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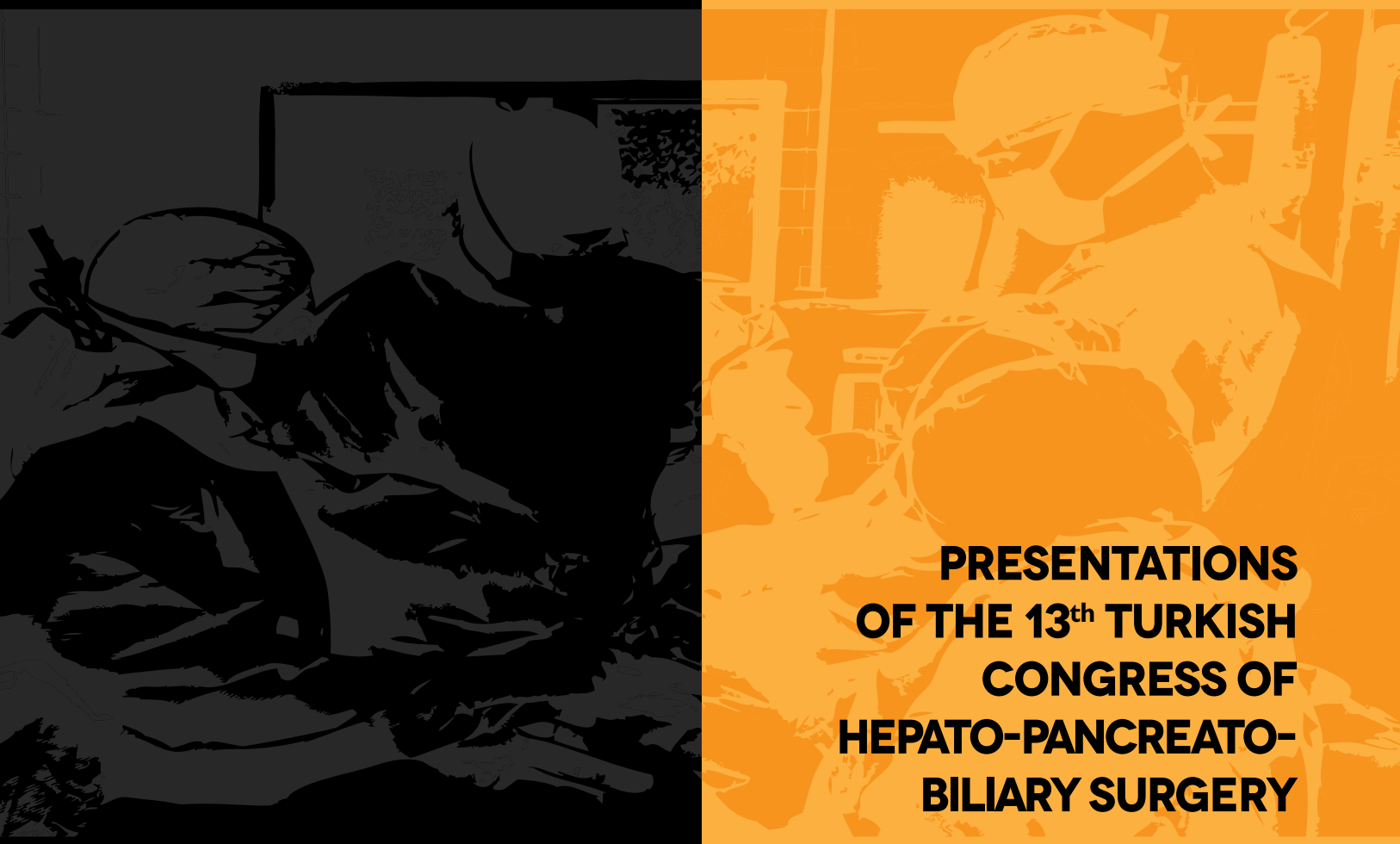

PRESENTATIONS OF THE 13th TURKISH CONGRESS OF HEPATO-PANCREATO-BILIARY SURGERY

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Dear Colleagues,

We are happy to welcome you to the 13th Congress of the Turkish Association of Hepato-Pancreato-Biliary Surgery, which is one of the first national associations founded in this division of surgery, and also to the 4th Congress of Hepato-Pancreato-Biliary Surgical Nursing.

Our congress, once again, provides a comprehensive scientific programme and an environment in which current developments will be discussed with many national and international faculty members. An important novel aspect of this congress is the organization of an E-AHPBA Postgraduate Course with a focus on the biliary tract and the European Board of Surgery Qualification (EBSQ) exam for Hepato-Pancreato-Biliary Surgery. Both events have been organized for the first time in conjunction with a national congress. I owe a great debt of gratitude to Dr. Martin Smith and Dr. Christos Dervenis, the previous and current presidents of the E-AHPBA, and to Dr. Xavier Rogiers, Director of the Division of Hepato-Pancreato-Biliary Surgery in UEMS for their support in organizing both of these events in our congress in Antalya, which is also a sign of the reputation of our association in Europe.

Another novelty in this congress is the organization of a whole-day session on the minimally invasive techniques in HPB surgery. Taking place on the final day, this course will provide you a fulfilling scientific platform with the participation of experienced laparoscopic HPB surgeons of our country. On behalf of our association, I would like to thank the congress president Dr. Ahmet Balık and the congress general secretary Dr. Mustafa Kerem, for a very successful organization and wish all of you a fruitful congress.

Sincerely.

Yaman Tekant
President, Turkish Association of HPB Surgery

Dear Colleagues,

Being aware of increasing expectations from this congress due to previous successful congresses, with a scientifically strong program that will open new horizons and gain your appreciation, we are honored to be with you in the 13th Turkish Congress of Hepato-Pancreato-Biliary Surgery and 4th Congress of Hepato-Pancreato-Biliary Surgical Nursing.

A postgraduate course, which is traditionally held in the congresses organized by E-AHPBA and conducted with the lectures of world-renowned specialists on a selected topic, will be organized in a conjunction with a national congress for the first time and the topic of "The Biliary Tract" will be focused in detail. Additionally, EBSQ (European Board of Surgical Qualification) exam for Hepatopancreatobiliary Surgery by European Union of Medical Specialists (UEMS) will be conducted for the first time in our country. We present our gratitude to Dr. Yaman Tekant, the President of the Turkish Association of Hepatopancreatobiliary Surgery, for his efforts to organize the course and the exam and to Dr. Martin Smith, the previous president of E-AHPBA, to Dr. Christos Dervenis, the current president of E-AHPBA, and to Dr. Xavier Rogiers, Director of the Department of Hepatopancreatobiliary Surgery in UEMS, for their supports.

On the 2nd and 3rd days of the congress, important topics will be handled in panels, conferences, debates, and video panels. The final day of the congress is allocated for minimal invasive hepato-pancreato-biliary surgery techniques. In the draft program, paper sessions were planned to be hold in 2 parallel sessions. However, the number of paraller sessions was then increased to 3 considering that the submitted papers were more than expected. We thank our colleagues for their great interest.

We also thank Executive Board Members of the Turkish Association of Hepatopancreatobiliary Surgery because of their supports during the organization of this congress, previous directors for their contributions to the development of the association, and all colleagues for their efforts and we remember those who are not with us with mercy and gratitude.

Best Regards.

Mustafa Kerem
Congress General Secretary

Ahmet Balık
Congress President

TURKISH JOURNAL OF SURGERY

Dear Colleagues,

Preoperative and postoperative nursing care for hepatopancreatobiliary surgeries involving surgical treatments of the liver, pancreas, gall bladder, and biliary tract is a special area. For nurses who serve with a philosophy of holistic approach from birth to death, reaching new knowledge on care, diagnosis and treatments is important to keep human health at the highest level and reflect innovations to practices. Particularly innovations in hepatopancreatobiliary surgeries, evidence-based health care, and treatment involve the period from clinic admission to home-care services after discharge. Scientific activities such as congresses and symposiums, which are held for nurses to reach necessary knowledge, to acquire skills, and to continue getting education after graduation, highly contribute to nursing care and medical treatment specific in this area.

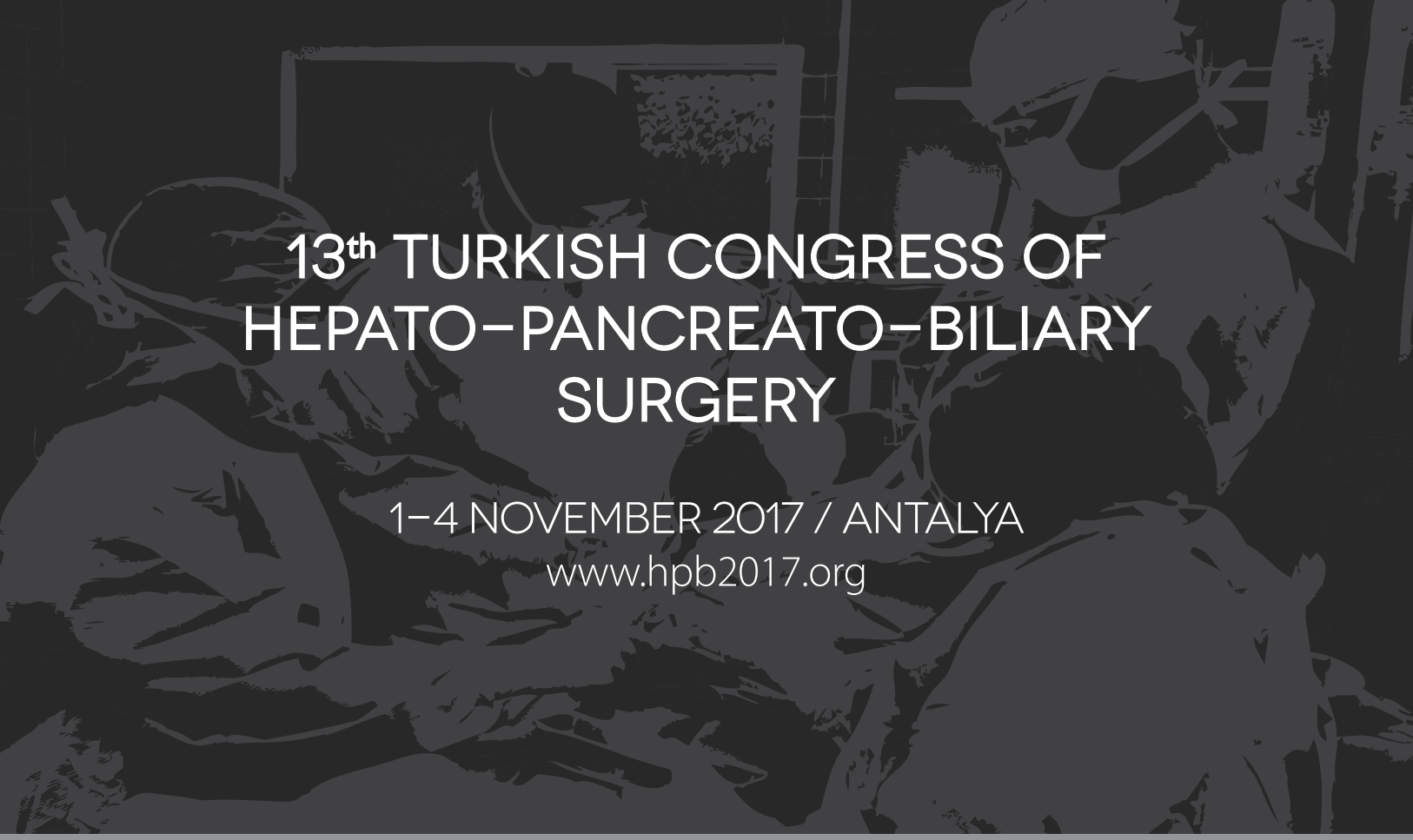
The aim of the "4th Congress of Hepatopancreatobiliary Surgical Nursing", which was organized with the abovementioned understanding, is to share our different knowledge and experiences on the area and to arrive a consensus by discussing new and effective methods in patient care with our colleagues having clinical and academic status.

In our congress, physio-pathological conditions emerging in related organs before hepatopancreatobiliary surgeries, preoperative patient preparation, pain management, accelerated recovery protocols which is a new approach in surgeries, wound care, infection control, measures to be taken for postoperative complications such as deep venous thrombosis, nursing care provided for postoperative problems, and innovations of our age such as nanotechnology and robotic surgery will be discussed in conferences, panels, and forums.

Prof. Deniz Şelimen, who organized the first Congress of Hepatopancreatobiliary Surgical Nursing, is the honorary president of this congress. Hoping that our congress, which is enriched with scientific papers, will provide new perspectives for the participants, I present my thanks to our colleagues contributing and supporting us.

Best regards.

Arzu Tuna
Nursing Congress President



13th TURKISH CONGRESS OF HEPATO-PANCREATO-BILIARY SURGERY

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ORAL PRESENTATIONS

SS-01

Patients with malignant liver tumors who consulted after the diagnosis of hemangioma

İbrahim Tayfun Şahiner[1], Arzu Poyanlı[1], Bülent Acunaş[2], Mine Güllüoğlu[3], Cem İbiş[4], Yaman Tekant[4], İlgin Özden[4]

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Introduction: Taking lessons from the experiences gained from patients who had been followed up due to the diagnosis of hemangioma in other health institutions but were found to have malignant tumors in our institution.

Method: The recordings of 15 patients treated between January 2003 and May 2016 were examined retrospectively.

Results: The median age of patients, 8 of whom were male, was 56 years (35-80 years). Ultrasonography (n:6), MR (n:6), and CT (n:3) had been used for the final diagnosis in another center. In our department, 13 of patients had MR and 2 of them were diagnosed with malignant tumor based on CT taken in the other center. In other words, ultrasonography findings of the other center were not confirmed by MR examination performed in our department and it was seen that CT and MR images of other patients were inadequate and/or misinterpreted. Ten of patients were carried out surgical intervention and 3 and 2 patients who had no chance for resection were administered chemotherapy and chemoembolization, respectively. One of patients was not performed indication of surgical resection because of the presence of metastatic liver tumor of unknown primary. Diagnostic error caused approximately 6- month treatment retardation in median (minimum 0-maximum 96). The final diagnoses were hepatocellular carcinoma in 11 patients, sarcomatoid hepatocellular carcinoma in one each patient, poorly differentiated adenocarcinoma, angiosarcoma, and metastatic liver tumor of unknown- primary.

Conclusion: Performance of high-quality MR or CT imaging and accurate interpretation of findings have the vital importance in the diagnosis of liver lesions. Performing control imaging after 4-6 months despite typical radiological findings will decrease margin of error.

Keywords: Hemangioma, liver, malignant tumor

SS-02

5-year survival rates of extended hepatobiliary resection for perihilar cholangiocarcinoma: Experience of Istanbul Medical Faculty

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Introduction: To examine the results of patients who were operated for perihilar cholangiocarcinoma between 2001 and 2012 and followed up for at least 5 years.

Method: The recordings of 53 patients operated for perihilar cholangiocarcinoma in study period were examined. After the computed tomography and/or magnetic resonance imaging for all patients, preparation for extended hepatobiliary resection was made. The postoperative risk of liver failure was decreased by using the methods of percutaneous biliary drainage, calculation of hepatectomy level, portal vein branch embolization, drinking bile, evaluation of bile quality, and

indocyanine green clearance test when needed. Adjuvant radiotherapy has been used since 2007 and adjuvant chemotherapy since 2011.

Results: Of the patients, 27 were male and 26 were female. The median age was 54 years (29-74 years). Before the surgery, 41 patients (77%) underwent percutaneous biliary drainage and 8 patients (15%) underwent portal vein branch embolization. Right hepatectomy in 27 patients (51%), left hepatectomy in 25 patients (47%), and right trisectionectomy in 1 patient were performed with caudate lobectomy (total or subtotal) and extrahepatic biliary tract resection. Portal vein resection was required to be performed in 10 patients (19%). 90-day mortality was 4% (2/53). A total of 16 patients was administered adjuvant radiotherapy and 4 patients were additionally administered adjuvant chemotherapy. Except one patient, all of them were followed up. Including deaths in hospital, the median survival was detected to be 48 months and 5-year survival rate was 41%. Five patients lived longer than 10 years; 3 are alive with non-recurrence and one with recurrence.

Conclusion: If major hepatobiliary resection is performed with low mortality in patients with perihilar cholangiocarcinoma, successful survival rates are obtained. For revealing the contributions of adjuvant radiotherapy and chemotherapy precisely, more data are needed.

Keywords: Hepatobiliary resection, cholangiocarcinoma, perihilar cholangiocarcinoma

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SS-03

Surgical approach to gallbladder tumors: 5-year experience

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Introduction: The incidence of quiet rarely seen gall bladder cancers is 1.6/100 000 in Turkey. They are incidentally detected in cholecystectomy procedures which are performed at the rates of 60-70%. Unfortunately, very few patients with gallbladder cancer access to only curative treatment choice of surgery. In this study, we aimed to evaluate our surgical approach and outcomes in patients with gallbladder cancer who were treated in our department.

Method: Twenty-one patients who were operated for gallbladder tumors or incidentally found to have gallbladder cancer in the last 5 year-period (May 2012-May 2017) were included in this study. Demographic features, preoperative imaging and laboratory results, surgical data, and postoperative follow-up results (morbidity and mortality) of these patients were examined.

Results: Our patient series involved 12 female and 9 male patients, whose mean age was 66±10 years. While suspected findings for gallbaldder ca were detected in preoperative examinations of 14 patients (67%), it was incidentally found in 7 patients (33%). When preoperative laboratory values were evaluated, CEA test scores were found be positive in 7 of 14 patients, Ca 19-9 test scores were positive in 7 of 14 patients and AFP test scores were found to be positive in 1 of 10 patients. Six of cases were considered as inoperable according to the results of preoperative radiological examinations (4 cases) or peroperatively (2 cases). Fifteen patients were performed cholecystectomy, pericholedochal/hepatoduodenal lymph node dissection and resection of liver segment 4B and 5; additional choledochal resection-hepaticojejunostomy was performed to 5 patients (33%); and due to direct invasion, additional colon resection was performed in 2 patients (13%). The pathological staging of the patients was stated as T1a (n=1), T1b+T2 (n=3), and >=T3a (n=17). The invasion rate of lymph node was 76%.

Conclusion: Gall bladder cancer is generally determined at advanced stages in elderly patients. The curative treatment for gall bladder cancer is still surgery. In the surgery, performing R0 resection and lymph node dissection in case of muscular layer involvement to patients, provide the advantage of survival.

Keywords: Gall bladder, cancer, surgery, biliary tract

SS-04

Liver resections with the ablation application in colorectal liver metastases

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Introduction: Liver resection is a treatment technique with curative potential for liver metastases of colorectal tumors. Approximately 10-15% of these patients are suitable for liver resection. Ablation-assisted liver resection is one of methods used for making inoperable patient operable for resection in liver metastases of colorectal tumors. Oncological results of this method are controversial because of the lack of comparative prospective studies. The aim of this study is to evaluate survival rates of patients undergoing only liver resection due to colorectal metastasis or resection with ablation.

Method: Prospective data of patients that were operated in Haydarpaşa Numune Hospital due to colorectal liver metastasis between the years of 2004 and 2016 were evaluated retrospectively. Clinicopathological features of the patients, survival rates, and factors affecting survival were analyzed.

Results: A total of 141 patients was operated for liver metastasis. Of them, 36 patients (25.5%) were performed liver resection with ablation. Perioperative mortality was found as 1.4% (2 patients) and morbidity as 26%. The mean duration of follow-up was 42,8 months. During follow-ups, 102 patients had tumor recurrence (72%) and 31 of them were re-operated. The 5-year whole survival rate was calculated as 58.5% and 5-year disease-free survival rate was calculated as 35.5%. In the patient group performed resection with ablation, 5-year survival rate was calculated as 41.8% and 5-year disease-free survival rate was calculated 19.6%.

Conclusion: The 5-year survival rates of patients who underwent liver resection due to colorectal liver metastasis were found to be consistent with literature. Moreover, it was observed that long-term survival could be obtained through liver resection with ablation and a potential for cure could be provided with this technique in inoperable patients.

Keywords: Colorectal liver metastases, tumor ablation, hepatectomy

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SS-05

Central hepatectomy: A multicenter experience perspective in terms of perioperative results

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Introduction: Postoperative liver failure is a rare but serious problem related to extended right and left hepatectomy and trisectionectomy. It has been reported that if these operations are performed following chronic liver disease, lipidosis, or long-term chemotherapy, the rate of the development of grade B and C liver failure can increase up to 10%. In this study, we shared our detailed experience in hepatectomy/mesohepatectomy, which is a choice for reducing the risk of liver failure in patients with a tumor located in the middle of the liver.

Method: Checking up data of totally 17 patients who were performed central hepatectomy in respect of three centers, retrospective analysis was carried out for evaluating indications, postoperative morbidity, and duration of hospitalization.

Results: Standard en-bloc resection of segment 4, 5, and 8 was carried out at all operations. The ages of the patients rangedfrom 41 to76 years and most of them were male. Among indications, the most common three diseases were colorectal cancer metastasis (65%), hepatocellular carcinoma (HCC) (18%), and neuroendocrine tumor metastasis (12%). Biliary fistula occurred in 4 patients (23%) and their drains were removed approximately on the 27thday. In two of them endoscopic retrograde cholangiopancreatography (ERCP) and stenting were needed. Moreover, percutaneous drainage was performed in one of these patients. Drains which were intraoperatively placed during the surgery were sufficient for other patients with fistula. Durations of hospitalization were 9, 14, 19, and 23 days for biliary fistula that occured in 4 patients. The mean duration of hospitalization was 8 days (5-11 day) in other patients. Grade A liver failure was observed in one patient (6%).

Conclusion: Based on our experience, we suggest that central hepatectomy is safe for avoiding liver failure in selected patients compared to extended major hepatectomy and it can provide acceptable morbidity and rates of biliary fistula despite wide transection surface.

Keywords: Central hepatectomy, liver resection, major hepatectomy, liver failure

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SS-06

Simultaneous colorectal cancer and liver metastasis resection

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Introduction: Optimal surgery strategy is controversial for the treatment of patients with colorectal cancer with simultaneous liver metastasis. In this study, it was aimed to evaluate the results of patients for whom simultaneous colorectal cancer and liver metastasis resection was performed.

Method: Data of patients who had colorectal cancer with liver metastasis and were performed simultaneous resection were evaluated retrospectively. The results of patients in the study cohort were compared according to the localization of primary tumor and the type of liver resection (major or minor).

Results: Simultaneous resection of primary colorectal cancer and liver metastasis was performed in 114 patients between January 2005 and March 2017. Primary tumor was localized on the right side in 26 patients (22%), on the left side in 42 patients (37%), and in the rectum in 46 patients (41%). Perioperative mortality occurred in 3 patients (2.6%). Postoperative complications were observed in 32 patients (28%). Most of them (75%) were between grade 1 and 3 according to the Clavien-Dindo classification. No statistically significant difference was detected among right colon, left colon, and rectal cancer groups in terms of postoperative complication rates after simultaneous resection and perioperative mortality rates. The 5-year general survival rate of the whole cohort was 54.3% and annual general survival rate was 67%.

Conclusion: In conclusion, regardless of the localization of primary tumor and hepatectomy's being major or minor, simultaneous resection of primary colorectal cancer and liver metastasis can safely be performed in selected patients without causing serious morbidity rates.

Keywords: Simultaneous, colorectal cancer, liver resection

SS-07

The relationship between macrophage migration inhibitory factor-173 G/C gene polymorphism and the development and severity of acute pancreatitis

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Introduction: Macrophage migration inhibitory factor (MIF) is a critical pro-inflammatory cytokine in the pathogenesis of acute pancreatitis (AP). -173G/C gene polymorphism in the promoter region of the MIF gene is associated with high MIF levels. There is only one study about AP and -173G/C polymorphism, whose relationship with the onset and severity of many inflammatory diseases was investigated, and the severity of the disease was determined through the Atlanta classification. In this study, the relationship between -173G/C polymorphism and the development and severity of AP, which was identified according to the Revised Atlanta Classification (RAC), was examined.

Method: The study included 62 AP patients treated in our department in 2016 and 83 healthy volunteers. Patients' demographic, clinical, laboratory, and radiological findings and etiologies were recorded. 366 base pairs of the promoter region of MIF gene were increased by using suitable primers for genetic analysis in blood samples. The products that were obtained by using Alu I restriction enzyme were viewed in 2,5% agarose gel and RFLP (restriction fragment length polymorphisms) analysis was performed.

Results: Of the patients, 35 were female and 27 were male. The mean age was 51 years. General characteristics of the patients were presented in the study. AP was mild in 37 patients, moderate in 21 patients, and severe in 4 patients. One patient with severe AP was exitus (Mortality: 1.6%). There was a significant difference between the patient and control groups in terms of genotype distribution and -173C allele frequency. While no statistically significant difference was found among mild, moderate, and severe AP groups, it was observed that CC genotype and -173C allele frequency had a tendency to be higher in the moderate and severe AP groups compared to the mild AP group. Genotype and allele distributions were shown with regard to the development of systemic inflammatory response syndrome and blood leucocyte counts.

Conclusion: This is the second study which evaluates the relationship between MIF-173 G/C gene polymorphism and acute pancreatitis and the first study that uses the RAC. The presence of higher CC genotype and -173C allele frequency in the patient group than in the control group and the absence of a significant difference in genotype distribution and -173C allele frequency

according to the severity of disease are consistent with the previous study. More comprehensive further studies on larger patient groups are needed on this issue.

Keywords: Acute pancreatitis, macrophage migration inhibitory factor, polymorphism

SS-08

Results of cholecystectomy in the treatment of mild acute biliary pancreatitis

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Introduction: While laparoscopic cholecystectomy is the golden standard method for the prevention of recurrences after biliary pancreatitis, timing of cholecystectomy is still controversial. In this study, it was planned to compare the results of early and interval cholecystectomy in patients hospitalized for acute biliary pancreatitis.

Method: 632 patients that were hospitalized to the Department of General Surgery due to acute biliary pancreatitis between January 2010 and December 2014 were evaluated retrospectively. In patients having the complaint of abdominal pain, the diagnosis of biliary pancreatitis was established considering 3-times higher amylase and/or lipase values and the detection of cholelithiasis in ultrasonography. The severity of pancreatitis was also evaluated according to CRP values in addition to the Ranson criteria. The patients with Ranson 48th hour>= 3 and 48th hour CRP>15 were evaluated to have severe pancreatitis and they were excluded from the study. Furthermore, the patients with recurrent pancreatitis and accompanying symptoms such as acute cholecystitis, choledocholithiasis, and biliary colic and those who rejected to be operated were also excluded. The patients were put into two groups. Group 1 included patients who did not have severe pancreatitis according to the Ranson score and were performed early cholecystectomy after 48 hours and Group 2 included patients who were performed interval cholecystectomy. Mann-Whitney U and x2 tests were used for statistical analyses.

