thoracic tomography showed a 2 cm thick pericardial effusion, mild increase in heart size and minimal pleural effusion posterobasal to both hemithoraxes. Echocardiography revealed an ejection fraction of 60% and a mild to moderate pericardial effusion surrounding the heart without tamponade. Electrocardiography showed normal sinus rhythm and no pathological findings were found. Diagnostic thoracentesis was performed. Pleural fluid was found to be exudate. After excluding possible etiologies such as rheumatological diseases, malignancy and tuberculosis, we suspected mesalazine-induced cardiopulmonary hypersensitivity, stopped using mesalazine and gave steroid. In the follow-up of the patient, symptoms regressed after 10 days, laboratory and radiological findings improved. In IBD patients, Mesalazine-induced cardiopulmonary hypersensitivity should always be considered in the differential diagnosis of unexplained cardiopulmonary symptoms and radiological abnormalities.

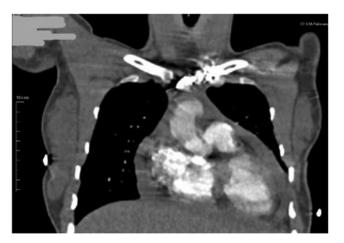


Figure 1. Before internation tomography.



Figure 2. The X-ray after 10 days of treatment.

GP41

#### Comparison of The SIBDQ Chronic Inflammatory Bowel Disease-Specific Quality of Life Score with the General SF12 Survey

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**Background/Aims:** Assessing the quality of life(QoL) of patients with chronic inflammatory bowel disease(IBD) has become an essential part of its management. The aim of our work is to compare the respective performances of the 2 scores: SIBDQ and SF12.

**Materials and Methods:** This is a prospective study of 78 patients followed as outpatients for IBD, between January and June 2023. QoL was assessed using 2 scores translated into French, one specific to IBD: SIBDQ and the other general non-specific to IBD: SF12, which were subsequently compared.

Results: The mean age of patients was 36.3 years with a sexratio (M/F) of 1.45, 52 of patients were followed for Crohn's disease (CD) and 26 for ulcerative colitis (UC). Mean follow-up was 3 years. At the time of inclusion, 56% of patients were in clinical remission. The mean CDAI score was 153.2. MC was ileo-colic (86%), colonic (12%) and ileal (2%). Ano-perineal lesions were present in 23 patients (11.5%). 21 patients (40.3%) had already undergone ileo-coecal resection. Ten patients (19%) had extradigestive manifestations. Therapeutically, 92.3% were on azathioprine, 5.7% on infliximab and 2% on adalimumab. UC was distal (23%), left (57.8%) and pancolitic (19.2%). Three patients (11.5%) had a history of severe acute colitis. Twenty-one patients (80.8%) were on 5-ASA, 3 (11.5%) on infliximab and 2 (7.7%) on azathioprine. The mean SIBDQ score was 45.06 ± 5 [extremes 24-66]. The significant impact of IBD on QoL, defined by a SIBDQ score below 40, was observed in 10 patients (7 for CD and 3 for UC). Analysis of the SF12 score revealed a mean physical health score of 32.11 ± 5.3 [extremes 22-60.6] and a mean mental health score of 38  $\pm$  5.2 [extremes 16.3-45.17]. The overall SIBDQ score and its domains were significantly correlated with all SF12 dimensions (r = 0.71, P = .01).

**Conclusion:** Our study revealed concordance between the SIBDQ score and SF12, suggesting the usefulness of the latter in assessing patients' QoL in daily practice.

GP42

#### **Assessing Quality of Life in IBD Patients**

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**Background/Aims:** The assessment of quality of life (QoL) is often neglected by physicians in the management of patients with chronic inflammatory bowel disease (IBD), Although it helps evaluate the disease's effect on patients' daily lives. The aim of our work is to assess the quality of life of patients followed in our department.

**Materials and Methods:** This is a cross-sectional study of all patients with IBD who consulted a Hepato-Gastro-Enterology department between January 2022 and January 2023. We conducted a telephone conversation with this group of patients. We used the short version of the IBDQ (short inflammatory bowel disease questionnaire) (S-IBDQ).

**Results:** A total of 103 patients were included with a mean age of 36.60 years [17-66], predominantly female (sex ratio= 0.90). Sixty-three patients had Crohn's disease. Ileocolic localization was

noted in 42 patients (66.7%), seventeen patients had ileal ± caecal involvement (27%), five patients had colonic involvement (7.9%). Ano-perineal manifestations were present in 15.9% of cases. Forty patients had haemorrhagic rectocolitis (UC). Four had rectitis. Pancolic involvement was found in 17 patients (43.6%). Thirty-five patients (34%) felt that their social circle was reduced because of the disease. Thirty-nine patients (37.9%) had a depressive profile. Intermittent abdominal pain was present in 57 patients during the 15 days preceding our telephone conversation. General signs were dominated by fatigue, which was present and disabling in 62 patients (60.2%). Significant impact of the disease on quality of life, as evidenced by an S-IBDQ score <40, was observed in 35 patients (33%). Ileocolic involvement with ano-perineal manifestation in Crohn's disease and left colonic localization in Hemorrhagic Rectocolitis were significantly associated with a low S-IBDO score.

**Conclusion:** Quality of life assessment is of paramount importance in the management of IBD patients, and should be the objective of follow-up consultations.

GP43

#### Correlation between Harvey Bradshaw Score and Fecal Calprotectin During Crohn's Disease: Experience from A University Hospital

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**Background/Aims:** Assessment of Crohn's disease (CD) activity is an essential component of adequate management, and involves clinical, endoscopic and biological scores. Numerous studies have focused on fecal calprotectin (FC) as a marker for monitoring inflammatory activity in IBD, and analyzed its correlation with endoscopic activity score. The aim of our work is to study the correlation between CF and clinical activity in CD.

**Materials and Methods:** This is a retrospective and analytical study, spread over a period of 5 years from January 2018 to December 2022, including patients with (CD) followed in our structure, whose clinical activity was assessed by the Harvey Bradshaw score and biological by the dosage of CF. A threshold of 250 mg/kg CF was used to distinguish active IBD from IBD in remission. Calculations were performed using SPSS 20.0 software, Chicago, IL. Values P < .05 were considered statistically significant.

**Results:** We enrolled 240 patients. The median age of our patients was 21 [17-31]. The M/F sex ratio was 1.19. The median CF level was 360 µg/g [96-1000]. Disease activity was mild in 26.8% of cases, moderate in 16.3% and severe in 15.5%. It was inactive in 41.4% of patients. The majority of our patients (65.1%) had ileocolic localization. Isolated colonic and ileal localization was reported

in 19.3% and 11.3% respectively. The phenotype of the disease was stenosing in 38.8% of cases, inflammatory in 34.2% and fistulizing in 27%. Analytical analysis showed a very strong positive correlation (r = 0.814) with statistical significance between the Harvey Bradshaw index and fecal calprotectin (P < .001).

**Conclusion:** Few studies have investigated the clinico-biological correlation between the Harvey Bradshow score and fecal calprotectin in CD. Our study was able to demonstrate the positive nature of this correlation. However, further research is needed to confirm this finding.

GP44

### Undesirable Effects of Immunosuppressants in Chronic Inflammatory Bowel Diseases

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**Background/Aims:** Immunosuppressive drugs are frequently used in chronic inflammatory bowel disease (IBD). The tolerance of this treatment depends on several factors, including the type of molecule used and the patient's comorbidities. The aim of our work is to determine the nature and frequency of adverse reactions to immunosuppressant in IBD.

**Materials and Methods:** A retrospective and descriptive study was conducted from January 2018 to January 2023 in our Department, including all patients with inflammatory bowel disease receiving immunosuppressant and who developed complications. Clinical and biological monitoring was performed systematically during treatment to identify potential complications.

Results: In our study, 81 IBD patients receiving immunosuppressive drugs were evaluated, 80 patients of them using azathioprine (98.76%) and one patient receiving 6-mercaptopurine (1.23%). Among these 81 patients, 22 developed complication while on immunosuppressive therapy for IBD (12 with crohn's disease, 6 with ulcerative colitis and 4 with indeterminate IBD), resulting in a frequency of 27.16%. The mean age of these patients was 34 years. The sex ratio M/F was 0.69. We observed hematotoxicity to azathioprine in 10 patients (45.45% of cases), while two patients (9.09% of cases) experienced acute pancreatitis and an allergic rash, and one patient (4.5% of cases) presented signs of liver toxicity. During treatment, 2 patients (9.09%) developed tuberculosis, hematological malignancy and gynecological cancer respectively, while one patient (4.5%) was diagnosed with pancreatic cancer. Immunosuppressive therapy was discontinued in 15 patients (68% of cases) and the dosage was reduced in 32% of cases, with favorable progression in the majority of patients (95%). No adverse effects were reported in patients on 6 mercaptopurine.

**Conclusion:** Our study shows the frequency of complications in IBD patients receiving immunosuppressive therapy. Hence the importance of maintaining rigorous monitoring during these treatments.

GP45

### Self-medication with Corticosteroids in Chronic Inflammatory Bowel Disease

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**Background/Aims:** Corticosteroids are the standard treatment for moderate to severe flare-ups of chronic inflammatory bowel disease (IBD). They have a powerful and rapid anti-inflammatory action, are highly effective, inexpensive and easy to use. The aim of our study is to assess the frequency and modalities of corticosteroid self-medication in IBD patients.

**Materials and Methods:** This is a prospective study of 76 patients followed for IBD in the gastroenterology department of Casablanca University Hospital.Patients were asked to complete a questionnaire.

Results: Of the 76 patients surveyed, 18 (23.6%) had already taken corticosteroids without a doctor's prescription, including 4 (22%) more than 5 times. Of these, 10 patients (55%) were being followed for Crohn's disease (CD) and 8 (45%) for ulcerative colitis (UC). The mean age was 35.1 years, with a M/F sex-ratio of 1.23. 37.8% of patients had no schooling, and only 14.6% had a university education. The average follow-up period was 3 years. 100% of patients followed up for CD were on azathioprine, those followed up for UC 96.3% were on 5-ASA, 2.5% on azathioprine and 1.2% on infliximab. The average duration of corticosteroid treatment was 27 days without adjuvant therapy, with a mean daily dose of 25 mg. Of the 7 patients (38.8%) on long-term corticosteroids, only 2 discontinued them after gradual tapering off, and 4 (22.2%) developed complications (3 osteoporosis and 1 adrenal insufficiency). Only 5 patients (27.7%) were aware of the possible side effects of corticosteroids. The three main reasons for self-medication were: rapid relief of symptoms, fear of hospitalization and unwillingness to seek medical advice.

**Conclusion:** Almost a quarter of IBD patients use corticosteroids without a prescription. Educating and informing patients about their side effects plays a vital role in the overall management of the disease

GP46

### Mesalazine-induced Pleural effusion in a Patient with Ulcerative Colitis

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Mesalazine is one of the first-line treatments for inflammatory bowel disease. Pleural effusion is both a rare extraintestinal manifestation

of ulcerative colitis (UC) and may occur as a side effect of mesalazine treatment. In this case, we have presented mesalazin induced pleural effusion in patient with UC. A 62-year-old male patient was admitted to the hospital with increasing shortness of breath for last month. He also complained cough and white sputum. The patient was evaluated by primary care physician and was diagnosed with pneumonia, empiric oral levofloxacin treatment was started for 7 days, but patient's complaints continued. It was learned that patient had no history of pulmonary disease, and no smoking. The patient was diagnosed with ulcerative colitis 2 months ago. Treatment with 4 g/day mesalazine was started for ulcerative colitis. His vitals were stabil, SpO<sub>2</sub> of 95% on room air. In pulmonary examination, decreased breath sounds in bilateral lower regions of lung, mostly on the right, dullness to percussion at base of both lungs. There was pleural effusion on the chest X-ray, more on the right, and it was confirmed by thorax CT. Sampling could not be performed because amount of pleural effusion was low. In laboratory tests, complete blood count, CRP and tuberculosis tests were normal. Echocardiography was normal. The calculated Naranjo ADR Probability Scale score for mesalamine was 6. Finally, the patient was diagnosed with mesalazine-induced pleural effusion, and mesalazine treatment stopped. During the follow-up period, the patient's complaints decreased, and the effusion disappeared completely on chest X-ray. Extraintestinal organ manifestations are observed in inflammatory bowel diseases. There may be various lung involvement such as thromboembolic disease, pleuritis, pulmonary eosinophilia and interstitial lung disease. Additionlly, lung manifestations may occur due to drugs used in treatment of disease. Pleuritis, pleuropericarditis, eosonophilic pleural effusion, bronchiolitis obliterans, and lung fibrosis have been reported in the literature due to mesalamine treatment. In our case, bilateral pleural effusion was detected due to mesalamine treatment.



Figure 1. Bilateral pleural effusion, more on the right.

GP47

#### General Practitioners' Knowledge, Attitudes and Practices Regarding Chronic Inflammatory Bowel Disease

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**Background/Aims:** General practitioners (GPs) play an important role in the initial care of patients with Chronic inflammatory bowel diseases (IBD). The aim of our work is to evaluate the knowledge, attitudes and practices of GPs in the management of IBD.

**Materials and Methods:** This descriptive and epidemiological study was carried out in August 2023. The survey was accessible via a Google Forms questionnaire which included socio-demographic and professional data, initial clinical and paraclinical orientation elements, therapeutic arsenal and evolutionary follow-up.

Results: A total of 96 GPs responded to the questionnaire. Their average age was 30.2 years (26-59 years), with a sex-ratio (F/M) of 2.17. 62.5% were self-employed, 89% in urban areas. The average number of years in practice was 7 years. All participants claimed to be knowledgeable about IBD. The symptoms most frequently associated with IBD were chronic diarrhea, abdominal pain and clinical malabsorption syndrome (81.2%, 73% and 54.1% respectively). 65.6% were aware of the various extra-digestive manifestations of IBD, and 52% were unaware of its complications. The biological and/or radiological tests most frequently requested in first-line were: inflammatory tests (92.7%) and abdominal CT scans (58.3%). The keystone in the diagnosis of IBD was the endoscopic examination, according to 93.7%, while 6.3% considered it to be the radiological examination. When there is a strong suspicion of IBD, 96.8% refer the patient to a gastroenterologist. Regarding the treatment, 52% of responders considered it to be a combination of biotherapy and corticosteroids, 31% said it was based on biotherapy, 10% considered it to be azathioprine, while 7% thought it was based on corticosteroids. 25% of participants said they could provide follow-up care for IBD, and 60% nutrition education.

**Conclusion:** Coordination between the GP and the gastroenterologist is essential to optimize the management of IBD. It is therefore essential to organize scientific days to raise awareness and provide ongoing training for our colleagues.

#### Tolerance of Biotherapies During Chronic Inflammatory Bowel Disease in A Hepato-Gastroenterology Department

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**Background/Aims:** Biotherapies, in particular anti-TNFa drugs, are considered effective in the management of IBD. However, due to significant immunosuppression, they can cause significant adverse effects, mainly infections. The aim of our work is to describe the various adverse effects occurring in IBD carrier patients on biotherapy and their management.

**Materials and Methods:** This is a monocentric cross-sectional study of a series of 42 IBD patients on anti-TNF, enumerated over a period from October 2017 and April 2018 in a Hepato-Gastro-Enterology department.

**Results:** Of the 42 patients treated with biotherapies, 29 (69%) developed at least one side effect: 51.7% were female, 67% had Crohn's disease and 76% were on Infliximab. Side effects included: common bacterial infections (33.3%), tuberculosis (4.76%), injection/infusion reactions (23.8%), arthralgia (19%), hematology (19%), dermatology (11.9%), neurology (7.14%) and fever (2.4%). Temporary discontinuation of treatment was noted in 43% of cases. Fourteen percent of patients discontinued treatment permanently in the face of peripheral neuropathy and severe respiratory discomfort.

**Conclusion:** Prescribing biotherapy for chronic inflammatory bowel disease requires a systematic pre-therapeutic assessment and regular clinical and paraclinical follow-up, in order to detect side-effects and assess whether or not the treatment should be continued.

GP49

### Thromboembolic Events in Inflammatory Bowel Disease

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Patients with chronic inflammatory bowel disease (IBD) are at high risk of thromboembolic events (TEA), which are a significant cause of morbidity and mortality. The aim of our study was to estimate their prevalence and determine their clinical and developmental characteristics. We conducted a retrospective study of all patients hospitalised for IBD management in the department between 2017

and 2023 who presented at least one thromboembolic complication during their follow-up. Only thromboembolic events confirmed by imaging were considered. For each patient we specified the characteristics of the IBD and the vascular complication. Twenty patients (3.43%) of the 583 IBD cases reported to the department had suffered a thromboembolic event, with an average age of  $40 \pm 15.3$ years and a sex ratio of 1. Thirteen patients had Crohn's disease and seven had UC. Eight patients had deep vein thrombosis (DVT) of the lower limbs, associated with pulmonary embolism in 1 case, portal thrombosis in 3 cases, isolated pulmonary embolism in 4 cases, cerebral venous thrombosis in 3 cases associated with thrombosis of the internal jugular vein in 1 case, and mesenteric thrombosis in 2 cases. ATE was identified on admission in 6 patients, occurred during hospitalisation in 10 patients and was diagnosed as an outpatient in 4 patients. At the time of the thromboembolic complication, all patients were in a progressive phase of their disease, which was considered severe in 11 cases, moderate in 8 cases and mild in 1 case. Smoking was reported in 4 patients. Dyslipidaemia was found in one patient and cardiopathy in one patient. Thrombophilia testing revealed antithrombin III deficiency in 1 case. The outcome was fatal in 2 patients following severe pulmonary embolism in one case and portal thrombosis in the other.

GP50

#### The Risk of Tuberculosis Occurrence in Patients on Immunosuppressive Therapy for Inflammatory Bowel Disease

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**Background/Aims:** Immunosuppressive therapy (IS) is widely used during chronic inflammatory bowel disease (IBD). This use of IS has aroused' growing concern about the risk of opportunistic infections, particularly tuberculosis. The aim of this work is to describe the epidemiological, and evolutionary profile of patients followed for IBD on IS and who have developed tuberculosis disease.

**Materials and Method:** This is a retrospective descriptive study carried out over a 7-year period from January 2014 to January 2022 in the Hepato Gastro Enterology Department and covering all patients with chronic inflammatory bowel disease (Crohn's disease, ulcerative colitis and unclassified IBD) on immunosuppressive therapy (azathioprine or 6-Mercaptopurine), who developed tuberculosis disease.

**Results:** A total of 167 IBD patients were included (120 cases of crohn's disease, 41 cases of UC and 6 cases of unclassified IBD). Mean age was 33 ± 12.3 years; sex ratio (M/F) was 0.92. A history of tuberculosis disease was noted in 9 patients, with pulmonary, pleural (3 cases), intestinal (2 cases) and peritoneal (1 case) localization. Quantiferon testing for tuberculosis was carried out in 85%

of patients before starting IS treatment. This test came back negative in 82.5%. 95.15% of patients received azathioprine and 4.85% received 6-mercaptopurine. Corticosteroid therapy was noted in 72.9%. 2 patients developed tuberculosis disease (1.19% of cases), with pulmonary (1 case) and pleural (1 case) localization. The delay in onset of tuberculosis disease after the start of immunosuppressive therapy was 2 months and 7 years respectively. Progression was favorable under anti-bacillary treatment.

**Conclusion:** The risk of tuberculosis in IBD patients on immunosuppressive therapy in our study is low (1.19%). Nevertheless, it may be necessary to recommend more rigorous screening and to maintain surveillance throughout the course of treatment.

#### GP51

#### Regional Demographic Data in Inflammatory Bowel Disease: Amasya Province

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**Background/Aims:** Inflammatory bowel disease (IBD) is a gastrointestinal system disease that begins with intestinal inflammation and mucosal tissue damage, causes intestinal and extraintestinal symptoms, and progresses with impaired immune response. This study aimed to determine the demographic characteristics of patients diagnosed with IBD residing in Amasya, a small province of Turkey.

Materials and Methods: The patients with known or newly diagnosed inflammatory bowel disease who applied to Amasya University Sabuncuoğlu Şerefeddin Training and Research Hospital Gastroenterology outpatient clinic between January 2018 and September 2023 were included in the study. Demographic data of the patients were recorded through the system or by contacting the patients directly at the outpatient clinic or by phone. Patients whose information could not be obtained were excluded from the study.

**Results:** Two hundred and fourty six patients, 154 (62.6%) of whom were male, with a mean age of 47.24 ± 15.20 (17-85) and a mean follow-up period of 7.6 ± 6.6 years (6 months-32 years) were included in the study. The median age at diagnosis was 39.53 ± 15.12 (4-84 years) and the median follow-up period was 7.15 ± 6.43 (6 months-32 years). While 59 (24%) of the patients were diagnosed with Crohn's disease (CD), 184 (74.8%) were diagnosed with ulcerative colitis (UC), and only 3 (1.2%) patients were diagnosed with indeterminate colitis (IC).

**Conclusion:** Contrary to popular belief, inflammatory bowel disease is a disease that can be seen in all age groups, regardless of its subtype. Our study also supports this. While some patients came for regular follow-up for years, it was determined that some patients did not come for follow-up unless there was any clinical activation. It has been noted that even patients with a definitive diagnosis of ulcerative colitis may experience stenosis due to severe inflammation

Table 1. Demographic Data of Patients

	UC (n=184)	CD (n=59)	IC (n=3)	Total
Age (years)	48.46±15.32	43.44±14.23	59.67±14.01	47.24±15.20
	(17-85)	(20-77)	(44-71)	(17-85)
Gender (M) (n/%)	117 (63.6)	36 (61)	1 (33.3)	154 (62.6)
Age at diagnosis (years)	40.03±15.34	37.16±14.08	55.00±13.52	39.53±15.12
	(4-84)	(16-74)	(41-68)	(4-84)
Duration of the disease	7.55±6.86	6.04±4.88	4.66±2.88 (3-	7.6±6.6 (0.5-
(year)	(0.5-32)	(0.5-21)	8)	32)
Follow-up (year)	8.12±7.07	6.35±5.18	4.66±2.88 (3-	7.15±6.43
	(0.5-32)	(0.5-21)	8)	(0.5-32)
Phenotype (n/%)				
Inflammatory	176 (96.2)	36 (62.1)	3 (100)	215 (88.4)
Fistulizing	6 (3.3)	5 (8.6)		10 (4.2)
Stenosing	1 (0.5)	17 (29.3)		18 (7.4)
Place of involvement (n/%)				
Distal	83 (46.1)	2 (3.6)	0	85 (35.6)
Left colon	57 (31.7)	0	0	57 (23.8)
Pancolitis	34 (18.9)	2 (3.6)	1 (33.3)	37 (15.5)
Backwash+pancolitis	2(1.1)	2 (3.6)	1 (33.3)	5 (2)
Ileal	1 (0.6)	28 (50)	0	29 (12.1)
Ileocolonic	3 (1.7)	16 (28.6)	1 (33.3)	20 (8.4)
Colonic	0	2 (3.6)	0	2 (0.8)
Ileocolonic+perianal	0	2 (3.6)	0	2 (0.8)
Upper	0	2 (3.6)	0	2 (0.8)
GI+ileocolonic				
Family history of IBD (n/%)	11 /101 (10.8)	3/30 (10)	0	14/132 (10.6)
Smoking (n/%)	21/101 (20.7)	10/31 (32.3)	0	31/133 (23.3)

#### GP52

### Emotional Disorders in Chronic Inflammatory Bowel Disease

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**Background/Aims:** Emotional disorders, including anxiety and depression, during chronic inflammatory bowel disease (IBD) are reported in the literature. The aim of this work is to determine the prevalence of these emotional disorders and the factors predisposing to their occurrence.

**Materials and Methods:** A prospective, descriptive and analytical study was undertaken in a gastroenterology department. A total of 91 outpatients with IBD in relapse or clinical remission were included. An information sheet exploring socio-economic, clinical, evolutionary and therapeutic characteristics was completed by each patient. Anxiety-depressive symptomatology was assessed by a psychiatrist using the Hospital Anxiety Depression Scale (HADS) and MINI DSM-V.

**Results:** The mean age of patients was 36.4 years with a sex-ratio (M/F) of 1.12. Thirty nine (43%) patients had an emotional disorder, 27 had Crohn's disease (CD) and 12 had ulcerative colitis (UC). Twenty two patients (56.4%) were anxious, 14 with CD and 8 with UC, concerning depression 13 (33%) were depressed 9 CD and 4 UC, 12 patients (31%) were anxio-depressive 8 CD and 4 UC. For patients

with CD, the risk of developing anxiety is linked to young age of onset (P < .001), the number of relapses per year (P = .004) and recourse to surgery (P = .03), while that of depression is correlated with the presence of ano-perineal manifestations (P < .001) and the number of hospitalizations per year (P = .02). For patients with UC, anxiety is linked to the number of flare-ups per year (P < .001), while depression is correlated with a high level of education (P = .01). Socioeconomic status and the presence of extra-digestive manifestations were not predisposing factors for anxiety and depression (P = .12 and P = .57 respectively).

**Conclusion:** Almost half of IBD patients present with an emotional disorder. As a result, it is vital for hepatologists to detect these disorders at an early stage, in order to optimize patient management and improve quality of life by combining effective treatment of these disorders with the usual IBD therapies.

GP53

### The Relationship between Quality of Life and Disease Severity in Irritable Bowel Syndrome

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**Background/Aims:** The quality of life in irritable bowel syndrome (IBS) patients is significantly lower than other chronic diseases, there are few studies analyzing the severity of the disease and quality of life. Our study aims to evaluate the relationship between disease severity and quality of life in IBS patients.

Materials and Methods: Our study included 139 patients with IBS diagnosed according to Rome-IV criteria, and control-group of 139 healthy people. Severity of the disease was created into three groups: mild, moderate, severe, using the Irritable Bowel Syndrome Score-Questionnaire. With the SF-36 survey; Eight parameters were evaluated; physical-functionality, physical-role, pain, general-health-perception, vitality, social-functionality, emotional-role and mental-health. The relationship between the severity of the disease and quality of life was evaluated.

**Results:** The study was conducted with a total of 278 cases, 58% (n = 161) of whom were female. It was observed that the quality of life was lower in IBS patients compared to the control group. Also the severity of IBS increased, physical function scores decreased. The physical function score of the cases with severe IBS was found to be significantly lower than the mild and moderate IBS groups. The pain score of the cases with severe IBS was found to be significantly lower than the mild and moderate IBS groups. The general health score in cases with mild IBS severity was found to be significantly higher than in cases with moderate and severe IBS. Physical role vitality, social function and mental health scores were found to be significantly higher in cases with mild IBS than in cases with severe IBS.

**Conclusion:** It was shown that there is a significant correlation between disease severity and poor quality of life in IBS patients. Therefore, in order to provide optimum treatment, patients must be followed up by a team of psychologists and psychiatrists along with treatments aimed at relieving symptoms.

GP54

#### Comparison of Sodium Picosulfate and Sennoside Solutions in Bowel Preperation Before Colonoscopy: Retrospective Study

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**Background/Aims:** Bowel preparation in colonoscopy increases the quality of the procedure. As important as it is for the patient to comply with his diet, it is equally important for him to consume purgative medications as recommended before the procedure. In this study, the colon cleansing of patients prepared with two different protocols for colonoscopy was compared.

**Materials and Methods:** A total of 95 patients who underwent colonoscopy at the Denipol Hospital Gastroenterology outpatient clinic were included in the study. It was determined that 50 of the patients prepared the colon with sodium picosulfate and 45 with sennoid. Colon cleansing of both groups after colonoscopy was evaluated. Whether this was related to the medication used, weight and Body Mass Index (BMI) was statistically investigated with SPSS V27.

**Results:** Of the 95 patients included in the study, 52 (54.7%) were female and 43 (45.3%) were male. The mean age of the patients was 54.8 ±18.4. The mean weight of the patients was 75.17 ± 12 kg. BMI was 27.62 ± 4.1. The colon was detected to be dirty in the colonoscopy of 12 of 95 patients. Of these 12 patients, 7 were prepared with sodium picosulfate and 5 with sennoid. No statistical significance was found between the medication used, the patient's weight and BMI, and colon cleansing (P > .05).

**Conclusion:** Colon cleansing is important for colonoscopy. The variety of medications used for colonoscopy preparation is increasing. Medicines prepared with a small amount of water, as well as high-volume medicines, can be offered to patients as an alternative. Colon cleansing is better in patients who follow their diet and use the prescribed medications as recommended.

GP55

### An Unusual Cause of Gastrointestinal Bleeding

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Primary intestinal lymphangiectasia (PIL) is a rare disease characterized by diffuse or localized ectasia of enteric lymphatics. PIL usually affects children and teenagers. Intestinal lymphangiectasia is characterized by impaired small intestinal lymph drainage associated with dilated intestinal lymphatic channels and consecutive loss of proteins resulting in hypoproteinemia and lymphopenia. Patients

usually present with peripheral edema. Rarely, patients may present with gradually progressive dyspnea or painless abdominal distention due to symptomatic pleural effusions or ascites. Gastrointestinal symptoms of diarrhea, steatorrhea, abdominal pain, nausea, and vomiting may be present. Chronic occult blood loss or massive bleeding one of the rare presentation of PIL. A 26-year-old man presented with episodic melena and 13 kg weight loss in last one month. His hemoglobin level was 5.7 g/dL (reference range, 13.0-14.6 g/dL), and serum platelet count, coagulation factors, and other parameters revealed normal values. Esophagogastro-duodenoscopic and colonoscopic examinations had been performed twice and had revealed no definite bleeding source, colonoscopy revealed melena stains in all colon segments including the terminal ileum. We performed double balloon enteroscopy (DBE) and showed a large bleeding and ulcerating polyp with partial luminal obstruction at the mid jejunum. The patient underwent surgical resection cause of the definitive diagnosis and curative intent. The total length of resected small bowel was about 15 cm, with clear proximal and distal margins. The results of the histological examination confirmed polypoid intestinal lymphangiectasia characterized by dilated lymphatic channels and villous widening. Postoperatively, the patient recovered well and was discharged in a stable condition. PIL is rare cause of protein losing enteropathy that usually affects children and teenagers. Chronic occult blood loss or massive bleeding has been reported rarely. To our knowledge, this is the first case to report small bowel bleeding from a solitary polypoid intestinal lymphangiectasia that looksk like malignancy.

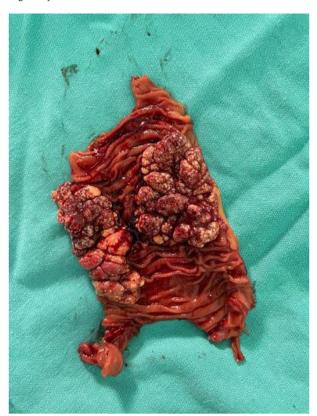


Figure 1. Double balloon enteroscopy image of the lesion.



Figure 2. Macroscopic findings of the surgically resected specimen.

GP56

#### Misuse of Antibiotics in The Management of Perianal Abscesses

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**Background/Aims:** Ano-perineal abscess is a common proctological emergency that requires surgical treatment, as antibiotics alone are insufficient for its management. This study aims to address the inappropriate use of antibiotics in treating ano-perineal abscesses and identify the prescription's indications.

**Materials and Methods:** This retrospective descriptive study is conducted over two and a half years (January 2021-June 2023), including patients with acute proctalgia who had received antibiotics and were diagnosed with anal/intramural abscesses during clinical examinations

**Results:** Out of the 185 patients included, 73 (39.45%) received antibiotic therapy. The average age was 43.7 years, with a sex ratio of 2.8. Active smoking and diabetes were present in 31.5% of cases each. 24.6% had an abscess drainage history, 6.8% were receiving chemotherapy, 2.73% had Crohn's disease and 1 patient was pregnant. All patients consulted for acute proctalgia, with 4.1% were discharging pus from the anal margin. The average time for patients to seek medical attention was 7.5 days. 57,5% of patients were self-medicating while 42.5% received antibiotic prescriptions from general practitioners. 21.9% of patients received dual antibiotic therapy, 23.8% prescribed amoxicillin or metronidazole alone and 16.43% received penicillin M. No proctological examination was conducted before prescription. The Anal margin inspection revealed a simple anal abscess in 67% of cases

treated by an ambulatory surgical drainage, 20% of cases were complicated abscess by Fournier's gangrene referred to the surgery department. Rectal examination detected an intramural abscess in 13% of cases, leading to surgical drainage under spinal anesthesia. Antibiotic therapy was maintained in patients with diabetes, Crohn's disease, those undergoing chemotherapy and discontinued for others.

**Conclusion:** Ano-perineal abscess is a surgical emergency, and antibiotics alone cannot treat it. Antibiotics should only be prescribed post-incision in immunocompromised patients, diabetics, cardiac patients, patients with Crohn's disease, or when there are signs of severity like fever or significant cellulitis.

GP57

#### Rare Syndrome Associated with Gastrointestinal Bleeding: Heyde Syndrome

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A 50-year-old male patient presented to the Emergency Department with a complaint of black stool. He had a history of Aortic Valve Replacement surgery due to calcific aortic stenosis 11 years ago. Besides taking Warfarin and Metoprolol, he was not on any other medications. His vital signs were as follows: Blood pressure: 100/60 mm Hg, Heart rate: 125 beats per minute, and Oxygen saturation: 98%. Abdominal examination was normal, but a rectal examination revealed hematochezia mixed with melena (black, tarry stool). Laboratory values showed a hemoglobin level of 5.6 g/dL and an MCV of 78, raising suspicion of gastrointestinal bleeding. The patient was admitted to the gastroenterology department with a preliminary diagnosis of gastrointestinal bleeding. Proton pump inhibitor infusion was administered, and erythrocyte suspension replacement was performed. Hydration was maintained with isotonic fluid. An esophagogastroduodenoscopy (EGD) was performed, which revealed only antral gastritis and no other pathology. During colonoscopy, clear visualization was not possible due to significant melena and hematochezia. Hemogram monitoring and melena follow-up indicated massive bleeding. Erythrocyte-labeled scintigraphy failed to locate the source of bleeding. During follow-up, as the patient continued to have melena, a detailed and repeated colon cleansing was performed. During the colonoscopic examination, after repeated washouts, two 2-3 cm-sized angiodysplasia foci with oozing bleeding were identified at the base of the cecum. Intervention was carried out using Argon Plasma Coagulation, and no complications occurred. Bleeding was successfully stopped. With no further decrease in hemoglobin levels and a gradual normalization of melena, the patient was transferred to a regular medical ward. His oral intake was gradually resumed, and he was discharged with outpatient follow-up recommendations. In individuals with calcific aortic valve disease and gastrointestinal bleeding, one should consider the possibility of Heyde syndrome, which can be overlooked.



Figure 1. Endoscopic image.



Figure 2. Endoscopic image.



Figure 3. Endoscopic image.

#### Non-Steroidal Anti-Inflammatory Drugs and Perianal Suppurative Pathology, What Impact?

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**Background/Aims:** Anal abscess is a frequent proctological emergency. The treatment is based on incision under local anaesthetic, followed by flattening of the fistulous path.

The aim of our work: to review the misuse of non-steroidal antiinflammatory drugs (NSAIDs) for the treatment of perianal abscesses and to cite the possible complications.

**Materials and Methods:** This is a retrospective descriptive study over a 2-and-a-half-year period(January 2021-June 2023), including all patients who consulted the emergency department for acute proctalgia revealing an anal or intramural abscess with notion of NSAID intake

**Results:** A total of 185 patients were enrolled. Of these, 67 (36.2%) received NSAIDs. The average age was 42 years, with a sex ratio of 3.4.Chronic smoking was noted in 32.8% of cases, diabetes in 28.3%, a history of anal abscess drainage in 5.3%, 4 patients were on chemotherapy, 1 Case: in a pregnant woman; on Crohn's disease and HIV. The average consultation time was 7 days (1-15 days). 63% of patients were self-medicated with NSAIDs, while 37% were seen by general practitioners. No patient underwent proctological examination. The main therapeutic classes used were diclofenac in 37.4% of cases, ketoprofen in 22.4%, fenoprofen in 16.4% and ibuprofen in 13.4%. The oral route was preferred by 59 patients (88%), while 12% took the intramuscular form. Proctological examination revealed a simple anal abscess in 62.8%, complicated by Fournier's gangrene in 23.8%, and intrarectal bulging in 13.4% of cases. Outpatient abscess drainage was performed in 42 patients, in the operating room in 9, while 16 patients were referred to surgery for necrosectomy. Discontinuation of NSAIDs was recommended in all our patients.

**Conclusion:** The use of NSAIDs in perianal suppurative pathology is contraindicated by all learned societies, as it may promote cellulitis. Unfortunately, this practice remains fairly frequent, due to the failure to perform anal margin examinations and the use of self-medication.

GP59

### Colonic Involvement in A Patient with Multipl Myeloma: A Case Report

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Multiple myeloma (MM) is a plasma cell neoplasm characterized by clonal plasma cells that produce a monoclonal immunoglobulin. These plasma cells proliferate in the bone marrow and can result in extensive skeletal destruction. Additionally, MM can present with extramedullary involvements. Gastrointestinal (GI) involvement in MM is a very rare condition. In this case report a patient with Multiple Myeloma with colonic involvement will be presented. A 66-year-old female was diagnosed with MM with a bone marrow biopsy after having severe back pain. PET-CT scan revealed lytic lesions in multiple areas. There were no gastrointestinal manifestations on the diagnosis. She had autologous bone marrow transplantation after chemotherapy the same year and MM recurred after 3 years from diagnosis. While on the Lenalidomide and Dexamethasone therapy, the patient had a cerebrovascular event. After hospitalization during the follow up she presented with melena and we are presenting the findings after the gastrointestinal bleeding. While the upper GI endoscopy showed no bleeding site, a pancolonoscopy was performed. In the procedure, ulcerated and pitted polypoid lesions were observed in the ascending colon and sigmoid colon. Some hemorrhagic lesions were stopped using Argon plasma coagulation. Regarding the diagnosis of Myeloma and the phenotype of the lesions, we had a prediagnosis of plasmacytoma. The biopsies showed extramedullary infiltrations of MM in the microscopy. In the immunohistochemistry staining Bcl-2-124, CD38, Ig G, Lambda, and MUM-1 were diffuse and strongly positive for neoplastic plasma cell infiltration. Ki-67 proliferation index was found %70. After the colonoscopy, the patient's melena resolved. Gastrointestinal and specifically colonic manifestations of Myeloma are very rare conditions that may present with GI bleeding. After recurrence, the patient presented with melena due to colonic involvement of Myeloma. We may assume that recurrences of MM can present in different situations and treatment refractory patients may progress with atypical extramedullary infiltrations. In any patient that undergoes GI endoscopy, specific featured lesions should be taken into consideration as Myeloma infiltration.

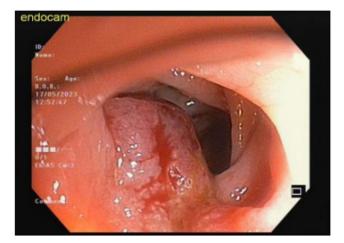


Figure 1. Multipl myeloma colonic Involvement.

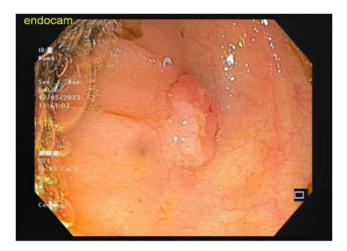


Figure 2. Multiple myeloma colonic involvement.