Results: The study included 386 patients. The mean age was 53.25±16.42 years and 301 of them (78%) were female. There were 214 patients (55%) in Group 1 and 172 patients (45%) in Group 2. Additional comorbid diseases were found in 148 patients (69%) in Group 1 and in 117 patients (68%) in Group 2 (p=0.81). The mean timing of surgical intervention was 62 hours (range 48-120 hours) in Group 1 and 8.4 weeks (range 6-16 weeks) in Group 2. The surgery was switched to laparotomy in 8 patients in Group 1 and in 5 patients in Group 2 (p=0.78). Wound site infection occurred in 2 patients in Group 1 and in 2 patients in Group 2. Port site hernia was detected in 2 patients in Group 1 and in 1 patient in Group 2. In Group 2, 7 (4%) and 13 (8%) patients consulted to hospital due to acute pancreatitis and complications associated with gallstone during interval, respectively.

Conclusion: No effect of cholecystectomy timing was found on the rates of conversion and development of complications. However, the occurrence of recurrences and related complications during interval can be prevented by performing early cholecystectomy.

Keywords: Biliary, cholecystectomy, pancreatitis

SS-09

Our clinical experience in retrospective evaluation of the effects on morbidity, mortality, and dissected lymph node count in pancreaticoduodenectomy performed for periampullary tumors

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Introduction: Pancreaticoduodenectomy (PD) surgery is a widely accepted procedure for periampullary tumors across the world. Despite all developments in surgical techniques and mortality rates decreasing from 40% to 3%, morbidity still remains at high rates around the world (40%-50%). In this study, by revealing decreased morbidity and mortality rates and changed number of dissected lymph nodes in association with increase in clinical experience and improvement in surgical technique, it was aimed to demonstrate that quality of life and lifetime of patients could be prolonged and duration of hospitalization could be shortened

Method: The files of 100 patients who were performed PD surgery in our hospital between January 2009 and January 2017 were examined retrospectively. Patients' ages, genders, demographic features, diagnoses, previous operations, comorbid diseases, preoperative symptom and findings, laboratory values, peroperative findings, postoperative complications, 1-,3-, and 5-year sur-

vivals, and dissected lymph node counts were evaluated. The changes in morbidity and mortality rates and in dissected lymph node counts were assessed considering the obtained data and findings. In association with the increase in the number of our cases and development of our surgical technique, decreased morbidity and mortality rates and increased dissected lymph node counts were tried to be revealed.

Results: Of patients, 49 (49%) were female and 51 (51%) were male. The age range of the patients was between 22 and 84 years and the mean age was 61 years (60.2±11.9 years). The patients were put into four groups according to the year of operation as Group 1 (<2010), Group 2 (2011-2012), Group 3 (2013-2014), and Group 4 (2015-2017). Patients' 1-, 3-, and 5-year survival rates, pancreatic fistula rates, early peroperative mortality rates, complication rates, durations of postoperative hospitalization, mortality and morbidity rates according to the Dindo-Clavien classification, and also the number of dissected lymph nodes were evaluated. One-year survival rate was found to increase from 56% in Group 1 to 69% in Group 4, 3-year survival rate from 33% in Group 1 to 55% in Group 3, and 5-year survival rate from 27% in Group 1 to 38% in Group 2. Early postoperative mortality rates decreased from 28% to 7% over the years and no increase was observed in morbidity rates. The number of dissected lymph nodes increased from 9 in Group 1 (10.1+5.2) to 14 in Group 4 (12.9+6.0).

Conclusion: Our hospital became a center of hepatobiliary surgery for PD cases increasing over the years. General survival of our patients increased in line with our increased experience. Early postoperative mortality rates were decreased and no increase occurred in morbidity. Durations of hospitalization became at reasonable levels owing to appropriate and timely interventions to encountered complications. The number of dissected lymph nodes increased and LN dissection of 12 and above was evaluated to be considered as the cut-off value. Increased body mass index was found to be associated with the development of postoperative pancreatic fistula.

Keywords: Early postoperative mortality, lymph node dissection, pancreaticoduodenectomy, periampullary tumor

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SS-10

Prognostic importance of the log odds of positive lymph nodes (LODDS) in patients having ampullary adenocarcinoma and undergoing curative resection

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Introduction: In ampullary adenocarcinomas, prognostic factors affecting survival include histopathological stage of tumor, presence of lymph node metastasis, perineural invasion state, and positive surgical margin. It has been reported in many studies that the variable having the most important prognostic value is the presence of lymph node metastasis. Furthermore, various studies investigating the rates of metastatic lymph node count and metastatic/total dissected lymph node count have been published. In recent years, a technique called log odds of positive lymph nodes (LODDS) has been defined for evaluating the prognostic importance of lymph node metastasis. In ampullary adenocarcinomas, the prognostic importance of LODDS is not known. In this study, it was aimed to investigate the prognostic importance of LODDS in ampullary adenocarcinomas.

Method: In the study, a prospectively recorded database was evaluated retrospectively. The study included patients who were operated in our center in the years between 2002 and 2015 and whose follow-up recordings were complete. The patients who died in the perioperative period and had positive surgical margins were excluded from the study. LODDS values were calculated with the formula of log (metastatic lymph node count+0.5)/(total lymph node count+0.5). The LODDS groups were formed according to LODDS values, as LODDS1 (LODDS<=-1.5), LODDS2 (-1.5<LODDS<=-1.0), LODDS3 (-1.0<LODDS<=-0.5), and LODDS4 (LODDS>-0.5).

Results: The study included 41 patients (24 males and 18 females). The mean survival was found to be 72.7±7.82 months. 1-, 3-, and 5-year survival rates were detected to be 93%, 65%, and 45%, respectively. The mean LODDS value was calculated to be -1.0466 ±0.51. The patients were put into sub-groups according to LODDS values. Eight patients were put in the LODDS1 group, 18 patients in the LODDS2 group, 10 patients in the LODDS3 group, and 8 patients in the LODDS4 group. The mean survivals of the LODDS 1, 2, 3, and 4 sub-groups were found to be 114.8, 81.8, 56.6, and 25.6, respectively (K-M; p=0.002). In addition, LODDS values were found to have a strong correlation with perineural invasion and microvascular invasion (p=0.015 and p=0.001).

Conclusion: There are many studies investigating particularly the relationship between lymph node metastasis and survival in patients with ampullary adenocarcinoma, which has an advantage of relatively longer survival among periampullary cancers. The findings of our cases support the hypothesis that LODDS values are correlated with the mean survival and they can be useful for the prediction of the mean survival.

Keywords: Ampullary adenocarcinoma, lymph node metastasis, LODDS, log odds of positive lymph nodes

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SS-11

The relationship between preoperative biliary tract stenting and infection

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Although jaundice that occurs in malignant or benign lesions of the periampullary region ispleasing in terms of early diagnosis, it is also accepted as a negative clinical datum with regard to its being a risk factor for many peroperative complications. Additionally, new pathological conditions that can affect further diagnosis and treatment processes can emerge after interventional procedures performed for recovering jaundice. In this study, it was aimed to retrospectively investigate how infection parameters were affected in patients that were performed ERCP and stenting while being followed up by our department due to periampullary tumors in our hospital. Serum CRP, leukocyte, and ferritin values of these patients before and after the procedure were evaluated. The presence of a statistically significant difference in the values of patients with and without stent was examined. ERCP was performed for diagnostic purpose in 200 patients applying to the outpatient clinics of General Surgery and Gastroenterology between the dates of January 01, 2017 and March 01, 2017. Stent was placed in 23 of these patients in order to recover jaundice and prepare them for surgery. While evaluating the data statistically, it was noticed that data were not normally distributed (Kolmogorov-Smirnov, $p<0.05$). Therefore, nonparametric tests were employed. CRP and leukocyte values were found to be statistically significantly higher in patients undergoing stenting than in those not undergoing stenting ($p<0.05$). In patients having stent, the mean rank was 102,76 for CRP values and 105,38 for leukocyte values. In our study, no statistically significant difference was detected in terms of ferritin values. In conclusion, stent application after ERCP causes a significant increase in infection parameters. Early surgery without stent placement in patients whose preoperative bilirubin values are not so high will contribute to the prevention of further complications.

Keywords: Infection, preoperative, biliary tract, stent

SS-12

Lymphadenectomy in surgery of periampullary tumors

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Introduction: Periampullary cancers constitute 5% of all gastrointestinal cancers and approximately 2% of all cancers. Pancreatic cancer has low survival rates due to its aggressive course and it is ranked as the fourth among deaths from cancer. In pancreatic cancer, the rate of noticing the disease in operable stage is highly low. Despite recently developed surgical techniques and treatment opportunities after surgery, long survival cannot be reached even in the patient group that has been performed surgery. Because the longest life expectancy is for the operable group, surgery still remains the most important treatment. It has been tried to develop various strategies for reducing local and systemic recurrence in the operated group. One of the most controversial issues is the definition of ideal lymph node dissection. Minimum number of lymph nodes to be included in dissection and the width of dissection are controversial. In our study, it was aimed to demonstrate the relationship between the numbers of resected lymph nodes and metastatic lymph nodes and local/systemic recurrence and survival in patients being performed pancreaticoduodenectomy.

Method: The study included 180 patients who were performed pancreaticoduodenectomy between 2011 and 2017 and whose files were accessed. Patients' tumor type, tumor size, numbers of total and metastatic lymph nodes that were resected, surgical margin, local and systemic recurrence, survival, and disease-free lifetime were evaluated. The criteria defined by the International Study Group of Pancreatic Surgery were taken as basis for the standardization of the definition of lymph node dissection. The Mann-Whitney U test and Chi-Square test were used for the correlation of parameters.

Results: Tumor type and surgical margin were found to have strong effect on local recurrence and survival, which was statistically significant (p<0.005). While recurrence rate increased in parallel with metastatic lymph node count, survival significantly decreased (p<0.005). The mean number of total lymph node was 18.3 (9-16). No significant relationship was observed between increased number of total lymph node and recurrence and survival. In the evaluation of lymph node rates, it was found that increased rate resulted in decreased survival.

Conclusion: It can be said that an increase in the number of lymph nodes resected in pancreatectomy performed for tumors of the periampullary region does not match up to elevated life expectancy. In conditions in which lymph node dissection is definitely provided at standardized rates, metastatic lymph node count and surgical margin positivity are confronted as determiners for life expectancy.

Keywords: Pancreatic cancer, lymph node, survival

SS-13

The role of cytokines in hepatopancreatobiliary cancers

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In this study, the roles of some cytokines (IL-2, IL-6, IL-8, IL-10, and TNF-alpha) in the diagnosis of HPM system cancers were investigated. A total of 79 cases were evaluated in 5 groups in the study. The patients were distributed into the groups according to their postoperative histopathological diagnoses.

1st group: control group
2nd group: HCC group: This group included 6 patients diagnosed with hepatocellular cancer. N=6
3rd group: Gallbladder cancer group: This group consisted of 9 patients diagnosed with gallbladder cancer. N=9
4th group: Cholangiocellular cancer group: N=16
5th group: Pancreatic cancer group: N=18

The levels of IL-2, IL-6, IL-8, IL-10, and TNF-alpha were found by using the ELISA method in blood samples of the patients. In the comparison of IL-2 test values between the control and patient groups, they were detected to be significantly higher in the biliary tract cancer group than in the control group (p=0.018). The groups were evaluated in terms of IL-6 test values and they were found to be significantly higher in the gallbladder cancer and pancreatic cancer groups (p=0.034 and p=0.001, respectively). When these two significant groups were compared between each other, no significant difference was found (p=0.520). Moreover, high IL-6 levels were also found in HCC and cholangiocellular cancer (p=0.006 and p=0.003, respectively). In other words, they increased in all HPB cancers. When the groups were compared in terms of IL-8 test values, the values were detected to be higher only in the pancreatic cancer group (p=0.009). The groups were evaluated with regard to IL-10 values and significantly higher values were found in the HCC group (p=0.003). Also in the gallbladder cancer group, values were higher compared to the control group, but there was no statistical significance (p=0.078). When the gallbladder cancer group was compared with the control group, values were found to be significant in the gallbladder cancer group (p=0.013). In the evaluation of the groups in terms of TNF-alpha values, the values were significantly higher in the cholangiocellular cancer and pancreatic cancer groups (p=0.007 and p=0.044, respectively). The levels of cytokines were revealed to be significantly high in HPB system cancers. Considering the sub-groups, a significant increase was observed in the levels of IL-6 and IL-10 in HCC; IL-6 and IL-10 in gallbladder cancer; IL-2, IL-6, IL-10, and TNF-alpha in cholangiocellular cancer; and IL-2, IL-6, IL-8, and TNF-alpha in pancreatic cancer. In conclusion, we suggest that cytokines have important diagnostic values for various sub-variants of HPB cancers.

Keywords: Hepatocellular cancer, gallbladder cancer, cholangiocellular cancer, pancreatic cancer, cytokine

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SS-14

Investigation of the role of miRNAs in periampullary tumors

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Introduction: Periampullary region tumors are mostly malignant and they are among the most common causes of deaths due to cancer with their poor prognosis. In our study, it was aimed to examine the levels of miRNA in cancers in the head of the pan-

creas and to reveal molecular basis of gene treatment for these cancers, and to establish early diagnosis of periampullary cancers through gene analyses before the occurrence of massive changes in these tissues.

Method: The study included 43 patients who were operated due to cancer in the head of the pancreas in the Department of General Surgery at Gaziantep University between 2006 and 2016, performed the Whipple procedure, and diagnosed with pancreatic adenocarcinoma according to the results of pathology. Pathology specimens of these patients, which were embedded in paraffin, were taken from the archive of the pathology department. For all patients, one unhealthy (tumoral tissue) and one normal tissue (pancreatic tissue not involving tumoral tissue) samples were taken. The levels of miRNA-196a, miRNA-223, and miRNA-145 were measured in unhealthy and normal tissues.

Results: In the analysis, it was revealed that the levels of miRNA-196a, miRNA-223, and miRNA-145 were significantly lower in cancerous tissues than in normal tissues in 43 patients who was performed the Whipple procedure due to periampullary tumor.

Conclusion: Although there are studies reporting that miRNA 196a and miRNA 223 were found at higher levels in cancerous tissues, both miRNA levels were detected to be statistically low. However, the detection of low miRNA 145 levels was consistent with the results of previous studies.

Keywords: Micro RNA, Periampullary region, miRNA-196a, miRNA-223, miRNA-145

SS-15

Preoperative phase-dependent changes of platelet/lymphocyte ratio and neutrophil/lymphocyte ratio in pancreatic neuroendocrine tumors

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Introduction: Pancreatic neuroendocrine tumors (PNET) are rarely seen tumors that display different biological behaviors. The golden standard for the determination of treatment strategy in these patients is the stage of disease. However, there are differences among TNM, ENETS, and WHO systems, which are used for this disease. Therefore, new markers are needed for guiding the regulation of treatment. Our aim is to analyze the relationship between ENETS and TNM staging systems and preoperative neutrophil/lymphocyte ratio (NLR) and platelet/lymphocyte ratio (PLR) in patients diagnosed with PNET.

Method: Data of 35 patients who were histopathologically diagnosed with PNET between March 2010 and April 2017 were evaluated retrospectively. Preoperative blood parameters and clinico-pathological findings of the patients were examined. The relationship between laboratory parameters and tumor stages was also evaluated. The control group of our study consisted of healthy volunteers who were similar to those in the study group with regard to age and gender.

Results: According to the ENETS staging system, the patients were classified as stage 1 at the rate of 42.9% (15), as stage 2 at the rate of 31.4% (11) and as stage 3 at the rate of 25.7% (9). According to the TNM staging, they were classified as stage 1 at the rate of 65.8% (23), stage 2 at the rate of 25.7% (9), and stage 3 at the rate of 8.6% (3). The median NLR and PLR values in the study group were 2.4 (range: 1.2-5.2) and 127(range: 59-500), respectively. NLR values of the patients in the study group were higher compared to the control group (p=0.001). NLR and PLR values of the patients who were stage 1, 2, and 3 according to the ENETS system had a tendency to increase (p=0.004). According to the TNM system, NLR and PLR values were higher in stage 2 patients than in stage 1 patients, but this difference was not statistically significant (p=0.108). However, NLR and PLR values of stage 3 patients were significantly higher compared to other stages (p=0.0001). Moreover, NLR values were found to be higher in patients with lymph node metastasis than N0 patients (p=0.001).

Conclusion: Our findings demonstrated that neutrophil and platelet-related inflammatory reactions had a role in the development of PNET. For both staging systems, NLR and PLR values can provide beneficial data for treatment choice and early diagnosis in PNET patients.

Keywords: PNET, neutrophil, lymphocyte, platelet

SS-16

Prognostic importance of preoperative CA 19-9, neutrophil/lymphocyte, and platelet/lymphocyte ratios in patients operated for pancreatic ductal adenocarcinoma

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Introduction: At present, it has been reported that many preoperative proinflammatory markers, such as neutrophil/lymphocyte ratio (NLO), platelet/lymphocyte ratio (PLO), and CA 19-9, are significant for the prediction of the prognoses of various cancer types. In this study, it was aimed to investigate the relationship between the values of NLO, PLO, and CA 19-9 and survival in patients operated due to pancreatic ductal adenocarcinoma (PDAC).

Method: Data of 118 patients who were operated due to PDAC between September 2011 and September 2016 were evaluated retrospectively. For all patients, white blood cell level, hemoglobin level, absolute neutrophil and lymphocyte counts, platelet count, neutrophil/lymphocyte rate (NLO), platelet/lymphocyte rate (PLO), and CA 19-9 level were recorded based on the results of complete blood count analyses. Moreover, ages and genders of the patients, localization of tumor, diameter of tumor (cm), T stage, N stage, stage, perineural invasion, metastatic lymph node count, pathological features such as the state of surgical margin, and durations of follow-up and survival were also recorded.

Results: It was detected based on the results of univariate analysis that 4 histopathological and 3 preoperative serum parameters had prognostic value for decreased length of survival. Poor differentiation degree (p=0.012), the presence of perineural invasion (p=0.016), the presence of lymph node metastasis (p=0.019), positive surgical margin (p=0.017), high NLO (p=0.001), low PLO (p=0.006), and low lymphocyte count (p=0.031) were observed to be associated with poor prognosis. According to the results of multivariate analysis, poor differentiation degree (p=0.001), tumor diameter larger than or equal to 2 cm (p=0.025), positive surgical margin (p=0.014), high NLO (p=0.015), and low PLO (p=0.030) were detected to be independent risk factors for poor prognosis.

Conclusion: Among preoperative serum hematological parameters, high NLO and low PLO is associated with shortened survival in patients that have been performed resection due to PDAC and both parameters are independent prognostic parameters for survival.

Keywords: Pancreatic ductal adenocarcinoma, neutrophil, lymphocyte, platelet

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SS-17

Non-coding RNA HOTTIP as a prognostic biomarker candidate in tumors of the periampullary region

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Introduction: Periampullary region tumors are at the top of the causes of deaths due to cancer around the world. Today's markers that are used for the diagnosis and follow-up of these tumors are inadequate. In this study, it was aimed to investigate the role of the long non-coding RNA HOTTIP (HOXA transcript at the distal tip), which has been discovered in recent years and found to contribute to the development of many cancers, in the prediction of prognosis in cases diagnosed with periampullary region tumors.

Method: In the study, 57 patients who were operated due to tumors of the periampullary region in the Department of General Surgery, Uludağ University Medical Faculty between 2011 and 2016 were evaluated. The HOTTIP expression analysis was performed by using Real-Time PCR technique from the blood samples of the patients collected intraoperatively and postoperatively. Based on the obtained findings, disease-free survival/general survival rates were found by using the web-based SABiosciences PCR-Data Analysis statistical software.

Results: Intraoperative blood samples of 57 cases and blood samples of 22 healthy individuals were compared and it was found that the HOTTIP expression was significantly 8.6 times higher in the blood samples of patients (p=0.0283). It was detected that 9 of 57 patients died within the first 7 months after the surgery. In the control blood samples of 48 patients having good prognosis after the surgery, the HOTTIP expression was observed to be at normal levels. In the comparison of intraoperative blood samples of 9 cases who were exitus after the surgery and intraoperative blood samples of 48 cases, the HOTTIP expression was found to be 2.76 times higher in the blood of 9 cases (p=0.0429).

Conclusion: While further studies and validation are required, our existent findings suggest that high HOTTIP expression in blood can be a prognostic biomarker in patients diagnosed with periampullary tumor.

Keywords: Periampullary region tumors, HOTTIP, prognosis, KRAS

SS-18

High expression of microRNA-10b Is an independent prognostic parameter in pancreatic ductal adenocarcinomas

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Introduction: MicroRNAs (miRNA) are small non-coding RNA molecules that are involved in many biological processes. An increase or a decrease in the amounts of these small RNAs affects the development of many cancer types. In our study, the expressions of miRNAs, which have a role in signaling pathways and are particularly effective in the formation of pancreatic ductal adenocarcinomas (PDA), in PDA tumor cells were examined and their effects on prognosis were investigated.

Method: In our study, let7a, miRNA-10b, miRNA-124, miRNA-135, miRNA-21, miRNA-106a, miRNA-335, and miRNA-31 were evaluated in 48 cases performed surgery for PDA tumors in the Department of General Surgery, Uludağ University Medical Faculty between the years of 2004 and 2016. Tumoral and normal tissues of the patients were obtained from the Department of Pathology, Uludağ University Medical Faculty. RNA isolation, complementary DNA synthesis, and Real-time PCR procedures were respectively performed on these paraffin-embedded tissues. Statistical significance levels of the obtained data were determined by using the Mann-Whitney U test, COX regression, and Student's t-test.

Results: Compared to normal tissues, a 2.5-fold increase in miR-21 expression ($p=0.036$), a 4,2-fold increase in miR10b expression ($p=0.001$), and a 3,6-fold decrease in let7a expression ($p=0.0241$) were detected in tumor tissues. In the evaluation of 8 miRNA expressions with patients' pathological data and lengths of disease-free survival and survival with disease, miRNA-10b invasion positivity was found to be associated with short disease-free survival ($p<0.001$). According to the multivariate COX regression analysis, high expression of miRNA-10b was associated with the occurrence of recurrence independently of other parameters.

Conclusion: It is suggested in the light of findings that data on the tumor aggressiveness and the risk of metastasis/recurrence development in patient can be obtained by miRNA-10b expression profile in PDA tumors. In this way, improved life expectancy and quality can be provided by contributing to the regulation of effective treatment approaches in this patient group that is followed up by administering treatment approaches similar to those for other PDA patients.

Keywords: Pancreatic ductal adenocarcinoma, microRNA, prognosis, real-time PCR

SS-19

The importance of biomarkers in early diagnosis of pancreatic cancer: Glypican 1

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Introduction: Pancreatic cancer is one of the most important life-threatening cancer types all over the world. It is the fourth frequent cause of deaths due to cancer. Although a chance of long-term life expectancy can be obtained if it is detected in early stages, the probability of its early diagnosis is low. Gypican 1 (GPC 1) is a cell membrane protein. It has been reported that it has an important role in oncogenesis. It was demonstrated in early studies that GPC1 had a role particularly in the development of ductal adenocarcinoma and premalignant lesions of the pancreas. In our study, it was aimed to investigate the presence of a difference between patients with pancreatic cancer and healthy individuals in terms of GPC1 level in blood.

Method: The study included patients having pancreatic cancer and undergoing operation in our department between January 2016 and January 2017 and equal number of healthy volunteers. The collected blood samples were centrifuged and stored at -80 degree until reaching suitable amount. Then, ELISA and RT-PCR techniques were used for resolving GPC1 protein and its mRNA following the resolution of exosomes. The Mann-Whitney U test and Chi-Square test were used for comparing the results and the value of $p<0.005$ was accepted to be statistically significant.

Results: The study included 50 pancreatic cancer patients and 50 healthy volunteers. The ELISA test revealed that the mean protein concentration was 101.24 ng/mL in patients with pancreatic cancer and 92.68 ng/mL in healthy individuals. Considering the cut-off value of 3.9 ng/mL, this difference was statistically significant ($p<0.005$). The level of GPC1 was found to be higher in

the pancreatic cancer group with the sensitivity of 83.14% and specificity of 74%. Moreover, the mean number of GPC1 m-RNA was observed to be 4 times higher in the patients with pancreatic cancer according to the result of RT-PCR examination. This difference was also statistically significant (p<0.005).

Conclusion: GPC1 level was demonstrated to be apparently higher in the blood samples of patients with pancreatic cancer. Because the measurement of serum GPC1 level is easy with high sensitivity and specificity, it can be evaluated as a promising biomarker for the screening of pancreatic cancer particularly in individuals at risk.

Keywords: Pancreatic cancer, biomarker, early diagnosis

SS-20

Predictive effect of postoperative 1st day drain amylase value on the development of pancreatic fistula that occurs after pancreaticoduodenectomy: A Prospective Clinical Study

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Introduction: One of the most life-threatening complications occurring after pancreaticoduodenectomy (PD) is the development of postoperative pancreatic fistula (POPF). The diagnosis of POPF is established according to the value of intraabdominally located drain amylase. However, the timing for the removal of drain is controversial. The aim of this study was to determine the predictive effect of the postoperative 1st day drain amylase values on the development of POPF following PD.

Method: This prospective study was conducted on 135 patients performed PD in the Department of General Surgery in Gazi University Medical Faculty between August 2015 and August 2017. Drain amylase values on the postoperative 1st, 3rd, and 5th days were recorded. Clinic-related pancreatic fistula was determined according to the criteria of the International Study Group of Pancreatic Fistula (ISGPF) revised in 2017 (Grade B/C). The fistula that was Grade A according to the previous classification system was evaluated as a biochemical leak. The cut-off values of postoperative 1st day drain amylase were detected according to the "Receiver Operating Curves" (ROC) analysis for using in the prediction of the development of clinic-related POPF.

Results: Of patients, 56% were male and 44% were female. The median age was 62 years (24-85 years). In 18 of 135 patients (13%), grade B and C POPF developed. The median postoperative 1st day value of drain amylase was 7153 (440-138300 U/L) in patients developing fistula. The "Area Under Curve" (AUC) value was found to be 0,91 (p=0,0001; 95% CI: 0.865-0.973) for the prediction of POPF determined by using postoperative 1st day drain amylase value. In the prediction of POPF development, 1st day drain amylase cut-off value was 1363 U/L. The duration of hospitalization was longer in patients having the cut-off value of >1363 U/L (p<0.001).