#### Rare Cause of An Colonic Polyp: Hemangioma

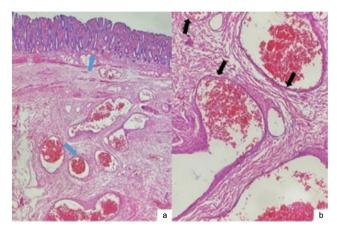
Kenan Moral<sup>1</sup>, Esin Kaymaz<sup>2</sup>, Mehmet Cindoruk<sup>1</sup>, Gökhan Kabaçam<sup>3</sup>

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Hemangiomas of the large intestine are very rare lesions. Eventhough such lesions doesn't posses the risk of malignant transformation, they have the risk of massive bleeding. Hence it is crucial to be suspicious for such lesions and be aware of any interventional procedure which would lead to excessive bleeding. Here in we report a patient who admitted our clinic in whom we detected an hemangioma in the transverse colon excised it accordingly without any complication. An 57 year old female patient admitted our clinic due to abdominal dyspepsia and constipation. An initial Proton-pump-inhibitor-trial didn't ameliorated the symptoms. Hence upper endoscopy was performed which was positive for pangastritis and esophagitis. An colonoscopy was performed to exclude malignancy due to constipation. An 1 x 1,5 cm polipoid lesions was detected in the transverse colon. The macroscopic appearance of the lesion was of an peduncaleted polypoid type including neovascularization patterns. Due to the abundant macroscopic neovascularization pattern, excision of the polyp was done cautiously with an endoloop procedure. The polyp was excised sucessfully without any complication. Pathological assesment of the specimen revealed an hemangioma. Hemangiomas of the large bowel are very rare. It is essential to keep such lesions in mind because the endoscopical approach can cause major complications. Interventional techniques like endoloop which are more safely done should be applied for any suspicion of an vascular polipoid lesion and abstaining from random biopsies is essential to avoid any further bleeding complication. In addition, even though many hemangiomas are hamartomas and have no association with any syndromic manifestasion, extracolonic and extrabdominal vascular lesions should be assesed to detect any other lesions.



Figure 1. Macroscopic appearance of the hemangioma.



**Figure 2.** Microscopic analysis of the hemangioma. (A) Submucosal and mucosal proliferation of large sinus like spaces filled with blood (blue arrow) (hex100). (B) Spaces are lined by single layer of endothelium (black arrow) without atypia, sperated by fibrous stroma (hex400).

GP61

### Intestinal Spirochetosis: A Rare Cause of Diarrhea

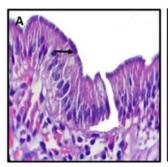
Zeynep Melekoğlu Ellik<sup>1</sup>, Sibel Acat<sup>2</sup>

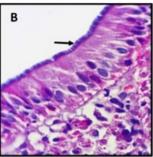
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Intestinal spirochetosis is a rare infection of the gastrointestinal tract caused by the colonization of colonic mucosa by spirochetae.

Some patients are asymptomatic, whereas others may present with gastrointestinal complaints such as abdominal pain, diarrhea, or rectal bleeding. We report a case of a 39-year-old man who was referred to the gastroenterology clinic for a diagnostic esophagogastroduodenoscopy and screening colonoscopy because of chronic watery diarrhea. Antral Gastritis and normal ileocolonoscopic findings were detected in the endoscopic examination, multiple biopsies were taken from the colon. Light microscopy Hematoxylin and eosin staining of colonic biopsy specimens revealed intestinal spirochetes with non-spesific colitis in the entire colon and rectum. After histological examination, metronidazole was administered. He also tested negative for an HIV infection. At the 6-week follow-up he remained asymptomatic. In conclusion, IS may be more frequent than suspected, and clinicians should take this disease into account, especially in cases of persistent diarrhea without any reason. It is diagnosed based on histological appearance and requires a colonoscopy with multiple biopsies throughout the colon.





**Figure 1.** Intestinal spirochetosis. (A-B) spirochetes appear on the surface of the colon epithelium, forming a fuzzy blue border (arrow) with a filamentous appearance (oil immersion objective).

GP62

### Gastrointestinal Tract Neuroendocrine Carcinoma: 2 Cases

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NEN are rare heterogeneous neoplasias originating from the endocrine system diffuse in the body. 21% of gastric NENs are NECs and are common in men. They are masses that grow large and deeply infiltrate the wall. Synaptophysin is positive, chromogranin A is generally absent. It has a poor prognosis. Colonic NENs are common in men over the age of 65. If Ki-67 proliferation index is high, it has a poor prognosis. Mitosis rate, G1G2G3 according to Ki-67, NET, NEC,

MINEN). A 65-years-old male, weight loss, melena. CT: Asymmetric mass wall thickness in the greater curvature, malignant ulcerovegetan mass in the corpus. Bx: LCNEC. Ki-67 proliferation index 75%-80%. Exitus. A 54-years-old, male. Hematochezia. HBV, chronic liver disease. AbdCT: Polypoid soft tissue lesion, 34 mm in an area of 12 cm in the distal transverse colon. Colonoscopy: An ulcerovegetating, fragile, necrotic malignant-looking lesion was observed in the transverse colon, narrowing the lumen and infiltrating it. Bx:LCNEC, staining with synaptophysin. Ki-67 index: 100%. 18FDG-PET: Increased F-18 FDG uptake in the mass in the transverse colon (SUVmax: 20.19). Malignant acid? The patient, who received 5 cycles of cisplatin, anthracycline, cyclophosphamide combination chemotherapy, was planned to be evaluated for surgery after LT. Among gastrointestinal system malignancies, neuroendocrine tumors constitute a special group that should be kept in mind.

GP63

#### A Rare Diagnosis in a Patient Presenting with a Giant Abdominal Mass: Solitary Fibrous Tumour

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The patient, who had constipation and abdominal pain for 2 years, had an involuntary weight loss of 20 kilograms in the last 10 months. At the same time, physical examination revealed swelling and bulging in the abdominal region. The patient was examined by us for a possible malignancy. Computed tomography examination showed a cystic mass lesion with a wax dense content and irregular septa in its structure, which significantly filled the intraperitoneal distance. Laboratory analysis showed no abnormal findings except mild anaemia. PET-FDG examination revealed a cystic mass starting from the prepancreatic area in the abdomen, surrounding the abdominal aorta anteriorly and pushing the intestine posteriorly and laterally, The solid component of the lesion, which almost completely filled the pelvis (33 x 20 cm) and arched the anterior abdominal wall anteriorly, had a slightly increased FDG uptake with a heterogeneous distribution in the solid component of the lesion, which also had a cystic component, which was prominent in the periphery, with fatty planes not clearly distinguishable between the anterior of the inferior pole of the left kidney. (SUV max: 3.7). With these findings, the patient who underwent Tru-Cut biopsy was evaluated as "intermediate risk solitary fibrous tumour". Solitary fibrous tumor (SFT) comprises a histologic spectrum of rarely metastasizing fibroblastic mesenchymal neoplasms that includes tumors formerly classified as hemangiopericytoma. In one nationwide study, SFT accounted for 3.7 percent of all soft tissue sarcomas and mesenchymal tumors of intermediate malignancy presenting over a four-year period (2013 to 2016), with an estimated annual incidence of 0.35 per 100 000 individuals. The majority of SFTs behave in an indolent fashion and do not recur locally or distantly. However, 10 to 25 percent of tumors recur, and reported 10-year disease-specific survival rates for both pleural and extrapleural SFTs are between 73 and 100 percent



Figure 1. CT image.

#### The Performance of the Video Capsule Endoscopy in the Diagnosis of Small Bowel Tumors

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**Background/Aims:** Small bowel tumours are rare and account for little more than 3% of all gastrointestinal neoplasia. Video capsule endoscopy (VCE) has become the main choice for the non invasive diagnosis of small intestinal tumors. Data information on its performance remain limited. The main of our study is to report our experience with VCE as well as to evaluate its contribution in the diagnosis of small intestinal tumors.

**Materials and Methods:** This was a retrospective monocenter study from 2007 to 2019, including all patients with clinical signs suggesting a small bowel disorder in whom a VCE was performed after a negative bidirectional endoscopy.

**Results:** In our study, we included 95 patients. Small bowel tumor lesions were suspected in 5 patients (4.75%), including two males and three females, with a median age of 60 years [39-79]. In these patients the indication for VCE was obscure GI bleeding in 3 cases, iron-deficiency anemia in one case, and the last case involved VCE as part of the assessment for the extension of gastrointestinal polyposis. The endoscopic appearance of lesions identified by VCE was: a spontaneously bleeding mass, an irregular surface, a large polyp with signs of degeneration, and a whitish appearance of the villi. Based on these endoscopic findings, surgical management was discussed for our patients. Following the histopathology examination,

adenocarcinoma was diagnosed in two cases, the second case was a GIST, the third was a Peutz-Jeghers polyp, and the last patient had a jejunal tumor related to an adenocarcinoma and died before completing the assessment.

**Conclusion:** VCE enables the early detection of small intestinal tumors, even before the onset of digestive stenosis, during phases such as iron deficiency anemia or unexplained gastrointestinal bleeding. As a result, it significantly having a positive impact on the therapeutic management and prognosis of patients.

GP65

# Comparison of Endoscopic Ultrasonography and Magnetic Resonance Cholangiopancreatography in Choledocholithiasis Cases

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**Background/Aims:** Our study is a retrospective study. It was aimed to compare the findings of MRCP and EUS for common bile duct (CBD) examination of 279 patients presenting with choledocholithiasis.

**Materials and Methods:** Between January 1, 2020-June 30, 2022, who underwent MRCP and EUS imaging were included in our study. Data were analyzed with SPSS version 23.0.

Results: 61.3% of the cases were female. The median age was 65 (16-94). Tenderness in the right upper quadrant in 76.7% of the patients. Stones were found in the CBD in 55.2% of the patients who underwent MRCP, in 63.4% of those who underwent EUS. The incidence of stones in the CBD was statistically higher with EUS than with MRCP (P = .006). When the median stone size values in the CBD were compared according to MRCP and EUS, there was a statistically significant difference (P < .001). In determining the presence of CBD with MRCP; In the ROC analysis performed to determine the effect of the CBD stone size measured by EUS, the cut-off value for the CBD stone size was determined as 2.5 mm. When the CBD diameter was taken as 6 mm cut-off point in MRCP and EUS, a significant difference was found in terms of the presence of stones in the CBD (P = .001, P = .001 respectively). Pancreatitis rate was found to be higher in patients with a median CBD stone size of 5mm and below in EUS, and it was statistically significant (P = .016).

**Conclusion:** EUS was found to be more sensitive than MRCP in demonstrating CBD stones. EUS was shown to be more sensitive than MRCP in detecting small CBD stones. The rate of MRCP negative-EUS positive cases for CBD stones was found to be 15.8%, the risk of recurrent pancreatitis was prevented by performing ERCP on these patients. The rate of MRCP positive-EUS negative cases for common choledochal stones is 7.2%, since no stones are seen in the CBD with EUS, unnecessary ERCP and complications can be prevented by not performing ERCP on these cases.



**Figure 1.** In the linear EUS examination, echogenicity compatible with the 5 mm diameter stone giving acoustic shadow in the common bile duct in the evaluation made from the papilla region.

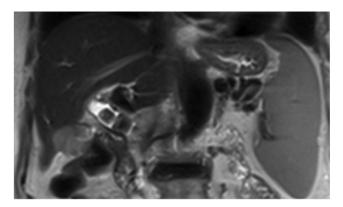


Figure 2. In MRCP, sequential stones with a diameter of approximately 1 cm in the common bile duct.

#### Factors Influencing Blood Bilirubin Decline Duration in Distal Malignant Biliary Obstructions with Biliary Drainage

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**Background/Aims:** Distal malignant biliary obstructions (DMBO) are one of the causes of extrahepatic jaundice. For these patients percutaneous biliary cholangiography (PTC) and endoscopic retrograde cholangiopancreatography (ERCP) procedures are performed for preoperative or palliative biliary drainage. The aim of this study is to investigate the factors affecting the duration of bilirubin decrease after interventional procedures in patients with DMBO.

**Materials and Methods:** The study included total of 34 patients who presented with jaundice to the Gastroenterology and Non-Vascular Interventional Radiology Departments of Hacettepe University between July 2022 and June 2023. During ERCP metal/plastic stents and during PTC 8/10 F catheters were placed for drainage. Before the procedures patients' laboratory test (platelet count, INR, liver function tests, total and direct bilirubin levels) and imaging were recorded. Total and direct bilirubin values were recorded on post-procedure 1st day, 1st, 2nd, 3rd and 4th weeks. The rates of decrease of total and direct bilirubin levels during follow-up were calculated and complications were recorded. The rate of bilirubin decrease was compared with the examined parameters, P < .05 considered statistically significant.

**Results:** A significant decrease was observed in total and direct bilirubin values on the 1<sup>st</sup> day after the procedure in patients who underwent PTC compared to ERCP (before PTC procedure total/direct levels were 10.54/6.25 mg/dL, after procedure 7.15/3.89, P=.04, P=.03 respectively). The group with cholangitis had a longer duration of bilirubin decrease (P<.05). Correlation analysis revealed a significant negative correlation between pre-procedure ALT and post-procedure total bilirubin (1<sup>st</sup> day-1<sup>st</sup> week, r=-0.26, P=.03,  $2^{nd}-4^{th}$  week, r=-0.24, P=.04), AST and total bilirubin (1<sup>st</sup> day-1<sup>st</sup> week, r=-0.31, P=.01,  $2^{nd}-4^{th}$  week, r=-0.26, P=.03) decrease rates.

**Conclusion:** As a result, we identified a negative correlation between liver function tests and duration of bilirubin decrease. Furthermore, in patients underwent PTC bilirubin levels decreased faster on the 1st day and cholangitis reduced the rate of bilirubin decrease.

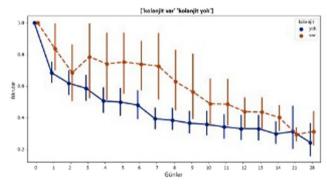
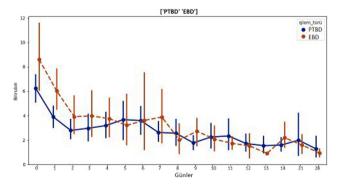
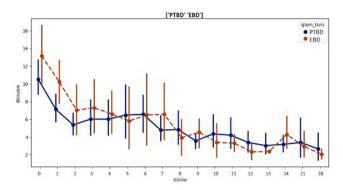


Figure 1. Total bilirubin decrease rates between groups with and without cholangitis.



**Figure 2.** Follow-up absolute direct bilirubin values of patients who underwent PTBD and EBD.



**Figure 3.** Follow-up absolute total bilirubin values of patients who underwent PTBD and FBD.

### Contrast-Free ERCP in Primary Sclerosing Cholangitis

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**Background/Aims:** Risk of cholangitis after ERCP increases in patients with PSC due to incomplete biliary drainage. It is an expected situation, especially in patients whose entire biliary tree is filled 'non-selectively'. It was investigated whether the risk of cholangitis after ERCP was different in patients with PSC who underwent 'selective' cholangiography after locating the branch to be drained with a guide wire under MRCP guidance, and who underwent endoscopic treatment without any contrast; under MRCP guidance.

Materials and Methods: Cholangitis conditions of patients with PSK who underwent endoscopic treatment with selective cholangiography and contrast-free ERCP in the ERCP unit of our hospital between January 2018-May 2023 were evaluated retrospectively. Antibiotic prophylaxis was given to each patient before endoscopic procedure. Endoscopic treatment was performed by dilation and nasobiliary drainage, dilation and plastic stent placement, depending on the patient's anatomy. Cholangitis was defined as prolonged hospitalization due to clinical cholangitis findings, laboratory findings, antibiotic use after the procedure.

**Results:** A total of 81 procedures performed on 30 patients; 43 (53.1%) were without contrast and 38 (46.9%) were with selective contrast. Non-selective cholangiography was not performed. Cholangitis was found to develop in 5 (11.6%) which contrast was not administered and in 3 (7.9%) which selective cholangiography was performed (P = .717). ERCP had previously been performed in 68 procedures and cholangitis developed in 6 (8.8%), while cholangitis developed in 2 (15.4%) of 13 procedure which ERCP had not been performed before. First procedure or previous ERCP did not affect

the risk of cholangitis (P = .608). There were intrahepatic stones in 12 (14.8%) of 81. Cholangitis developed in 2 (16.7%) of stone removal procedures. When patients with stones were excluded from the study, cholangitis developed in 5 (12.8%) of 39 procedures in which contrast-free ERCP was performed, while cholangitis developed in 1 (3.3%) of 30 which selective contrast was administered (P = .223). Presence of concomitant intrahepatic stones did not affect the risk of cholangitis (P = .338).

**Conclusion:** Contrast-free ERCP and selective cholangiography performed in PSC patients have similar risk of cholangitis. A study comparing these methods with non-selective cholangiography will better reveal the effectiveness of these methods.

GP68

#### Application of Fully Covered Metal Stents in Selected Patients with Primary Sclerosing Cholangitis: A Case Series

Yavuz Emre Parlar, Bengi Öztürk, Onur Keskin, Beyza Kılavuz Atay, Taylan Kav, Erkan Parlak

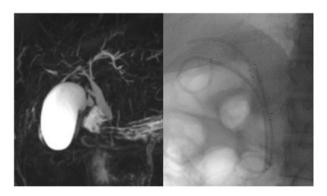
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**Background/Aims:** Dominant stricture (DS) occurs in 10%-62% of patients with primary sclerosing cholangitis (PSC). The accepted treatment is balloon dilation ± short-term plastic stent placement. Due to its multifocal nature and unsuitable anatomy, fully covered self-expanding metal stents (FC-SEMS) are rarely used. This study aims to evaluate the efficacy and safety of FC-SEMS in selected PSC patients with suitable anatomy.

**Materials and Methods:** FC-SEMS were applied to a total of 6 out of 37 PSC patients who underwent procedures due to DS at our hospital [2 (33.3%) females, mean age 46.8]. Technical, clinical, and laboratory success, complications, and long-term efficacy were examined.

Results: The dominant stricture was only in the distal common bile duct in 5 patients. In one patient, FC-SEMS was used as an adjunct method for intrahepatic stone removal. In 3 patients, plastic stents were placed, and simultaneous gallbladder drainage was performed. One patient had cholecystectomy. The technical success rate of FC-SEMS placement was 100%. Itchiness decreased in 2 patients, and fatigue completely resolved in 4 patients. Laboratory values significantly improved in all patients (ALT 127.50 IU/L vs. 36.00 IU/L, AST 67.66 IU/L vs. 22.16 IU/L, ALP 564.33 IU/L vs. 247.33 IU/L, GGT 499.00 IU/L vs. 107.00 IU/L, T.bil 4.40 IU/L vs. 0.70 IU/L). The patient with intrahepatic stones had them removed. No endoscopic procedure-related or stent-related complications were observed in any patient. The stent was kept in place for a median of 22 (14-60) days. Resolution of the stricture was observed in all 5 (100%) patients with distal strictures. The median follow-up period after stent removal was 29 (12-48) months. In one patient (16.7%) with distal DS, stenting was repeated after experiencing cholangitis attack at the end of the 2<sup>nd</sup> year.

**Conclusion:** FC-SEMS application in selected PSC patients is effective and safe.



**Figure 1.** Dominant stricture in the distal bile duct in a patient with PSC. Rescue gallbladder stenting along with FC-SEMS placement.

#### Endoscopic Prevention of Esophageal Variceal Bleeding Caused by Portal Hypertension

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**Background/Aims:** Varicose veins of the esophagus, one of the most important complications of portal hypertension, occurs in 60% of cases, about 30% cause bleeding and 17%-20% cause lethargy. In this study, we present the results of endoscopic-medikamentous treatment of varicose bleeding in our practice.

Materials and Methods: In 2017-2023, 148 patients with a diagnosis of varicose veins of the esophagus of portal hypertension entered our clinic. Of these, 55 are women and 93 are men. The cause of portal hypertension is hepatitis B in 27 of these patients, hepatitis C in 40, alcohol in 63 and portal vein trambosis in 18. Therapeutic ligation was performed after bleeding in 94 patients, while preventive ligation was performed in 59 patients with a high risk of bleeding during routine endoscopic examination (varicose veins of III-IV degree with a red spot on it) was performed in patients. All patients presenting with bleeding were placed in intensive care for 4-6 days after the closure of varicose veins and received appropriate treatment. After prophylactic band ligation, all patients were prescribed antisecretory and enveloping (sucralfate) for 1 month and enrolled in outpatient treatment. Both groups of patients were given a long-term betablocker and after 1, 3, 6 and 12 months the control was examined.

**Results:** In 23 of the patients presenting with bleeding, technical difficulties were observed during the closure of varicose veins, in 5-repeated bleeding after 3 days, and these patients underwent repeated endoscopic ligation. Four patients have been sent for TIPS. Patients in the prophylactic group did not have episodes of bleeding after endoscopic band ligation.

**Conclusion:** Periodic endoscopic examination of varicose veins in patients with portal hypertension and early prophylactic endoscopic ligation in cases with bleeding risk significantly reduce bleeding and mortality, and it is recommended that this approach be widely used.

GP70

### Endoscopic Palliation in Malignant Distal Biliary Obstructions Due to Metastasis

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**Background/Aims:** Distal malignant biliary stricture (DMBS) may occur primarily (p-DMBS). DMBS may also develop due to tumor metastasis (m-DMBS). The aim of this study is to compare the endoscopic palliation outcomes of m-DMBS and p-DMBS.

**Materials and Methods:** Clinical, laboratory data, endoscopic procedures, short and long-term results of endoscopic drainage, complications, prognosis of m-DMBS patients underwent ERCP between November 2017-April 2023 were examined. Metal stent was inserted for palliation, metal stent or two 10 fr plastic stents were inserted for bridging.

Results: 11 m-DMBS patients [group 1, age: 59 (20-80) years, 6 (54.5%) females], and 15 p-DMBS patients [group 2, age: 66 (41-83) years, 3 (20%) females] were inluded. Colon, lung, breast, prostate, ovarian cancer, sarcoma metastases, multipl myeloma and lymphoma involvement were in group 1. Group 2 consisted of pancreatic and Oddi tumors. In group 1, 7 (63.6%) patients were placed metal stent, 4 (36.4%) plastic stent. In group 2, these numbers were 6 (40%) and 9 (60%), respectively. Post-procedure cholangitis (0% x 0%) and rescue drainage (0% x 6.7%) were similar. The 'rate of decrease' in total and direct bilirubin was similar after one week (%56 x %48, P = .305 and %63 x %51, P = .217). Stent patency was 3 (0.5-31) months in group 1, 5.3 (0.1-17.5) months in group 2 (P = .919). Re-drainage was required in 4 (36.4%) patients in group 1, 10 (66.7%) patients in group 2 (P = .119). The stent wasn't obstructed in 7 (63.6%) patients, group 1 and 5 (33.3%) patients, group 2. Stent patency was higher with metal stents compared to plastic stents [6 (54.5%) x 3 (20%) for group 1 and 1 (9%) x 2 (13%) for group 2].

**Conclusion:** Endoscopic palliation in m-DMBS has similar efficacy and side effects with p-DMBS. Metal stents should be preferred whenever possible.

GP71

#### Is Transpancreatic Septotomy Prevent Needle-Knife Sphincterotomy in Difficult Biliary Cannulation?

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Background/Aims: In cases where standard cannulation techniques fail, precutting incision techniques such as needle knife sphincterotomy (NKS) and transpancreatic septotomy (TS) can be used. However, these precutting incision techniques may also fail in 10%-40% of cases. Our knowledge about the combined use of two preliminary incision techniques in the same procedure is limited. The aim of our study is to evaluate the effectiveness of transpancreatic septotomy in cases where standard techniques fails.

Materials and Methods: A retrospective analysis of ERCP procedures performed between 2017 and 2022 was performed in our advanced endoscopy unit. During this period, ERCP was performed on 1697 different patients by an experienced endoscopist (M.K.). Of these patients, 1350 were patients with naïve papillae and 266 were patients for whom precutting incision techniques were used. As a result, 266 patients who used a precutting incision were included in the study. All patients signed the consent form for the ERCP procedure.

**Results:** The cannulation success rate was 80.2% in patients with 1350 naïve papillae who were cannulated with the standard technique. Precutting techniques was applied to 266 (19.8%) of the patients. Of these, TS was applied to 65, NKS to 198, and combined TS+NKS to 23. Cannulation success was 69% in the TS group, 75.3% in the NKS group, and 87% in the TS+NKS group. There was no significant difference in cannulation success in the TS+NKS group compared to the NKS group, but the cannulation success of both groups was significantly higher than the TS group (P < .001). When evaluated in terms of complication rates, there was no significant difference between the three groups.

**Discussion:** A combination of pre-incision techniques appears to be effective in cases where standard cannulation techniques fail. Needle-knife sphincterotomy can be used safely in cases where cannulation with transpanceatic septotomy fails.

#### GP72

#### Our Short-Term Follow-Up Outcomes in Low and High-Risk T1b Colorectal Cancer Patients Treated with Endoscopic Submucosal Dissection Method

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**Background/Aims:** In colorectal cancer (CRC), the presence of deep submucosal invasion (≥1000 mm) (T1b) alone is a low-risk condition

for lymph node metastasis (LNM). It has been demonstrated in a limited number of studies that non-surgical follow-up may be one of the treatment options in these patients.

**Materials and Methods:** Between July 2019 and May 2023, 20 T1 CRC patients who were resected en bloc and R0 using the endoscopic submucosal dissection (ESD) method were screened. Patients with T1b submucosal invasion depth but without other risk factors (lymphovascular invasion, poor differentiation, medium/high tumor budding) were considered low risk. Patients with at least one of the other risk factors were considered high risk. As the primary endpoint, cumulative recurrence results were compared between the two groups.

**Results:** A total of 15 patients were evaluated as T1b CRC. Twelve patients were categorized in the low-risk group and 3 patients were categorized in the high-risk group. While surgical resection was performed in 1 patient in the low-risk group, LNM was not observed in this case. No recurrence was observed in any case in the low-risk group during a median follow-up of 31 months (IQR 5-51 months). Surgical resection was performed in 1 patient in the high-risk group and LNM was observed in this case. Cancer recurrence was observed in one case in the high-risk group during a median follow-up of 12 months (IQR 11-21 months).

**Conclusion:** Non-surgical follow-up after endoscopic treatment in patients with low-risk T1b CRC has been found promising in terms of recurrence

#### GP73

# Assessment of the Safety and Feasibility of Discharge the Same Day Following Endoscopic Submucosal Dissection

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**Background/Aims:** Endoscopic submucosal dissection (ESD) has revolutionized the treatment of early-stage gastrointestinal neoplasms by providing a less invasive alternative to surgery. Traditionally, patients undergoing ESD are hospitalized for overnight observation. In this study, we aimed to investigate the safety and feasibility of same-day discharge after ESD in order to optimize resource use while preserving patient safety.

**Materials and Methods:** In our study, patients who underwent ESD at University of Health Sciences, Ankara Etlik City Hospital between May 2023 and September 2023 were prospectively evaluated. Criteria for same-day discharge after ESD were determined as lesion size <8 cm, no peri-operative complications such as perforation or severe bleeding, no significant decrease in the 4<sup>th</sup>-hour hemogram control, 4<sup>th</sup>-hour VAS score <6, and no severe nausea and vomiting. Those who met discharge criteria after ESD were discharged with instructions.

**Results:** Forty eight patients who underwent ESD were included in the study. Esophageal ESD was applied to 3 of the patients (6.25%), stomach to 18 (37.5%), and colorectal ESD to 27 (56.25%). Thirty

nine (81.25%) patients who met the criteria were discharged after 4-6 hours of follow-up in the post-op service. Of the 9 hospitalized patients, 2 (22.2%) underwent esophageal ESD, 4 (44.4%) underwent gastric ESD, and 3 (33.4%) underwent colorectal ESD. Intraoperative perforation developed in one of the patients who underwent colorectal ESD and was completely closed with hemoclip application. The other 2 patients were hospitalized due to large lesion sizes (9 cm and 15 cm). None of the patients discharged on the same day visited the emergency department within 24 hours or 1-week

**Conclusion:** Same-day discharge after ESD holds promise for optimizing healthcare resource allocation and increasing patient satisfaction. Our study shows that this approach is not only safe but also feasible. However, further research with larger patient groups and longer follow-up periods is required to confirm these findings and improve patient selection criteria, ultimately making same-day discharge after ESD a standard practice.

GP74

#### A New Method for the Prevention of Migration of Nested Stents: Stent to Stent Fixation

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Anastomotic leaks are common after gastrointestinal tract surgery. The management of complications affects the quality of operation and success of treatment. The stents used for the treatment of anastomotic leaks should be covered. The most common problem we encounter in covered stent applications is migration of stents. To prevent migration, fixation to tissue provides a solution. We would like to present the method we applied to prevent migration in a patient in whom we applied a stent for anastomotic leakage in our clinic. A 28-year-old female, underwent sleeve gastrectomy operation 2 months ago. After the operation, 24 cm covered stent was applied in our clinic because of leakage from the proximal suture line. Despite this, the leakage continued and two more stents were placed proximal and distal to the previous stent. The stents were placed so that the proximal end of the distal stent remained inside the previous stent. The distal stent migrated distal to the pylorus. Since the leakage continued, it was planned to re-stent this area. However, since the necessity of fixation of the stent to prevent migration was indisputable and there was no tissue to fix. During the procedure, a 12 cm covered duodenal stent was placed without any problem. The proximal end of the stent was then fixed to the distal end of the previous stent with circumferential four clips. Follow-up showed that anastomotic leakage decreased and healed. The patient is being followed up and stent removal is planned. Migration is a common complication of covered stents. Fixation of stent to tissue in the lumen provides a partial solution. However, fixation is usually not possible in parts that don't contact the lumen. Fixation of the stent to the stent, which we mentioned especially in nested stent applications, can prevent migration and provide successful results.



Figure 1. Stent fiksation.

GP75

### Safe Removal of a Migrated Stent into the Choledoch with a Dilatation Balloon

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Stenting is the main endoscopic treatment modality for biliary strictures and injuries. Coated stents are used in procedures performed for benign reasons. Therefore, stent migration is a common condition. We would like to present a case of proximal migration of a 6 cm fully covered biliary stent implanted in the choledochus due to biliary injury. A 64-year-old male patient was admitted to our clinic with a prediagnosis of bile leakage after cholecystectomy operation and ERCP was performed. ERCP revealed a bile leak in the proximal choledochal duct and a 6 cm coated metallic stent was placed to cover this area. The stent was planned to be removed after three months. No stent was seen in the papilla in the planned procedure. Cholangiogram showed that stent migrated proximally. The choledochus was irrigated with a stone balloon but the stent could not be removed. The stent could not be reached with foreign body forceps because it was proximal. A guide wire was sent through the stent, a dilatation balloon was sent over the guide wire and inflated in the stent under scope.

After it was observed that the balloon was inflated to be fixed in the stent, the migrated stent was removed by pulling it safely. Subsequently, a cholangiogram was obtained and the leakage area in choledochus was found to have improved. No pathology was detected in the close follow-up of patient. Stenting in biliary injuries allows biliary tract healing without the need for a second surgical procedure. Proximal migration of the covered stents used is a common condition. Complications may sometimes develop during removal of these stents. Especially secondary biliary injuries due to foreign body forceps can be seen. In addition to being successful, our method is a safer method since the possibility of complications is low.



Figure 1. Stent removal with dilatation balloon.

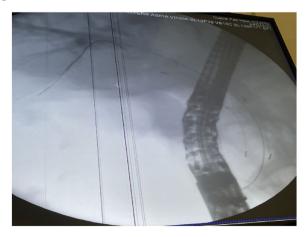


Figure 2. Migrated stent.

GP76

#### Ingestion of Foreign Bodies in Prisons: How Should They Be Managed: Study of 13 Cases

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**Background/Aims:** Intentional ingestion of foreign bodies is a frequent occurrence in the prison environment. The aim of this study is to describe the profile of inmates who have ingested foreign bodies, to determine the nature of these foreign bodies and to specify their management.

**Materials and Methods:** Our retrospective and descriptive study focused' on 13 inmates having ingested' 47 foreign bodies and who consulted the emergency of our department over a 5-year period from January 2018 to July 2023.

**Results:** The study population consisted of 12 men and one woman with an average age of 32 years (24 years-47 years). Foreign bodies ingested by inmates were dominated by batteries (59.52%) followed by lighters (19.04%). The majoritý of foreign bodies were, at the time of discovery, located mainly in the stomach (6 cases) and colon (4 cases). Ingestion resulted in epigastric pain (3 cases), externalized gastrointestinal bleeding with epigastralgia (2 cases), and no symptoms (8 cases). Of the 13 cases of foreign body ingestion, 6 patients underwent endoscopic extraction in the gastroenterology department. Extraction was by diathermic loop, dormia loop and endoscopic basket. Successful extraction was achieved in 4 cases (66.66%), and unsuccessful extraction in 2 cases (33.33%). Only one inmate required surgical extraction, and in 6 patients the elimination of foreign bodies in the stool was spontaneous under medical supervision.

**Conclusion:** Foreign body ingestion is frequent and voluntary in the prison environment. It is characterized by the multiplicity of foreign bodies. The rate of successful extraction of ingested foreign bodies in our practice is satisfactory, requiring an experienced endoscopist to perform the extraction without complications and avoid recourse to surgery. Education of the prison population is important, and psychological follow-up is essential.

GP77

### Upper Gastrointestinal Bleeding in Cirrhotic Patients Revealing a Gastro-Duodenal Ulcer

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Department of Hepato-Gastroenterology, Ibn Rochd University Hospital Center, Casablanca, Morocco **Background/Aims:** Gastro-duodenal ulcers commonly lead to upper GI bleeding in cirrhotic patients, significantly affecting their prognosis, underscoring the importance of not overlooking this diagnosis. The aim of this study is to report on the risk factors, endoscopic aspect and management of gastro-duodenal ulcer in cirrhotic patients.

**Materials and Methods:** This was a retrospective and descriptive study conducted from January 2019 to July 2023 in a hepato-gastro-enterology department, including all cirrhotics patients hospitalized for upper GI bleeding revealing a gastro-duodenal ulcer, associated or not with portal hypertension bleeding.

**Results:** Our study included 31 patients with a mean age of 61.19 years [24-81] and a sex ratio of 1.58. The most common cause of cirrhosis was hepatitis C in 22.6% of cases. 71% of patients had a history of haemorrhagic decompensation. Five patients were being followed up for hepatocellular carcinoma, 11 were smokers and 7 were taking non-steroidal anti-inflammatory drugs. At the time of the bleeding incident, 51.6% of patients had a child-pugh score C. Upper gastrointestinal endoscopy revealed a duodenal ulcer in 54.8% of cases and a gastric ulcer in 45.2%. 17 patients had a hemorrhagic gastroduodenal ulcer associated with portal hypertension bleeding. Stage III ulcers according to Forrest's classification were most frequently described in 67.7% of cases; one case of stage IIa ulcer was reported, and benefited from adrenaline injection with clip placement. The remaining patients were all treated with proton pump inhibitors. The evolution was favorable in 93.5%, with recurrence in two patients. No deaths were recorded.

**Conclusion:** Hemorrhagic gastroduodenal ulcer was more frequent in cirrhotic patients with advanced Child-Pugh scores. Would it make sense to introduce proton pump inhibitors in combination with specific treatment in the initial management of upper GI bleeding in Child-Pugh C cirrhotics?

GP78

#### Compassionate Use of REP 2139-Mg in Cirrhotic HBV/HDV Coinfection with Previous Failure to pegIFN: A First Turkish Experience

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**Background/Aims:** REP 2139-Mg inhibits HBV subviral particles and hepatitis delta antigen function, countering HBV and HDV infection. We introduce the first Turkish experience treating cirrhotic HBV/HDV patients with REP 2139-Mg, TDF, and pegIFN.

**Materials and Methods:** The Turkish Ministry of Health approved compassionate REP 2139-Mg use. Four Caucasian patients with

HBV/HDV received REP 2139-Mg 250 mg SC QW and TDF 300 mg QD. Data, obtained every 4 weeks, included HDV RNA (RT-qPCR), HBsAg, and anti-HBs (Roche Elecysys).

**Results:** 29-30 weeks into therapy, REP 2139-Mg shows good tolerance with no injection reactions or adverse events. (1) Patient 1, 53, has compensated cirrhosis, grade 1 varices, and was pegIFN-resistant. Also given 180µg pegIFN for 21 weeks, he showed undetectable HDV RNA at week 12, HBsAg loss by week 16, and seroconversion by week 20. (2) Patient 2, 64, with decompensated cirrhosis, saw HBsAg drop from 9754 to 1111 IU/mL by week 20. A significant HDV RNA decline and HBsAg reduction occurred post transitioning to IV REP 2139-Mg at week 20. (3) Patient 3, 30, reported a decline in HDV RNA at week 28 following a shift to IV REP 2139-Mg at week 20. qHBsAg remained stable. (4) Patient 4, 43, exhibited no HDV RNA or qHBsAg change until week 24, then switched to IV REP 2139-Mg.

**Conclusions:** REP 2139-Mg, whether SC or IV is accepted well in cirrhotic HBV/HDV cases. Adjusting REP 2139-Mg dosage or introducing pegIFN combination might be essential for achieving total antiviral response in certain scenarios.

GP79

#### Risk factors of In-Hospital Mortality Among Cirrhotic Patients during Bacterial Infections: Results from University Hospital Center Study

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**Background:** Bacterial infections are very frequent complications in patients with cirrhosis. They are serious, with a high mortality rate. The clinical characteristics and prognosis of cirrhotic patients with bacterial infection have been rarely reported. Our aim is to identify predictors of in-hospital mortality in cirrhotic patients with bacterial infection.

**Materials and Methods:** This was a retrospective descriptive and analytical study of all cirrhotic patients with bacterial infections admitted to our center over a 5 years period (January 2018-December 2022). The demographic, clinical and biological characteristics and the in-hospital mortality rate were studied. Numerous independent risk factors for mortality were assessed using univariate and multivariate logistic regression.

**Results:** Of the 176 patients, 59% were women, with an average age of  $56 \pm 14.5$  years. Cirrhosis of viral etiology was the most common (39%). Seventy-six patients (43.18%) had other comorbidities, of which diabetes was the most prevalent (16.5%). Patients in our study were hospitalised for hepatic encephalopathy (38.1%) or upper gastrointestinal haemorrhage (28.4%). Community-acquired infections predominated with a rate of 84.7%. The most frequent site of infection was urinary tract infection (n = 73, 41.5%) followed by SBP (n = 49, 27.80%). The mortality rate in our population was calculated

at 18.8%. After multivariate analysis, the independent risk factors for in-hospital mortality in cirrhotic patients with bacterial infection in our population were: a high MELD score (OR = 0.83, 95% CI = 0.73-0.94, P < .005), low serum albumin (OR = 1.46; 95% CI = 1.25-1.70; P < .001), and the presence of SIRS (OR = 20.11; 95% CI = 5.21-77.62; P < .001).

**Conclusion:** Bacterial infection in cirrhotic patients can be responsible for significant in-hospital mortality. This mortality may be exacerbated by the presence of risk factors such as SIRS, hypoalbuminemia and advanced stage of the disease.

GP80

#### Knowledge State of Medical Students in Morocco Regarding Metabolic Dysfunction Associated with Non-Alcoholic Fatty Liver Disease

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**Background/Aims:** Metabolic Dysfunction Associated with Non-Alcoholic Fatty Liver Disease (MASLD), formerly known as Non-Alcoholic Fatty Liver Disease (NAFLD), is the leading cause of chronic liver disease. The cardiometabolic risk factors associated with MASLD represent common health issues. Medical students, being active participants in the healthcare system and a young demographic, are particularly relevant for understanding this entity to prevent its occurrence. The objective of our study is to assess the level of knowledge among medical students regarding MASLD.

**Materials and Methods:** We conducted a descriptive cross-sectional study using an anonymous questionnaire distributed through social media over a period of 2 weeks. Medical students from various faculties in Morocco answered 22 questions about MASLD. All responses were analyzed using the Jamovi software.