Conclusion: Drain amylase value on the postoperative 1st day can be useful for early detection of POPF. The postoperative 1st day drain amylase value of >1363 U/L is a risk factor for the development of POPF. Based on these findings, drain can be removed in patients having postoperative 1st day drain amylase value of <=1363 U/L. However, further prospective studies on larger populations are needed to be conducted for a more reliable cut-off value. We are continuing to study within this scope.

Keywords: Pancreaticoduodenectomy, fistula, drain amylase

SS-21

Long-term effects of adjuvant chemotherapy on the pancreas in operated gastric cancer cases

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Introduction: Postoperative chemoradiotherapy (CRT) significantly improves disease-free survival and general survival in patients with gastric cancer who wereperformed surgery. However, while planning radiotherapy (RT), the pancreas is not considered among organs that are at risk and the toxicity of this organ is disregarded. In our prospective study, it was aimed to investigate the levels of pancreatic enzymes and the volume of the pancreas after RT.

Method: The study included 71 patients undergoing adjuvant CRT due to the diagnosis of gastric cancer. At the end of two years, 25 of the patients (35.2%) were alive. The values of fasting blood glucose, insulin, amylase, and HbA1c were evaluated before RT, after RT, and in the 1st, 3rd, 6th, 12th, and 24th months following RT. Moreover, the median pancreas volume and the median pancreas dose were calculated.

Results: Of the patients, 23 (32%) were female and 48 (68%) were male. The mean age was 55±9,2 (36-75) years. All patients received RT (45-54Gy) and CT (FUFA or capesitabine) concomitantly. The mean volume of the pancreas was 55.79±21.71 cm^3 (26.14-153.12) before RT and 21.78±6.75 cm^3 (12.06-33.01) in the 24th month after RT. The decrease was statistically significant (p=0.002). No statistically significant difference was found with regard to fasting blood glucose (p=0.209), insulin (p=0.276), HbA1c (p=0.528), and amylase (p=0.109) values among the analyses performed before RT, after RT, and in the 1st, 3rd, 6th, 12th, and 24th months following RT.

Conclusion: In gastric cancer patients treated with postoperative chemoradiotherapy, the pancreas, which is theoretically included in the area of RT, has a risk for diabetes. However, in our study, no significant finding, except decreased volume of the pancreas, was found in the 2-year long-term follow-up as in short-term outcomes. No patient was observed to develop diabetes.

Keywords: Gastric cancer, chemoradiotheraphy, long-term effects, pancreas

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SS-22

The final diagnosis in patients consulting to the emergency unit with apparently high transaminase levels

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Introduction: In clinical practice, apparently high transaminase level is generally thought to be associated with hepatitis. There is a common idea about that ischemic, viral or toxic hepatitis is more frequently encountered. On the other hand, it is seen that biliary obstruction is associated with apparently high transaminase level at a considerable rate.

Method: The hospital recordings of patients who consulted to the emergency unit with any complaint and whose transaminase levels were higher than 550 IU/L in biochemical examinations between January 2013 and January 2016 were evaluated retrospectively. The Mann-Whitney U test and Chi-square test were used for statistical analyses ($p<0.05$).

Results: In the study period, 154635 patients consulted to the emergency unit. Transaminase levels were detected to be above 550 IU/L in 6924 of the patients (4.4%). 173 patients, whose data could not be reached, were excluded from the study. The study included 6751 patients. The median age of the patients was 55 years (18-98 years) and 3567 (53%) of them were male. Of the patients, 167 (2.4%) consulted with trauma and 6694 patients (99.1%) were hospitalized for treatment. The diagnoses of cholangitis, choledocholithiasis, and pancreatitis were added in 1452 of the patients. Of the patients with biliary tract obstruction, 97 had periampullary region tumor and 15 had cholangiocarcinoma. It was observed that the most common cause of apparently high transaminase level was pancreaticobiliary diseases (n=6363, 94.2%). It was detected that hepatitis secondary to ischemic or primary hepatocellular damage was the cause of apparently high transaminase level in 162 patients (2.4%).

Conclusion: The most common cause of apparently high transaminase level is pancreaticobiliary diseases. Patients should be examined considering these etiologies first of all.

Keywords: Hepatitis, pancreaticobiliary, transaminase

SS-23

Evaluation of cardiovascular mortality risk score and epicardial fat thickness in gallstone disease

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Introduction: Gallstone disease (GSD) and coronary artery disease (CAD) are the disorders that share the same risk factors and frequently seen in the society. Risk factors such as age, obesity, diabetes, and hypercholesterolemia are included in

the etiologies of both diseases. Although increased cardiovascular mortality has been found in GSD patients, there is no study conducted on this issue in our country. Our aim is to determine the 10-year risk for cardiovascular mortality in GSD patients with the help of "SCORE Turkey" and to evaluate epicardial fat thickness (EFT), which is an indicator of metabolic syndrome.

Method: This prospective study included GSD patients in our hospital between January and August 2017. Demographic features and laboratory findings of the patients were recorded. The "SCORE Turkey" and EFT values were calculated. T-test, Chi-square test, Mann-Whitney U test, and logistic regression analysis were used for statistical analysis.

Results: The study included 65 patients (44 GSD and 21 controls). No statistically significant difference was found between two groups in terms of age, body mass index, diabetes, and CAD ($p>0.05$). In the study and control groups, the median age was 53 (40-77) years and 57 (45-69) years; the female/male ratio was 28/16 and 18/3; the mean total cholesterol was 199.8±38 and 28.9±5.7 ($p>0.05$); the median fasting blood glucose (FBG) was 102 (80-210) and 94 (84-128) ($p<0.05$); frequency of smoking was 19 (47.5%) and 2 (9.5%) ($p<0.05$); the mean EFT was 4.57±0.97 and 2.99±0.52 ($p<0.05$); and the median value of SCORE Turkey was 3 (0-33) and 3 (1-13) ($p>0.05$), respectively. In the univariate regression analysis, gender, FBG, smoking rate, and EFT were found to be statistically significant ($p<0.05$). In the multivariate logistic regression analysis, retrospective variable selection was preferred and smoking rate and EFT were found to be significant ($p<0.05$). The cut-off value for EFT was determined to be 3,4 with the ROC curve and the AUC value was detected to be 0.91.

Conclusion: This has been the first study evaluating EFT and SCORE Turkey values in GSD patients. The detection of similar SCORE Turkey values in two groups might have resulted from that the patients kept their blood pressure and cholesterol levels under control. Smoking can affect the development of GSD due to its toxic effects. Moreover, impaired glucose tolerance suggests the impairments in the dietary habits of patients. From a different viewpoint, patients having EFT value above 3,4 according to the result of echocardiography and smoking should be evaluated for GSD.

Keywords: Cholelithiasis, biliary tract, general surgery, cardiology, coronary artery disease

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SS-24

The effect of silymarin which was given to the rats undergoing experimental ischemic preconditioning during liver resection before hepatectomy on liver regeneration

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Introduction: In this study, it was aimed to investigate the effect of silymarin administration before partial hepatectomy and ischemic preconditioning (IPC) on liver regeneration.

Method: Thirty rats were put into 5 randomized groups (n=6). In the sham group, only hepatic manipulation and portal triad dissection were performed. In Group 2 (partial hepatectomy), only 70% hepatectomy was performed. In Group 3 (Silymarin+Partial hepatectomy), Silymarin was administered at the dose of 200 mg/kg for 6 weeks and 70% hepatectomy was performed after 6 weeks. In Group 4 (IPC+Silymarin+Partial hepatectomy), IPC and 70% hepatectomy was performed after giving Silymarin for 6 weeks. In Group 5, IPC+partial hepatectomy was performed without giving silymarin. The values of serum AST, LDH, Bilirubin, TNF-α, and IL-6 were analyzed 48 hours after hepatectomy. Tissue samples were histopathologically evaluated for mitosis count, congestion, necrosis, cytoplasmic vacuolation, and presence of neutrophil. PCNA (proliferating cell nuclear antigen) antibody was examined immunohistochemically. Liver regeneration rate was calculated by using the formula of (%)=Remnant Liver Weight/Whole Liver Weightx100.

Results: The values of IL-6, TNF-alpha, LDH and AST were lower in Group 3, which was given silymarin, than in Group 2, but this difference was insignificant. On the other hand, these values were significantly higher in Group 4 than in Group 5 ($p=0.025$). The rate of necrosis in the remnant liver tissue 48 hours after partial hepatectomy was observed to be at the highest level in Group 4. Moreover, it was lower in Group 3 than in Group 2 ($p=0.001$). Similarly, congestion rate was significantly lower in Group 5 than in Group 4 ($p=0.001$). In the group given silymarin, mitosis rate was found to be higher compared to the group undergoing only partial hepatectomy ($p=0.03$). In the comparison of Group 3 and Group 2, PCNA activity was detected to be significantly higher in Group 3 ($p=0.03$). Regenerated liver weight (%) was higher in the group giving silymarin than in the group performed only hepatectomy ($p=0.001$). It was also higher in Group 5 than in Group 4 ($p=0.49$).

Conclusion: The use of silymarin before hepatectomy and IPC during hepatectomy increase liver regeneration.

Keywords: Liver resection, ischemic preconditioning, silymarin, liver regeneration

SS-25

Surgical treatment of liver hydatid cyst disease in percutaneous treatment age

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Introduction: Human echinococcosis infection occurs due to the transmission of larval forms of the *Echinococcus* tapeworms. Cystic echinococcosis is a disease that is endemically seen in some regions of the world. Percutaneous aspiration, injection, and re-aspiration (PAIR) is the first treatment choice for Gharbi type 1-2 liver hydatid cyst. However, while some types of hydatid cysts are successfully treated with PAIR, surgery still remains to be a treatment choice for some patients. Surgical treatment choice in hydatid cyst cases is for patients who are PAIR-resistant and have cyst-biliary tract relationship and secondary bacterial infection or obstruction. In this study, it was aimed to investigate the indications for hydatid cyst disease and long-term outcomes of open surgical treatment.

Method: Data of patients who were operated due to liver hydatid cyst in our department between January 2005 and December 2016 were evaluated retrospectively.

Results: Fifty-five patients were operated due to liver hydatid cyst. The median age of the patients was found to be 41,5 (17-74) years. The most common surgical indication was cyst-biliary tract relationship (67.2%) and the second most common one was unsuccessful PAIR intervention (14.54%). The mean duration of follow-up was 31.7 months. Surgical procedures that were performed to the patients were partial cystectomy (89%), hemihepatectomy (3.6%), sectorectomy or segmentectomy (7.2%). 23 patients had a history of preoperative interventions. In only one of these patients, postoperative ERCP procedure was required. On the other hand, postoperative ERCP+ papillotomy was required in 28% of patients not having a history of preoperative intervention.

Conclusion: Although PAIR is a current treatment method for some patients with liver hydatid cyst, surgeons contend with liver hydatid cyst particularly because of complicated cases. Surgery should be kept in mind as a treatment choice for cases who are PAIR-resistant and have cyst-biliary tract relationship and other complications.

Keywords: Surgery, echinococcosis, liver, hydatid cyst, PAIR

SS-26

Retrospective evaluation of percutaneous treatment of the liver hydatid cyst

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Introduction: The aim of this study was to determine the rate of percutaneous treatment versus surgical treatment and evaluate the results of treatment in liver hydatid cyst.

Method: Percutaneous intervention was performed for 324 patients due to the diagnosis of liver hydatid cyst between January 2011 and December 2016. 44 pediatric patients (age range: 4-16 years) were excluded from the study. 280 patients (age range: 17-87 years) were included in the study and they were examined with regard to age, gender, cyst localization, cyst diameter and count, being recurrence or primary, association with the biliary tract, ERCP, surgical necessity, and complications.

Results: Of the cases, 161 were female and 119 were male. The mean age was 42,06 years and the mean cyst diameter was 8,3 cm (3-19 cm). The localization of the cyst was in the right lobe in 229 patients, in the left lobe in 32 patients, and bilobular in 19 patients. Of them, 209 patients had a single cyst, 52 had 2 cysts, and 19 had 3 and more cysts. No complication developed in 228 of 280 patients performed percutaneous intervention and a regression was observed in cyst size and serology in the follow-ups. Biliary fistula occurred in 26 patients (9.2%). These patients were performed ERCP. In 12 patients who was performed ERCP, regression was seen in biliary fistula and cyst and abscess occurred in 14 patients. Surgery was performed due to partial response to treatment in 11 patients (those having many cysts and having type 3 and 4 cysts) and non-compliance with treatment in 7 patients. Eight patients were operated because of the occurrence of abscess without biliary fistula. Of patients who were performed percutaneous procedures, 240 were treated non-operatively. Anaphylactic reaction did not develop in any patient. 314 patients were surgically treated in the same time interval.

Conclusion: Percutaneous treatment of hydatid cyst is successfully performed by experienced clinics in suitable patients. With the percutaneous treatment, type 1 cysts, type 2 cysts, and some type 3 cysts and type 4 cysts having fluid content, postoperative recurrent cysts and collections can be treated. It can also be successfully used by experienced clinics in patients refusing surgery and in patients that cannot tolerate surgical therapy and general anesthesia because of being too weak and old.

Keywords: Hydatid cyst, percutaneous intervention, ERCP

SS-27

The evaluation of our results in the surgery of liver hydatid cyst between 2011 and 2016

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Introduction: In this study, it was aimed to evaluate patients operated in our department due to the diagnosis of liver hydatid cyst retrospectively.

Method: The data of patients that undergoing surgery for the diagnosis of liver hydatid cyst in our department between 2011 and 2016 were obtained by examining their files in the archive. Performed surgical procedures and complications were evaluated.

Results: In our department, totally 314 patients were operated between the years of 2011 and 2016. Of them, 163 were female and 151 were male. The mean age was 33.5 years (12-75 years). According to liver localization, cysts were located in the right lobe of the liver in 241 patients, in the left lobe in 38 patients, and bilobular in 35 patients. Surgery was recommended to 269 patients because of primary cysts, to 5 patients because of recurrence, and to 40 patients after percutaneous intervention. Cy stotomy±unroofing±omentoplasty±outward drainage was performed to 222 patients, partial cystectomy±outward drainage to 21 patients, pericystectomy non-anatomic resection to 19 patients, left hepatectomy to 2 patients, right hepatectomy to 1 patient, laparoscopic cystotomy to 29 patients, and abscess drainage to 20 patients. Intraoperative biliary fistula repair was carried out to 78 patients (24.8%). ERCP was performed to 38 patients in preoperative period (12.1%), to 39 patients in postoperative period (12.4%), and to 7 patients in both preoperative and postoperative periods (totally 26.7%). Fifteen patients in whom postoperative collection developed and 5 patients with recurrence were treated through percutaneous intervention. 8 patients were re-operated. Hepaticojejunostomy was performed in one patient because of progressive structure in the choledochus. Two patients underwent primer repair over T-tube. Five patients were re-operated due to recurrence (Type 3 cyst).

Conclusion: Postoperative biliary fistula and ERCP were observed at lower rates in patients who were performed primer biliary tract repair during the surgery. It was observed that most of occult biliary leakages closed spontaneously. Postoperative biliary fistulas were treated through ERCP at the rate of 95%. However, ERCP can be unsuccessful in the cases with hydatid cyst that destruct the main biliary tracts near the hilus of the liver; therefore, we suggest that primer biliary tract repair will be suitable for these patients during the surgery.

Keywords: Liver, hydatid cyst, biliary fistula, ERCP

SS-28

Our PAIR experiences in liver hydatid cyst

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Introduction: Hydatid cyst (HC) is a disease that is endemically encountered in our country and occurs with the transmission of larvae of the *Echinococcus Granulosus* parasite. These cysts are localized in the liver at the rates of 50%-70%. This cyst often locates in the right lobe and it is generally single. Current treatment choices for liver HC are medical treatment (albendazole), surgery, and percutaneous drainage. In this study, it was aimed to examine the results of percutaneous treatment in patients diagnosed with type 1-2 liver HC.

Method: 60 HC patients treated with PAIR between the years of 2016 and 2017 were examined retrospectively. As sclerosing agents after aspiration, pure ethanol and hypertonic saline solutions were injected into the cyst. After the insertion of catheter, free drainage was allowed and catheter and cavity irrigation was performed intermittently. If catheter was clogged, it was revised or changed. Even if drainage stopped, catheter was kept for at least one week because of the risk of cystobiliary fistula occurrence particularly in centrally-localized and large cysts. During the follow-up, if circadian drainage decreased below 10 cc, cavitography was performed. Besides, if there was no fistula, sclerosis was done and catheter was removed. If drainage was not decreased but began to include bile juice, ERCP was performed with papillotomy and plastic stent was inserted when needed.

Results: The diameters of cysts varied between 5 and 19 cm. Of the patients, 48 were female and 12 were male. Hydatid cyst associated with biliary tract was detected in 5 patients. While 3 patients were treated with ERCP+endoscopic sphincterectomy, 2 patients were performed open surgery. Follow-up was done by ultrasonography and computed tomography.

Conclusion: In conclusion, we think that percutaneous treatment is a primarily preferred method in the selected HC cases owing to being minimally invasive and scarless and providing low morbidity and mortality rates and short length of hospitalization.

Keywords: Liver hydatid cyst, percutaneous treatment, surgical treatment

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SS-29

Comparison of in vitro effectiveness of scolicidal agents in hydatid cyst

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Introduction: Although it is relatively easy to establish the diagnosis of hydatid cyst, which is a zoonotic disease, through imaging techniques, its effective medical treatment is still unavailable. The curative treatment of the disease is mostly surgery or interventional radiological procedures. Inactivation of living scolexes is one of the basic principles of curative treatment. In this study, some scolicidal agents which are frequently used in the hydatid cyst fluid as in vitro were evaluated in terms of their scolicidal effectiveness regarding to time.

Method: With this prospective in vitro study, fluids aspirated from patients who were diagnosed with liver hydatid cyst during the treatment were examined. Living scolexes which were not stained with eosin and protected their ameboid movements and oval shape under the microscopy, were put into six microtubes. Afterwards, 0.9% NaCl, 15% NaCl, 10% povidone-iodine, 1,5% chlorhexidine-15% cetrimide (savlon solution), 0.000024% hydrogen peroxide -0.24% sodium hypochloride (Crystalline solution), and 0.4% chlorhexidine were respectively added into the microtubes. At the 2nd, 5th, 10th, and 20th minutes, samples were taken from the mixtures and scolexes were counted. The number of living scolexes /number of total scolex amount was calculated. The conformity to normal distribution was evalauted by the Shapiro-Wilk test. ANOVA and LSD tests were used for comparing variables.

Results: All scolicidal agents added to hydatid cyst fluids were insufficient for inactivating all scolices at the 2nd and 5th minutes. As time-related, chlorhexidine showed the highest effectiveness in the shortest time. Approximately 93% of scolices died at the second minute by chlorhexidine. A significant difference continued at the 10th minute between NaCl and 15% NaCl. 10% Povidoniodine, Savlon, and Chlorhexidine inactivated all of scolices at the 10th minute. 15% NaCl was found completely efficient only at the 20th minute.

Conclusion: It was observed that time-related effectiveness of the scolicidal agents that were used in this study increased. In terms of time, chlorhexidine became prominent. An ideal agent should have rapid scolicidal effectiveness without local and systemic side effects and should be easily accessible and low-cost. As an important reason for preferring scolicidal agent, side-effect profile should be examined on further studies and effectivity-reliability analysis should be performed for finding ideal scolicidal agent. This is the only possible way to reduce recurrence rates after surgery or percutaneous drainage.

Keywords: Ecinococcusus granulosus, hydatid cyst, chlorhexidine, scolicidal agent, time

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SS-30

Superselective transarterial chemoembolization as an alternative to surgery in symptomatic/growing liver hemangiomas

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Introduction: The aim of this study was to reveal the effectiveness of superselective transarterial chemoembolization with bleomycin-lipiodol mixture in symptomatic/growing liver hemangiomas.

Method: The recordings of 29 patients were evaluated retrospectively.

Results: Twenty-six patients had abdominal pain. 3 patients had asymptomatic/mild symptomatic growth as the reason of treatment. Sessions were performed once to 21 patients, twice to 7 patients, and three times to 1 patient. In median 4 months (2-8 months) after the first application, the mass volume was reduced by 46% (10-92) in median and decreased from 636 (226-8435) cm^3 to 380 (28-4710) cm^3 in median ($p<0.01$). In patients whose complaints did not regress and/or who had large lesions with blood supply both from the right and the left hepatic arteries (staged treatment) [the first volume: median 1276 (441-8435) cm^3], the second session was performed. After the second session, the mass volume decreased from median 806 (245-4710) cm^3 to 464 (159-2150) cm^3 ($p<0.01$). Postembolization syndrome lasting longer than a week occurred in 3 patients and allergic reaction that required steroid therapy occurred in one patient. Pain was regressed or recovered in 20 of 26 symptomatic patients (77%). After the last treatment session, in patients re-scanned after having documented regression in the lesion dimensions (n:27), no growth was observed in the median (margins) 18-month (8-43) follow-up. On the contrary, lesion dimensions were determined to reduce at the second control ($p<0.01$).

Conclusion: With bleomycin-lipiodol mixture, transarterial chemoembolism is a potential alternative to surgery in symptomatic/growing liver hemangiomas. It provides a reduction in all lesions and pain control at satisfying level in symptomatic patients. Without any additional treatment, continuing reduction of lesions make us think that waiting at least 6 months will be better for the second session. Two sessions may be required for centrally localized and very large (>1000 cm^3) lesions.

Keywords: Bleomycin, embolization, hemangioma, lipiodol, superselective

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SS-31

Evaluation of the effect of intraperitoneally applied tacrolimus on liver regeneration in major (70%) hepatectomy model after experimental Pringle Maneuver in rats

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Introduction: It is known that regeneration begins after the experimental liver resection. The Pringle Maneuver has been used for decreasing blood loss during hepatectomy operations for many years, but this procedure has some potential harmful effects on liver regeneration. After liver transplantation operations, patients are given immunosuppressive therapies in order to prevent graft rejection. These immunosuppressive drugs can also lead to various side effects on liver regeneration. In our study, we investigated the effects of tacrolimus on liver regeneration in partial hepatectomy performed rats in cases in which the Pringle Maneuver was performed or not.

Method: This study was performed on 35 male Wistar Albino rats whose weights ranged between 200 grams and 300 grams. The subjects were randomly put into five groups: Group 1: those whose abdomens were opened with no other process, Group 2: those performed 70% hepatectomy, Group 3: those performed the Pringle Maneuver for 15 minutes +70% hepatectomy, Group 4: those performed 70% hepatectomy+1 mg/kg/day i.p. tacrolimus for 5 days, and Group 5: those performed the Pringle Maneuver for 15 minutes+70% hepatectomy+1 mg/kg/day i.p. tacrolimus for 5 days. All rats were sacrificed on the postoperative 7^{th} day. The remnant liver tissues were weighed and their weight indices were formed. Their mitotic indices were calculated by staining remnant liver tissues with phosphohistone H3 and they were examined under a light microscope.

Results: In the comparison of the Pringle Maneuver+70% hepatectomy+tacrolimus group with the control group in terms of mitotic index and weight index, no statistically significant difference was found in both indices. Moreover, there was no statistically significant difference between the 70 % hepatectomy+tacrolimus group and the control group with regard to mitotic index and weight index.

Conclusion: Suppression of regeneration can pose a risk after liver transplantation performed with small-volume grafts. Therefore, the investigation of the effect of combined tacrolimus and Pringle Maneuver has become important after transplantations

particularly performed with segmental liver graft. It was demonstrated in our study that the use of tacrolimus had no negative effect on liver regeneration.

Keywords: Hepatectomy, liver regeneration, Pringle Maneuver, tacrolimus

SS-32

Do mesenchymal stem cell and VEGF gene transfection have an effect on regeneration after the major liver resection?

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Introduction: The aim of this study was to demonstrate the accelerating effect of mesenchymal stem cell (MSC) and vascular endothelial growth factor (VEGF) gene transfection on liver regeneration.

Method: This study was performed on 38 Wistar albino rats in 4 different experimental groups. Group 1: Control (sham operation), Group 2 control (70% liver resection), Group 3: study (70% liver resection + systemic MSC transplantation), Group 4: study (70% liver resection+systemic MSC transplantation+VEGF transfection). All experimental groups were sacrificed on the postoperative 14th day. VEGF, FGF (fibroblast growth factor), PDGF (platelet derived growth factor), EGF (epidermal growth factor), TGF (transforming growth factor), HGF (hepatocyte growth factor), and ALR (augmenter liver regeneration) factors were analyzed in the liver tissue. For determining the action mechanism of VEGF gene, VEGF-receptor, Angpt-1, and Angpt-2 (angiopoietin-1 and 2) levels were evaluated. Biochemical parameters that showed liver function were measured. Liver tissues in every group were histopathologically evaluated for demonstrating liver tissue regeneration. Moreover, after sacrificing, weight and volume of each rat's liver were measured.

Results: In the comparisons of the groups, it was found that MSCs expressed the growth factors in the study groups of Group 3 and Group 4 compared to the control groups, which was statistically significant. In the same way, VEGF receptor, Angpt-1 and Angpt-2 levels in the liver tissue were compared and they were detected to be significantly higher in the study groups. In the comparison of liver volume and weight with Group 2, the difference was significant in favor of Group 4. In the histopathological examination, the study groups were found to be significantly higher compared to Group 2, except portal inflammation.

Conclusion: It is seen that MSC and VEGF-transfected MSCs accelerate many parameters related to regeneration after major liver resection. It was found that they histologically increased the number of biliary tracts and performed hepatocyte proliferation through growth factors released with paracrine effect. This action also accelerates recovery by providing a supportive effect on liver function, volume, and weight. The application of MSC and gene transfection in selected patients that will undergo major liver resection in the clinic seems promising for the prevention of postoperative liver failure.

Keywords: Mesenchymal stem cell, liver resection, VEGF, liver regeneration

SS-33

Braun anastomosis reduces the problem of delayed gastric emptying that occurs after pancreaticoduodenectomy: A randomized controlled study

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Introduction: Delayed gastric emptying (DGE) is an important complication seen after pancreaticoduodenectomy (PD) at the rate of 15-30%. The purpose of this study is to evaluate the effectiveness of Braun anastomosis on the problem of delayed gastric emptying after PD.

Method: Ninety-four patients who were performed PD between November 2015 and June 2017 were included in this study. The patients were randomized into two groups by using sealed envelope method, as the group who was performed Braun anastomosis (n=47) and the group who was not performed (n=47). Postoperative pancreatic fistula and DGE description were made according to the recommendations of Pancreas Surgery Study Group. Nasogastric tubes were inserted in all patients and they were removed in case the postoperative drainage was <200 mL. Liquid food intake started on the postoperative 3rd day and solid food intake started on the postoperative 5th day.