**Results:** A total of 124 students voluntarily provided complete responses. Among the respondents, 27% were overweight, obese, or diabetic. 83% correctly answered more than half of the questions. However, 12% considered it a rare condition. Regarding etiological factors, overweight and obesity were mentioned in 93% of responses, and type 2 diabetes in 84%. 62% of participants believed that type 1 diabetes could not be implicated in MASLD. For 83 students, MASLD was considered a diagnosis of exclusion. 44% were unaware that MASLD could progress to hepatocellular carcinoma. Regarding treatment, 85% included weight loss, and 19% did not consider diabetes management as a therapeutic approach for MASLD. 89% of the students expressed a desire to learn more about MASLD and were invited to access an informative sheet through a hyperlink.

**Conclusion:** MASLD represents a significant public health concern due to the prevalence of its risk factors, notably the obesity pandemic, which is widespread among the young population. There is a need for awareness about this emerging and long-underestimated condition among young future physicians.

GP81

### The Role of APRI Score in the Diagnosis of Intrahepatic Cholestasis of Pregnancy

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**Background/Aims:** The diagnosis of intrahepatic cholestasis of pregnancy (ICP) is based on pruritus, elevated serum ALT and fasting bile acid levels and exclusion of liver dysfunction or other causes of pruritus. Serum bile acid is not a test that can be performed in all centers in our country. In this study, we aimed to investigate the role of APRI score in the diagnosis of intrahepatic cholestasis of pregnancy in cases where serum bile acid cannot be studied.

**Materials and Methods:** Pregnant patients referred to the gastroenterology outpatient clinic of Kayseri City Hospital for pruritus between January 2022 and June 2023 were retrospectively analyzed. 49 patients who were in the last trimester of pregnancy and whose serum bile acid levels were studied were included in the study.

**Results:** Eighteen patients had ICP. In 31 patients, pruritus complaint was attributed to non-ICP causes. The mean age of the patients was  $28.6 \pm 4.4$  years in the ICP group and  $28.6 \pm 8.9$  years in the non-ICP group (P = .972). Serum bile acids were normal in 5 (10.2%) patients with elevated AST. APRI score was  $0.893 \pm 0.955$  in the ICP group and  $0.289 \pm 0.258$  in the non-ICP group (P < .001). When the cut-off value was taken as 0.302 in ROC analysis, it showed 77.7% sensitivity and 74.1% specificity in the diagnosis of ICP (AUC 0.83).

**Conclusion:** The diagnosis of ICP causing pruritus in pregnancy is based on fasting bile acid levels. Although the APRI score was defined to predict liver fibrosis due to chronic HCV infection, there are studies suggesting that the APRI score in the first trimester can be used to predict the diagnosis of ICP in the third trimester. In centers where serum bile acids cannot be measured, APRI score can be used to support the diagnosis of GIC.

GP82

# The Effects of Inflammation on Liver Function Tests Can Be Used as a Mortality Marker in ANCA Positive Vasculitis Followed in Intensive Care Unit?

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<sup>1</sup>Department of İnternal Medicine, Ege University Medical Faculty, İzmir, Turkey

<sup>2</sup>Department of Rheumatology, Ege University Medical Faculty, İzmir, Turkey **Background/Aims:** Although small vessel vasculitis is a pathology that affects many organs, hepatobiliary system involvement is among the rare involvements. In this group of rare diseases, a reflection of the inflammatory process causes changes and pathologies on the hepatobiliary system. In this study, the use of liver function tests in predicting mortality in small vessel vasculitis presenting with vital organ involvement without any known hepatobiliary system disease or involvement was investigated.

Materials and Methods: A total of 45 patients who had no signs of non alcholic steatohepatitis, active/chronic viral and autoimmune hepatitis before their hospitalization were included in the study. The hospitalization of the patients and the lowest and highest liver function tests during follow-up were recorded as Δ[(Outcomeadmission)/Admission]. The most common disease detected in the study was Granulomatous Polyangiitis (64%). Mortality was found to be 31.1%.  $\triangle AST$ .  $\triangle total bilirubin$ .  $\triangle direct bilirubin were significantly$ higher in the mortality group (P = .005, P = .004, P < .001, respectively). Hospitalization albumin levels were significantly lower in the mortality group. The highest values of AST, ALT, total and direct bilirubin and the lowest value of albumin during follow-up were significantly different in terms of mortality (P = .001, P < .001, P = .016, P = .001, P = .002, respectively). In univariate analyses, low albumin level at admission was found to be a significant indicator of mortality [OR: 0.734 95% CI (0.600;0.898)].

**Conclusion:** Although active heptobiliary system involvement is not expected in small vessel vasculitis, the effects of inflammation on this system can be used in monitoring. Impairment in liver function tests should be a warning about mortality. Albumin, on the other hand, can be considered a direct indicator of inflammation as a negative acute phase reactant. Studies on large populations are needed on this subject.

**Table 1.** Use of Liver Function Tests as an Indicator of Mortality in ANCA Positive Vasculitis

AST <sub>edm</sub> (U/L)	19,5 (14:54)	16 (11:28)	0,259
ALT <sub>ode</sub> (U/L)	25 (10;69)	15 (10;25)	0,235
Total Biluribin <sub>adm</sub> (mg/dL)	0,5 (0,3;0,8)	0,4 (0,3;0,8)	0,825
Direkt Biluribin <sub>adm</sub> (mg/dL)	0,2 (0.1;0,4)	0.3 (0,2;0,3)	0,954
Albumin <sub>adia</sub> (mg/dL)	2,8±0,5	3,3±0,6	0,014
Globulin <sub>ode</sub> (mg/dL)	2,9±0,9	3,2±0,8	0,472
AST <sub>mar</sub> (U/L)	79,5 (52;1034)	32 (18;44)	0,001
ALT <sub>max</sub> (U/L)	96,5 (31;994)	25 (15;46)	<0,001
Total Biluribin <sub>max</sub> (mg/dL)	1,7 (1,1;3,6)	1,1 (0,5;1,6)	0,016
Direkt Biuribin <sub>max</sub> (mg/dL)	1,1 (0,5;2,6)	0,4 (0,3;0,8)	0,001
Albumin <sub>min</sub> (mg/dL)	2,3±0,5	2,9±0,5	0,002
Globulin <sub>min</sub> (mg/dL)	2,2 (1,9;3)	2,3 (2,1;2,7)	0,616
DALT	0.3 (-0,1;2,2)	0 (-0,4;0,4)	0,149
DAST	1,6 (0,1;2,9)	-0,2 (-0,4;0,5)	0,005
aTotal Bilurubin	1,3 (0,1;3,4)	-0,1 (-0,4;0,7)	0,004
Direkt Bilurubin	2 (0,4;4)	-0,2 (-0,5;0,3)	<0,001
Albumin	0±0,3	0±0.2	0,337
Milobulin	-0,1 (-0,2:0,1)	-0.1 (-0.3:0.1)	0,963

**GP83** 

### Terlipressin Induced Skin Necrosis of Three Cases: Should We Concern?

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Hepatorenal syndrome (HRS) is a severe complication of cirrhosis, potentially life-threatening. Liver transplantation is the definitive treatment for hepatorenal syndrome resulting in acute kidney injury (HRS-AKI). Terlipressin, a synthetic vasopressin, is used in emergencies to manage HRS-AKI. Terlipressin generally presents fewer complications and less severe side effects compared to vasopressin. However, recent literature reports have indicated an increasing incidence of acute skin necrosis associated with terlipressin. In this case series, we describe three cases from our clinic over the past year where patients developed ischemic skin necrosis while undergoing terlipressin treatment for HRS-AKI. Three male patients, aged (A) 67, (B) 69, and (C) 65, with liver cirrhosis due to hepatitis C, hepatitis B, and hepatitis B with HCC, respectively, received terlipressin therapy for HRS-AKI. In all cases, treatment had to be discontinued due to the development of ischemic bullae and necrosis primarily affecting the lower extremities and scrotum. Cases A and B showed significant improvement in skin necrosis within 5 to 10 days following treatment discontinuation. Unfortunately, despite some improvement observed on the fifth day after treatment discontinuation, Case C dead to other cirrhosis-related complications. Terlipressin-induced skin necrosis is rare, with around 50 cases reported in the literature. One of these cases was recently published by our clinic as Case A. Patients who receive terlipressin therapy for HRS-AKI are typically in advanced stages of cirrhosis and may receive additional terlipressin treatments. Skin lesions that develop in these patients could be attributed to alternative causes and may be overlooked. Clinicians must be vigilant regarding the possibility of terlipressin-induced skin necrosis in this patient group.



**Figure 1.** Case A: skin necrosis that developed on the second day of terlipressin treatment.



**Figure 2.** Ischemic necrotic areas that developed on the third day after starting terlipressin in the lower extremities.



**Figure 3.** Ischemic necrotic areas that developed on the third day after starting terlipressin in the lower extremities.

#### 5 Years Clinical Follow-Up of the Patients, Hbeag Negative Chronic Hepatitis B Virus Infection Who Are Followed Without Treatment

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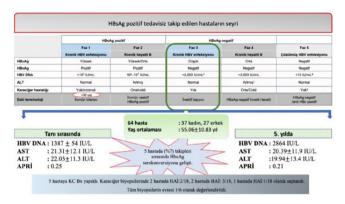
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**Background/Aims:** There are 250 million people worldwide infected with Hepatitis B virus, and it is a matter of debate which patients will be followed without treatment. We tried to reveal the characteristics of patients with HBeAg negative, chronic HBV infection whom we follow without medication in our own center.

**Materials and Methods:** In our study, the files of HbsAg positive patients who were followed up without treatment at the gastroenterohepatology outpatient clinic of a tertiary university hospital were evaluated retrospectively. The files of 109 patients who were followed up without treatment were examined. The demographic characteristics, liver transaminases, and seroconversion rates of 64 patients with a 5-year viral serology findings were evaluated.

Results: Thirty-seven (58%) of the 64 patients who were HbsAg positive, HbeAg negative, HBV DNA <20 000 IU/L and were followed up without treatment, were women and 27 were men. The average age of the patients was 55.06 ± 10.83 years. 14% of HbsAg positive people were detected in the family, and 33% of the patients with HbsAg positivity were mothers.At the time of diagnosis, the average HBV DNA level was 1387 ± 54 IU/L, AST:  $21.31 \pm 12.1 \text{ IU/L}$ , ALT:  $22.03 \pm 11.3 \text{ IU/L}$ , and at the 5<sup>th</sup> year, the average HBV DNA level, AST and ALT levels were: 2864 IU/L, 20.39 ± 11.9 IU/L, 19.94 ± 13.4 IU/L, respectively. Liver biopsy was indicated in 5 patients during outpatient follow-up. Liver biopsies revealed HAI: 2/18 in 2 patients, HAI: 3/18 in 2 patients, and HAI: 1/18 in 1 patient. The stage of all biopsies was evaluated as 1/6. HbsAg seroconversion occurred in 5 patients (7%) during followup. The APRI score was found to be 0.25 at diagnosis, and 0.21 at the  $5^{th}$  year follow-up (P > .005).

**Conclusion:** HbsAg seroconversion developed at a rate of 7% in the five-year follow-up of patients with HbeAg-negative chronic HBV infection and normal liver transaminases.



**Figure 1.** 5 years follow-up of the patients who HbsAg positive and HbeAg negative.

#### State of Knowledge Among Medical Students in Morocco Regarding Viral Hepatitis B and Vaccination Adherence

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**Background/Aims:** Viral hepatitis B represents a significant concern for public health both in Morocco and globally. Medical students are particularly vulnerable to this virus. Thus, it becomes crucial for them to attain a thorough comprehension of hepatitis B and its vaccination in order to prevent the spread of this infection.

**Materials and Methods:** A cross-sectional study, combining both descriptive and analytical approaches, was carried out. To this end, an anonymous individual electronic questionnaire was disseminated across social media platforms over a two-week period. The data collected underwent analysis using SPSS software.

**Results:** Out of a total of 134 participating students, 60% were female, all voluntarily offering comprehensive answers to the entire questionnaire. An impressive 99% demonstrated accurate responses to half of the questions. Notably, 8% lacked awareness about the possibility of blood transmission, and 14% erroneously believed that medical and paramedical personnel faced minimal risk of contracting the virus. While all respondents acknowledged the virus's potential long-term impact, merely 85 students recognized its association with decompensated cirrhosis. Turning to vaccination, 13% were uninformed about its inclusion in the national immunization program, while 15% presumed a single dose to be sufficient. In terms of vaccine boosters, 67% had received one, with 58% doing so after commencing their studies at their respective faculties. Regrettably, 84% of the students had not completed the

3 doses of the vaccine due to the difficulty of accessing the vaccine mentioned in 40% of cases. Notably, the presence of family medical history (P = 1) and knowledge level (P = .4) were not statistically significantly associated with an improved rate of vaccine adherence

**Conclusion:** Overall, students exhibited a reasonable level of knowledge regarding hepatitis B and its vaccination. However, a heightened commitment to vaccination could be achieved through targeted campaigns within medical faculties.

GP86

#### The Power and Priority of Genetic Examination in the Diagnosis of Wilson's Disease: A Case Report

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Wilson disease (WD) is an autosomal recessive genetic disease associated with copper metabolism. Variable clinical symptoms are observed in WD, including hepatic, neurological, psychiatric and hematological disorders. Liver disorder; It should be evaluated in a wide spectrum such as hepatomegaly, hepatosteatosis, decompensated chronic liver disease, chronic hepatitis and fulminant liver failure. Early diagnosis and treatment may result in a good prognosis of WD. Therefore, family screening is highly recommended. It is stated that the disease occurs in 25% of the siblings of cases diagnosed with WD, 0.5% in their children and 0.5% in their parents. However, examining the location of genetic mutations in the family genetic tree of patients diagnosed with WD with two ATP7B mutations (homozygous or compound-heterozygotes) is more valuable than all other diagnostic tools in diagnosing family members. In our case report we present three cases of familial WD in a family: A 28-year-old mother who underwent liver transplantation with a diagnosis of WD, a 6-year-old girl diagnosed with WD who presented with elevated transaminases, and a 3.5-year-old girl diagnosed with presymptomatic WD detected by ATP7B gene mutation screening. In family screening; We detected a compound heterozygous mutation in the mother and two siblings, two heterozygous mutations in the father, and one heterozygous mutation in one sibling. Their marriage was thought to be an interesting and bad coincidence, as two mutations were detected in the ATP7B gene in both of the unrelated parents. Considering its place in the Ferenci Score, the priority examination of the patient's genetic mutations and the creation of a family pedigree when necessary suggests that it may be a diagnostic tool with high priority and power in the future.

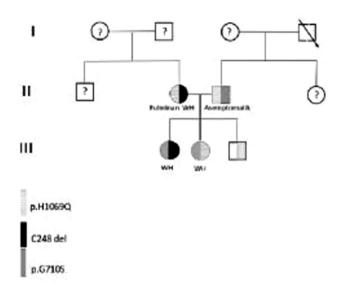


Figure 1. ATP7B gene mutations of the cases, family pedigree.

Table 1. Wilson Ferenci Scoring Evaluation

	Olgu 1	Olgu 2	Olgu 3	Olgu4	Olgu 5
Başvura yaşı	12 yeş	6 yaş	3,5 yaş	7 sylik	32 yeş
Cinsiyet	(Anne) Kin	Ku	Kee	Erkek	(Baba) Erkek
Klinik surum	Akut felminan hepatit, yetmerlik	Seconda Transaccionez yOksokdiği	Yok	Yok	Palkiyazik bezekluk, Panik arak
Scruloplazmin (20-40 mg/dL)	11	28	32	25	18
24 saatiik idror Cu (>100mcg/24s)	103	200	200	-	75
ALT (<50 U/L)	134	238	106	29	40
AST (SOUT.)	349	87	78	53	26
Abdomen USG  Karacijjer Biyopsi	Karaciĝer parankimi beterojen, mikronoditier gôrênûmde Karaciĝer	Hepatomegali, korsetjor paraskten heterojonitosi hatif heterojon, grantiler görünümde Kanseiger Ince läre	Normal	Normal	Grade 1-2 heparostoatox
manage styles	Roreksiyon Biyopsi: Belirgin kolanjial proliferasyonu Rhodonin negatif	Biyopsi Microveziktiler steator, nükleer glikojenilizasyon. Rhodonin negatif			
Karneiğer Doku Ca (>250 mcg/g )	-	1783 mog/g	-	-	-
ATP7B Genetik Mutasyon	y.H1009Q c248Md	p. G7108.	p.H1009Q p.G7108	<i>у.W1009</i> Q	p.H1069Q p.G7108
Ference skorlaman puan	6	0	5	2	2

**Table 2.** Clinical and Examination Data at First Admission According to the Ferenci Scoring of the Cases

Perend Shorlama puen	4		,	2	
Kayeer Felsber kelken		Yok		Ver	
WH adropolic yarric bulgator voya Beyle MR bulgator		Yok		Var	
Edwards Co (aktai hapwiri olimathig: clumeritentis)		Normal	1-2XN09**	>3X NOS**, yield termid accels 2x0.5 gr penishlarila ytkicine tectinden by glin sown >3Xntla	
Karneiğer doku Cu	Normal		<500005*** (<259) *#/g/	>5XN08**	
Khodarin poritif (Karaciĝer Doka Cu baltiameyas deramiaria )		Yell	Var		
Serum Seruloplanmin		> 20 mg/dt.	10-20 mg/st.	<10 mg/dL	
Genetik manapon		Yok	Hir kromovom		lci bromoven

## Retrospective Evaluation of the Etiological and Demographic Characterictics of Patients with Cirrhosis

<u>Velican Arda Eyüpoğlu</u><sup>1</sup>, Orhan Özgür<sup>2</sup>, Arif Mansur Coşar<sup>2</sup>, Sami Fidan<sup>2</sup>

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**Background/Aims:** Cirrhosis is a disease characterized by the destruction of liver parenchyma and the formation of regenerative nodules. In our study, we aimed to evaluate the demographic and clinical characteristics of patients with cirrhosis who applied to the Gastroenterology Clinic of Karadeniz Technical University, Faculty of Medicine.

**Materials and Methods:** The demographic characteristics, etiology of cirrhosis, and complications of patients with cirrhosis over the age of 18 who were followed up at our clinic between January 2010 and December 2020 were retrospectively evaluated. Patients under the age of 18 were excluded from the study.

**Results:** A total of 1201 patients, 444 (36.9%) of whom were female and 757 (63.1%) were male, with an average age of 61.91 (18-93), were included in this study. The most common etiological causes

were hepatitis B (32.6%), hepatitis C (22.4%), cryptogenic (13.6%), non-alcoholic fatty liver disease (8.6%), alcoholic cirrhosis (7.8%), and autoimmune liver disease (4.6%). Ascites was detected in 598 of the cirrhosis patients, and spontaneous bacterial peritonitis was detected in 117 (19.5%) of these. In addition, 278 (23.1%) patients had hepatic encephalopathy, 168 (14%) had esophageal variceal bleeding, and 43 (3.6%) had hepatorenal syndrome. Hepatocellular carcinoma was diagnosed in 351 (29.2%) of the patients at the time of diagnosis or during follow-up.

**Conclusion:** In our region, the most common cause of liver cirrhosis etiology was viral hepatitis, similar to other studies conducted in our country. The most common complications of cirrhosis were ascites and hepatic encephalopathy. In this study, the rates of detection of hepatocellular carcinoma in patients were quite high, and we would like to emphasize the importance of cancer screening in these patients.

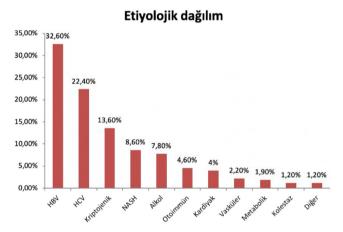


Figure 1. Distribution of causes.



Figure 2. Complications and HCC.