Results: Delayed gastric emptying was seen in 21.2% of the patients. Six of the patients with DGE were in the Braun group and 14 of them were in the group who was not performed Braun. There was not a significant difference between the two groups in terms of some parameters such as age, gender, BMI, duration of operation, peroperative blood loss, period of starting solid food, biliary leakage, intraabdominal or gastrointestinal bleeding, intraabdominal abscess/collection, wound site infection, and reoperation ($p<0.05$). NG tube staying period, duration of hospitalization, the rates of DGE and pancreatic fistula, and total morbidity rate were found significantly lower in the group that was performed Braun anastomosis compared to the group who was not performed Braun ($p<0.05$).

Conclusion: It was observed that performing Braun anastomosis after PD decreased the rate of morbidity incidence and duration of hospitalization.

Keywords: Braun anastomosis, pancreaticoduodenectomy, delayed gastric emptying

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SS-34

A multicenter experience in terms of perioperative results of resectional laparoscopic liver surgery

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Introduction: Laparoscopic liver surgery has made great progress over the world in recent years and particularly minor resections of anterior segments have been begun to be performed laparoscopically in most of the cases in some centers. The aim of this study is to present a multicenter perspective related to laparoscopic liver resection experience in our country.

Method: Data of patients who were performed laparoscopic liver resection due to malignancy, suspicion of malignancy, or benign diseases for which surgery was planned due to symptoms/bleeding were retrospectively evaluated in 13 centers. Data were recorded on a specially designed database and analyzed in detail. The patients undergoing partial pericystectomy and cystotomy due to liver cystic diseases were excluded from the study.

Results: A total of 194 patients were included in the study. Of them, 177 patients, whose data were reached while writing the presentation, were included in the final analysis. 54% of the patients were male and the mean age was 45 years (18-79 years). The most common five indications for resection were found to be colorectal cancer metastasis (42%), liver hydatid cyst (10%), hemangioma (8%), hepatic adenoma (6%), and hepatocellular carcinoma (5%). 30 (17%) patients were performed major hepatectomy (including right posterior sectorectomy) and 147 (83%) were carried out minor liver resections such as anatomic

bisegmentectomy, single segment resection, total pericystectomy or metastasectomy. 47% (32) of minor resections were bisegmentectomies and the most frequent procedure among them was left lateral sectorectomy (64%). 20 patients (11%) were performed simultaneous multi-organ resection. The most common of them was simultaneous lower anterior resection performed for rectum cancer with liver metastasis. Clavien-Dindo I-IV morbidity occurredin 16% of the patients and mortality in one patient (0.006%).

Conclusion: Our study examining a multicenter experience in laparoscopic liver resection makes us think that laparoscopic liver surgery is also successfully performed in our country.

Keywords: Laparoscopy, liver resection, hepatectomy, segmentectomy

SS-35

Surgical treatment of biliary tract injuries occurring during the cholecystectomy

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Biliary tract injuries associated with cholecystectomy are quite often. Leakages and strictures developing in association with these injuries can be treated by endoscopic and surgical methods. In this study, it was aimed to evaluate the demographic data, clinical pictures, and results of surgical treatment of the patients with biliary tract injuries. Fifty-seven patients with biliary tract injury who were treated surgically at three university hospitals between 2005 and 2016 were examined. Fifty-one of these injuries (89%) occured during laparoscopic cholecystectomy and 6 of them occurred during open cholecytectomy. Forty (70%) of the patients were female and 17 of them were male and their median age was 48 years (range: 18-82 years). Only 16 injuries (28%) were noticed during the operation. According to the Strasberg Classification, the numbers of injuries were 23 for type E2, 11 for type E4, 9 for type E1, 7 for type E3and 7 for type B, C, or D. The median period from the injury to repair operation was 51 days (Ranges 0-5 200). Four patients (7%) had accompanying hepatic artery injury. Large majority of the patients (47.83%) were performed Roux-en-Y hepaticojejunostomy. The most common early complications were injury infections seen in 16 patients (28%) and biliary leakages seen in 8 patients (14%).Mortality came into existence in two patients. One of the patient died due to complications associated with cirrhosis and the other patient died due to cardiac reasons. Excellent or good results were obtained in median 32-month (range: 1-120) follow-up (Terblanche 1st degree 30 patients, 2nd degree 15 patients). The results in the other 10 patients were medium or poor. Although good results may be obtained in most of the patients with biliary tract injuries by surgical treatment, morbidity and mortality associated with surgical interventions maintain their importance.

Keywords: Biliary tract injuries, Roux-en-Y hepaticojejunostomy, biliary tract strictures, laparoscopic cholecystectomy

SS-36

Results of surgical treatment in iatrogenic biliary tract injuries

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Introduction: Iatrogenic biliary tract injuries have high morbidity and mortality rates and require emergent clinical and surgical interventions. In this study, patients who were treated because of iatrogenic bile duct injury were evaluated.

Method: Patients who were treated because of iatrogenic bile duct injury at the Department of Surgery, University of Gaziantep between January 2010 and September 2017 were retrospectively evaluated considering their demographic data, type of injury preoperative diagnostic tests, surgical treatment methods, and complications.

Results: The study included 50 patients. The male/female ratio was 21/29 and their ages ranged between 18 and 76 years (mean 43.92 years). Initial operation was laparoscopic (39) and open (11) cholecystectomy and indication for operation was acute cholecystitis or cholelithiasis. The complaints were abdominal pain and jaundice in 31 patients and biliary drainage from the drain in 10 patients. Injury was detected intraoperatively in 9 patients. Diagnostic tests were ERCP (16), endoscopic stent (5), and percutaneous transhepatic cholangiography (4). The mean preoperative laboratory values were as follows: total bilirubin: 5.22, direct bilirubin: 4.04, ALT: 89.22, and AST: 63.50.

Surgical procedures were Roux-en-Y hepaticojejunostomy (31), primary repair (6), T-tube (11), choledocoduodenostomy (1) and portoenterostomy (1). Biliary fistula (6), stricture (2), and wound infection (6) were observed as complications. Mortality was seen in 3 patients.

Conclusion: The aim of surgical treatment is to provide drainage of the bile to the proximal gastrointestinal tract, to prevent the formation of cholangitis and stone, and to prevent the development of end-stage biliary cirrhosis. Tension-free anastomoses should be performed on healthy tissues. As the level of injury increases in the biliary tree, the risk of complications elevates. Early or intraoperative detection of iatrogenic injuries decreases the rates of complications. Surgery can be postponed with late interventional methods.

Keywords: Surgery, hepaticojejunostomy, biliary tracts, injury

SS-37

Successful treatment of biliary and vascular injury occurring during the laparoscopic cholecystectomy

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The most frightening complication of laparoscopic cholecystectomy is biliary tract injury with vascular injury. While delayed diagnosis may result in the death of patient, patient can recover with the appropriate management of surgical intervention and treatment during surgery without the need for performing liver transplantation. A 32-year-old female patient, who was taken into laparoscopic cholecystectomy surgery for the diagnosis of cholelithiasis, was switched to open surgery because of intraoperative bleeding and it was noticed that the right hepatic artery and the right and left bile ducts had been cut through the full thickness and anterior branch of the right portal vein had been injured. Primary repair had been performed for the right hepatic artery with cardiovascular surgery and by repairing the right anterior portal vein, hemostasis had been provided. She was referred to our center for the repair of the biliary ducts. As soon as she was transferred to our hospital by ambulance helicopter, she was taken into the operating room. It was observed that there was a demarcation line in the right lobe of the liver and the right and left biliary duct were cut through full thickness and distal choledoch was closed with a clip. No pulse was felt in the repair of the right hepatic artery. It was seen in the continuation of dissection that the anterior region of the right portal vein was narrowed with sutures that were put for hemostasis. The right hepatic artery anastomosis was renewed by using a 3-cm autologous graft taken from the inferior mesenteric vein of the patient. In the same way, narrowed right anterior portal vein of the patient was repaired by using a 2x1 cm-peritoneal patch graft taken from the anterior abdominal wall of the patient. Vascular structures were clearly viewed in peroperatively performed Doppler USG. Biliary tract repair was completed with hepaticojejunostomy and patient was taken into the intensive care unit as intubated. She was extubated on the postoperative 1st day. She was discharged from the hospital on the postoperative 10th day since she had no problem in her follow-up. She is now in the postoperative 5th month and she lives without any problem. Patient's own inferior mesenteric vein and peritoneum can be used in the repair of vascular injuries occurring during laparoscopic cholecystectomy. We suggest that this easy use of autologous grafts should be remembered by surgeons.

Keywords: Biliary tract injury, vascular injury, autologous graft

SS-38

Results of our patients followed due to liver injury

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Introduction: The mostly injured organ in abdominal traumas is the liver. Medical monitoring and surgical procedures are used in the management of liver injuries (LI). In this study, it was aimed to retrospectively evaluate the results of patients followed up due to LI.

Method: This study retrospectively evaluated the patients who were followed up in our department due to LI between 2010 and 2017. Demographic data of the patients, type and degree of injury, need for blood replacement, length of hospitalization, need for intensive care, additional injuries, and mortality rates were assessed.

Results: 102 patients that were followed up for LI were determined. Of them, 74 were male and 28 were female and the mean age was 39 years (17-73 years). 56 of injuries were due to motor vehicle accidents, 29 were due to falling down from height and

other blunt traumas, 13 were firearm injuries, and 4 were penetrating stab wounds. With regard to LI degree, 20 patients had first degree, 35 had second degree, 35 had third degree, 9 had fourth degree, and 3 had fifth degree injuries. The diagnosis of LI was established with tomography in 99 patients and with laparotomy in 3 patients. While 31 patients were performed surgical treatment, others were done medical monitorization. In 18 of operated 31 patients, isolated LI was intervened. In other 13 patients, intraabdominal organ injuries accompanying LI were intervened. Primary repair was performed to 15 patients, segmentectomy to 2 patients, right hepatectomy to 1 patient, and packing to 2 patients. Nine patients had liver laceration, but no intervention was performed because there was no active bleeding. Two patients became exitus intraoperatively. Biliary leakage was detected in 6 operated patients. While ERCP with sphincterotomy and stenting was performed to 2 patients, no additional intervention was performed to 4 patients.

The mean hospitalization length of the patients was 12.7 (2-90) days. The number of patients followed in the intensive care unit wase 27 and the mean duration of follow-up in the intensive care unit was detected as 3.9 (1-72) days. Blood replacement was required in 40 patients during hospitalization. Mortality was observed in 8 patients (7.8%). 83 patients had accompanying injuries of other systems. Among these, the most frequent ones were rib fracture, hemothorax, pneumothorax, and vertebral and extremity fracture.

Conclusion: Liver injury is a condition that can present with mortality and it should be treated with a multidisciplinary approach.

Keywords: Trauma, liver injury, multitrauma, non-operative

SS-39

Our diagnosis and treatment approaches in biliary tract traumas; a series with 35 cases

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Biliary tract injuries generally occur due to iatrogenic reasons. It is seen as a frequently encountered complication, notably in laparoscopic cholecystectomy and also encountered in hepatobiliary surgical interventions. The rates of biliary tract injuries have increased in conjuction with laparoscopic cholecystectomy, which has become popular recently. The complication rate in open cholecystectomy isbetween 0.1% and 0.2%and it varies from 0.2% to 0.8% in laparoscopic cholecystectomy. In this study, the experiences of our hospital, which is a reference center for biliary tract traumas, will be discussed. In our study, biliary tract injuries that occurred in our hospital or were referred to our hospital between 2010 and 2017 were investigated. The causes of injuries were retrospectively evaluated in terms of time of diagnosis, diagnostic tools, biliary tract injury type according to the Strasberg-Bismuth classification system, and time and method of treatment. It was detected that a total of 35 patients (17 male and 18 female) were treated in our hospital due to biliary tract trauma. During the laparoscopic cholecystectomy, injury occurred in 24 patients. Ten of them were detected in intraoperative period. Six of them were treated with Roux-N-Y hepaticojejunostomy, 2 with primary suture, and 2 with T-tube drainage. 19 of 35 patients were included in the class E according to the Strasberg-Bismuth classification system. Of 25 patients who were postoperatively detected, 10 were diagnosed by ERCP, 9 by CT, 2 by percutaneous transhepatic cholangiography (PTC), and 1 by MRCP. Diagnostic and treatment methods used for biliary tract injuries show a change. Because acute abdomen and intraabdominal bile were detected in 12 patients, the biliary tract was evaluated through emergent laparotomy. Roux-N-Y hepaticojejunostomy was performed in 16 patients, t-tube in 5 patients, and primary suture in 7 patients. While stent was placed in the treatment of 1 patient who was diagnosed by PTC, 3 patients diagnosed by ERCP were treated by placing stent. No exitus patient was observed after the treatment. Iatrogenic biliary tract injury is a surgical complication that often develops during the surgery of upper gastrointestinal system. Its diagnosis can be established intraoperatively or in a delayed postoperative period. While classical surgical techniques can be used for the treatment of this condition, it can also be treated with endoscopic and percutaneous non-surgical techniques at present. Maximum effort should be performed in order to avoid from complications. Therefore, experience and dissection performed in accordance with safe cholecystectomy technique are the most important rules.

Keywords: Biliary tract injuries, types of diagnosis, types of treatment

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SS-40

Outreach hepato-pancreato-biliary surgical team

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Introduction: Major hepato-pancreatico-biliary surgery constitutes a sub -group requiring special experience in the area of general surgery. Trauma or complications that may occur in minor cases can create a condition requiring major surgery. In this case, while a correct decision and an appropriate surgical treatment increase successful results, a contrary situation may lead to

a catastrophic picture. Lack of equipment and experience made the situation more complex although ending the operation and referring the case to an more advanced center is the most commonly preferred method in the presence of major trauma and iatrogenic biliary tract injury, this may sometimes lead to serious medico-legal problems. When necessary, as an alternative way to this situation, an experienced surgical team can be invited to join the operation. Considering the lack of equipment in the institution, the experienced team may bring their surgical and retractor sets and special suture materials.

Method: During 5-year period between 2012 and 2016, an outreach team joined the operation because of emergency call from different institutions. The team was called because of iatrogenic bile duct injury during cholecystectomy (4), intraoperative major vascular injury (1), major liver injury (3), and pancreas-duodenum injury (1).

Results: The patients with biliary tract injury were followed-up in their institutions after the operation. While one of the patients with major liver injury died, one of the patients was followed-up in the same institution where he was operated and the other patients with vascular, duodenum and pancreas injury were admitted to our institution.

Conclusion: Hepato-pancreato-biliary outreach team provide help when necessary. It is important for both, the treatment of the patient and physical and psychological support to medical attendant. However, for being able to receive calls that may come from longer distances, bureaucratic regulations are required.

Keywords: HPB surgery, major HPB surgery, support team

SS-41

Evaluation of the volume and anatomic structures of the liver of donor candidates by a 3-dimensional printer model that was obtained from the data of computed tomography before living donor liver transplantation

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Liver is one of the most important organs in our body which has an ability of regeneration against the physical and chemical injuries. The liver has thousands of functions such as detoxification, protection from infection, regulation of glycaemia, and many protein syntheses including coagulation factors and enzymes in metabolism. Increased liver transplantation has also elevated the rate of shortage in liver transplantation from cadaver and living donor. In our country, living donor liver transplantation is performed more commonly. The safety of living donor is important. Misdetection of the anatomic locations of vascular structures and misestimating of liver volume endanger the safety of living donor. The number of donor deaths reported around the world is increasing. Our aim is to facilitate surgery planning with 3-dimensional printed organ before transplantation and to provide the safety of donor. This model will enable the surgeon to understand anatomic structure better. General processes of 3-dimensional model include reconstruction, digital preparation, and 3-dimensional printing. We aim to conduct our study with a Stratasys J750 3D printer. First of all, liver model should be viewed by computed tomography. Then, 3-dimensional printing organ and then the main blood vessels will be stained by using transparent polymer. 3-dimensional imaging will be an important clinical tool for planning complex surgeries and it seems superior to conventional 2-dimensional imaging techniques in terms of viewing anatomic structures. Moreover, it provides more accurate navigation as a physical model in surgical operations of critical regions. In conclusion, liver model obtained with 3-dimensional printer technology will be one of the important inventions for preoperative planning of living donor liver transplantation.

Keywords: Liver transplantation, 3-dimensional printing, living donor, modeling

SS-42

Hepatic venous anatomy, reconstruction, and its results in successive 100 living donor liver transplantations: A single-center experience

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Introduction: Easy and unproblematic venous drainage in liver transplantation with partial grafts is important for graft function and survival. With this aim, many venous reconstruction techniques that include the removal of the middle hepatic vein, most of which are applied under total cava clamping and also use different biomaterrials have been defined. In this study, hepatic venous anatomy, reconstruction techniques, and survival rates were examined in 100 successive liver transplantation procedures performed by the right liver graft.

Method: Hepatic venous distributions of 100 grafts were shown at Figure 1 according to the Varotti classification. The middle hepatic vain was not involved in the graft in any case. In implantation, all venous anastomoses were completed with lateral clamping performed to the retrohepatic cava. Total cava clamping was not performed in any case. Right hepatic vein (rHV) patency in the recipient was expanded towards the cava almost in all cases (>=2.5 cm). All vein openings in >5 mm diameter (such as inferior-rHV, seg 5 and 8 veins) were drained into the vena cava by using PTF and/or cadaver venous grafts. Depending on the tissue, continuous suture technique with 4-6/0 prolene was preferred. After implantation, Doppler USG examination was performed intraoperatively and every day for the postoperative 3 days and then when needed.

Results: The mean graft/recipient weight ratio of the cases was 1.2±0.3 (min 0.7; max 2.1). Reconstruction was performed to vein in inferior –rHV in 26 cases and in seg 5 and/or 8 vein in 33 patients. Besides 9 cases (HAT-3, cardiac-2, sepsis-1, PV thrombosis-1, small-for-size-1 and pneumonia-1) who died in early postoperative period (<30 days), a total of 7 patients including 6 patients developing primary disease recurrence and one patient developing MI died in the late postoperative period. (median: 315 days, min 105; max 769). Early or late graft loss that connected with hepatic vein narrowing or thrombosis was not observed. In diagnostic imaging performed to grafts having dysfunction in postoperative early period, rHV anastomosis stricture was suspected in 4 cases. After invasive measurements, 10-12 mm 'self-expendable' stent was placed to 3 (3%) patients and clinical recovery was provided.

Conclusion: Venous implantation of the right liver grafts can be performed under lateral vena cava clamping without impairing hemodynamic balance and kidney perfusion safely with regard to rapid and easy drainage.

Keywords: Anatomy, hepatic vein, liver transplantation, reconstruction, survival

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SS-43

Comparison of Milan and UCSF criteria in liver transplantation performed in hepatocellular carcinoma

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Introduction: The selection of the most appropriate candidate for liver transplantation (LT) in hepatocellular carcinoma (HCC) is still controversial. In this study, it was aimed to evaluate long-term survival of HCC patients that were performed LT by using the criteria of Milan and University of California San Francisco (UCSF) in our department.

Method: In this study, prospectively collected data of the patients were evaluated retrospectively. Between the years of 1998 and 2016, 115 of 563 LTs were performed due to HCC. The patients were put into groups according to their preoperative radiological results and postoperative pathological results. The groups were as follows: Milan before LT + (n=84), Milan -/UCSF + (n=14) before LT, UCSF– (n=77) before LT, Milan + (n=77) after LT, Milan -/UCSF + (n=16) after LT, UCSF– (n=22) after LT.

Results: The mean duration of follow-up was 56.6 (1-176) months. According to the evaluations before LT, 5-year survival rates of group of Milan+, Milan-/UCSF+, and UCSF- were 79.4%, 61.4% , and 11% (p=0.00), respectively. According to the evaluations after LT, 5-year survival rates of the groups were 80%, 67%, and 26% (p=0.0001), respectively. Similarly, tumor recurrence rates of these groups were 5.2%, 6.25%, and 22.72% (p=0.034), respectively. Moreover, the presence of microinvasion in the explant liver was a negative factor for 5-year survival (74.2% vs 39.6%, p=0.003).

Conclusion: The Milan and UCSF criteria in appropriate candidates can safely be used in the selection of the most appropriate candidate for LT in the treatment of HCC.

Keywords: Hepatocellular carcinoma, liver transplantation, Milan criteria, UCSF criteria

SS-44

Portal vein reconstructions in living donor right lobe liver transplantation

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Introduction: Anomalies detected in the branches of the portal vein during living donor liver transplantations are the challenging procedures for surgeons in terms of donor safety and reconstruction techniques to be performed in the recipient. In this study, it was aimed to present our experience on patients who were performed portal vein reconstruction.

Method: The living donor liver transplantation patients who were carried out portal vein reconstruction between May 2012 and April 2017 were evaluated retrospectively. Preoperative triphasic computed tomography was performed for all patients. In the operation, different reconstructions were done depending on the distance between portal branches. Patients' demographic features, reconstruction techniques that were realized, development of thrombus, and mortality rates were evaluated.

Results: This study included 25 patients. Of them, 18 were male and 7 were female. The median age was 53 years (range 14-70 years). Reconstruction was performed in 2 portal branches to 23 patients and in 3 portal branches to 2 patients. In 17 patients, anterior and posterior branches were side by side sutured with 5/0 polydioxanone. In 2 patients, the graft was placed between the branches by suturing with 5/0 polydioxanone. And, in 6 patients reconstruction was performed after forming a single lumen with cadaveric graft around the whole lumen following side-by-side suturation of portal branch walls. The cadaveric grafts that were used were saphena in 2 patients and pericardium in 2 patients. The mean duration of follow-up was 23.68 months (range, 3-60 months). Portal vein thrombosis did not occur in any patient during follow-up. Mortality occurred in one patient because of the hepatopulmonary syndrome in the 1st month.

Conclusion: Preoperative portal branch anomalies should be avoided. Portal vein reconstruction is a safe procedure. Portal vein thrombus risk and mortality rates were detected low.

Keywords: Liver, portal vein, reconstruction, transplantation

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SS-45

Results of living donor liver transplantation in geriatric patients

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Introduction: Survival after liver transplantation is increasing with the development of surgical techniques, anesthesia, infection control, and immunosuppressants. Therefore, the profile of patients who are candidates for transplantation is expanding. Additionally, the population of geriatric patients is gradually increasing. In this paper, it was aimed to present the results of living donor liver transplantation in geriatric patients.

Method: Patients at the age of 60 years and above, who were performed living donor liver transplantation between May 2012 and April 2017, were evaluated retrospectively. All patients were performed preoperative triphasic computed tomography. Their demographic data, etiologies, presence of additional comorbid diseases, postoperative complications, and survival rates were assessed.

Results: This study included 184 patients. The median age was 63 years (range, 60-74 years). Comorbid diseases were observed in 100 (54.3%) patients. The most common comorbidity was diabetes mellitus and coronary artery disease. The etiology was hepatitis B in 58 patients, cryptogenic carcinoma in 52 patients, hepatocellular carcinoma in 52 patients, hepatitis C in 43 patients, autoimmune in 19 patients, and alcohol in 11 patients. The mean duration of follow-up was 28 (range, 4-59) months. Biliary complication was seen at 26 patients (14.1%) and mortality was seen at 32 patients (17.3%) (Mortality was seen at 14 patients in 3 months). In patients, 1st year survival rate was 92%.

Conclusion: Acceptable complication and survival rates are detected in geriatric patients. Therefore, the decision of transplantation should not be postponed due to age and comorbid diseases in geriatric patients.

Keywords: Geriatrics, liver, transplantation

SS-46

Last 3-year analysis of liver transplantations that were performed to patients with hepatocellulary cancer

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Hepatocellular carcinomas (HCC) which are the most common primary malignancy of liver highly accompany with liver cirrhosis. The most effective method for the treatment of this group of patients especially in the early period is accepted to be liver transplantation. The most important criterion in selection of the appropriate patient is accepted to be tumor burden. We aimed to evaluate the consistency between the tumor burden detected before the operation and the results arising with the postoperative histopathologic examination by analyzing the documents of patients undergoing transplantation due to HCC. The files of 155 patients who were carried out liver transplantation in the Center of Organ Transplantation of Akdeniz University Medical Faculty in the last three years were analyzed retrospectively. It was detected that liver transplantation was planned for 24 of these 155 patients due to HCC. The data of the number of tumors and their sizes were gathered by examining radiological evaluations of these 24 patients before the operations and the data of the number of tumors and detected sizes were compared by evaluating postoperative histopathologic examinations of hepatectomy material. It was observed that HCC occured in 19 of 24 patients on the basis of cirrhosis. All of the patients were evaluated with computerized tomography (CT) in the postoperative period. It was detected that the size of tumor in the final pathology and the size of tumor detected in CT of the three of the patients were same and the size of tumor of one patient was smaller. In spite of these, the tumor burdens of 18 patients detected in the final pathological examination were larger than the tumor burdens calculated in the preoperative radiological examination. Moreover, there were no tumors in the histopathological evaluations of 2 patients. Consequently, it should be kept in mind that the tumor burden detected in the radiological examinations at the time of diagnosis of hepatocellulary cancers may be larger than in reality and we consider that it would be useful to evaluate the liver transplantation as the first treatment option.

Keywords: Hepatocellulary cancer, histopathology, liver transplantation

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SS-47

Minimal invasive pancreaticoduodenectomy, our early period results

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Introduction: Although minimal invasive pancreatic surgery has its share of rapidly improving laparoscopic surgery, laparoscopic pancreaticoduodenectomy (LPD) is still the most difficult one among abdominal surgeries. The aim of this study is to share the results of our patients who were performed LPD.

Method: Thirty three patients who were carried out invasive LPD at the Gazi University Hospital and Gülhane Training and Research Hospital between July 2015 and July 2017 years were included in the study. Pancreaticoduodenectomy was performed by total laparoscopic technique (completing all of resection and anastomoses laparoscopically) in 9 patients and by hybrid laparoscopic technique (performing resection laparoscopically, but anastomoses from the place of mini-laparotomy from which specimen will be removed) in 24 patients. Demographic features, duration of surgery (minute), blood loss (mL), total number of dissected lymph nodes, tumor diameter (cm), surgical margin (R0/R1), duration of hospitalization (day), complications (pancreatic fistula, delayed gastric emptying, bleeding, biliary leakage, intrabdominal abscess and others), and mortality (deaths within postoperative 30 days or at hospital) rates were analyzed. Complications were assessed according to ISGPS.

Results: Of the patients, 16 were female and 17 were male. The mean age was 53.1±10.4 years. Body mass index (BMI) was 26.2±2.4 kg/m^2. While tumor was benign in 12 patients, it was malignant in 21 patients. 28 patients were performed pylorus-preserving PD and 5 were carried out classical PD. The median duration of surgery was 320 (range: 180-450) minutes and the median blood loss was 200 mL (range: 100-580 mL). The median total number of dissected lymph nodes was 17 (range: 10-37). The surgical margin was R0 in 29 patients (87.8%). Total morbidity rate was 36.3% (n=12). Pancreatic fistula was seen in 5 patients, delayed gastric emptying in 9 patients, biliary leakage in 2 patients, intraabdominal bleeding in 2 patients, intraabdominal abscess in 1

patient, wound site infection in 1 patient, and pulmonary complication in 2 patients. The median duration of hospitalization was 7 days (range: 1-28). Postoperative mortality rate was detected as 9.1% (n=3).

Conclusion: Our early experiences in LPD reveal that this technique is applicable and reliable.

Keywords: Minimal invasive, pancreaticoduodenectomy, laparoscopic

SS-48

The effect of oral nutrition support in cachectic patients with pancreatic cancer

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Pancreatic cancer is a leading factor causing cachectic weight loss and muscle mass loss. The effect of oral nutrition support with ERAS protocols on these factors and complications is a less known subject. In addition to quality of life, clinical parameters such as anastomosis safety and re-admission to hospital cannot be supported by evidence-based medical data because they are dependent multiple factors. 152 patients with pancreas cancer and 73 patients with papillary tumor, who were operated by the same surgeon between the years of 2012 and 2016 and had weight loss more than 10%, were examined as a case series. The patients who could not complete adjuvant chemotherapy were excluded from the study. The inclusion criteria for the patients were the age older than 35 years, weight loss above 10% at the time of surgical decision, the absence of a remote metastasis, and the absence of a psychiatric disorder and liaison psychiatry was consulted when needed. The patients whose Karnofsky performance status was <50 and who could not complete the questionnaire and monitorization were not included in the study. Because the patients with papillary tumor were not expected to lose weight, they were included as the control group. ERAS protocol was performed in all patients. Patients completed the quality of life questionnaire at the beginning and at the end of the 8th week. All patients were evaluated at the EU HPB council. After being discharged from the hospital, all patients were given oral nutrition support with a product including HMB and a special product for cancer patients or diabetic product. Descriptive and comparative statistical methods were used for analysis. The patients were compared in terms of anastomosis leakage, re-admission to hospital, minor complication rate, and quality of life. QLQ-C30 values were lower in the cachectic patients with pancreas cancer than in those with papillary tumor. While the median baseline QoL was 61±2.61 in the patients with pancreas cancer, it was measured as 74±3.05 ($p<0.05$) after the Overall Quality of Life nutrition support. Fatigue symptom score was 47±3.81 after the operation. After the nutrition support and before the chemotherapy, it was 31±469 and 24±7.85, ($p<0.05$) respectively. In those receiving nutrition support, the rates of anastomosis leakage (Grade A, B, or C), re-admission to hospital, and minor complication rates were statistically lower. In conclusion, the rate of complications in patients with pancreatic cancer decrease with the nutrition support and their quality of life increases.

Keywords: Pancreatic cancer, nutrition support, cancer, quality of life

SS-49

A new classification for portal vein resection in locally advanced pancreatic cancers: anatomic location and surgical approach

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Introduction: In the surgical treatment of borderline pancreaticoduodenal cancer (B-PDC), involvement diameter should be considered in the resection of portal and mesenteric veins (PV-SMV). In this study, anatomic classification used in the approach to PV-SMV resection in B-PDC patients and the results of performed surgical procedures were evaluated.

Method: Prospective data of all patients who were performed pancreaticoduodenectomy (PD) in the last 4-year period (between June 2013 and June 2017) were evaluated retrospectively and the patients undergoing PV-SMV were included in this study. Their demographic features, tumor size, surgical data, hospitalization length, postoperative and morbidity and mortality rates were recorded. PV-SMV involvement classification was performed according to the portal confluence (PC). The results of the patients were comparatively evaluated in 3 groups (Level I, Level II, and Level III).

Results: This study included totally 40 patients. Of them, 24 were male and 16 were female and their mean age was 56.4±8.2 years. There was no significant difference among the groups in terms of demographic features. Tumor diameter was higher in the group of Level III. Only 4 patients were given neoadjuvant therapy. While the frequency of primary repair was higher in Level I, graft repair was more common in Level III. Autologous graft was performed in 3 of each 4 graft performed patients. The duration of hospitalization was significantly higher in Level III. While postoperative complication rate was found to be higher in Level III, the difference among the groups was not statistically significant. While 1 patient died due to the progress of thrombosis on the postoperative 1st day, other patient died due to sepsis following the development offistula.

Conclusion: In conclusion, while involvements with Level I localization are more suitable for primary repair, the repair of Level III involvements is more difficult and they mostly require graft application. Accordingly, we have the opinion that this new anatomic classification will be beneficial for determining surgical approach to PV/SMV in B-PDC cases, as well as the area of involvement.

Keywords: Locally advanced pancreatic cancer, pancreaticoduodenectomy, portal vein resection, anatomic classification

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SS-50

Pancreaticojejunostomy performed after pancreaticoduodenectomy (PD) "technical detail": Jejunal anastomosis involving the pancreas (PEJA anastomosis)

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Pancreatic leakage is the most significant factor associated with death in many pancreaticoduodenectomy series. It is regarded as increasing the cost, making the hospitalization period longer, serious and life threatening factor. Various surgical techniques have been defined for reducing anastomosis leakage to the minimum level. The best defined predisposing factor in anastomosis leakage after pancreaticoduodenectomy has been demonstrated as the experience of surgeon and center. When anastomosis is performed in normal and soft pancreas tissue, fistula often occurs and there is no difference among the different techniques. When we examined various techniques, advantages and disadvantages for pancreaticojejunostomy, we made a new technical definition that would decrease the weaknesses of anastomosis. This technique was defined as an end-side anastomosis invaginating the pancreas to the jejunum between the jejunum and pancreas. In this anastomosis, No-8 non-dissolvable double sutures that would involve the pancreatic tissue were used. With this technique, tension over anastomosis and trauma of sutures on the pancreas tissue were reduced to the minimal level and vascularization of the stump was preserved. At the beginning, this technique was assessed in different neoplasias of the head of the pancreas on successive 15 patients (8 male and 7 female). Thirteen patients were older than 70 years (range: 60-83 years). In this small series, 1 patient died due to ischemic perforation in the sigmoid colon. Upper gastrointestinal system bleeding occurred in 2 patients and they were treated conservatively. Normal soft pancreas tissue was observed in 5 patients. Pancreatic fistula and abscess were not observed in any patient. None of the patients was discharged with a drain. Gastric emptying problem was not encountered for the patients as well. The weakest point of anastomosis seems to be potential leakage risk from the needle holes. Interrelatedly, biochemical leakage was detected in 6 patients due to the technique itself and embedding sutures in the first postoperative days, but this condition did not create any clinical problem. This biochemical leakage spontaneously disappeared within 3-5 days. In conclusion, jejunal anastomosis involving the pancreas can be defined as a reliable surgical procedure that reduces leakage to minimal level even if the pancreas tissue is normal and soft.

Keywords: Pancreas, anastomosis, technique

SS-51

Mortality and morbidity conclusions in patients performed pancreaticoduodenectomy with vascular resection

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Introduction: In recent years, radicalization of the surgery of pancreatic tumors has gradually increased. This radicalization provided an increase in series of especially pancreaticoduodenectomy (PD) with vascular resection. However, mortality and morbid-

ity rates in patients who were performed vascular resection are still controversial. In our study, we aimed to present the results of morbidity and mortality of patients for whom we performed PD with venous resection.

Method: The data of 164 patients who were performed PD due to pancreatic tumor between June 2015 and June 2017 were examined retrospectively. While portal and mesenteric vein (PV/SMV) resection was performed in 18 of the patients (group 1), standard PD was performed in 146 of them (group 2). Venous resection, pancreatic fistula, delayed gastric emptying and the definitions of other complications were made according to the recommendations of ISGPS. Technique of venous resection was categorized as tangential or segmental resection. In the tangential resection, primary vascular repair (type 1) or repair with patch (type 2) were performed and end-to-end anastomosis (type 3) or repair with graft (type 4) were performed in segmental resections. The two groups were compared in terms of demographic data, surgical findings and the results of morbidity and mortality.

Results: The comparative results of the parameters such as demographic data, surgical findings, and morbidity and mortality of the patients related to two groups were presented.

Conclusion: PD with venous resection can be performed in selected patients to provide negative surgical margin, but it has high morbidity rate. When the findings are taken into consideration, further studies are needed including large case series and long follow-up periods.

Keywords: Vascular resection, pancreaticoduodenectomy, vascular invasion

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SS-52

Our vascular interventions in Whipple procedures: an analysis of 30 cases

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Introduction: In the treatment of periampullary tumors, whipple surgery is still the mostly preferred curative procedure and accepted as the "gold standard". R0 resection is aimed during the surgery and vascular invasion is no more inoperability criterion at present. During the Whipple procedure, performing vascular interventions are obligatory time to time. In this study, it was aimed to examine the vascular problems encountered in the patients undergone Whipple surgery and vascular interventions that were performed and their reasons.

Method: It was detected that vascular problems were encountered in 30 of 275 patients who were performed Whipple surgery due to periampullary tumor by examining the surgical recordings from the database of the hospital between 2010 and 2017.

Results: Tumor invasion was detected in 14 patients and traumas occurred during the dissection in 16 of them. Of the patients having tumor invasion, invasion was seen in the portal veins in 7 patients, in the hepatic arteries in 2, in the superior mesenteric veins in 2, in both portal vein and superior mesenteric vein in 1, and it was seen in both portal vein and right hepatic artery in 1 patient. Partial tangential resection and primary repair were performed in 7 cases having tumor invasion, resection and anastomosis in 4, and resection and anastomosis with polytetrafluoroethylene graft was carried out in 2 of them. Six of the other traumatic 16 patients had injury in portal vein, 5 of them in the right hepatic artery, 2 of them in superior mesenteric vein, 1 of them in superior mesenteric artery, 1 of them in portal vein and splenic vein, and 1 of them in mesenteric vein and portal vein. Primary repair was performed for these patients. Postoperative mortality rate of the patients undergone Whipple operation due to periampullary tumors was 14.18% and the postoperative mortality rate of the patients in whom we encountered vascular problems was 23.3%. In these patients, performing more surgical procedures than normal and disease's being in the advanced stage are accepted as the factors that increase the mortality and morbidity.

Conclusion: Vascular complications and interventions during the Whipple procedure will be increasingly encountered. Before the operation, radiological evaluation of the case, determination of the appropriate approach plan, and keeping the necessary vascular sets available will minimize the complication risk. Primary anastomosis should be preferred at first in the patients whose resections are needed due to tumor invasion; however, continuity should be provided in the patients in whom long segment resection was performed.

Keywords: Periampullary tumor, vascular injury, Whipple procedure

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SS-53

Xanthogranulomatous cholecystitis: Our center experience

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Introduction: Xanthogranulomatous cholecystitis is a rarely encountered variant of chronic cholecystitis. In this study, it was aimed to evaluate diagnosis, treatment, and perioperative findings of patients in whom xanthogranulomatous cholecystitis was detected in histopathological examination.

Method: In this study, cholecystectomy performed in 2803 patients were retrospectively evaluated between the January 2010 and December 2016. The patients who were pregnant and whose operation could not be begun as laparoscopic were excluded from the study. Patients were grouped according to the results of histopathological examination. Xanthogranulomatous cholecystitis- detected patients were put into Group 1 and cholelithiasis, cholecystitis, and malignancy- detected patients were examined as Group 2. The procedures of the patients were initiated as laparoscopic. The groups were compared in terms of demographic findings, the presence of morbidity, imaging examinations, conversion rates, and progress of postoperative complications.

Results: There were 45 patients at Group 1 and 2758 patients at Group 2. Group 1 included 27 female patients (60%) and Group 2 included 2051 female patients (74%) (p=0.04). The median age was 53 years at Group 1 and 49 years at Group 2. Additional comorbid disease was in 19 patients (42%) at Group 1 and in 827 patients (30%) at Group 2 (p=0.10). Leukocytosis was detected in 25 patients (55.5%) at Group 1 and in 275 patients (10%) at Group 2 (p<0.0001). In the ultrasonographic examination, wall thickness was increased in 88.8% of patients at Group 1 and in 24% at Group 2 (p<0.0001). In 5 patients at Group 1 (11%), there was a radiological suspect of preoperative malignancy. The results of intraoperative frozen section biopsy did not support malignancy. It was switched to open surgery in 24 patients (53.3%) at Group 1 and in 61 patients (2.1%) at Group 2 (p<0.0001). In the postoperative period, complication occurred in 5 patients (11.1%) at Group 1 and in 32 patients (1%) at Group 2 (p<0.0001). Relaparoscopy and/or relaparatomy were not performed in any patient. While mortality was seen in 1 patient at Group 1, it was not seen at Group 2.

Conclusion: Surgery is quite difficult in xanthogranulomatous cholecystitis. In these patients, the rates of switching to open surgery and detection of wall thickness are higher. Intraoperative diagnosis is also difficult. In the presence of clinical suspect, frozen section analysis can be performed.

Keywords: Cholecystitis, xanthogranulomatous, laparoscopy

SS-54

Our surgical experiences in iatrogenic perforations after ERCP

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Endoscopic retrograde cholangiopancreatography (ERCP) is the imaging process of choledoch and pancreatic channel under fluoroscopy by injecting contrast material through Vater's ampulla, passing duodenum with lateral view endoscope. If appropriate, it can be used for therapeutic purposes. Perforation has an important place among the complications of ERCP. Perforation can be grouped by Stapfer's classification according to the localization. In this study, it was aimed to evaluate the patients who were performed ERCP in Gastroenterology Department between 2011 and 2015, were followed-up due to perforation, and were performed emergency surgery in General Surgery Department. Forty-three patients were included in this study. The ERCP indications of these patients were choledocholithiasis (23), malignancy (10), high bilirubin level (4), acute cholangitis (3), and biliary leakage (2). Twelve patients were operated after ERCP. Perforation focuses of the operated patients were determined according to Stapfer's classification as Type 1 for 7 of them, Type 2 for 1 of them, Type 3 for 3 of them, and Type 4 for 1of them. Sphincterotomy was performed to 7 of these patients and stent was placed to the choledoch for 3 of them. Five of the patients were operated on the same day due to acute abdomen. The indication for surgery was determined after 1.5 days on average to the remaining 7 patients according to physical examination, radiological findings and laboratory values. Two of the operated patients died. Full-thickness duodenal perforation was found in exitus patients. ERCP is an invasive process having mortality and morbidity. Therefore, it should be performed with high caution by experienced teams. Perforation after ERCP is a rare but serious complication. The most common localization is the retro-peritoneal duedonal perforation. Perforation occurs when sphincterotomy exceeds the intramural part of bile duct. Bile duct perforation takes place generally as a result of dilatation of strictures, forced cannulation, placement of guide wire, and stent migration. Moreover, complications should be approached as multi-disciplinary in terms of intervention.

Keywords: ERCP, complication, Stapfer

SS-55

Our results of choledochal exploration performed by rigid choledocoscopy

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Introduction: Choledochal stones are frequently seen disease that can cause important problems due to its complications. In this study, it was aimed to compare the conventional and laparoscopic exploration techniques in terms of safety and efficiency via some parameters such as duration of operation, need for transfusion, morbidity, complications, re-need for operation, duration of hospitalization, mortality, stone clearance, and postoperative need for endoscopic sphincterotomy in patients undergoing surgery due to choledochal stones.

Method: The files of 280 patients undergoing surgical treatment due to choledochal stone between 2011 and 2016 were evaluated retrospectively. The patients were put into two groups as those who were performed laparoscopic choledochal exploration (Group 1, 164 patients) and those who were carried out conventional choledochal exploration (Group 2, 116 patients). The patients were examined in terms of demographic features, diagnoses, previous surgery data, types of previous incisions, comorbid diseases, symptoms, preoperative biochemical and radiological examinations, preoperative history of endoscopic retrograde cholangiopancreatography, surgical technique, type of biliary reconstruction, duration of surgery, the need for blood transfusion, morbidity, complications, need for re-operation, duration of hospitalization, mortality, and the need for postoperative endoscopic sphincterotomy. The results of the groups were compared.

Results: With regard to clinical results, it was observed that durations of surgery and hospitalization were shorter, general morbidity and mortality were lower, and the need for postoperative endoscopic sphincterotomy was less at Group 1. There was no difference between two groups in terms of the need for re-operation. Stone clearance success rate was higher at Group 1 than at Group 2. General complications were found to be at a lower rate at Group 1. Moreover, wound site infection and residue stone were less frequent at Group 1. No significant difference was found in terms of drain dislocation and biliary leakage.

Conclusion: Laparoscopic choledochal exploration is a more successful technique compared to conventional choledochal exploration with regard to clinical results. Laparoscopic choledochal exploration should be kept in mind for the treatment of choledocolithiasis when possible.

Keywords: Choledocolithiasis, conventional choledochal exploration, laparoscopic choledochal exploration

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SS-56

Inappropriate/inadequate endoscopic and radiological biliary tract interventions as a primary cause of cholangitis in patients referred to a tertiary healthcare service

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Introduction: The aim of this study is to derive lessons by evaluating institutional experience related to referred patients in the case of cholangitis developing after inappropriate/inadequate endoscopic and radiological biliary tract interventions.

Method: The files of 48 patients that were treated in our department (n:44) or in other units (n:4) due to the consultation of our department between January 2005 and March 2016 were evaluated retrospectively. Cholangitis was diagnosed by the Charcot's triad clinic (fever, pain in the right upper quadrant, and jaundice). The diagnosis of severe cholangitis was established with the progress of any of cardiovascular, neurological, respiratory, renal, hematological, or hepatic insufficiency.

Results: Of 48 patients, 29 were male and the median age was 61 years (range: 30-90). In 13 of 48 patients, severe cholangitis was observed. Inappropriate/inadequate ERCP and percutaneous transhepatic cholangiography (PTC) were performed in 42 and 6 patients, respectively. The most common source of infection was endoscopic stent application to hilar obstruction (n:26). ERCP with inadequate drainage and ERCP without drainage were performed in 11 and 6 patients, respectively. Seven of patients with inadequate drainage were those with intrahepatic lithiasis. Their choledochal stones were tried to be removed by endoscopic method, but it was

caused intrahepatic biliary ducts to be polluted with duodenal fluid. The mistakes in the inappropriate PTC group were placement of catheter in the duodenum to hilar obstruction (n:4) and incorrect drainage. Moreover, necrotizing pancreatitis occurred in one patient whose PTK catheter was passed to the duodenum. The patients were treated with broad-spectrum antibiotic and emergent biliary decompression (radiological and/or endoscopic). Two patients with severe cholangitis died due to infection (general mortality: 4%, mortality in the sub-group of severe cholangitis: 15%). The most common diagnosis was perihilar cholangiocarcinoma (n:27; 56%). Of these cases, one of the patient died due to infection and 23 patients could not be operated due to tumor being at advanced stage, comorbid diseases or unimproved liver dysfunction. Four patients could be operated after 1.5, 5, and 6 months because of reasons such as waiting for the improvement of liver functions and decolonization of carbapenem-resistant microorganisms.

Conclusion: Inappropriate/inadequate endoscopic and radiological biliary tract interventions jeopardize the lives of patients and delay their radical treatments. These interventions should be performed in centers that can undertake the treatment from beginning to the end particularly in patients with perihilar cholangiocarcinoma.

Keywords: Cholangitis, severe cholangitis, endoscopic retrograde cholangiopancreatography, percutaneous transhepatic cholangiography

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SS-57

Percutaneous balloon dilatation, biliary drainage and endobiliary radiofrequency ablation in the treatment of benign bilioenteric anastomosis

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Introduction: The aim of this study was to investigate the effectiveness of percutaneous balloon dilatation and long-term biliary drainage techniques in the treatment of benign bilioenteric anastomosis stricture and the results of endobiliary radiofrequency ablation in resistant patients.

Method: Twenty-one patients (11 male) who were referred to our unit due to benign bilioenteric anastomosis stricture (hepaticojejunostomy=17, choledecojejunostomy=4) were included in the study. The symptoms at admission were jaundice (100%), pain in the right upper quadrant (90%), and itching (81%). Cholangitis was detected in 15 patients (71%). The symptoms occurred approximately 1383 (4–7592 days) days after the operation. In all cases, long-term internal-external biliary drainage (14Fr) was performed following percutaneous balloon dilatation. In the follow-up period, catheter changing and balloon dilatation were repeated every 3 months. Biliary drainage catheters were kept for at least 6 months. Endobiliary radiofrequency ablation was performed in 6 patients who did not respond to balloon dilatation and long-term biliary drainage.

Results: Technical success rate was 100%. No major complications associated with the procedures were observed. Primary clinical success rate reached in the mean 59.8 (2-137 months)-month follow-up after removal of catheter was 81%. Two patients who were detected to have recurrent stricture 240 and 1365 days after the removal of the catheter were re-treated with the techniques of percutaneous balloon dilatation and biliary drainage. The rate of secondary clinical success was 90%. One patient was performed surgical therapy due to treatment failure (5%). One patient (5%) is followed-up with control catheter after endobiliary radiofrequency ablation. Five of 6 patients undergoing endobiliary radiofrequency ablation responded to the treatment and biliary drainage catheters were removed from these patients.

Conclusion: Percutaneous balloon dilatation and long-term biliary drainage techniques are effective and reliable in the treatment of benign bilioenteric anastomosis stricture in selected cases. In resistant patients, the application of endobiliary radiofrequency ablation increases the success rate.

Keywords: Benign biliary stricture, biliary drainage, endobiliary radiofrequency ablation, percutaneous balloon dilatation

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SS-58

Total laparoscopic resection and roux-en-Y hepaticojejunostomy in choledochal cysts

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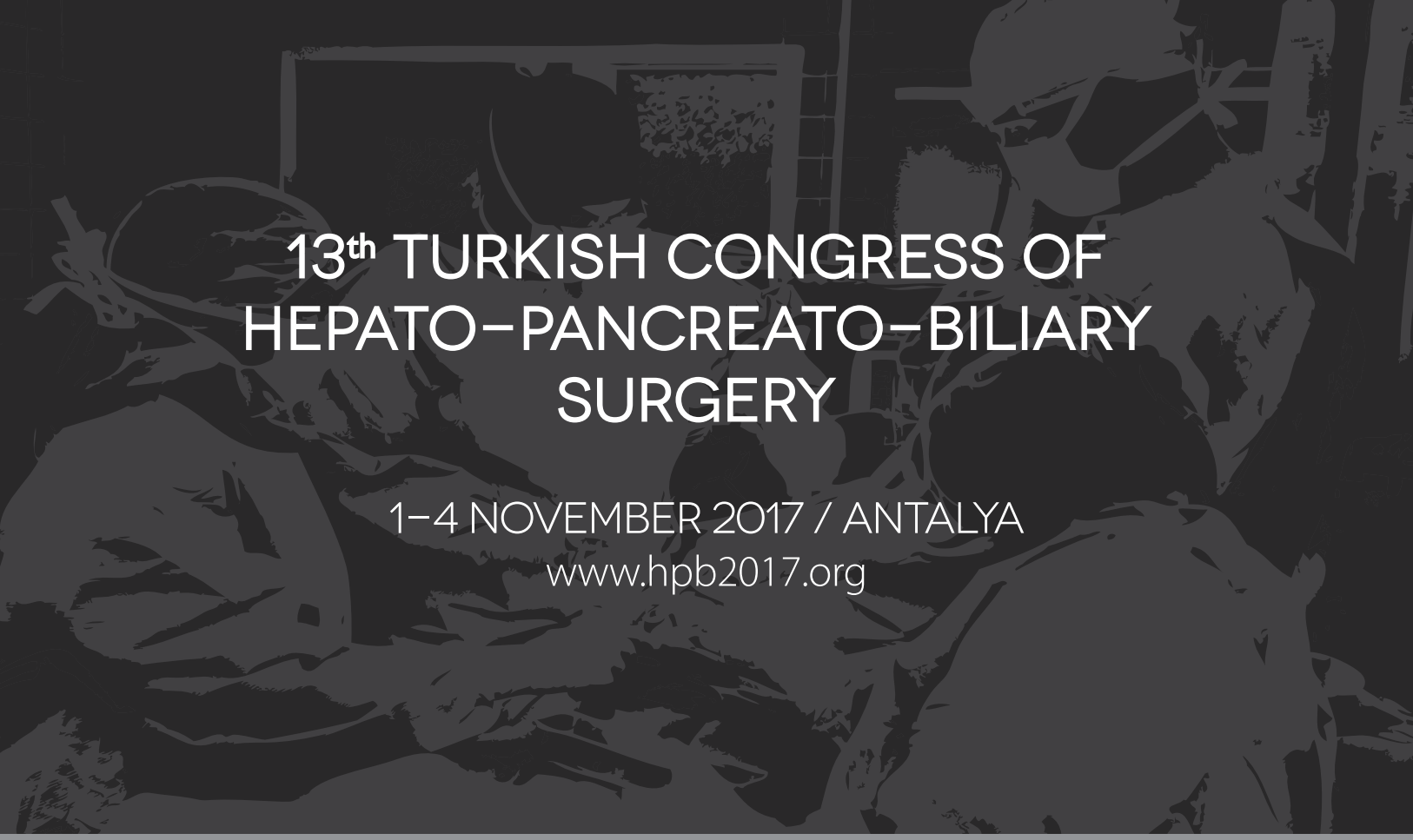
Although choledochal cysts are rarely seen, they cause clinical pictures resulting in various complications including malignancy. Recent improvements in technology and laparoscopic experience have made the use of laparoscopy more common in cyst surgery as in many areas. The aim of this study is to present peroperative and postoperative results of 7 patients undergoing laparoscopic choledochal cyst excision. Laparoscopic choledochal cyst excision and hepatico-jujenostomy were performed in 7 patients diagnosed with choledochal cyst between 2014 and 2016. Of these 7 patients included in the study, 2 were male and 5 were female. The mean age was 38.5±11.3 (22-49) years. Five patients had type 1, one had type 2b, and one had type 4a choledochal cyst. All patients were performed laparoscopic choledochal excision, cholecystectomy, and heptico-jujenostomy (HJ). In one patient, leakage was detected in the control examination after HJ and the procedure was switched to open surgery. In this patient, supportive suture was put on the leaking areas. Specimens were taken from the transjejunal region in 3 patients (42.8%), from trocar in 3 patients (42.8%), and from incision site in 1 patient (14.4%). The mean duration of operations was 356±85.0 (240-480) min and blood loss was 62.8±27.3 (10-100) mL. Postoperative biliary fistula occurred in 2 patients and laparoscopic drainage was performed in one of them. Pneumonia symptoms were observed in 1 patient in early period and this patient was discharged with medical treatment without any problem. In the pathology result of the patient who was switched to open surgery, adenocarcinoma (T2) was detected in the gallbladder. The patient was performed gallbladder bed revision and lymph dissection. The mean duration of hospitalization was 5.6±1.5 (4-7) days and the mean duration of follow-up was 21.4±18.5 (1-55) months. No early and late mortality occurred. Considering the advantages of laparoscopic surgery and predicting that it will provide perioperative outcomes similar to open surgery with developing learning curve, we suggest that it can be used in choledochal cyst surgery. Moreover, we think that the use of laparoscopic choledochal cyst surgery in combination with this method will minimalize postoperative complications.