GP88

### Toxic Hepatitis Due to Prangos Ferulacea (Heliz Herb, Çakşır Herb) - Case Series

Ali Rıza Çalışkan

Department of Gastroenterology, Adıyaman University, Adıyaman Education and Research Hospital, Adıyaman, Turkey Prangos Ferulacea exists in two chemotypes with different biological effects. The toxic chemotype mainly contains prenyl coumarins such as ferulenol and related compounds responsible for ferulose (a fatal hemorrhagic disease affecting mainly goats, sheep, cattle, and horses) and its toxicity. The other chemotype is not poisonous and contains daucane esters. Ferula is a genus rich in coumarins, especially sesquiterpene coumarins. Many sesquiterpene coumarins from this genus have been identified. It has been stated that consumption of Prangos Ferulacea is associated with a serious hemorrhagic condition called ferulosis in cats and is occasionally seen in humans. Studies have shown that 4-hydroxycoumarin is involved in hemorrhagic events, and it has been suggested that poisoning caused by Prangos Ferulacea causes symptoms similar to those caused by fermented sweet clover intoxication in cattle and that the plant contains antithrombotic coumarin derivatives. In some species of this plant, ferulenol has been shown to have profound antibacterial activity, acting as a major toxin for microtubule disruption. Interactions of this toxin is used to induce mitochondrial dysfunction, and ferulenol plays a role in the inhibition of oxidative phosphorylation. Fulminant liver failure developed in only one of our cases, and the patient underwent two sessions of plasmapheresis. Patients were given bed rest, i.v. hydration and N-acetylcysteine 3x1 i.v. treatment was started. During the follow-up, no hemorrhage developed in any of the cases. An improvement in the clinical picture and laboratory values observed rapidly. As a result, it should be considered that wild plants consumed for nutritional purposes may cause liver damage. Consumption of wild plants should also be questioned in patients, followed by acute hepatitis or food poisoning clinics. The physician monitoring the patient should consider that herbs, herbal products and food supplements may also cause liver damage.



Figure 1. Prangos ferulacea.



Figure 2. Prangos ferulacea.



Figure 3. Prangos ferulacea.

#### A Rare Complication of Cirrhosis: Portopulmonary Hypertension: A Case Report

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Portopulmonary hypertension (PoPH) is a rare but threatening vasculopathy defined by the presence of pulmonary hypertension (PH) on the background of portal hypertension. Identification of PoPH is important for the prognosis of liver cirrhosis and the priority of liver transplantation. A 24-year-old male patient diagnosed with liver cirrhosis and atrial septal defect (ASD) applied to us with a complaint of abdominal swelling. The patient, who had been diagnosed with cryptogenic liver cirrhosis for approximately 1.5 years, had pleural effusion and widespread intraabdominal ascites. In the laboratory, albumin was low and serum-acid albumin gradient was above 1.1. Other biochemistry parameters, hepatitis serology and autoimmune markers were normal. Abdominal Doppler ultrasonography revealed lobulated liver contours, parenchyma consistent with cirrhosis, and dilated portal vein and hepatic veins. No esophageal varicose veins were seen on endoscopy. In light of these findings, the patient underwent transthoracic echocardiography (ECHO) for further examination of portal hypertension. ECHO revealed a defect compatible with ASD with a diameter of 12 mm, dilatation in the right heart, advanced tricuspid insufficiency and pulmonary arterial pressure (PAP): 60 mm Hg. After right heart catheterization was performed. Pulmonary capillary wedge pressure (PCWB) = 15 mm Hg, PAP = 30 mm Hg, Qp/Qs 1.31. Since the patient's PAP was >25 mm Hg, pulmonary vascular resistance was >3, and PCWB = 15 mm Hg, PoPH was considered to be a cause of Type 1 PH in the patient diagnosed with cirrhosis. The patient was referred to the medical genetics department for gene analysis to investigate the etiology of liver cirrhosis and to the relevant branch for PH treatment. Hemodynamic changes such as portosystemic shunts and splanchnic vasodilation due to portal hypertension may play a role in the pathogenesis of PoPH by causing significant changes in the pulmonary vascular bed. Right heart catheterization is the gold standard in diagnosis. Vasomodulatory pharmacological agents can be used to reduce PH in moderate to severe patients.

#### Gene of Tumor Necrosis Factor in Cholelithiasis Complicated by Mechanical Jaundice

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**Background/Aims:** The aim of this study was to identify the relationship with the frequency of occurrence of allelic variants of tumor necrosis factor (TNF-a) genes at position -308 with obstructive jaundice.

**Materials and Methods:** The role of the TNF a gene polymorphism G308A in the Uzbek population with mechanical jaundice in choledocholithiasis was studied on the material of 90 patients, as well as for control in 60 healthy ones. When analyzing the distribution of genotypic and allelic frequencies in the total sample in the control group of patients, the frequency of occurrence of the G allele was 92.5%, and the A allele was 7.5%. Homozygotes for allele G (genotype GG) were 85% of patients (n = 51), heterozygotes (genotype GA) –15% of patients (n = 9), homozygotes for allele A were not found in our observations.

**Results:** The results of the analysis based on the study of polymorphic markers of tumor necrosis factor genes showed that the occurrence in mechanical jaundice is -3.2; (1.48-6.89),  $\chi$ 2 = 9.45, P = .002 and significantly ( $\chi$ 2 = 10.7, P = .001, OR = 3.78; (1.66-8.62) occurs less with dominant homozygotes TNFa. The same indicators for the heterozygous distribution were  $\chi$ 2 = 9.91, P = .002, OR = 0.28; (0.12-0.63). Depending on the age, the patients were divided into two groups: under 50 years old (main group, n = 47; control group, n = 31) and over 50 years old (main group, n = 43; control group, n = 29). The analysis of polymorphism of genes of tumor necrosis factors among patients with mechanical jaundice, depending on age, did not reveal statistically significant differences ( $\chi$ 2 = 0.004; P = .95).

**Conclusion:** Thus, when studying the polymorphism G308A of the TNF a gene in the Uzbek population in the population control group and in the group of patients with mechanical jaundice.

GP91

#### Bulevirtide Treatment in Chronic Delta Hepatitis: Initial Data from Turkey

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**Background/Aims:** Chronic delta hepatitis is a rare and severe form of chronic viral hepatitis affecting approximately 12 million people

worldwide. Hepatitis D virus (HDV) infection is a significant clinical challenge due to limited treatment options. Bulevirtide is the first HDV drug licensed by the European Medicines Agency for the treatment of delta hepatitis in July 2020. It prevents the virus from binding and entering hepatocytes, thereby preventing new hepatocytes from getting infected. This study examines the efficacy and safety of Bulevirtide in patients with HDV infection.

Materials and Methods: The study was conducted with the participation of 4 patients diagnosed with chronic HDV infection. One of these patients received the drug under an early access program, while the other three sourced the drug on their own from Russia. Each patient was treated with 2 mg/day of subcutaneous bulevirtide. ALT, AST, GGT, Total and Direct Bilirubin, Albumin, complete blood count, and HDV RNA measurements were taken at regular intervals before and during treatment. Biochemical and virological responses were evaluated. The paired t-test was used to assess differences in laboratory values.

**Results:** One of the 4 patients has been receiving bulevirtide treatment for 15 months, two for 3 months each, and the fourth for 1 month. No serious adverse events related to the treatment were observed. Based on pre- and post-treatment comparisons, significant changes were observed in ALT and AST (ALT:  $64.50 \pm 50.92$  P = .08, AST:  $66.50 \pm 49.66$  P = .075). No significant changes were observed in HDV RNA, GGT, PLT, Albumin, Total, and Direct Bilirubin values

**Conclusion:** This study is the first ongoing study on the use of bulevirtide in the treatment of delta hepatitis in Turkey. Preliminary findings support the effect of Bulevirtide in patients with HDV infection. Results from larger patient groups and longer treatment durations are anticipated.

GP92

#### Predictors of Mortality After First Hepatic Encephalopathy in Cirrhotic Patients

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**Background/Aims:** Hepatic encephalopathy is a serious complication of liver cirrhosis. Despite the management of hepatic encephalopathy, mortality rate remains elevated. The objective of our study is to determine the factors predicting mortality of cirrhotic patients hospitalised for the first hepatic encephalopathy.

**Materials and Methods:** The retrospective study was conducted between November 2019 and March 2022. Total 48 cirrhotic patients included in the study who were admitted for the first hepatic encephalopathy.

**Results:** Forty-eight patients with a mean age of 60.9 years old were included in the study. Thirty patients (62.5%) were males. The main etiology of cirrhosis was viral cirrhosis (HBV and HCV) at 29.2% followed by alcohol at 16.7% and non alcoholic steato-hepatitis (NASH)

at 14.6%. The most frequent triggering factor was variceal bleeding at 48.5 followed by infections at 1.8%. The mortality rate was 31.3%. The predicting factors of mortality were high meld score >24.5, high meld-Na score >27.3, high creatinine level >18.9, low prothrombin time percentage <51.9 and low blood Sodium <129.

**Conclusion:** Neurologic troubles in cirrhotic patients are major complications leading to high mortality rate. Survival rate after first hepatic encephalopathy is affected by meld score, meld -Na, creatinine level, prothrombin time and blood Sodium level.

GP93

#### The Effect of Adding Oral Nutritional Supplements to the Diet of Cirrhotic Patients with Ascites on Acid, Protein, and Complement Content

<u>Arda Bilgili,</u> Zubeyir Yurtsever, Mukaddes Tozlu, Ahmet Tarık Eminler, Selma Yüceldi Demirbaş, Mustafa İhsan Uslan, Mustafa Sadeçolak, Zeynep Bıyık, Furkan Serdar Güneyceli

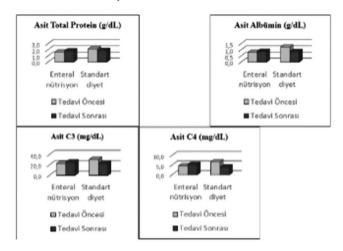
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**Background/Aims:** It was aimed to determine the effect of adding oral nutritional supplements to the diet of patients with cirrhosis and developed ascites, on acid protein and complement levels and the development of spontaneous bacterial peritonitis.

**Materials and Methods:** Patients with cirrhosis who applied to our Gastroenterology clinic between January and August 2022 were screened. Among these patients, those who were referred to the nutrition outpatient clinic and who were started on a 30-35 kcal/kg/day diet or a 30-35 kcal/kg/day diet and oral nutritional supplement were included in the study. Anthropometric measurements of patients; SGA, NRS-2002, RFH-NPT, MAC, TST, SST, HG tests and height, weight and BMI measurements were performed and recorded. By performing paracentesis, acid acid C3, C4, total protein and albümin levels were measured. Baseline and 8th week data were analyzed.

**Results:** There were 12 (52.2%) patients in the enteral nutrition group and 11 (47.8%) patients in the standard diet group. SBP developed in 12 patients in a 6-month period. There was a significant decrease in NRS-2002, RFH-NPT, SGA scores at the end of the treatment compared to the beginning in patients receiving enteral nutrition. There was no significant difference in HG, MAC, TST and SST measurements, between groups and within groups before and after treatment. At the end of the treatment, the acid albümin value in the standard diet group showed a significant decrease (P < .05) compared to the baseline. There was no significant difference between the groups in terms of SBP development.

**Conclusion:** As a result, there was an increase in acid complement levels in the enteral nutrition group, although that increase would make a significant difference was not observed. The effectiveness of enteral nutrition in terms of SBP development has not been observed. Studies with more patients and longer follow-up periods are needed on this subject.



**Figure 1.** The acid protein change in the group before and after the treatment

**Table 1.** Change in Intragroup Acid Protein Values Before and After Treatment

	Nütrisy	on D	)urumu				_		
	Enteral	Nüt	risyon	Standart D	iyet		p		
	Ort.±ss	/n-%	-	Ort.±ss/n-9	6		_		
Asit Total Protein (g/dL)									
Tedavi Öncesi	1,7	$\pm$	0,8	2,2	±	1,0	0,204	t	
Tedavi Sonrası	1,8	$\pm$	0,7	1,9	±	1,1	0,880	t	
TÖ/TS Değişim	0,2	$\pm$	0,7	-0,3	±	0,5	0,113	t	
Grup İçi Değişim p	0,396		E	0,131		E			
Asit Albümin (g/dL)									
Tedavi Öncesi	0,8	±	0,5	1,2	±	0,7	0,131	m	
Tedavi Sonrası	0,9	#	0,4	0,9	<b>±</b>	0,6	0,441	m	
TÖ/TS Değişim	0,1	$\pm$	0,3	-0,4	±	0,7	0,049	m	
Grup İçi Değişim p	0,610		w	0,046		W			
Asit C3 (mg/dL)									
Tedavi Öncesi	22,7	±	18,2	30,8	±	17,6	0,175	m	
Tedavi Sonrası	25.8	$\pm$	16,6	23,2	#	12,6	0,423	m	
TÔ/TS Değişim	afik Alanı	±	9,6	-7,6	±	12,4	0,084	=	
Grup İçi Değişim p	0,325		w	0,083		w			
Asit C4 (mg/dL)									
Tedavi Öncesi	4,8	$\pm$	3,3	6,7	±	5,2	0,289	m	
Tedavi Sonrası	5,5	$\pm$	3,1	4,1	<b>±</b>	2,9	0,171	m	
TÖ/TS Değişim	0,8	±	1,6	-2,6	±	6,0	0,056	=	
Grup İçi Değişim p	0,142		w	0,121		w			

<sup>&</sup>lt;sup>t</sup> Bağımsız örneklem t test / <sup>m</sup> Mann-whitney u test

 $<sup>^{\</sup>rm E}$  Eşleştirilmiş örneklem t test /  $^{\rm w}$  Wilcoxon test

#### **Sexual Dysfunction in Cirrhotic Patients**

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**Background/Aims:** Sexual dysfunction (SD) is defined as decreased libido, erectile dysfunction or feminization in men, decreased libido, dyspareunia or anorgasmia in women. It is rarely reported spontaneously by patients, and investigated by hepatologists. SD is a frequent occurrence in cirrhotic patients, which can affect their quality of life. The aim of our work is to evaluate the prevalence and risk factors of sexual dysfunction in cirrhotic patients.

**Materials and Methods:** This is a prospective study running from December 2022 to May 2023, enrolling 58 patients followed for cirrhosis on an outpatient basis. For the assessment of sexual function, we used the ASEX classification whose items were scored from 1 to 6. SD was defined by a total  $\geq$ 19 or a score  $\geq$ 5 on any item or  $\geq$ 4 on at least 3 items.

**Results:** Of the 58 cirrhotic patients interviewed, SD was diagnosed in 32 patients (55%). Their mean age was 51.2 years, with a sex-ratio (M/F) of 2.45. In men, SD was dominated by erectile dysfunction in 87% of cases, while decreased libido was found in only 13% of patients, with no cases of feminization reported. In women, SD was distributed as follows: decreased libido in 89% of cases, anorgasmia in 9% and dyspareunia in 2%. In our study, SD was significantly related to betablocker use (P = .006), diabetes (P = .03) and Child-Pugh score severity (P < .0001). On the other hand, gender, smoking, spironolactone intake, viral hepatitis B and viral hepatitis C were not predisposing factors for SD (P = .29, P = .36, P = .57, P = .42 and P = .72 respectively).

**Conclusion:** According to our study, 55% of cirrhotic patients suffer from sexual dysfunction, hence the interest in systematically screening for it. Its management is crucial to improving patients' quality of life. Diabetes, beta-blocker use and severity of liver damage were identified as risk factors for SD.

#### GP95

#### Cirrhotic and Non-Cirrhotic Portal Thrombosis: Similarities and Differences

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**Background/Aims:** The aim of this study was to compare cirrhotic and non-cirrhotic portal thrombosis.

**Materials and Methods:** In this retrospective descriptive and analytical study we compared two populations of patients hospitalised in

the hepato gastroenterology department of the lbn Rochd University Hospital in Casablanca: Group 1: Thrombosis on cirrhosis liver (n = 40) Group 2: Thrombosis in healthy liver (n = 26). The data were entered and analyzed using Jamovi 2.4.6 software.

Results: The circumstances of discovery were dominated by digestive bleeding in the cirrhotic group, unlike abdominal pain, which was the main symptom in non-cirrhotic patients. This difference was statistically significant (P = .010). Thrombosis was total in 42.5% and 50% of patients in the two groups respectively and extended to the superior mesenteric vein in 7.5% and 62% of patients. Total thrombosis and extension to the superior mesenteric vessels were not statistically more frequent in either group, with P values of 0.367 and 0.574 respectively. In non-cirrhotic patients, thrombosis was recent in 92,3% (n = 24) of patients, compared to 52.5% (n = 22) in cirrhotic patients. This difference was found to be statistically significant (P = .001). Likewise, splenic or mesenteric infarction occurred more frequently in non-cirrhotic patients (P = .014). In addition, cirrhotic patients experienced more hemorrhagic complications due to portal hypertension (P = .038). Among treated patients, long-term repermeabilisation of thrombosis was observed in 24% of cases in group 1 compared to 25% in group 2. No significant difference was observed (P = .95).

**Conclusion:** Based on our study's findings, portal thrombosis tends to be recent in patients not being followed for cirrhosis. The prognosis of portal thrombosis appears to be dominated by the extent of thrombosis in non-cirrhotic patients, and by hemorrhagic complications associated with portal hypertension in cirrhotic patients.

#### GP96

#### Coexistence of Autoimmune Hepatitis, Primary Sclerosing Cholangitis and Cutaneous Vasculitis Presenting with Rash and Purpura Case Report

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Although a close relationship has been reported between autoimmune liver diseases and other autoimmune diseases such as rheumatic and inflammatory bowel diseases with liver involvement, the relationship between them and vasculitis has been reported less frequently. In our case, we presented a rare case of PSC+Autoimmune hepatitis + cutaneous vasculitis. In this way, it was aimed to raise awareness about the possible coexistence of autoimmune liver diseases in patients with vasculitis. A 22-year-old female patient is referred due to fatigue, rash, purpuric skin lesions, elevated liver enzymes and bilirubin and thrombocytopenia. There was a rash in his medical history, weakness upon system interrogation and widespread purpuric skin lesions on examination. In pathological examinations, total protein: 8.1 g/L, albumin: 3.9 g/L, t.bil: 2.4 mg/

dL, d.bil: 1.2 mg/dL, alt: 569 U/L, ast: 609 U/L, agt: 214 U/L, ALP: 292 U/L, LDH: 306 U/L, CRP: 5.2 mg/L, sedim: 28 mm/h, PLT: 104 103/uL, INR: 1.6 were seen. As findings in imaging, it was reported as USG:Liver parenchyma fine granular appearance, spleen 133 mm, MRI: Liver 157 mm, microcorunculated irregularities in its contours and heterogeneity in the parenchyma are noteworthy. In autoimmune laboratory tests, ANA (IFA): 1/80+(positive), ANA (EIA): 28.1 U/mL+, c-ANCA:77+, p-ANCA:22+, IgG: 20 were high. In rheumatology consultation, steroids were recommended for cutaneous vasculitis. Liver biopsy reported biliary and hepatitic type chronic liver damage, ductopenia in portal areas, bile duct proliferation and fibrosis in some parts. Steroid+ursodeoxycholic acid treatment was started for the patient, whose diagnosis was considered to be autoimmune hepatitis/sclerosing cholangitis overlap syndrome and vasculitis. Azathioprine was added. During the follow-up, the patient's purpuric skin lesions disappeared, liver enzymes decreased and then normalized. Our 22-year-old patient with vasculitis findings is a young lady whose liver biopsy showed partial fibrosis and the findings were mostly in the direction of AIH and PSC. When the autoantibodies p and c-ANCA, ANA positivity, bilirubin, cholestatic and transaminase enzyme elevation were evaluated together, it was thought that liver involvement was compatible with overlap syndrome and may be related to vasculitis. Parenchymal and duct damage seen in the biopsy may be an indicator of this condition. It is observed that liver damage and symptoms regress biochemically and clinically with rapid diagnosis and early treatment.



Figure 1. A Case of OIH+PSK+Cutaneous Vasculitis.