Keywords: Choledochal cysts, laparoscopy, hepaticojejunostomy



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POSTER PRESENTATIONS

PS-01

A rare tumor of the gallbladder: Clear cell carcinoma

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Introduction: Gallbladder cancers constitute 0.6-3% of all cancers. The five main predisposing factors for the development of gallbladder cancer include age, being female, gallbladder stones, specific race/ethnicity/geographical distribution, and ulcerative colitis. Other possible etiologic factors are polypoid lesions of gallbladder, genetic predisposition, chemical carcinogens, anatomic variations of the pancreatico-biliary duct system, porcelain gallbladder, primary sclerosing cholangitis, and being a carrier of typhoid. Approximately 90% of these tumors are adenocarcinoma. Other histopathological types according to their frequencies include undifferentiated adeno-squamous carcinoma, sarcoma, carcinoid tumors, melanoma, lymphoma, and leiomyosarcoma.

Case: A 74-year-old female patient consulted to our outpatient department due to ongoing abdominal pain for a week . The patient was planned to undergo a surgery with the diagnosis of cholelithiasis. Laparoscopic cholecystectomy was performed. No mass formation was palpated. Our patient was discharged on the 2nd postoperative day with full recovery. The result of the pathologic specimen examination was reported as "clear cell carcinoma of the gallbladder". It was identified that the tumor size was 1x1, 2x0,8 cm with serosa invasion. No metastatic focus was found in her iv contrast-enhanced thoracic and abdominal tomography that were performed for the purpose of postoperative scanning. Because the PET CT showed FDG enhancement in 2 lymph nodes, the patient was scheduled for a re-operation and wedge resection was performed to 2 cm intact liver tissue within the gallbladder bed in addition to hepatoduodenal lymph node dissection. The patient was discharged with full recovery on the 4th postoperative day after the second operation. On the third month control examination, no metastatic focus was determined.

Conclusion: Gallbladder cancers are the rarely seen malignancies of the gastrointestinal system that have poor prognosis and are difficult to diagnose. The most common type is adenocarcinoma with the clear cell subtype rarely being encountered. Before they are considered to have primary gallbladder carcinoma, patients with clear cell carcinoma should be investigated clinically for metastasis in terms of possible secondary focus, particularly in the kidneys.. Its treatment does not differ from other types of gallbladder tumors. Cholecystectomy is adequate for stage 1 gallbladder cancers with a reported survival rate of 100%. Extended cholecystectomy is the recommended treatment for the stage 2 and stage 3 disease. For patients with stage 4 disease, palliative treatment is recommended instead of radical surgery.

Keywords: Clear cell, carcinoma, gallbladder

PS-02

A rare tumor of the pancreas: Solid pseudopapillary tumor

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Introduction: Solid pseudopapillary tumors (SPT) of the pancreas are lesions that are often seen in young women. They constitute 1-2% of all exocrine pancreas tumors with low malignancy potential. In this study, we presented a case of SPT that was radiologically diagnosed and treated with surgical resection.

Case: A 19-year-old female patient consulted to our outpatient clinic due to nausea, vomiting, and epigastric pain ongoing for three weeks. Her CBC, biochemistry, CRP, and tumor markers were normal. The USG of the abdomen revealed a well-circumscribed nodular lesion with a diameter of 4 cm in the pancreatic tail. Moreover, a 34x35 mm diameter hypodense mass with heterogeneous content in the localization of the pancreatic tail was detected in the abdominal CT. Thereupon, distal pancreatectomy was performed. No postoperative complication developed. The diagnosis of "solid pseudopapillary tumor of the pancreas was established based on the findings of histopathological examination.

Conclusion: Solid pseudopapillary tumor of the pancreas (SPT) is a rare pancreatic tumor with low malignancy potential. In one of the largest retrospective reviews conducted so far, it was reported that more than 90% of 718 SPT patients were women that were younger than 22 years old. The tumor is most commonly located in the head and tail of the pancreas. The SPT constitutes about 5% of the cystic tumors of the pancreas and approximately 1-2% of the exocrine pancreas tumors. Most of these patients are young women that consult with the complaint of abdominal pain. In general, the complaints and findings of general digestive system, which are not specific to the disease, are at the forefront. Abnormal liver functions, cholestasis, and elevated pancreatic enzymes are often not observed in these patients. Serum tumor markers are also normal. Radiologically, SPT is seen as a well-circumscribed and solid hypodense lesion with cystic component in CT. The ultrasonography reveals a view of an encapsulated mass composed of echogenic and hypoechogenic components. Although these tumors usually display a benign behavior, malign transformation also occurs. These tumors are usually seen in elderly and male patients. The criteria for malignancy in SPTs include vascular and nerve invasion and deep invasion into the pancreatic

tissue. Their definite treatment is complete surgical resection. Metastasis most commonly occurs in the liver, mesenterium, omentum, and peritoneum. The criteria for poor prognosis include vascular invasion, tumor size greater than 5 cm, and low nuclear grade. Five-year survival rate after complete surgical resection is approximately 94-100%.

Keywords: Pancreas, pseudopapillary, tumor

PS-03

The financial dimension of biliary tract injuries

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Introduction: Treatment costs of the patients that were treated and followed-up due to biliary tract injury at the Unit of Surgery of Liver and Biliary Tract, Department of General Surgery in İstanbul Medical Faculty were presented and the annual numbers of cholecystectomies and biliary tract injuries in Turkey were gathered from the Social Security Institution (SSI).

Method: Forty-nine patients who consulted due to biliary tract injury after cholecystectomy between 2011 and 2015 were included in our study. Total treatment costs of these patients were calculated and the results were compared with the costs of standard cholecystectomy patients without complication. After the data obtained from SSI were examined and evaluated, the number of biliary tract injuries induced by open and laparoscopic cholecystectomy, rough total cost, and rates of secondary intervention after cholecystectomy were determined.

Results: Forty-nine patients were included in the study. Thirty-eight (77.6%) of the patients were female, 11 (22.4%) of them were male, and the mean age was 51 (21-79) years. It was detected that 10 patients (20.4%) had Type II, 19 patients (38.8%) had Type III, and 20 patients (40.8%) had Type IV injuries according to the Bismuth classification system. The total number of cholecystectomies invoiced to SSI was 308481 in the years of 2014 and 2015. Although it is difficult to present the exact frequency of cholecystectomy-induced biliary tract injuries with the data in hand, it was calculated to be between 1.5% and 2.4%. It was detected that 2.5% of the patients that underwent open or laparoscopic cholecystectomy invoiced to SSI were applied an endoscopic or surgical operation for their biliary tract injuries after the surgery in Turkey. The mean total treatment cost of the patients with biliary tract injury was calculated as 9199 TL. This amount reaches approximately to 8 times of cost for standard laparoscopic cholecystectomy without complication. Total treatment cost of Bismuth IV injuries was found to be significantly higher compared to Bismuth II and III injuries. Annual cost of biliary tract injuries to SSI in Turkey was calculated to be approximately between 21 and 34 million TL.

Conclusion: All precautions should be taken in order to prevent biliary tract injury during cholecystectomy and the strategy of surgery should be built on this. The steps to be taken during and after injury will directly affect the treatment cost and also morbidity and mortality of the patient.

Keywords: Laparoscopic cholecystectomy, cholecystectomy, biliary tract injury, cost

PS-04

A rare case: Annular pancreas

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Annular pancreas is a rare congenital abnormality characterized by a ring of pancreatic tissue surrounding the descending portion of the duodenum. It is considered to originate from incomplete rotation of the ventral pancreatic bud. In an autopsy series performed, the prevalence of annular pancreas was shown to be ranging approximately from 5 to 15 per 100,000 adults. Anatomically, it is divided into two as complete and incomplete. While approximately two-thirds of the patients remain asymptomatic, those who are symptomatic have symptoms such as vomiting, feeding intolerance, and bloating associated with duodenal obstruction in neonatal period. It can present with chronic abdominal pain, nausea, vomiting, peptic ulcer, pancreatitis, and jaundice in adulthood. Abdominal radiography, computerized tomography, magnetic resonance imaging, endoscopic retrograde cholangiopancreatography, and endo-ultrasonography can be used for its diagnosis. Surgical treatment option is applied especially for symptomatic patients to eliminate gastric-outlet obstruction and biliary obstruction.

Gastroduodenostomy and gastrojejunostomy are the surgical procedures that are preferred for duodenal by-pass and bilateral truncal vagotomy is added to these procedures in the existence of accompanying peptic ulcer. Moreover, hepaticojejunostomy and biliary stent are the methods preferred for patients with biliary obstruction.

In our case, a 62 year-old female patient consulted to surgical outpatient clinic with the complaints of nausea, vomiting, weight loss, and abdominal pain. All findings of the patient, whose physical examination revealed no abnormality, were normal in blood

analysis including bilirubin (Ca 19-9:250 IU/L). The patient's oral and intravenous contrast-enhanced computerized tomography revealed that the choledoch had a diameter of 9 mm and involved air-fluid leveling. There was an edematous thickening up to 36 mm in the head of pancreas and the stomach was in the form of distension. And also in the patient's magnetic resonance imaging, it was reported as choledochal distal bile duct tumors, stomach distension, narrowing in the second part of the duodenum, periampullary tumor, and pancreas tumor. The gastroscopy demonstrated severely dilated pyloric obstruction in the stomach and prepyloric extensive ulcer field and the distal region of the pylorus could not be reached.

Operation decision was made for the patient based on the obtained radiological and clinical findings. During the operation, it was detected that the pancreas tissue surrounded the second part of duodenum by Kocher maneuver and opening a gastrocolic ligament and no other pathology was detected about the pancreas. Edema and contracture caused by ulcer tissue in the pyloric area were found to be remarkable. The patient was introperatively diagnosed with annular pancreas and the operation was ended after performing truncal vagotomy and gastrojejunostomy for gastic bypass. The patient was discharged on the postoperative 5th day.

Keywords: Annular, gastric, obstruction, pancreas

PS-05

Current approaches in hepatolithiasis treatment: A clinical series of 13 cases

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Introduction: The term hepatolithiasis means the presence of stone in bile ducts. Nowadays its prevalence is increasing in East Asian countries. There is an increase of its incidence in Europe and America as well with migrations. Surgical treatment is also used as the last alternative in addition to medical treatments and minimal invasive methods for the treatment of this disease. There are surgical alternatives ranging from a small segment resection to liver transplantation. In this study, we aimed to review the patients diagnosed with hepatolithiasis and the treatments that we applied to them in the light of the literature.

Method: The files of patients followed-up with the diagnosis of hepatolithiasis in our departments between 2014 and 2017 were examined retrospectively and the data obtained were used for the study. Interventional techniques such as ERCP and PTC were used in addition to radiological methods such as USG, CT, MRI, and MRCP for the diagnosis of the disease.

Results: A total of 13 patients were included in the study and the mean age was 66 (32-89) years. The most common clinical complaint was abdominal pain and then jaundice. For diagnosis, MR and MRCP were used for 12 patients and BT for 1 patient. Abdominal USG was performed for all patients. ERCP was performed in 7 patients. There were bile stones in the right lobes of 3 patients, in the left lobes of 7 patients, and in both lobes of 3 patients. There were cholelithiasis in all patients and choledocholithiasis in 6 patients. In 6 patients with choledocholithiasis, ERCP+ sphincterotomy and recurrent stone extractions were conducted. No patient underwent liver transplantation. Five patients were operated. Neohepaticojejunostomy was performed in 2 patients, who underwent Whipple procedure and recurrent neohepaticojejunostomy after biliary tract trauma, due to obstruction of hepaticojejunostomy. Left hepatectomy was performed in 3 patients. One patient was stable with regard to hepatolithiasis; however, cholecystectomywas performed for acute cholecystitis. One of our patients was exitus because of persistent cholangiosepsis. One of 5 patients who were clinically followed-up was the one who was diagnosed with metastatic thymoma and who had a spontaneous regression in the liver functions tests and bilirubin values. Other two patients were followed-up by stenting with ERCP. One patient was planned to be followed up due to vascular variations. Moreover, another patient was followed-up because of refusing surgical intervention. Our patients have been followed-up for 24 months (1-84 months) on average.

Conclusion: Surgical approach is a curative treatment choice for the treatment of hepatolithiasis. Every patient should be evaluated with a multidisciplinary approach considering the findings and endoscopic and surgical alternatives.

Keywords: Hepatolithiasis, intrahepatic lithiasis, liver resection

PS-06

A rarely seen anatomical variation of bile ducts: Opening of cystic duct into right hepatic canal

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It is reported that developmental variations at the level of intrahepatic and extrahepatic level in the biliary system are seen at the rate of 42-58% in the population. The incidence of opening of cystic duct into the hepatic canal in these variations is 0.7%. Although it is rarely seen, it is important with regard to the fact that it may cause morbidity and sometimes mortality in patients developing complications. It is important to know the anatomy and potential variations of biliary system so as to prevent the possible complications before hepato-pancreato-biliary surgical interventions. The methods such as ultrasonography, i.v. cholangiography, percutaneous transhepatic cholangiography (PTC), endoscopic retrograde cholangiopancreatography (ERCP), magnetic resonance cholangiopancretography (MRCP), computerized tomography, and scintigraphy are used for the purpose of imaging. It was revealed in our study that right and left hepatic bile ducts combined in distal after forming a long segment and cystic duct opened into right hepatic canal (Benson-Page Classification, Type D) in our patient who underwent Whipple procedure for the ampulla of Vater tumor. Cholecystectomy was performed. The main hepatic duct, which had to be cut just over the cystic duct according to the procedure, was cut after the combination in distal region and continuity was provided with hepaticojejunostomy. Although there are advanced imaging techniques such as MRCP for revealing the anatomy of biliary system in the preoperative period, they are not routinely performed apart from the investigation of choledoch stones and similar interventions. It is specified in the literature that preoperative MRCP is insufficient to detect the opening of right cyctic duct into the hepatic canal and this variation is mostly detectedintraoperatively owing to the attention of surgeons. Right hepatic bile duct can be injured easily during laparoscopic cholecystectomy, particularly in Type D anomalies. Here, the modification conducted due to bile duct anomaly that was encountered while performing Whipple procedurein a 77-year-old male patient diagnosed with the ampulla of Vater tumor and cholelithiasis was presented and the subject was discussed with literature.

Keywords: Anatomical variation, bile ducts, right hepatic canal, cystic duct.

PS-07

Total pancreatectomy in an insulin-dependent diabetes patient

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Introduction: In this study, it was aimed to present a patient that we followed-up due to neurological complications after total pancreatectomy.

Case: The patient, who was referred to our clinic from an external center because of a mass in the head of pancreas viewed in the tomography image taken after vague abdominal pain, was hospitalized in the service. The 53-year-old male patient had complaints of weight loss more than 10%, fatigue, and lack of appetite going onfor the last 6 months. The patient had a 4x5 cm sized massin the head of the pancreas and high bilirubin level at the upper limit of the reference interval. distal bile duct terminated as wide and blunt and the gallbladder had an image of distension. There was no any vascular invasion in multiphasic Computed Tomography. Percutaneous biliary drainage catheter was inserted to the patient because of increasedbilirubin. The patient was planned to undergo an operation because there was an appearance consistent with malignant mass in the head of the pancreas in PET/CT image and there was no metastasis. There was an irregularity in fasting blood glucose evaluation of the patient having insulin dependent type 2 diabetes. The patient was defining an increasing steatorrhea in the recent days. By considering the other pathologies and the fact that the patient and his relatives were informed preoperatively, total pancreatectomy was scheduled. Patient underwent peroperative total pancreatectomy without any intraabdominal problem. On the postoperative 6th day, oral feeding was provided, gas-stool discharge existed, and blood glucose was regulated. In the advancing hours, mental fog was added to the complaints of fatigue and weakness that began gradually. This led to decreased Glasgow coma scale (GCS) (M+V+E=3+1+1=5) and the patient to be referred to the intensive care unit as intubated with cerebral edema associated with metabolic encephalopathy. The patient whose cerebral edema regressed was transferred to our service with GCS:15 on the following day. There was no additional pathology in the patient whose computed tomography of the brain and MR were performed, exceptsubdural effusion with 1cm thickness in the bilateral frontoparietal region. The patient was transferred to the ICU because of developing the same picture again in the upcoming days. As no organic pathology was detected to explain the current picture, the patient for whom haloperidol was initiated by psychiatry department with the pre-diagnosis of delirium associated with subdural effusion was discharged with the GCS 15 and regulated blood glucose one week later.

Conclusion: Performing consultation and imaging without losing time in case there is personality and mood changes after major surgical operations such as total pancreatectomy make a great contribution in solving difficult cases.

Keywords: Total pancreatectomy, diabetes, complication

PS-08

Postcholecystectomy syndrome cases undergoing surgical treatment

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Continuation of the complaints such as abdominal pain in the right upper quadrant, nausea, jaundice, and dyspeptic symptoms after cholecystectomy is defined as postcholecystomy syndrome. It may occur days or years after the surgery. Partial cholecystectomy or stones remaining in the cystic duct are important biliary causes that are closely associated with this syndrome. In this study four patients developing postcholecystomy in the late period after partial and laparoscopic cholecystectomy were presented. Partial cholecystectomy was performed in the first patient with the diagnosis of acute cholecystitis two years ago. In the physical examination, the signs of acute cholecystitis were found. The hepatobiliary ultrasonography revaled a hydropic gall bladder with increased wall thickness. Laparoscopic cholecystectomy was performed in the other three patients 3, 4, and 9 years ago, respectively. All the patients were defining postoperative mild abdominal pain, nausea, and dyspeptic complaints. However, they stated that the recently developing pain and other complaints were more severe. The signs of cholangitis were observed in the physical examination. In the MRCP, stones were seen in choledoch and dilated cystic duct. ERCP was performed in three patients. However, the cannulation of biliary ducts or removal of stones could not be succeeded. Therefore, all the patients were taken into operation. Cholecystectomy was performed in the first patient. In the other patients, the cystic duct stump was found and the stones in the biliary ducts were removed from here.Then, the choledoch was washed with 0.9% NaCl solution by the help of catheter placed from the cystic duct. Afterwards, intra-operative cholangiography was performed. The long remain cystic duct was cut and sutured primarily by shortening it. All the patients were discharged without any complications. The patients should be evaluated with regard to postcholecystectomy in the control examinations after cholecystectomy and bile ducts should be assessed by performing MRCP in patients having complaints. Open or laparoscopic cholecystectomy should be applied in partial cholecystectomy patients developing post-cholecystectomy syndrome. ERCP is the first treatment method that should be performed in cases developing post-cholecystectomy syndrome associated with residual or newly forming stones in the bile ducts. In case of a failure in ERCP, the main surgical methods include choledochotomy and t-tube drainage or the application of bilioenteric anastomosis techniques. As in the cases that we presented, cystic duct stump can be re-closed primarily by removing the stones from the cystic duct in the patients with dilated cystic duct. This method will protect the patients against the risks of choledochotomy or anastomotic leakage.

Keywords: Postcholecystectomy syndrome, partial cholecystectomy, bile duct stones

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PS-09

Case presentation of isolated cystic duct cyst: Should there be todani type 6?

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Biliary duct cysts are characterized by cystic dilatation of the intrahepatic or extrahepatic biliary ducts and they are congenital anomalies seen in 1 case per 100000-150000 live births. Biliary duct cysts were first classified by Alonjo-Lej et al. and after this classification, it took its most commonly used form with the modification carried out by Todani et al. Todani classification includes 5 categories and isolated cystic duct cyst is not handled separately in this classification. In our case a 26- year-old female patient having an isolated asymptomatic cystic duct that was detected incidentally is presented. The patient consulted to the emergency unit due to a story of mild trauma in the suprapubic region during pregnancy and distal bile duct dilatation was detected incidentally in the abdominal US performed at admission. Type 4 choledoch cyst was detected in the patient, whose treatment was postponed to a date after labor. Further examinations revealed that her serum ALT level was 13 U/dL, AST was 20 U/dL, and T/D Bilirubin was 0.6/0.08 mg/dL and her other analyses were normal. Conventional cholecystectomy was performed in the patient because isolated cystic duct cyst was viewed in the laparotomy conducted with the prediagnosis of type 4 choledoch cyst. The patient not developing preoperative and postoperative complications was discharged from the hospital as her clinical course and laboratory values were normal. In literature, it is reported that Cystic duct cysts generally presenting with symptoms and diagnosed in infancy or childhood rarely reach to adult age as asymptomatic, as in this case. While it is seen that a cystic dilatation generally accompanies to cystic duct cysts in other segments of the biliary system, the presence of cystic duct cyst in our patient makes the case rarer. Surgery is recommended to all choledochal cysts due to their malignancy potentials. Although rare, isolated cystic duct cysts are seen as in our case and their being classified separately in classification will increase radiological diagnosability and thus provide the change of surgical plan and improvement of patient comfort and costs.

In this study, a case of a young female patient who was diagnosed preoperatively, and whose perioperative isolated cystic duct cyst wasconfirmed will be presented.

Keywords: Isolated cystic duct cyst, choledochal cyst, bile duct dilatation, Todani classification

PS-10

A difficult case: Cholecystocolic fistula

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Cholecystocolic fistulas are rare cases seen at the rate of 10-20% in bilioenteric fistulas. It is considered that gallbladder malignancies, cholelithiasis, previous upper GIS surgery, trauma, and accompanying DM play a role in the formation of cholecystocolic fistula. In spite of the developing imaging methods, its preoperative diagnosis can be difficult and challenging. In its treatment, removal of fistula tract, cholecystectomy (partial or complete), and the protection of the continuity of colon and biliary passage are crucial. In our case, a 64-year-old male patient with uncontrolled DM, who was admitted to the emergency service with the complaints of high fever, abdominal pain, nausea, and vomiting, is presented. The Murphy's sign was evaluated as positive. There was no defense and rebound. In the laboratory analyses, WBC was 15.4, CRP was 255, and LFT and KFT were detected normal. The USG examination revealed multiple stones in the gallbladder, thickening up to 4.2 mm in diameter in its wall, and dilatation up to 9 mm in the proximal common bile duct. In the MRCP performed due to dilatation in the common bile duct, it was observed that gallbladder was contracted and there were images consistent with multiple stones, the biggest of which was approximately 20x20 mm. Diffuse heterogeneous signal intensity in the left hepatic lobe was remarkable and it was reported to be consistent with the abscess. Air density was evaluated to exist in the intrahepatic bile ducts. A drainage catheter was inserted to the center of the abscess in the left hepatic lobe by interventional radiology. Exploration was performed with right subcostal incision since there was air density in the gallbladders in intrahepatic bile ducts and the patient did not recover clinically. The presence of cholecystocolic fistula was detected. It was repaired by conventional cholecystectomy, abscess drainage, and wegde resection of affected colon segment. The patient taken to the service on the 6th day after postoperative intensive care follow-up was discharged from the hospital on the postoperative 9th day after he recovered clinically and his drains were removed. The pathological result of the specimen was reported as chronic active cholecystitis. Diagnosis and treatment of cholecystocolic fistulas are quite complicated. Cholecystocolic fistulas should be taken into consideration in patients having cholangitis- like symptoms with unknown origin. In spite of developing diagnostic techniques, it is difficult to establish a preoperative diagnosis that requires multidisciplinary evaluation of a team highly experienced in hepatobiliary. Morbidity/mortality development will decrease in patients who are well-evaluated and whose additional examinations and treatments are well-managed in preoperative and postoperative periods.

Keywords: Bilioenteric fistula, liver abscess, cholangiography, cholecystocolic fistula, MRCP

PS-11

A rare bile duct anomaly mimicking choledochal cyst; Hourglass gallbladder

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Bile duct anomalies are entities having surprises that may be a nightmare for surgeons from time to time. It is reported that developmental variations of intrahepatic and extrahepatic bile ducts are seen at a rate of 42-58% in society. On the other hand, hourglass gallbladder is such a rare case that a rate cannot be estimated and the number of cases reported in the literature is a lot fewer. Choledochal cysts are also rare pathological cases and they constitute 1% of benign pathologies of the bile ducts. The incidence of choledochal cyst, which is 1/100,000 in Western countries, rises up to 1/1,000 in Asian countries. Although they are mostly seen in females and children, they can be detected at advanced ages in cases not presenting with clinical symptoms. Both cases are pathologies that have common symptoms with regard to their diagnoses and some diagnostic difficulties. In our case, the presence of choledochal cyst (Todani classification, Type II) was confirmed in MRCP examination of our patient, who was referred to our clinic with the prediagnosis of choledochal cyst and who had biliary colic complaints. It was detected in the exploration that the gallbladder was in its normal location, it continued as a second sac by separating the part considered as cystic duct, and cystic duct opened to distal choledoch. Extrahepatic bile ducts were evaluated to be completely normal. The patient who underwent cholecystectomy was discharged from the hospital without any problem. Gallbladder has various congenital or acquired anatomical variations. Hourglass gallbladders are pathologies that can be seen in children and young people congenitally and that are generally considered to occur in a chronic process associated with cholecystitis attacks in adults. Here, our 54-year-old male patient was taken into operation with prediagnosis of choledochal cyst and cholecystectomy was performed after detecting hourglass gallbladder and the case was presented with literature.

Keywords: Anomaly, choledochal cyst, gallbladder, bile ducts

PS-12

Granular cell tumor of the choledoch: A case from Turkey

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Introduction: Granular cell tumor (GCT) is a rare benign tumor that is more common between the ages of 40 and 50 years. It is more frequently seen in women than in men. First of all, GCT was considered to arise from muscle tissue by Abrikossoff in 1926 and called as granular cell myoblastoma. Tumor located in the bile ducts was firstly reported by Coggins in 1952. Although the tumor is generally seen in chest and upper extremity skin, tongue, mouth cavity, and gastrointestinal system, its frequency in the bile ducts is less than 1%. The diagnosis is established as a result of histological/ immunohistochemical analyses indicating Schwann cells with positive S-100 protein. It is difficult to differentiate it from cholangiocarcinoma or Klatskin tumor with its clinicalal findings and radiological images. In the literature, 50 cases were reported as granular cell tumor with the localization of the choledoch and we present the 51th case with our patient.

Case: It was determined that a 39-year-old female patient without any previous complaint consulted to the medical faculty in her province due to complaints of jaundice and abdominal pain and the abdominal ultrasonography revealed a solid and hypoechoic mass narrowing the choledoch. Alkaline phosphatase, total bilirubin, gamma glutamyl transferase, and CA19-9 values of the patient were within normal range. It was detected in the endoscopic ultrasonography that a solid and hypoechoic mass with possible submucosal origin was observed in a segment of 15 mm in the common bile duct. A solid mass at the same size was reported in the computed abdominal tomography. A hard solid mass having a diameter of 2cm, which extended to the common bile duct in the middle part of choledoch, was detected in the abdominal exploration performed in the patient with the pre-diagnosis of cholangiocarcinoma. The mass was removed through the excision of the choledoch and common bile duct with cholecystectomy and then Roux-en-Y end-side hepaticojejunostomy was performed. Postoperative period had a course without problem. As a result of histopatological examination, granular cell tumor of the choledoch was diagnozed.No relapse was detected in the control examination performed in the postoperative 6th month.

Conclusion: The imaging methods are not helpful in differential diagnosis of GCT from other factorscausing biliary obstruction, such as choledoch cyst, cholangiocarcinoma, and benign stricture. The final diagnosis is established by examination of surgical specimen or endoscopic biliary biopsies. Investigation of any bile duct lesion on time is important for prevention of complications of biliary obstruction and elimination of malignancy.

Keywords: Granular cell tumor, choledoch, S-100 protein

PS-13

Observed or predicted albendazole hepatotoxicity as an indication for a resection procedure in hepatic hydatid disease

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Introduction: The choice between a drainage versus a resection procedure in hepatic hydatidosis is multifactorial. Observed/ predicted albendazole hepatotoxicity is a rare indication for pericystectomy or hepatectomy.

Method: The charts of three patients were reviewed retrospectively. In two patients, albendazole caused greater than 10-fold increases in transaminase levels and was stopped. One patient had concomitant autoimmune hepatitis that required steroid and azathiopurine treatment.

Results: In the first case, two large hydatid cysts involving the right and the left hepatic veins. (8 cm and 9 cm in diameter respectively) were detected. First, left lateral sectionectomy and ligation of the right posterior portal vein branches were performed. Hypertrophy of the remnant liver allowed a safe right posterior sectionectomy two months later. The second patient had a 9-cm in diamater cyst in segments 6 and 7. Pericystectomy was carried out. In the patient with autoimmune hepatitis, pericystectomy was chosen for two objectives 1) to eliminate a cavity prone to recurrence in an immunosuppressed patient 2) to avoid albendazole that may complicate the interpretation of liver function tests and aggravate the leucopenia that may be caused by azathiopurine. The postoperative period of all patients was uneventful. The second and the third patient have been followed for longer than 6 months (56 and 17 months respectively) and no recurrence has been detected.

Conclusion: A resection procedure not only eliminates the cavity but also the need for adjuvant albendazole treatment. This is a vital advantage for the small subset of patients with severe albendazole hepatotoxicity.

Keywords: Hydatid cysts, albendazole hepatotoxicity, hepatic resection

PS-14

The case of ectopic spleen mimicking a solid tumor in pancreas

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Introduction: The ectopic spleen, which is also called as the accessory spleen, is a spleen tissue located in a different localization other than the normal spleen in the embryological development process. It can be seen in about 10% of the society. Although it often occurs around the vascular structures in the hilus of the spleen, it can rarely be seen in different anatomical localizations, as well. They are incidentally noticed and they are asymptomatic. In this study, a patient who was operated due to the diagnosis of a mass in the pancreas tail region and whose postoperative diagnosis was determined as an intraparenchymal-located ectopic spleen in the pancreas waspresented.

Case: The patient was a 62-year-old woman.A hypoechoic well-circumscribed solid mass with a size of approximately 3x4 cm and located in the pancreatic tail section was detectedin the ultrasonographic examination performed due to dyspeptic complaints. Contrast-enhanced abdominal tomography revealed an intraparenchymal-located well-circumscribed solid mass with a size of 3x4x3 cm in the pancreas tail localization. Imaging revealed no pathology in other organs except the pancreatic mass. In the laboratory analysis, no pathological values were found in hemogram, biochemical parameters, and tumor markers. The patient was taken into operation for this reason. The mass was totally excised through distal pancreatectomy. In the macroscopic examination, it was seen that the mass was well-circumscribed and soft. In the pathologic microscopic examination, the mass in the pancreatic parenchyma was diagnozed as spleen tissue.

Conclusion: Ectopic spleen mimicking malignancy is a rare case, but similar cases have been reported in the literature. In the literature; pancreatic, retroperitoneal, adnexal, and adrenal masses, for which further research and operations are required to recognize that they are ectopic spleens mimicking malignant masses, have been reported. Ectopic spleen should be remembered in the differential diagnosis of a pancreatic intraparenchymal-located well-circumscribed solid mass and we recommend selective spleen scintigraphy and endoscopic ultrasound-guided needle biopsy for exclusion.

Keywords: Ectopic spleen, pancreatic mass, case report

PS-15

Primary hydatid disease of the pancreas

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Hydatid cyst disease is still an endemic public health problem in some regions, particularly in South America, Central Asia, and South Europe countries. Although hydatid cyst, which is caused by Echinococcus granulosus parasite at the larval stage, is mostly seen in the liver and lungs, it can rarely be found in any organ and soft tissue. In the literature, the incidence of isolated pancreatic hydatid cyst disease is 1-2% and 50% of them have a localization in the head of the pancreas. Pancreatic hydatid cysts are the cases in which some problems are encountered in the differential analysis with cystic carcinomas of the pancreas and in the formation of treatment algorithm. In this study, a 23-year-old female patient, who was admitted to the outpatient clinic due to the complaint of epigastric pain, treated with distal pancreatectomy due to the suspicion of cystic carcinoma after the detection of a cystic mass located in the pancreatic tail, and histopathologically diagnosed with hydatid cyst, was presented with literature.

Keywords: Hydatid cyst, pancreas, resection

PS-16

Solid pseudopapillary tumor for which Whipple procedure was performed with the prediagnosis of neuroendocrine tumor

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Introduction: Cystic lesions of the pancreas are commonly seen lesions. In most cases, cystic lesions are benign and they usually consist of pseudocysts (80-90%) or retention cysts (10-15%). Cystic neoplasms are rare. The solid pseudopapillary tumor (SPT) of the pancreas is a rare tumor with low malignancy potential and constitutes 1-2% of pancreatic exocrine tumors, and it mostly

occurs in young women. Its treatment is surgical and the prognosis after resection is good. However, since there are no specific symptoms, it is often difficult to be diagnosed. Here, we aimed to present a case of SPT, which was diagnosed as a neuroendocrine tumor in the pathologic examination.

Case: An 18-year-old female patient was operated in an external center with the pre-diagnosis of pancreatic pseudocyst and the cystic mass was aspirated. Because of the postoperative development of bile fistula, the patient was referred to us. The 120 mm diameter collection in the abdomen was drained percutaneously. However, because the biliary collection continued, ERCP was performed and the choledoch injury was detected, and external drainage was started. The pancreas was observed tobe atrophic in the CT and a thin-capsuled dense collection with a size of 49x42 mm was found in the head section of the pancreas. Meanwhile, aspirated cyst contents were reported to be consistent with the findings of grade 2 neuroendocrine tumor (chromogranin A (+) and Ki67 3.5%). The pancreaticoduodenectomy was planned and a control tomography was performed 3 weeks later. In the head of the pancreas, a heterogeneous area, the widest point of which increased to 39x30 mm, was observed and a 21x16 mm collection was detected in the neighborhood of the mass. The distinction of focal pancreatitis and mass could not be made clearly. In the peroperative exploration, a 4 cm tumoral mass was found in the pancreas head and no metastasis was detected. Two additional pancreatic resections were performed after the frozen section examination was reported as persistent neuroendocrine tumor. During reconstruction, pancreaticogastrostomy and hepaticojejunostomy were performed. The pathological examination of the specimen was consistent with solid pseudopapillary tumor. The patient, who had no additional problems, was discharged on the 17th postoperative day.

Conclusion: Solid pseudopapillary tumor is a rare tumor of the pancreas with a low malignancy potential. As in our case, it is most often seen in young women. Because they do not present with any specific signs and symptoms, it should be remembered in all young women who have a cystic mass in the pancreas. The pancreatic SPT can be confused with neuroendocrine tumors. It should be kept in mind that this confusion can also be seen in the frozen section examinations.

Keywords: Neuroendocrine tumor, solid pseudopapillary tumor, pancreatic tumors

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PS-17

A rare cause of the acute left ventricular dysfunction after cholecystectomy: Takotsubo cardiomyopathy

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Introduction: Takotsubo cardiomyopathy (TCM) is a temporary left ventricular dysfunction that results from emotional or physical stress. Its prevalence is 2%, and 90% of the patients are postmenopausal women. Its most common symptoms are chest pain and shortness of breath. It is characterized by elevated cardiac enzyme and elevated ST in electrocardiography (ECG) in 50% of patients. The diagnosis is made with normal coronary angiography that is performed with the pre-diagnosis of acute coronary syndrome (ACS) and with the presence of impaired wall motion and apical ballooning along with the left ventricular dysfunction in transthoracic echocardiography (TTE). The treatment is symptomatic. Full recovery is obtained in 96% of the cases. In this study, a 56-year-old female patient who consulted with cholelithiasis and who was diagnosed with TCM upon the development of ACS on the postoperative first day of laparoscopic cholecystectomy will be presented.

Case: A 56-year-old female patient with a known history of hypertension consulted to our department with the complaints of bloating and abdominal pain developing after meals. The patient's physical examination and laboratory values were normal. A great number of stones, the largest of which was 29 mm in diameter, were found in the gallbladder lumen in the hepatobiliary ultrasonography. The patient who underwent laparoscopic cholecystectomy complained of a sudden onset of chest pain on the postoperative first day. Supraventricular tachycardia was found in the ECG of the patient, whose arterial blood pressure was 210/110 mmHg and pulse was 150 / min. No coronary pathology was detected in CAG performed with the suspicion of ACS because of a progressive increase in Troponin-I enzyme levels. The ejection fraction was found to be 35% in the patient in whom TTE was performed, and severe hypokinesia was detected in the septum and posterior, inferior, and lateral walls. Based on these results, symptomatic treatment was given to the patient diagnosed with TCM. In TTE that was repeated one week later, a significant improvement was observed in the ejection fraction and wall motions of the patient.

Conclusion: Takotsubo cardiomyopathy is a temporary situation induced by stress and the patients, like our patient, are usually postmenopausal women. ECG findings suggesting chest pain, elevated cardiac enzymes, and ACS are found in these patients. Different from ACS, coronary pathology is not detected is CAG. As in our patient, recovery in systolic functions is seen in the vast majority of patients within a week. As a result, TCM is a condition that should be considered in the differential diagnosis of ACS in patients developing chest pain after surgery.

Keywords: Surgery, chest pain, takotsubo cardiomyopathy

PS-18

A rare cause of gastrointestinal bleeding after aortic surgery: Aortoenteric Fistula

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Introduction: Aortoenteric fistula (AEF) is an abnormal connection of the aorta and the gastrointestinal tract (GIS). Novo fistulization is defined as primary AEF (PAEF) due to the causes such as aortic aneurysm, and the fistulization developing after aortic interventions is defined as secondary AEF (SAEF). SAEF is most commonly seen after surgically placed aortic grafts. SAEF occurs in 0.36-1.6% of the patients who undergo reconstruction of abdominal aorta due to occlusive or aneurysmal diseases. It is eight times more frequent in men. Its exact pathogenesis is unknown. Due to the proximity of the aorta in the GIS, its most frequent localization is the junction of the 3rd-4th portions of the duodenum. The most common finding of this disease is bleeding. Computed tomography (CT), endoscopy, and angiography can be used for its diagnosis. The treatment includes removal of the graft, providing the maintenance of GIS, and revascularization. In this study, the etiology of GIS bleeding following aortobifemoral bypass will be investigated and the patient diagnosed with SAEF will be discussed.

Case: Due to occlusion in bilateral iliac arteries, a 64-year-old male patient without internal diseases was performed aorto-bifemoral bypass by the Department of Cardiovascular Surgery in April 2015. Because of hematoma and infection that postoperatively developed in the incision site, debridement was performed and the graft was partially removed. In February 2017, amputation was performed above the right knee because the circulation was impaired on the right leg. The upper gastrointestinal endoscopy of the patient in whom melena developed after the amputation was reported as "a foreign body thought to belong to the aortic graft in the duodenum third part of the duodenum passes from one wall of the duodenum to the other wall; there is an ulcer in the area that it passes through; some mucosa-based areas are covered with blood but there is no active bleeding". Moreover, the abdominal CT was reported as "the graft located between the 1/3 distal part of the infrarenal abdominal aorta and the right main femoral artery is seen to pass through the third segment of the duodenum and to occlude it". Based on these findings, graft excision+duodenojejunostomy surgery was performed in our clinic.

Conclusion: Secondary aortoenteric fistula is a late complication of aortic graft operations, and it developed in our patient two years after the operation. Melena and hematemesis are seen in 32-78% of patients, as in this patient. The postoperative mortality rate for SAEF varies between 14 and 70%. As a result, SAEF is a condition that should be considered in the differential diagnosis in the presence of GIS bleeding symptoms in patients undergoing aortic surgery.

Keywords: Aortic surgery, aortoenteric fistula, GIS bleeding

PS-19

A rare late complication after pancreaticoduodenectomy; intrahepatic lithiasis developing due to hepaticojejunostomy anastomotic stricture

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Pancreaticoduodenectomy is the surgical treatment of duodenal tumors. In patients in whom R0 resection was performed, 5-year survival rate has been reported to be 60%. Bilioenteric anastomosis stricture is one of the rare complications encountered in the long term after pancreaticoduodenectomy (PD). In the study of Cameron et al., it was found that the mean duration of biliary stricture development after PD was 13 months and the risk of development was 2.6%. It was also reported that it developed in the postoperative 1st month at the earliest and after 9 years at the latest. In our study, we aimed to present a case of hepatolithiasis associated with hepaticojejunostomy stricture 12 years after PD. In the examination of a 43-year-old female patient in whom jaundice suddenly developed after childbirth 12 years ago, a mass lesion causing obstruction was detected in the choledoch in the 2nd portion of duodenum, and Whipple procedure was performed. Postoperative adjuvant radiotherapy and chemotherapy were given to the patient whose pathology result was reported as duodenum adenocarcinoma. No evidence that could be consistent with recurrence or metastasis was found in the radiological and biochemical follow-ups. Liver function tests, alkaline phosphatase, and bilirubin values were found to be normal in blood tests that were performed due to the complaints of abdominal pain and itching. In the MRCP, a significant stenosis was observed at the level of hepaticojejunostomy anastomosis in the lumen and dilatation was found in the intrahepatic bile ducts up to the level of anastomosis. A large number of round-shaped filling defects consistent with stone were observed in the bile ducts that drained the segment 6 and at the hilus level in common bile duct. The patient was evaluated by interventional radiology. Surgical intervention was recommended due to the presence of intrahepatic lithiasis along with stenosis. It was seen that hepaticojejunostomy anastomosis in which stricture developed during

the operation was found to be about 1.5 cm away from bifurcation. Anastomosis was broken down. A great number of stones, the largest of which was 1.5 cm in diameter, were extracted through the dilated right hepatic duct. Hepaticojejunostomy anastomosis was performed with Hepp-Couinaud technique at the level of bifurcation and operation was terminated. In the MRCP that was performed after 5 months, it was seen that the passage was open and the dilatation in intrahepatic bile ducts was regressed, and no intrahepatic lithiasis was observed. It should be kept in mind that bilio-enteric anastomosis strictures may develop in cases that are followed up for a long term without any diseases after PD. More serious consequences can be avoided by regular follow-up of the patients, informing them about possible complications, and the early detection and treatment of stenosis.

Keywords: Pancreaticoduodenectomy, Bilioenteric stricture, intrahepatic lithiasis

PS-20

Stent-induced iatrogenic pancreatitis after the Whipple procedure

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Introduction: Although iatrogenic pancreatitis is the 5th most common cause of pancreatitis, it is important in terms of the rates of morbidity that it causes. It mostly occurs after endoscopic retrograde cholangiopancreatography (ERCP), but any interventional procedure that affects pancreatic duct and biliary tracts can lead to pancreatitis. We aimed to present a case of acute pancreatitis that developed due to the complication of stent placed during Whipple procedure.

Case: Our case was a 60-year-old male patient who was performed Whipple procedure 2 years ago because of ampulla of Vater tumor. The histopathological examination of the specimen was compatible with adenocarcinoma and the surgical margin was reported as clean. No lymph node metastasis and vascular or neural invasion were observed. The patient with no problems during routine controls was admitted to the emergency service for several times due to abdominal pain. At the last admission, iv contrast-enhanced abdominal tomography was taken because his amylase value was measured as 421 U/l, lipase value as 990 U/l, and CRP value as 291 mg/L in laboratory analyses. The result of tomography was reported to be consistent with acute pancreatitis and it was seen that the stent placed in the pancreatic duct was broken, and some part of it stayed in the pancreatic duct and some in the jejunum. Symptomatic treatment was started by stopping oral intake of the patient. The anastomosis line could not be reached although it was planned to be removed through gastroscopy. On the 5th day, the patient's clinical condition was recovered and he was discharged when his physical examination and biochemical test results returned to normal.

Conclusion: Acute pancreatitis is a commonly encountered disease and its etiology is associated with biliary disease or alcohol abuse in 80% of the cases. Iatrogenic pancreatitis is also seen with high mortality and morbidity rates. Among the iatrogenic causes, ERCP application is the most common one. In our case, the patient was operated due to malignancy without any history of pancreatitis or biliary endoscopic intervention, he was followed up for 2 years, and he came to us with acute pancreatitis after the preoperatively placed stent was broken. Although pancreatitis cases associated with stent migration or infection have been reported previously, as far as we know, a broken stent causing pancreatitis by staying in two separate surgical sites is the first case in the literature. Acute pancreatitis should be kept in mind in patients with severe abdominal pain developing in the follow-up after the Whipple procedure, and it should be remembered that a broken stent that has been placed intraoperatively, which can be recognized through biochemical and radiological examinations, can be an etiologic factor even after 2 years.

Keywords: Iatrogenic pancreatitis, pancreatic stent, Whipple procedure

PS-21

Risk factors affecting the transition from the laparoscopic surgery to open surgery during cholecystectomy

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Introduction: Since its first implementation by Mouret in 1987, laparoscopic cholecystectomy has been an important procedure in the treatment of gallbladder pathologies. The superiority of laparoscopy to open surgery is obvious with its advantages such as short hospital stay, low morbidity, good cosmetic results, and quick return to daily activities. However, in some cases, transition to an open technique is inevitable in terms of patient's safety or management of possible complications. Although there are publications giving the rates of transition to open surgery as high as 35%, generally accepted rates vary between 2% and 15%. The factors reported in the literature in relation to high rates of transition to open surgery include advanced age, being male, the presence of acute cholecystitis, obesity, unclear anatomy, bleeding, adhesions, biliary tract injuries, and high leukocyte count.

Our study aims to determine these factors.

Method: In our study, 2483 cases of cholecystectomy performed at our General Surgery Department between 2013 and 2016 were retrospectively reviewed. A hundred and ten cases of cholecystectomy which were started with open surgery and which were applied during another operation were excluded from the study, and 88 patients whose operations were started as laparoscopic but then converted to open surgery were selected for the study. Information on the demographic and clinical characteristics of the patients was obtained from the hospital records. The data of the randomly selected patients in equal numbers, whose operations were laparoscopically completed, were collected and compared. These factors were evaluated in terms of having a significant impact on the transition to the open surgery.

Results: The rate of transition from the laparoscopic cholecystectomy to open surgery was found to be 3.7%, and the most frequent cause for the transition to open surgery was detected to be an inflammation-related adhesion. While being male, advanced age, the presence of diabetes, the presence of median incision on the abdomen, multiple millimetric calculus in the ultrasonography, and increase in wall thickness were significantly effective on the transition to open surgery, no significant relationship was found with body mass index, pancreatitis, cholangitis, history of ERCP or abdominal operation, anesthesia evaluation score, and laboratory values. The lengths of hospitalization and operation were significantly longer in the group that was converted to open surgery.

Conclusion: Being male, advanced age, the presence of diabetes, the presence of median incision in the abdomen, multiple millimetric calculi in the ultrasonography, and an increase in wall thickness are associated with increased transition rates. The most important factor among all of these seems to be having a history of cholecystitis.

Keywords: Open cholecystectomy, laparoscopic cholecystectomy, risk factor

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PS-22

Esophageal variceal hemorrhage and liver transplantation

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Massive hemorrhage associated with esophageal varices is the most destructive complication of portal hypertension in advanced cirrhosis. Portosystemic shunt operations and endoscopic sclerotherapy are the primary techniques frequently used for the control of bleeding. Portosystemic shunt is the most effective way for taking esophageal variceal hemorrhage under control, but some difficulties are encountered after shunt because of the rates of hepatic encephalopathy and progressive hepatic failure. Although they do not affect liver circulation, the incidence of recurrent hemorrhage is quite high in non-shunt operations and sclerotherapy. Liver transplantation, at least theoretically, has become the most rational treatment for esophageal variceal hemorrhage in patients with advanced liver disease. We performed a successful orthotropic liver transplantation to a 58-year-old male patient who was included in the cadaveric liver transplantation list due to the diagnosis of cryptogenic liver cirrhosis and followed up in the intensive care unit for his esophageal variceal hemorrhage. We suggest that liver transplantation is very important in the treatment of hemorrhagic esophageal varices.

Keywords: Esophagus, variceal hemorrhage, liver, transplantation

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PS-23

Our results of the first two years in liver transplantation

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Introduction: In recent years, liver transplantation is a treatment choice for patients with all types of liver failure. In this study, it was aimed to retrospectively evaluate liver transplantations performed in the first two years of a recently founded organ transplantation center and to present our results.

Method: In this study, 7 successful liver transplantations performed in our organ transplantation center in Antalya Education and Research Hospital between September 2015 and August 2017 were evaluated. Patients' ages, genders, preoperative diagnoses, surgical procedures that were applied, duration of hospitalization, mortality, and morbidity were obtained and assessed retrospectively.

Results: Of 7 patients, 3 were female and 4 were male. The mean age was 58.57±4.57 (54-65) years. While preoperative diagnosis of 3 patients was hepatocellular cancer, it was HCV in 1 patient, HBV in 1 patient, and cryptogenic cirrhosis in 2 patients. All of liver transplantations were performed as cadaveric. The mean duration of hospitalization was 12.56±5.45 (7-30) days. Intraoperative mortality did not occur in any patient.

Conclusion: As is known, liver transplantation is one of treatment alternatives in patients with chronic liver failure. We present the results of liver transplantations performed in our recently founded organ transplantation unit in the first two years.

Keywords: Liver, transplantation, results

PS-24

Choledocoduodenal fistula developing after laparoscopic choledochal injury

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Although the rate of biliary duct injuries is decreasing with increasing number of safe practices and experience in laparascopic cholecystectomy, it is still between 0.5% and 1.4%. Choledochal injury is the primary troublesome and severe complication. Moreover, biliary leakage, peritonitis, stricture, frequent cholangitis attacks, sepsis, secondary biliary cirrhosis, liver failure, and mortality can be observed. ERCP and MRCP are commonly used for the diagnosis of biliary duct injury. In addition, the Strasberg classification is also used for diagnosing. These injuries are generally observed in difficult laparoscopic cholecystectomies. The risk of injury is higher in the elderly and male patients and in those frequently having attacks. The patient should be referred to a center having a team that is experienced in biliary tract surgery. Reconstructive surgery should be postponed for 6 weeks for the regression of inflammation and complete appearance of ischemic areas and intervention should be performed in accordance with the Strasberg classification. In general, Roux-En-Y hepaticojejunostomy is applied. In our case, reconstructive surgery was planned after waiting for 6 weeks. However, this decision was given up because of the development of spontaneous choledocoduodenal fistula after 6 weeks and the patient was followed up. No problem was observed during one-year follow-up.

Keywords: Laparoscopic cholecystectomy, injury, choledocoduodenal fistula

PS-25

Laparoscopic non-anatomic resection in metastatic liver masses

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Introduction: Laparoscopy plays an increasingly important role in liver surgery. The most common cause of liver resections is metastatic liver tumors. In liver resection, laparoscopic surgery has begun to be preferred more than open surgery in recent years due to the advantages such as postoperative pain, cosmetic results, and short hospital stay. In addition, laparoscopic examination before the laparotomy can reduce the number of patients that will undergo unnecessary exploration. In this video presentation, we aimed to share a non-anatomic laparoscopic liver resection that was performed in the patient with liver metastasis in segment 2-3 from breast cancer.

Case: A 56-year-old female patient with a body mass index (BMI) of 38 was performed breast conserving surgery due to left breast Ca (invasive ductal carcinoma). She had no history of abdominal operation. The liver appeared to be normal in USG. In Positron Emission Tomography (PET), the liver involvement was evaluated to be metastasis. The patient had no involvement in any other region. A mass lesion with a size of 3x1.5 cm was seen at the intersection of the segment 2 and 3 in the liver in MRI. Following the completion of all preparations, the operation was started under general anesthesia. The patient was placed in the supine position with the legs spaced apart on the operating table. The abdomen was entered using an optical trocar. Then, a 5 mm trocar was inserted in the right side, and 12 mm and 5 mm trocars were inserted in the left side of the patient, thus a total of 4 trocars were used. The Falciform ligament and the liver were released from the left diaphragm. The resection of the mass in the junction area of the segments 2-3 of the liver was started by marking the intact liver tissue as a safe surgical site. Energy-based devices were used during resection. The major ductal and vascular structures were closed using clips and laparoscopic staplers. By using the specimen endobag, the 12 mm trocar was removed from the site. The amount of bleeding was about 150 cc. A silicone drain was inserted into the site. The operation time was 100 min. The patient who did not have any complaints during the postoperative follow-ups was discharged on the 2nd postoperative day.

Conclusion: In comparison to open surgery, laparoscopic liver resection is a safer surgical procedure in appropriately selected patients in terms of reducing postoperative pain, better cosmetic results, shorter hospital stay and fewer number of patients undergoing unnecessary exploration.

Keywords: Laparoscopy, liver, metastasis

PS-26

Laparoscopic cholecystectomy operation in a patient diagnosed with situs inversus totalis

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Introduction: Situs inversus totalis (SIT) is a rare condition which shows autosomal recessive inheritance and in which the visceral organs shift places as in the mirror image. In this study, the laparoscopic cholecystectomy (LC) performed in a patient with SIT was presented.