GP97

#### Autoimmune Hepatitis: The Hidden Enemy – A Case Report

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Abnormal liver tests are frequently detected in patients with asymptomatic or nonspecific symptoms. There may be many reasons. In our case report, the general approach will be discussed through an multifactorial patient. Our case was a 29-year-old male. He had consuming 5-6 beers a day for 10 years. His body mass index was 38.9. He had complaints of weakness, loss of appetite, and jaundice. Application tests were AST: 108, ALT: 37, ALP: 236, GGT: 792, T.Bil: 11.98, D.Bil: 6.52, INR: 2.4, Alb: 2.1, plt: 201000, TSH: 10. The patient was hospitalized. Abdominal ultrasonography revealed grade 3 hepatosteatosis, minimal free fluid in the abdomen, and heterogeneity in the liver parenchyma. Endoscopy revealed pangastritis and portal hypertensive gastropathy. Portal Doppler revealed portal hypertension. Thyroid ultrasonography was evaluated as thyroiditis. Levothyroxine was started. Tests were requested for the etiology of chronic liver disease. Hepatitis B was found to be vaccinated, and Hepatitis A and C were unexposed. TORCH panel viruses were negative. Ceruloplasmin and a1-antitrypsin levels were normal. ANA, AMA, SMA antibodies were negative. There was no use of any potentially toxic substances. IgG level was 20.3 g/L. Monoclonal gammopathy was detected in protein electrophoresis. In our case, steatohepatitis and alcoholic hepatitis were considered due to heavy alcohol use and obesity. However, although the autoantibodies were negative, it was necessary to exclude autoimmune hepatitis (AIH) due to high lgG and a diagnosis of thyroiditis. The liver biopsy result is shown in Figure 1. The AIH simple score was calculated as 6. The patient was started on methylprednisolone, furosemide and spirinolactone. The patient, whose values have decreased, continues his routine followup. AIH is a chronic, inflammatory disease of the liver characterized by circulating autoantibodies and high serum globulin levels. It may start as acute hepatitis and progress to cirrhosis. It is a diagnosis of exclusion and should always be brought to mind.

KLINIK TAN

TANI: PRESÎROZ, KARACIĞER BİYOPSİ, LÜTFEN TARİFİ OKUYUNUZ

Kuracijor biyogi oʻrneginde turacijor dotusu turuvje hasarlarmig potrurimdedir. Portal alanda lokoli sinnna äeriyem yaygin inlerface hepetia talarida, pototal alandaria bjetima hisorelet di operan histot tigi filiabi bitori nifilitasvoru, vyayin duktive profiderasyon oprilmisig, infersitsyumda hepetiosiferde yaygin bolonigima dejenerasyonu, lek hūce netrocian, rozel formasyonu dikkati çekmiştir. Triktorn lie potrali portal, portal -astrali koprüleyneletek kancelderin kalan septialaria kolciblere ayılmısısı izlemmekderi. Yaplan gümüylemedi nodülasyon gösteren paranilm dişirden yayını kollaşıs dikkatı çekmiştir. Olguda bu mortoliyle kuplurları persezi döjürilminde betikte eykviçik olarak yağılarmanın z olması nedeniyle (< %5) steatohepatit

MAKROSKOBÍ: karaciĝer biopsi kayrtli materyal: 1 0 7x0 1x0,1 küçüğü 0 5x0 1x0.1 cm boyutunda 2 adet biyopsi materyali iki blok 2 parça yok ad

Figure 1. Liver biopsy.

### An Unusual Mushroom Poisoning; Gyromitra Esculenta

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The fake morel mushroom, Gyromitra esculenta, has a distinctive toxicity. The Latin word for edible is where the name "esculenta" of the fungus comes from. Even though G. esculenta is not advised for food choices, locals in the western region of Turkey collect, consume and sell it in open bazaars, especially during spring. In this case report, one of this unique toxications will be presented. A 61 year old female patient was admitted to the ER with vomiting starting after eating mushrooms nearby her house. Due to high liver function test (LFT) levels, it was evaluated as mushroom intoxication and the patient was hospitalized with preliminary diagnosis of acute hepatitis. Poison advisory recommendations were followed by contacting national poisoning center after confirming the mushroom was Gyromitra esculenta. The patient was transferred to the ICU for close follow up for liver failure, with King's College Score: 1. After 5 days of staying in ICU, the patient was transferred to the Gastroenterology service with King's College Score: 0. The patient was discharged with decreasing LFT values. This case indicates the potential serious toxicity of Gyromitra esculenta and emphasizes the value of taking a thorough medical history from patients who complain of vague gastrointestinal symptoms.

GP99

#### Epidemiological Profile of Hepatitis A in the Adult Population of the Hepato-Gastroenterology Department

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**Background/Aims:** Acute viral hepatitis A (AVH) has recently been on the increase in adults. The aim of this study is to describe the epidemiological, clinical and evolutionary profile of VHA in adults in a gastroenterology department.

**Materials and Methods:** This is a prospective study over a 7-year period (2017-2023) including all patients followed up in consultation or hospitalized for AVH. The diagnosis of viral hepatitis A virus infection was based on positive anti-HAV IgM antibodies.

**Results:** We collected 109 cases of AVH, 63 men and 46 women with a sex ratio of 1.36. The average age of patients was  $21 \pm 6$  years, representing 50.25% of patients. Over 84% of patients lived in urban areas, 9% in suburban areas and 6.63% in rural areas. Socioeconomic

status was average for 57.81% of patients, and low for 27.55%. Almost all patients drank drinking water, 85% of them from the tap. More than 50.51% of patients consumed fast food. A similar case was reported by 23.16% of patients, and 30.20% of patients had taken medication before the onset of jaundice, with paracetamol being taken by 90% of patients. Herbal remedies were reported in 19.58% of patients. An influenza-like syndrome was noted in 71.73% of patients, and jaundice in 89%, with an average onset time of 6 days. Clinically, hepatomegaly was found in 8 patients and asterexis in one. ALT was more than 50 times normal in 47.66% of patients.

**Conclusion:** In this study, we note an epidemiological transition in AVH, the average age of our patients was 26 years, and AVH was severe in 27.24% of them, with no cases presenting with fulminant forms. Additional nationwide studies are needed to reevaluate AVH prevalence and identify new risk factors.

**GP100** 

#### A Case of Essential Thrombocytosis Complicated with Portal Vein Thrombosis Diagnosed After Splenectomy

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Portal vein thrombosis (PVT) occurs with narrowing or complete occlusion of the portal vein due to thrombosis or tumor. While cirrhosis is the most common cause of portal vein thrombosis, myeloproliferative diseases, malignancies, and thrombophilic conditions also lead to thrombosis in the portal vein. One of the thrombophilic causes is essential thrombocytosis, characterized by overproduction of thrombocytes. It often manifests with thrombosis and bleeding, and is mostly seen in young women. Here, we will present a case of ET masked due to hypersplenism that is due to portal vein thrombosis. A 29-year-old female patient was admitted to the emergency department with hematemesis which persisted for 2 days. Splenomegaly was detected in the physical examination of the patient. The patient had no previous use of contraceptives and no history of thrombosis. In the laboratory examination, hemoglobin 7.2 g/dL, hemotocrit 28.7 platelet (PLT) 158 000 were detected. Coagulation tests, liver function tests, kidney function tests were normal. Endoscopic band ligation was performed upon the esophageal varices detected during the endoscopical examination. Abdominal CT revealed marked splenomegaly and portal vein thrombosis. Extensive evaluation for the underlying cause of PVT was done; Thrombophilia panel, nextgeneration sequencing panel, PNH panel were analyzed. Malignancy and inflammatory conditions were excluded. TIPS was planned for treatment recurrent variceal bleeding. However, the patient was admitted to the emergency department again with varicose bleeding. Conventional treatments couldn't stop the bleeding. Hence urgent splenectomy was performed. Postoperatively on day fourteen a platelet 2 327 000 was detected. After the JAK-2 mutation positivite result, bone marrow biopsy was performed which was in accordange with ET due to abundant megakaryocyte hyperplasia. Hidroxyurea therapy was started immediately. Although one of the most common causes of PVT is chronic liver disease, myeloproliferative diseases and malignancies also lead to thrombosis in the portal vein. Especially in patients whose platelet levels are within normal limits despite splenomegaly, ET should be considered and the necessary tests should be performed.

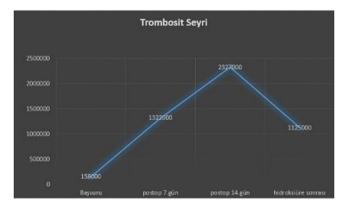


Figure 1. Platelet course.

GP101

#### Crimean-Congo Haemorrhagic Fever: A Zoonotic Threat to Keep in Mind

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Crimean-Congo haemorrhagic fever (CCHF); is a serious medical and public health issue globally. Especially in some parts of Turkey locals are frequently exposed to the principal tick vector due to seasonal changes. In this case a 51-year old male was admitted with fever, jaundice and generalized rash to our department. Pancytopenia with less than 10 000 mL thrombocyte levels together with mucosal bleeding and hepatitis was present. The patient was working as a farmer. Physical examination revealed no any evidence of ticks or tick bites. He was recently prescribed amoxicillin-clavulanate and ibuprofen for upper respiratory tract infection and had no alcohol or herbal medicine consumption. Given the known use of medications, the patient was evaluated for infectious hepatitis causes, drug rash with eosinophilia and systemic symptoms (DRESS) or non-eosinophilic drug eruption. Both initial diagnostic assumptions were discarded due to atypical skin rash, deep panyctopenia and no eosinophilia. Hepatitis B, C, A, E, and other non hepatotropic viral etiologises were all negative. In the follow up, the bleeding was stopped by thrombocyte replacement. Due to the patient's rural living history, CCHFV and other infectious etiologies were investigated. When the CCHFV PCR test returned positive, the paint was evaluated with the infectious diseases department: Due to the stable condition of the patient, additional antiviral treatment was not considered.

When clinical stability was achieved and the liver function tests decreased to normal levels; the patient was discharged from the hospital. Multiple etiologies can be present under concomittant rash, deep thrombocytopenia, pancytopenia and liver enzyme elevation ranging from hemophagocytosis syndrome, dress-syndrome, noneosinophilic drug eruption, still-disease and infectious etiologies. It is essential to consider CCHF as an potential etiology especially in endemic parts of Turkey.

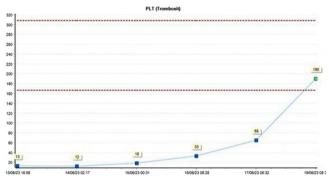


Figure 1. Platelet course.

**GP102** 

### **Endoscopic Sleeve Gastroplasty Experience** in a Private Clinical Setting

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**Background/Aims:** Endoscopic sleeve gastroplasty (ESG) uses full-thickness suturing to achieve tubular reconfiguration of the gastric body and decrease gastric volume. ESG has been demonstrated to be a safe, durable and effective procedure for the management of obesity. We aimed to present our experiences of changes in body composition before and after ESG performed in a real-life setting.

Materials and Methods: We conducted a retrospective review of medical records of patients underwent ESG between October 2022 and September 2023. Procedure related details like suture pattern, suture counts and procedure duration were noted. Data including demographics, anthropometrics and comorbidities were collected at baseline and at every follow-up visit. Patients were followed online or face to face at weekly intervals for two months, thereafter once every two weeks. Interviews were supported by nutrition training to ensure behavioral changes. Instead of a restrictive diet plan, completely individually planned nutrition programs were implemented.

**Results:** A total of 6 patients [all females;  $38.7 \pm 5.6$  years; body mass index (BMI)  $34.6 \pm 4.1$  kg/m²] were included. Only one patient had intraprocedural bleeding and submucosal hemorrhage that was controlled endoscopically with adrenalin injection. All patients experienced one of symptoms like minimal abdominal pain, abdominal discomfort, nausea, vomiting after ESG. One patient stayed in the hospital overnight because of persistent vomiting and pain. Five of six patients discharged six hours after ESG. There was no admission

or hospitalization after discharge. There was not any fluid, electrolyte or nutritional insufficiency during follow-up. The mean follow-up time for all cases was 19.2 weeks. Mean total body weight loss was found 15.3  $\pm$  8%. Also, mean BMI decreased from 34.6  $\pm$  4 kg/m² to 29.4  $\pm$  5.3 kg/m².

**Conclusion:** ESG resulted in significant improvements in body composition with a high safety profile over a short-term follow-up.



Figure 1. Post ESG body weight changes.

Table 1. Demographic and Metabolic Parameters

Demographics	Patients (N=6)
Mean Age (SD)	38.7±5.6
Gender. Female (%)	6 (100)
Race, White (%)	5 (83.3) (1/6 hybrid individual)
Basic Weight Parameters and Comorbidities	
Weight, kg (SD)	96.6±12
BMI, kg/m²(SD)	34.6±4.1
Hypertension (%)	1 (16.6)
Dyslipidemic (%)	1 (16.6)
Psychiatric Illness (%)	I (16.6) (under control for I year)
Hypothyroidism (%)	2 (33.3) (under control)
Transaction Information	
Number of sutures (SD)	5.3±0.8
Processing time, min(SD)	123.3±29.6
Suture pattern	U (3) / alterne patern (3)

Table 2. Metabolic Follow-Up Parameters of Patients

Patient	Initial weight (Kg)	initial BMI (Kg/m²)	Current weight (Kg)	Weight loss (Kg)	% Weight loss	Follow-up period (weeks/months)	Current BM (Kg/m²)
1	90.7	32.1	65.6	25.1	27.7	11.5 months	23.2
2	99.1	31.6	76.6	22.5	22.7	8 months	24.2
3	103.2	37.9	90.2	13	12.6	6 months	33.1
4	99.7	35.7	88.4	11.3	11.3	5 weeks	31.7
S	75.4	29.8	69.2	6.2	8.2	5 weeks	27.4
6	111.4	40.4	100.9	10.5	9.4	3 weeks	36.6
Mann	06 64 17 4	74 64 4	81 94 13 6	14 9+7 4	15 240	10 2wanks+20 E	70 445 7

GP103

## The Relationship Between Visit Frequency and Weight Loss in Intragastric Balloon Procedure

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**Background/Aims:** Intragastric balloon (IGB), is an effective method for managing the obesity. However, clinic data about visit frequency and its relation with weight loss is limited. Therefore, we investigated the relationship between visit frequency and weight loss in IGB.

**Materials and Methods:** This study is a retrospective analysis of 99 patients who underwent Medsil and Orbera IGB placement between October 2021 and March 2023 in a Private Clinic in Ankara. Balloon volume was adjusted between 500 and 700 ml. Data was collected at baseline and at every visit during 6 months. Patients were followed up by a bariatric dietitian online or face-to-face at weekly intervals for two months, thereafter every two weeks.

**Results:** Ninety-nine patients were enrolled. 8 (12.7%) patients showed intolerance and required early removal of the balloon and one patient was lost to follow-up. A total of 90 patients with mean age of 37.40 ± 10.27 years, whom 79 (87.8%) were female were included in the final analysis. Before IGB, mean body weight was 91,49 ± 15,32 kg and mean body mass index (BMI) was 33.39 ± 4.81. Sixth month results after the IGB revealed that mean total body weight loss (TBWL) was 14.30 ± 7.57 kg, %TBWL was 15.56 ± 7.72% and mean change in BMI was 5.24 ± 2.81. In addition, ≥5% TBWL, ≥10% TBWL and ≥15% TBWL was achieved in 92.2%, 76.7% and 53.3% of patients, respectively. Regarding visit frequency, mean TBWL was 7.27 ± 4.53 kg, 10.15 ± 6.76 kg, 16.85 ± 6.93 kg, and 19.17 ± 5.24 kg in those with a visit frequency between 1-5, 6-10, 11-15, and ≥15 during six month, respectively (P < .001).

**Conclusion:** IGB is an effective procedure for weight loss, with minimal adverse effects. Higher number of visits suggest greater weight loss in obese patients.

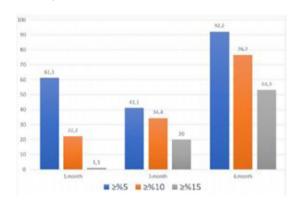


Figure 1. Percentage of patients who lost  $\geq 5\%$ ,  $\geq 10\%$  and  $\geq 15\%$  of their total body weight at 1, 3 and 6 months.



**Figure 2.** The relationship between the total number of interviews and weight loss rates at  $3^{rd}$  and  $6^{th}$  months.

**Table 1.** Demographic and Anthropometric Parameters

Demographics	Patients (N#90)	
Hean Age (SD)	37,4 (10,3)	
Gender, Female (%)	79 (87,8)	
Height, m (SD)	1,66 (0,9)	
Basic Weight Parameters		
Pre-op body weight, kg (SD)	9L5±1S.3	
BMI, kg/m²(SD)	33,4±4.8	
lst month kg loss (%)	9.4±2,6	
3rd month weight loss (%)	14,425,4	
6th month weight loss (%)	15,647,7	
How Patients Are Followed		
Face-to-face follow-up (%)	78,9	
Online follow-up (%)	21,1	

# Is Helicobacter Pylori Positiveness a Factor in the Success of the Intragastric Injection of Botulinum Toxin in The Treatment of Obesity?

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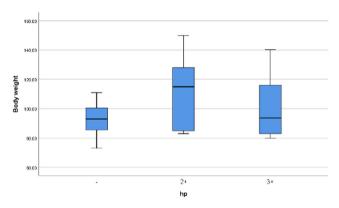
**Background/Aims:** Obesity is becoming more common around the world. Although there have been many developments in the

treatment of obesity recently, endoscopic treatment methods have an important place due to their low side effects and higher success rate compared to behavioral treatments. Although studies on intragastric botulinum toxin (BTX-A) injection have had confusing results, the reason why the treatment causes these different results has not been clarified. Our aim in this study was to evaluate the presence of Helicobacter pylori (HP) infection, which may affect the success of intragastric BTX-A injection treatment.

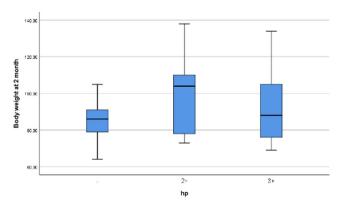
**Materials and Methods:** Patients with a body mass index of greater than 25 kg/m² and at least one obesity-related complication, or a body mass index of greater than 30 kg/m² without complications, were eligible for the study if they were between the ages of 18 and 65. In all patients, a biopsy was taken for HP evaluation from the stomach antrum simultaneously with intragastric BTX-A administration.

**Results:** [/I] In our study on 80 patients, compared to their beginning weight, the patients' weights in all groups decreased statistically significantly (P < .001). However, neither HP density nor HP presence had a statistically significant impact on weight loss in the second or sixth months

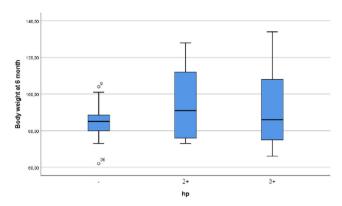
**Conclusion:** It has been shown that HP infection, which is one of the conditions that may cause conflicting results of intragastric BTX-A administration, has no effect on weight loss.



**Figure 1.** Baseline body weight according to helicobacter pylori presence and density.



**Figure 2.** Second month body weight according to helicobacter pylori presence and density.



**Figure 3.** Sixth month body weight according to helicobacter pylori presence and density.

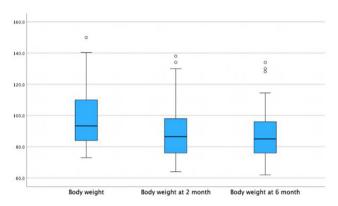


Figure 1. Weight change from baseline.

#### Intragastric Injection of Botulinum Toxin in Treatment of Obesity: A Single Center Study

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**Background/Aims:** Due to the increasing prevalence of obesity, many new surgical and non-surgical treatment methods have been developed in recent years. Intragastric botulinum toxin injection of botulinum toxin A (BTX-A), which is one of these methods, is still being discussed due to its controversial success. This study aims to add to the existing knowledge by reporting our center's experience in evaluating the effectiveness of intragastric BTX-A injections for obesity treatment.

**Materials and Methods:** Patients with a body mass index (BMI) of greater than 25 kg/m² and at least one obesity-related complication, or a BMI of greater than 30 kg/m² without complications, were eligible for the study if they were between the ages of 18 and 65.

**Results:** In our study on 82 patients, we saw a significant weight loss (-9,2 kg, P < .001) in the second month, and there was no additional weight loss in the sixth month of follow-up, but we saw that the lost weight was maintained. We did not see any serious side effects in any of the patients.

**Conclusion:** It is seen that intragastric injection of BTX-A is a safe method in the treatment of obesity when the correct dose and application sites are, combined with the appropriate patient selection.

#### **GP106**

#### The Economic Impact of Obesity on Private Healthcare Providers in Turkey: Health Resource Utilization and Costs Associated With Obesity-Related Comorbidities

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**Background/Aims:** In this study, the impact of obesity on public health was evaluated from the perspective of private health institutions in terms of the financial burden it creates.

Materials and Methods: A micro-costing approach was used to estimate the direct healthcare costs of 10 obesity-related comorbidities from the perspective of private healthcare providers in Turkey. A survey was conducted to a representative sample of physicians in Turkey to determine healthcare resource utilization rates for comorbidities in the identified cost categories (adverse events, complications, medical device, diagnostic tests, inpatient procedures, imaging tests, outpatient visits and drug treatment costs). The unit costs of each cost item were provided by CompuGroup Medical (CGM) and obtained separately for type A, B and C private hospitals. Costs in the different categories were obtained by multiplying the unit costs by the health resource utilization rate. The total annual cost per patient per year of all comorbidities was estimated by summing all cost items in each cost category.

**Results:** The cost of the most costly three comorbidities, chronic kidney disease (CKD), heart failure (HF) and type 2 diabetes mellitus (T2DM), were 626 113 TL, 473 226 TL and 297 943 TL per patient per year respectively for type A hospitals; 383 706 TL, 271 283 TL and 179 223 TL per patient per year respectively for type B hospitals; and

324 003 TL, 233 235 TL and 152 647 TL per patient per year, respectively for type C hospitals. The total annual per patient cost of the 10 comorbidities was calculated as 2 518 609 TL in type A hospitals, 1 497 454 TL in type B hospitals and 1 273 776 TL in type C hospitals. Costs were mainly due to health resource utilization for treatment of adverse events, complications and inpatient procedures.

**Conclusion:** Our findings confirm that obesity-related comorbidities impose a significant financial burden on the private healthcare system.

Table 1. Costs per Procedure

		Atrial Fibrilasyon	Angina	Astım	KBH	Kalp Yetmezliği		Hipertansiyon				
	Advers Olaylar	10,268		8.037	174,459	112.288	4.750	11.698	8.106	26.149		
8	Komplikasyonlar	15,328	30.815	7.325	299.101	76.896	93.447	8.685	15.346	51,148	129,009	727,100
	Tibbi Cihaz	10.251	. 0	242	3.528		0	3.422	2.833	3.808	5.350	29,434
	Diagnostik Testler	17.542	24.517	10.889	27.632	30.736	16.082	7.841	4.810	37.407	2.083	179.541
	Yatan Hasta Prosedürleri	24.082	107,891	0	7.195	159,215	988	0	142.996	63,700	34.547	540.613
સ	Görüntüleme Testleri	25.628	28.636	10.397	67.749	51.139	21,134	13.624	6.135	50.395	7.285	282.122
2	Ayaktan Hasta Vizitleri	25.692	21.513	25.438	28.083	34.780	25.240	14.754	15.771	19.769	29.505	240.544
Ipi	flaç Tedavileri	12.757	10,260	12.678	18.365	8.172	2.555	2.605	2.766	. 0	5.582	75.738
2	Toplam	141.549	226.812	75.005	626.113	473.226	164,196	62.628	198.762	252,375	297.943	2.518.609
	Advers Olaylar	6.161	1.909	4.822	104.676	67.373	2.850	7.019	4.864	15.689	50.749	.266,111
	Komplikasyonlar	9.197	18,489	4.395	179,461	46,137	56.068	5.211	9.208	30.689	77,405	436,260
	Tibbi Cihaz	10.251	0	242	3.528		0	3.422	2.833	3.808	5.350	29,434
	Diagnostik Testler	10.525	14.710	6.534	16.579	18.442	9.649	4,705	2.886	22,444	1.250	107.724
ä	Yatan Hasta Prosedurleri	12.041	52.989	0	3.597	79,607	494	. 0	71.347	31,700	16.812	268.587
Hastane	Görüntüleme Testleri	15.377	17.181	6.238	40.649	30.684	12.680	8.174	3.681	30.237	4.371	169.273
쿤	Ayaktan Hasta Vialtleri	15.415	12.908	15.263	16.850	20.868	15.144	8.852	9.463	11,861	17.703	144.326
BTipi	İlaç Tedavileri	12.757	10,260	12.678	18.365	8,172	2,555	2.605	2.766	. 0	5.582	75.738
8	Toplam	91.724	128.446	50.171	383.706	271.283	99.440	39.988	107.046	146.428	179.223	1.497.454
	Advers Olaylar	5.134	1.590	4.018	87.230	56,144	2.375	5.849	4.053	13.074	42,291	221.759
	Komplikasyonlar	7.664	15.408	3.662	149.551	38,448	46.723	4.342	7.673	25,574	64.504	363.550
	Tibbi Cihaz	10.251	0	242	3.528		0	3.422	2.833	3.808	5.350	29.434
	Diagnostik Testler	8.771	12,258	5.445	13.816	15.368	8.041	3.921	2.405	18,703	1.042	89.770
8	Yatan Hasta Prosedürleri	10.526	44.157	. 0	3.597	72.144	412	0	59.456	26,416	15.483	232.192
Hastane	Görüntülem e Testleri	12.814	14.318	5.198	33.874	25.570	10.567	6.812	3.067	25,198	3.643	141.061
2	Ayaktan Hasta Vizitleri	12.846	10.756	12.719	14,042	17.390	12.620	7.377	7.886	9.884	14.753	120.272
Tipi	Îlaç Tedavileri	12.757	10.260	12.678	18.365	8.172	2.555	2,605	2.766	0	5.582	75.738
5	Toplam	80.763	108.748	43.963	324.003	213,235	83.293	34.327	90.138	122,658	152,647	1.273.776

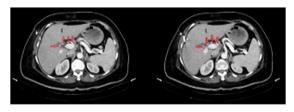
CP1

### A Bile Duct Injury Outside of the Widely Used Bismuth and Strasberg Classification

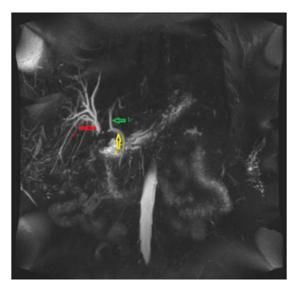
#### Sinan Ömeroğlu

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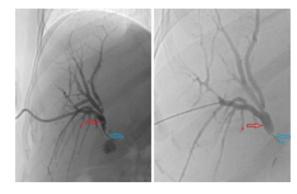
Laparoscopic cholecystectomy (LC) is the gold standard treatment method in gallstone disease. The rate of bile leakage is seen up to 3% after LC. The first and maybe the most important step in the treatment of bile duct injuries is the determination of the injury type. The description and classification of iatrogenic bile duct injuries after cholecystectomy have an impact on surgical treatment and outcome. There are a number of classifications for bile duct injury. The first classification of bile duct injury is authored by H. Bismuth in 1982. The Strasberg and Bismuth classification are the most commonly used and practical. However, they also have the disadvantage that they do not identify all types of injuries. The Stewart-Way and Hannover classification are two of the classifications used to complete this situation. A 48-year-old female patient was referred to our clinic with the diagnosis of biliary injury on the 4th day after LC. The vital signs and abdominal physical examination were normal. In blood tests, WBC: 9300 (10°/L), CRP: 30 (mg/L), ALT: 3 (U/L), AST: 48 (U/L), ALP: 362 (U/L), GGT: 482 (U/L) and Direct Bilirubin was 0.27 (mg/ dL). There was 50 ml/day bile drainage from the abdominal drain. Intravenous contrast-enhanced computed tomography showed no intra-abdominal collection, and the right hepatic artery was normal. Magnetic resonance cholangiopancreatography was evaluated as Stewart-Way Class 4 and Hannover Type D4 injury. A percutaneous transhepatic catheter was placed in the right hepatic duct. After 8 weeks, Roux-en-Y hepaticojejunostomy was performed on the right hepatic duct. The patient was discharged on the 6th postoperative day without any complications. The classifications that define the type of bile duct injury have their own limitations. Bismuth and Strasberg classification are most commonly used by clinicians but others should also be considered. A comprehensive classification system that includes all types of biliary injuries should be planned in the near future.



**Figure 1.** Intravenous contrast-enhanced computed tomography shows the right hepatic artery.



**Figure 2.** Magnetic resonance cholangiopancreatography (MRCP) shows; A) Right hepatic duct, B) Left hepatic duct, C) Common hepatic duct.



**Figure 3.** Percutaneous transhepatic cholangiography from the catheter placed in the right hepatic duct shows; A) Right hepatic duct, B) Surgical metal clip.

CP2

### A Rare Complication After Low Anterior Resection: Coloieiunal Fistula

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Abdominal internal fistulae are usually encountered after inflammatory bowel diseases and we reviewed a rare case of internal fistula. A 61-year-old male patient diagnosed with rectal cancer underwent a robotic low anterior resection and loop ileostomy procedure after neoadjuvant treatment. Rectoscopy performed after oncological treatment showed that the colloanal anastomosis was intact but there was a fistula mouth approximately 6 cm proximal to the anastomosis. When the fistula mouth was approached with an endoscope, we noticed that the ostomy bag was swollen with air. We performed rectal opaque tomography and encountered a suspicious fistula appearance. The patient was taken to the operation and it was observed that there was an internal fistula in the segment of the colon superior to the anastomosis and in the jejunum anus proximal to the loop ileostomy. We found a minimal abscess focus in the presacral area inferior to the fistula area and drained it. The fistulised jejunum anus was resected and the colon was repaired with omental patch. In the literature, fistulas after low anterior resection have been described in colorectal anastomoses, but a case of normal colorectal anastomosis and a case of collojejunal internal fistula has not been described. When the etiology was considered, iatrogenic injury was excluded. The only possibility is that a presacral abscess eroded the colon proximal to the colloanal anastomosis and the jejunum proximal to the loop ileostomy and caused a controlled fistula between them. In the fight against this rare complication, it was aimed not to close the loop ileostomy, but to resect the proximal jejunal anus, to clean the pouch and to protect the anastomosis by covering this area with omental patch and to control it with endoscopic procedures as in the literature.



Figure 1. Fistula mouth seen on rectoscopy.



**Figure 2.** Suspicious fistula between the colon and jejunum on computed tomography.

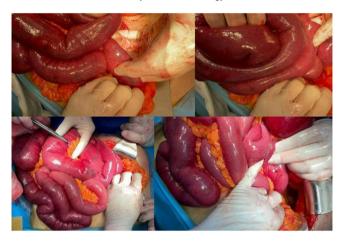
CP3

#### A Case of Small Bowel Mesenteric Torsion Resulting in Ileus and Acute Renal Failure

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Intestinal obstruction presents as mechanical or functional obstruction of the small or large intestines. Mechanical intestinal obstruction is caused by adhesions, hernias, malignancies, and other physical blockages. Paralytic ileus or functional ileus occurs when there is a non-mechanical decrease or stoppage of the flow of intestinal contents. The small intestine is predominantly affected. Treatment varies depending on the underlying pathology and the clinical condition of the patient. A 23-year-old autistic male patient was admitted to the emergency department with nausea, vomiting and abdominal pain for three days. He was receiving medical treatment for epilepsy and had no previous abdominal surgery. The abdomen was distended, bowel sounds were hypoactive, and there was tenderness in four quadrants on palpation. In blood tests, WBC: 9000 (10°/L), CRP: 191 (mg/L), Creatinine: 3.31 (mg/dL), and Lactate was 2.82 (mmol/L). There were dilated small bowel loops with air-fluid levels on radiography. A nasogastric tube could not be inserted due to patient compliance.Intravenous fluid replacement was started. Non-contrast abdominal computed tomography was observed that the stomach was massively enlarged, the proximal small intestine loops were dilated and there were air-fluid levels, and the distal small intestine loops were collapsed. We performed laparotomy and found that the small intestines were dilated up to 150 cm proximal to the ileocecal valve and vascular circulation was impaired, but there was no ischemia or necrosis. It was determined that the small bowel mesentery was torsioned to the right side. The mesentery was detorsioned and intestinal circulation improved. There was no other pathology such as adhesion/omental band, paraduodenal hernia, mass, volvulus, giant polyp or bezoar. The manual bowel decompression was performed on the contents of the small intestine towards the stomach, a total of 5500 ml of liquid was aspirated from the nasogastric tube, and the surgery was completed. The patient was discharged on the 8th postoperative day without any complications. Intestinal obstruction can be life-threatening and surgery should not be delayed. Although rare, mesenteric torsion may occur in etiology.



**Figure 1.** Intraoperative findings. Non-contrast abdominal computed tomography images.

CP4

#### A Rare Benign Tumour of the Stomach: Gastric Schwannoma

#### Sinan Ömeroğlu

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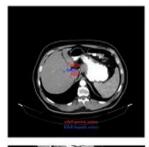
Soft tissue tumors are classified on the basis of the 2020 WHO classification. Many subtypes have been identified based on conventional morphology, immunohistochemistry and molecular genetics. They can show benign, intermediate and malignant behavior. Schwannoma subtype is a benign nerve sheath tumor deriving from differentiated Schwann cells. It is more commonly seen on the limbs, head and neck area, oral cavity, orbit and salivary glands, and is rarely seen in the gastrointestinal tract. Schwannomas constitute 2-6% of gastrointestinal mesenchymal tumors, 60%-70% occur in the stomach, and are generally benign. This case report highlights the rarity of a schwannoma at the lesser curvature of the stomach. A 57-year-old male patient

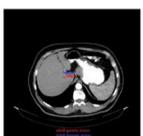
was admitted to our clinic after a gastric submucosal lesion was detected during upper gastrointestinal endoscopy performed due to dyspeptic complaints. Abdominal physical examination, hemogram, biochemical tests and tumor markers were normal. Oral and intravenous contrast-enhanced computed tomography (CT) and endoscopic ultrasound (EUS) were performed. In EUS, a solid. heterogeneous, hypoechoic, well-circumscribed, 4x3 cm in size gastric submucosal lesion was observed 5 cm distal to the gastroesophageal junction in the lesser curvature of the stomach. CT showed that the exophytic subepithelial lesion was in close contact with the left gastric artery and that the left hepatic artery originated from the left gastric artery. Due to the location of the mass and vascular contact, open surgery was preferred and gastric wedge resection was performed. The patient was discharged on the 5th postoperative day. The pathology result was reported as schwannoma and S100 (+), CD34 (-), SMA (-), DESMIN (-), DOG1 (-), CD117 (-) and 1 mitosis /10 HPF. Microscopic and immunohistochemical studies should be performed on surgical specimen for the differential diagnosis of subepithelial tumors. Complete surgical excision is the gold standard in the treatment of schwannomas, which are mostly benign and have a low probability of malignant transformation.





Figure 1. Intraoperative findings.







**Figure 2.** Oral and intravenous contrast-enhanced computed tomography imaging.

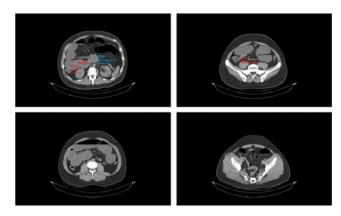


Figure 3. Non-contrast abdominal.

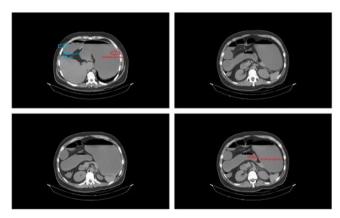


Figure 4. Computed tomography images.

CP5

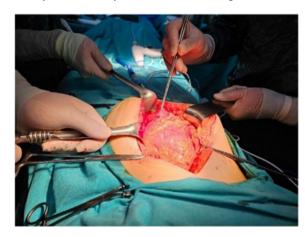
#### Two Rare Diseases, One Patient: A Case Report of Abdominal Cocoon Sydrome and Small Intestinal Bezoar

Zehra Zeynep Keklikkıran¹, Resmi Hakan Adaş², <u>Muhammed Ali Özdemir</u>³, Gökhan Demiral⁴

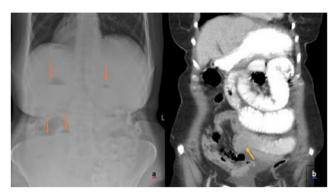
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Sclerosing encapsulated peritonitis, also known as abdominal cocoon syndrome in the literature, is a rare clinical cause of ileus. The exact reason is unknown. Although preoperative diagnosis may be difficult, diagnosis can be made through cross-sectional imaging such as computed tomography (CT). It is characterized by the small intestine being partially or completely covered by a white fibrocollagen

membrane layer that resembles a cocoon. The most common symptoms are abdominal pain, nausea and vomiting. It often causes intestinal obstruction. Bezoars are obstructive hard structures composed of undigested food debris and are a rare cause of acute mechanical ileus. It is more common in the elderly population and in people with predisposing conditions. Radiological imaging can often make a definitive diagnosis. A 58-year-old female patient with no history of previous abdominal surgery and no comorbidities was admitted to our hospital with clinical symptoms of intestinal obstruction. Following the necessary imaging and examinations, an emergency diagnostic laparotomy was performed with the diagnosis of acute mechanical intestinal obstruction. Intraoperatively, abdominal cocoon syndrome and a 3 cm sized bezoar was detected in the small intestine, located at 160 cm from Treitz and completely obstructing the lumen. It was thought that this patient's abdominal cocoon syndrome may have contributed to his chronic constipation and ultimately to the development of bezoar, thus causing acute mechanical intestinal obstruction. A careful etiological investigation is mandatory in cases of mechanical ileus. Additionally, early detection of bezoars and, in appropriate cases, early resolution may reduce the need for surgical intervention.



**Figure 1.** A laparotomy showing a fibrous membrane like a cocoon. During the surgery, the bright transparent membrane cocoon structure surrounding the small intestine was observed.



**Figure 2.** The patient's preoperative abdominal x-ray (A) and ct scan (B) coronal plane. The preoperative standing plain abdominal radiograph shows air-fluid levels in the small intestines, and the CT shows that the bezoar is obstructing the passage of contrast and the proximal loops are dilated.



**Figure 3.** Bezoar removed from 160 cm from treitz. Bezoar approximately 3 cm in size, which is the cause of intestinal obstruction, was removed from the jejunotomy performed on the antimesenteric side of the jejunum.

HP1

#### Determining the Effect of Using Virtual Reality Glasse and Music Therapy During Liver Biopsy on Treatment Satisfaction and Anxiety Level

İlknur Yücel<sup>1</sup>, Bilger Çavuş<sup>2</sup>, Meryem Salhaoğlu<sup>2</sup>, Nurdane Güder<sup>2</sup>

**Background/Aims:** This study was planned to determine the effect of individuals' use of virtual reality glasses and music therapy during liver biopsy on treatment satisfaction and anxiety level, and has a quasi-experimental design consisting of pre-test and post-test groups.

Materials and Methods: The study was conducted with a total of 9 cases who applied to a medical faculty hospital for liver biopsy between August and September 2023. Personal Information Form prepared by the researchers, Visual Analog Patient Satisfaction and Facial Anxiety Scale, and a pre- and post-procedure survey form were used to collect data. Before the procedure, virtual reality glasses were worn on the virtual reality group of the experimental group and they watched the Malibu Beach video. For the other group of the experimental group, which consisted of music therapy, the Hüseyni Maqam recital was started when the patient was laid on the stretcher for the procedure and continued throughout the procedure. A pre-test was administered to individuals in the experimental group before the procedure and a post-test was administered at the end of the procedure. The control group underwent a routine liver biopsy procedure, and they were asked to fill out the pre-test and post-test sections of the questionnaire before and after the procedure. The results of the study were analyzed using the Statistical Package for the Social Sciences (SPSS) 26.0 Statistics Package Program, Chi-Square and Paired Sample T tests.

**Results:** There was no significant difference between the treatment satisfaction and anxiety levels of the patients in each group who underwent liver biopsy before and after the application (P > .05).

**Conclusion:** Accordingly with the results, the use of virtual reality glasses and music therapy during liver biopsy had no effect on treatment satisfaction and anxiety level.

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