Case: A 44-year-old female patient with a known diagnosis of SIT and with no additional problem consulted because of being recommended to undergo elective cholecystectomy operation. LC was performed after preoperative preparation. The surgeon and camera assistant were on the right side of the patient and the first assistant and nurse were on the left side. A 10 mm trocar was inserted into the abdomen over the umbilicus and the camera was used from this point. A 10 mm trocar was placed through the epigastric region, a 5 mm trocar was placed from the left subcostal midclavicular area, and a 5 mm trocar was placed from the left subcostal anterior axilla. The assistant applied traction to the gallbladder fundus through the 5 mm trocar on the very left. The surgeon used the holder with the right hand through the other 5 mm trocar and used the l-hook and the dissector with the left hand through the epigastric 10 mm trocar. The choledoch, cystic duct, and cystic artery were revealed with the dissection of the Calot's triangle. The cystic duct and the cystic artery were clipped and cut. The gallbladder was dissected out of the liver bed and removed from the umbilical port. The operation duration was 40 minutes. No problem developed in the postoperative follow-ups of the patient.

Conclusion: The displacement of organs in the patient with SIT makes LC, which is an operation open to anatomical variations, more difficult. For surgeons using the right hand, there are techniques in which the localization of the midclavicular port is modified, the surgeon works between the legs, or only the epigastric port is controlled with the right hand of the surgeon. In these techniques, however, the hand contacts the patient's body in a long field and early fatigue develops. In the technique, which we used in this case and similar ones of which can be found in the literature, though rare, the surgeon who can use both hands dominantly performs the major operations with the left hand through the epigastric port. The performance of these operations by the surgeons, who are able to use both hands dominantly or have sufficient experience, is the safest choice.

Keywords: Laparoscopic cholecystectomy, situs inversus, gallbladder stone

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PS-27

Laparoscopic splenectomy operation in a patient with the diagnosis of situs inversus totalis

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Introduction: Situs inversus totalis (SIT) is a rare condition characterized by the reverse placement of organs in the abdomen and chest cavity. In this article, laparoscopic splenectomy (LS) performed in a 62-year-old male patient with 8 cm splenic cyst was presented.

Case: A 62-year-old male patient in whom 8x5x5 cm cystic lesion was detected in the abdominal ultrasound and tomography taken in an external center due to abdominal pain a month ago and who was diagnosed with SIT was referred to our center. The patient had no complaints other than a mild pain in the upper right quadrant, which had repeated several times in the last 3 months. The patient, who had a history of appendectomy performed twenty years ago, had hypertension. Serological tests were negative in terms of hydatid cyst. LS was applied because of its size and being symptomatic. The operation was started in the left lateral decubitus position. The surgeon and camera assistant were on the left side and the first assistant was on the right side. The 10 mm trocars were placed from the right side of the umbilicus and the camera was used in here. During the exploration, a cystic mass was observed at the lower pole of the spleen. A 5-mm trocar was placed at the anterior axillary level in the arcus costarum line, a 12-mm trocar in the epigastric region, and a 10-mm trocar in the midclavicular area. Except the umbilical trocar, the other 2 trocars of 10 mm and 12 mm were used by the surgeon. The spleen was eliminated through the 5 mm trocar. The left hand or the right hand was dominantly used according to the current position. The splenic ligaments were released and the spleen was mobilized. Splenic artery and splenic vein were excised using clips and endoscopic vascular staples. The 10 mm trocar incision was extended for about 5 cm and the spleen was taken out. The operation lasted 105 minutes and there was 30 cc bleeding.

Conclusion: Laparoscopic surgery may be difficult in SIT patients because of some reasons such as different placement of organs and dominant hand use of the surgeons. Although SIT was an anatomically compelling cause in the presented patient, LS was

preferred considering its contributions to the patient. The position and the defined surgical technique were modified for this patient. In patients with SIT, LS can be performed without problems in experienced hands.

Keywords: Splenic cyst, splenectomy, laparoscopic splenectomy, situs inversus

PS-28

Spleen rupture developing due to anticoagulant use

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Introduction: Anticoagulant-induced splenic rupture or bleeding is a rare condition but it can be fatal. The diagnosis of splenic rupture should be considered in the coexistence of oral anticoagulant use and abdominal pain. In this article, we aimed to present a case of splenic rupture detected in a patient using warfarin because of a history of heart valve replacement.

Case: A 44-year-old male patient consulted to the emergency unit with the complaint of abdominal pain ongoing approximately for one day. His blood pressure was 85/55 mm Hg and pulse was 95/min at the initial evaluation. He had sensitivity and defense in the upper left quadrant in the examination of the abdomen. He had a history of mitral valve replacement 15 years ago and a history of an operation for abdominal aortic aneurysm about 2 years ago. The patient using warfarin did not describe any history of trauma. His hemoglobin was 12.5 g/dL, leucocyte count was 8300/mm^3, thrombocyte was 137 thousand/mm^3, and the INR value was 3.22. Abdominal tomography angiography was performed on the patient whose hemoglobin value decreased and tachycardia continued in the control examination. A 9×8 cm subcapsular hematoma and perihepatic fluid were reported in the spleen of the patient who had no active bleeding found in the tomography. Two units of erythrocyte and fresh frozen plasma replacement was performed in the patient. Emergency operation was planned because his hypotension and tachycardia deepened and hemoglobin decreased to 8 g/dL. Laparotomy revealed approximately 2 liters of hemorrhagic fluid, spleen rupture, and active bleeding foci in the abdomen. After releasing the splenic ligaments, splenectomy was performed by ligating the splenic artery and vein. No problem, except atelectasis, was observed in the follow-ups. He was discharged on the 5th postoperative day.

Conclusion: Splenic rupture is a rare condition in patients using anticoagulants. The absence of a trauma history can mislead the physician and cause delays in the diagnosis. The possibility of splenic rupture should be kept in mind in patients in whom coexistence of anticoagulant use and abdominal pain is detected. Early diagnosis and early treatment have vital importance for the patient. Its treatment includes conservative treatment, interventional treatment, and surgical options and the most appropriate one should be preferred according to the hemodynamic status of the patient.

Keywords: Spleen rupture, abdominal pain, subcapsular hematoma

PS-29

A rare complication of laparoscopic cholecystectomy: Portal vein injury

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Introduction: Portal vein injury is a very seldom complication of laparoscopic cholecystectomy and may be mortal. In this article, a case of portal vein injury that occurred during laparoscopic cholecystectomy was presented.

Case: A 54-year-old female patient was recommended to undergo an operation due to acute calculous cholecystitis that she had experienced twice previously. The patient had no additional problems apart from the obesity and hypertension. She was operated in an external center. She had serious adhesions to the omentum in the surgical site. The adhesions were eliminated and due to severe bleeding during the Calot's triangle dissection, the operation was switched to open surgery by trying to control the bleeding area with sponge and adsorbent. Bleeding was taken under controlled by compression and our team was invited to the case. Meanwhile, the patient's pulse was measured as 110/min and the blood pressure was measured as 85/55 mmHg. Intraoperatively measured hemoglobin was 8.5 gr/dL. Erythrocyte and fresh frozen plasma replacement was performed in the patient. In a short time, the team reached the related hospital and got involved in the operation. In the exploration performed after taking the hepatoduodenal ligament under control with Pringle maneuver, it was observed that there was a 3-4 mm defect and active bleeding in the lateral wall of the portal vein. Concomitant hepatic artery or biliary tract injury was not detected.

It was decided to repair the isolated portal vein injury primarily. The defect area was primarily sutured using 6-0 prolene loop, which would not cause any narrowing. Then, the patient was taken to the postoperative intensive care unit. The duration of the operation was 180 minutes and the amount of bleeding was 500 cc. The patient whose vital findings remained stable was extubated on the first postoperative day. Anticoagulant was started to be given to the patient whose drain contents did not have any pathology in terms of appearance and amount. The patient who had no additional problems and whose liver function tests were normal was discharged on the postoperative 5th day. In the control tomography performed in the postoperative period, the portal vein was observed as normal.

Conclusion: Early repair of portal vein injuries encountered in laparoscopic cholecystectomy is very important. Anticoagulant therapy should be given for the risk of thrombus development. Because additional biliary tract or hepatic artery injury may accompany to this condition, attention should be paid. Patient can be returned to normal life with good exploration and timing. It should not be forgotten that it may be mortal otherwise.

Keywords: Laparoscopic cholecystectomy, portal vein injury, vascular injury

PS-30

Laparoscopic cholecystectomy applied to the gallbladder with the localization of ligamentum teres hepatis

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Introduction: Anatomic variations are frequently seen in the biliary system. However, the gallbladder with the localization of ligamentum teres hepatis (LTH) is a rare condition, which is generally noticed intraoperatively despite many imaging techniques. In this study, a case of laparoscopic cholecystectomy applied to the gallbladder with the localization of LTH detected intraoperatively was presented.

Case: A 41-year-old female patient was admitted laparoscopic cholecystectomy operation that was recommended as an elective method for her previous two acute cholecystitis attacks. She had no comorbid diseases. According to her previously taken abdominal ultrasonography, there was a 16 mm stone in the gallbladder. She was taken into operation after preoperative preparation. A 10 mm port was placed on the umbilicus and the camera was used from here. Then, one 10 mm trocar was inserted from the epigastric region, one 5 mm trocar from the right subcostal midclavicular region, and one 5 mm trocar from the right subcostal anterior axillary region. The exploration revealed adhesions between the omentum and liver. The adhesions were eliminated with blunt and sharp dissection. However, the gallbladder could not be viewed in normal localization. Dissection was advanced towards the left lobe of the liver and the gallbladder with the localization of LTH was observed. It was also observed that the cystic artery was extending to the fundus in the neighborhood of the gallbladder and there was ectopic liver tissue in the neighborhood of the gallbladder. No accompanying biliary tract anomaly was encountered. Modification was not needed for the placement of the ports. After cystic artery and cystic tract were isolated with carefully performed dissection, they were clipped and cut. Then, the gallbladder was separated from LTH with cautery and removed through the periumbilical port. No problem developed in postoperative follow-ups.

Conclusion: The gallbladder with the localization of LTH is a rarely seen anomaly that is considered to be an embryological event. The pain is generally localized in the right upper quadrant. Many cases cannot be detected in preoperative period and the diagnosis is established intraoperatively. In general, it is possible to end the process laparoscopically. Modification can sometimes be needed for the placement of ports. Accompanying biliary tract or vascular variations can be observed. Because of these variations, these cases are specified to be open to complications. Carefully performed dissection becomes much more important in this type of cases that are open to the development of complications.

Keywords: Ligamentum teres hepatis, gallbladder anomaly, laparoscopic cholecystectomy

PS-31

A case of isolated splenic hydatid cyst

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Introduction: Hydatid cyst is a zoonotic infection that is commonly encountered across the world. Infection is caused by larvae entering into the human body with foods. It is mostly seen in the liver and secondly in the lungs. Its incidence in the spleen is

highly low. In this study, it was aimed to present an isolated splenic hydatid cyst case detected in our country, which is located in the endemic region for hydatid cyst.

Case: A 51-year-old male patient consulted to the outpatient clinic due to the complaint of intermittent pain in the left upper quadrant lasting one year. He had no history of a known disease or surgical operation. In the abdominal ultrasonography performed for abdominal pain, splenomegaly and cystic structure in the spleen were detected. Abdominal tomography was performed to the patient. The size of the spleen was measured as 27x21 cm. A mass that was considered to be a hydatid cyst locally including septa was observed in the whole spleen. The serology test showed that echinococcus IgG was positive. No pathology related to hydatid cyst was detected in the liver and lungs of the patient. Open splenectomy was recommended to the patient. With the aim of preventing infection in the abdomen in surgery, measure was taken by 20% NACl. By paying attention for the spleen not to be damaged, the ligaments of the spleen were released. After the splenic artery and vein were ligated and excised, splenectomy was performed. During postoperative period, the patient had no problem apart from atelectasis. The patient visits the outpatient clinic for controls and he is followed up without any problem in the 2nd postoperative year.

Conclusion: The incidence of hydatid cyst with splenic involvement is highly low according to other organs. Splenomegaly can cause some symptoms such as a palpable mass in the left upper quadrant, abdominal pain, and constipation. Splenic hydatid cyst can be confused with other splenic cystic masses and this can lead to misdiagnosis or late diagnosis. Its treatment includes total or partial splenectomy according to the localization and size of the cyst. It is operated by laparoscopic or open surgery. It is very important to make a correct diagnosis because of complications such as intraabdominal contaminant and anaphylactic shock.

Keywords: Hydatid cyst, splenic hydatid cyst, splenic cyst

PS-32

Does the cyst shrink in hydatid cyst patients undergoing ERCP?

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Introduction: In this study, it was aimed to investigate the shrinkage of cyst cavity in liver hydatid cysts expanding to the common bile tracts, which was treated with ERCP.

Method: Eight patients that were admitted for obstructive jaundice due to liver hydatid cyst expanding to the choledoch were examined. In all of these patients, hydatid cyst was treated by using ERCP and endoscopic sphincterotomy. The procedure was performed twice in one patient and stent was placed in 2 patients. All patients underwent sedation and those with cholangitis were administered antibiotic prophylaxis. After 2 and 6 months, the cyst cavity was examined through USG by the same radiologist in addition to clinical controls. Cyst cavity did not completely disappear in any patient.

Results: Of the cases, 5 were female and 3 were male. Their ages were between 28 and 75 years and the mean age was 53.2 years. All patients had abdominal pain and nausea. Two patients with cholangitis additionally had jaundice, lack of appetite, fever with chills, and shivering. Serum alkaline phosphatase and GGT incresed in all patients. On the other hand, bilirubin showing direct dominance and luekocytosis were found in patients with cholangitis. Based on the result of tomography, it was reported that there were hydatid cysts, the sizes of which varied between 5 and 20 cm, in the liver, the biliary tracts were enlarged, and the cyst was ruptured into the biliary tracts. An apparent improvement was found in the clinical and biochemical laboratory values of the patients in the following day of the procedure. After the procedure, the patients stayed at hospital for 2-10 days (mean: 5.4 days). In the control examinations performed 2 months after, no symptoms and signs of hydatid cyst and its complications were observed in the patients. Biochemical laboratory values were normal and cyst cavities were shrunk by 1-9 cm.

Conclusion: Cyst cavity is rapidly shrunk and recovered in cysts extending into the common bile tracts and being treated with ERCP. The follow-up of the remaining cyst cavity causes problems. Therefore, it is important to eliminate or shrink the cyst cavity.

Keywords: ERCP, hydatid cyst, cyst cavity

PS-33

Metastatic splenic malignancies: presentation of 3 cases

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Introduction: Secondary malignancies of the spleen are rarely seen. Breast, lung, skin, ovarian, and colorectal cancers are the tumors that mostly cause metastasis to the spleen. In this study, splenic metastasis detected in 3 patients, who were previously operated due to ovarian, endometrial, and colon cancers, will be discussed.

Case 1: A 61-year-old male patient was operated due to the diagnosis of left colon cancer that was detected through examinations performed for constipation symptoms and left hemicholectomy was applied. The pathological result of the patient having a 2.5*2*1.5 cm cyst was reported as T3, N0, M0 colon adenocarcinoma. In the abdominal tomography (CT) performed for control approximately 14 months later, a 18x18 mm solid mass lesion was viewed in the spleen. Because it was a new mass, it was evaluated to be a metastasis and splenectomy was performed to the patient. His pathology was assessed as a 3x3x3 cm adenocarcinoma.

Case 2: A 60-year-old female patient had undergone total abdominal hysterectomy and bilateral oopherectomy (TAH+BSO) due to left ovarian cancer 4 years ago and her pathology result had been evaluated as ovarian papillary adenocarcinoma. The control abdominal CT revealed a 5 cm mass with margins that could not be differentiated clearly from the gastric corpus in the spleen and it was considered as a metastasis. The patient was operated and splenectomy+gastric wedge resection was performed. Her pathology result was reported as papillary adenocarcinoma metastasis in the stomach and spleen.

Case 3: A 58-year-old female patient had been operated due to endometrial adenocarcinoma and TAH+BSO had been performed. Approximately after 2 years, abdominal CT was performed and it revealed a mass that was considered to be a metastasis in the middle region of the spleen. Surgery was planned for the patient and splenectomy was performed. The result of pathology was reported as 6.5X4X3.5 cm adenocarcinoma metastasis. All 3 patients were discharged without any problem in the postoperative period.

Conclusion: Secondary malignancies of the spleen are seen very rarely and data on the prognosis of these patients are insufficient. However, restricted available data suggest that splenectomy improves the prognosis in the splenic metastases of colorectal, endometrial, and ovarian tumors.

Keywords: Splenectomy, splenic metastasis, splenic mass

PS-34

Pseudopapillary tumor of the pancreas: A single-center case series

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Introduction: Solid pseudopapillary tumor (SPT) is a rarely encountered cystic neoplasia of the pancreas. Most of these patients are female and they are diagnosed between the ages of 25 and 35- years. This tumor has low malignancy potential and its treatment approach is surgical resection. In our study, demographic, clinical, radiological, and pathological features of 8 patients that were diagnosed with solid pseudopapillary tumor and the treatment choices were evaluated with current literature.

Method: In this study, 8 patients diagnosed with solid pseudopapillary tumor of the pancreas and operated in our clinic between January 2008 and May 2017 were retrospectively evaluated based on the database of the hospital. Demographic data, clinical features, imaging reports, pathology results, and immunohistochemical data of the cases were presented.

Results: Of 8 patients with solid pseudopapillary tumor, 7 were female and 1 was male. The mean age was 32- years (18-49 years). The most common complaint for consulting to the clinic was abdominal pain. The localization of tumor was in the head of the pancreas in 4 patients and in the tail of the pancreas in other 4 patients. The mean diameter of tumor was 61.3 mm (20-100 mm). In surgical treatment, pancreaticoduodenectomy was performed to fourpatients, distal pancreatectomy to three patients, and distal pancreatectomy with splenectomy to one patient. Each patient was immunohistochemically examined with hematoxylin-eosin staining and they were histopathologically diagnosed as pancreatic pseudopapillary tumor. Lymph node metastasis was not pathologically observed in any case. In only one patient, tumor was found to be invasive into the portal vein and superior mesenteric vein and anastomosis was performed after resection. All of the patients were followed up for at least 24 months and no recurrence and mortality occurred.

Conclusion: Solid pseudopapillary tumor of the pancreas is a cystic neoplasia that is mostly seen in young women and has low malignancy potential. It is incidentally diagnosed by recently increasing imaging techniques. Curative treatment choice for this tumor is a surgery and it increases long-term survival. These tumors should be followed up for a long time because of their low malignancy potential and possible recurrences. Since its prognosis is well with surgical resection, it should be kept in mind, particularly in pancreas lesions of young female patients.

Keywords: Solid pseudopapillary tumor, pancreas tumors, solid pseudopapillary tumor

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PS-35

Bilateral assessment in liver metastases of colorectal carcinoma: The effect of tumoral and parenchymal features on prognosis

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Introduction: Colorectal carcinoma is the third most common cancer type across the world and it is the fourth most frequent cause of cancer-related deaths. Liver metastasis is the primary cause of mortality in colorectal carcinoma cases and it is found in 25% of patients at the time of diagnosis. Five-year survival rate varies between 40 and 60%. Surgical resection is an important treatment choice for these patients. Various clinical risk scores are used for the prediction of prognosis, but there are no well-defined prognostic histopathological factors. In this study, changes observed in tumor and surrounding parenchyma in liver metastasis of colorectal carcinoma were evaluated in terms of different histopathological features recommended in various studies in the literature and their relationship with prognosis was investigated.

Method: HE-stained sections representing tumor and surrounding parenchyma of 40 patients undergoing liver resection due to colorectal carcinoma metastasis in our hospital between the years of 2011 and 2014 were evaluated in terms of total number of nodules, the biggest tumor diameter, distance to surgical margin, rate of necrosis, tumor differentiation, presence of a capsule, perineural and lymphovascular invasion, micrometastasis, and rate of lymphocytic infiltrate in the tumor periphery in tumor and in terms of presence and percentage of steatosis, lobular inflammation, hepatocyte aneurysm, confluent necrosis, and portal inflammation in surrounding parenchyma and they were scored. The relationships of these parameters with survival and mortality were statistically investigated.

Results: The mean age of the patients was 58.07 (26-76) years. The female: male ratio was 0.66. One, three, and five-year general survival rates after resection were 91%, 74 %, and 52 %, respectively. The relationship between tumor differentiation and survival was found to be statistically significant. Survival length of well-differentiated tumors was significantly higher than that of moderate-poor-differentiated tumors (p=0.014). Moreover, survival length was found to be significantly lower in cases with lymphovascular invasion (p=0.024). The relationship between lymphovascular invasion and mortality was statistically significant (p=0.013). Micrometastasis was detected only in 4 patients. While the survival length was 39.31 months in patients with micrometastasis, it was 59.9 months in those not having micrometastasis. However, the difference was not statistically significant.

Conclusion: According to this study, tumor differentiation and the presence of lymphovascular invasion in colorectal liver metastases can be potential prognostic factors that should be specified in pathology reports. No relationship with prognosis was detected for the parameters evaluated for surrounding liver parenchyma. However, this study was conducted on limited number of cases and data should be supported with further studies including larger series.

Keywords: Colorectal carcinoma, liver metastasis, prognosis

PS-36

Intraductal papillary mucinous neoplasm of the pancreas: 25-case series

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Introduction: Intraductal papillary mucinous neoplasms of the pancreas (IPMN) are intraductal mucinous cystic lesions containing varying rates of dysplasia. While the possibility of malignancy development in sub-branch type IPMN is reported to be between 5% and 25% in the literature, about 70% of main-branch type IPMNs are reported to contain high grade dysplasia or carcinoma. It is known that pancreatic carcinomas associated with IPMN have better prognosis than those that are not related with IPMN. For this reason, the recognition and correct evaluation of these lesions in operation materials is important for prognosis. Several histopathological parameters that should be mentioned while reporting IPMNs have been reported in recent years. In this histopathologic study, our 25-case series was evaluated according to the standards recommended in the literature.

Method: Patients who were operated in our hospital and diagnosed with IPMN between 2007 and 2017 were evaluated in terms of the parameters such as grade of dysplasia, rate of high- grade dysplasia , dominant cell type, lesion size, multifocality, main duct diameter, parenchymal changes, the presence of PANin, invasive tumor type if any, differentiation, pathological stage, and lymph node metastasis.

Results: Eleven of the cases were pure IPMN and 14 were ductal (n=12) or mucinous (n=2) adenocarcinoma associated with IPMN. While the female:male ratio was 1:4 in all cases and 5:6 in noninvasive IPMNs, all of the cases with adenocarcinoma were male. In all cases and in cases with accompanying adenocarcinoma, the predominant histological type was pancreatico-biliary and gastric type. Thirty-nine percent of all cases, 60% of pure IPMN cases, and 23% of cases with adenocarcinomas were sub-branch type. Sixty-eight percent of all cases, 36% of pure IPMNs, and 92% of the cases with adenocarcinomas included high-grade components, but the rate of high-grade dysplasia was observed as >25% only in 2 cases with carcinomas and vared between 5 and 10% in other cases. The mean survival time was 20.98 months in total, 28.38 months in patients with pure IPMN, and 11.2 months in patients with adenocarcinoma.

Conclusion: In this study, it was found that most of the adenocarcinoma cases had pancreaticobiliary and gastric morphology, and they had main-branch type. It was also observed that they had high-grade dysplasia at a higher rate. It was remarkable that the rate of high-grade dysplasia was low in the majority of cases accompanied by adenocarcinoma (5-10%). For this reason, it is necessary that the macroscopic and microscopic evaluation of these lesions should be performed appropriately and the parameters such as cell type and main/sub-branch distinction should be indicated in the report. Even if the grade dysplasia is low, the whole lesion should be sampled because it can be accompanied by a focally high-grade/invasive component.

Keywords: Pancreas, intraductal papillary mucinous neoplasia, adenocarcinoma

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PS-37

The importance of holistic approach to patient after liver transplantation

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Introduction: The aim of this study was to emphasize the importance of holistic approach to patient after liver transplantation.

Method: Liver transplantation, which is a risky surgical intervention, is the only treatment method that is recommended for the continuation of life in cases with end-stage liver failure. By considering psychological state of patient and family in addition to patient selection, diagnostic methods, infection risk, surgical technique, graft size, wound care, and immunosuppressive treatment, a holistic approach should be provided for minimizing possible problems before and after transplantation. Liver transplantation requires a nurse to do a multi-dimensional observation, to analyze probabilities for patient and family, to empathize, and to see the big picture.

Results: In this period, patients have highly strong and complex emotions such as new body image, gratefulness to the donor, anxiety, and fear of rejection or infection. They feel anxious about having the fear of death again. They are worried about familial relationships and their jobs. They have the fears of being left and job loss and concern for the future. Regular and accurate application of immunosuppressive therapy, which is an important factor for the prevention of organ rejection, and medical and psychological approach to minor and major neurological complications should be paid attention by nurses. It is very important a nurse to be a good observer for the detection of apparent weight gain after transplantation, rejection signs, and body image changes associated with therapies. The process of transplantation deeply affects the families as well as patients. In order to be able to evaluate coping behaviors of patient and family with feelings such as fear, helplessness, and inadequacy, nurses should examine the physical, social, and psychological development of patient beginning from childhood.

Conclusion: Liver transplantation is a condition that requires long-term treatment and care. The importance of nursing care and especially holistic approach is high for solving patients' problems after transplantation and for increasing their quality of life to the top level and maintaining it.

Keywords: Liver, transplantation, holistic approach

PS-38

A severe complication associated with an internal catheter forgotten in the bile duct after liver resection: Multiple liver abscesses

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Introduction: In this study, it was aimed to present multidisciplinary management of a patient presenting with a septic clinical picture and having cholangitis and multiple liver abscesses that developed in association with the internal plastic stent (feeding catheter) which had been peroperatively placed in the bile duct in the right hepatectomy due to liver hemangioma 8 years ago.

Case: A 51-year-old female patient had undergone right lobectomy due to liver hemangioma in an external center in 2008 and she did not have any problem related to this procedure until the admission to our clinic. The patient was admitted to the emergency unit with the complaints of fever, chills, sweating, shivering, and jaundice in 2016. The imaging of the patient, whose cholestatic enzymes and bilirubin levels were high, revealed an appearance that extended from the choledoch to the 4th segment of the liver and that was consistent with catheter. Intra/extrahepatic biliary tracts were reported to be dilated and she was hospitalized in the department of Gastroenterology with the diagnosis of cholagitis. In her follow-ups, she was not relieved and her fever could not be taken under control. Because her control imaging revealed multiple liver abscesses, she was transferred to our department of general surgery and operated. Catheter was removed in choledocotomy and multiple abscesses were drained under the guidance of peroperative USG. The choledoch was closed with T tube. On the 15th day, T-tube was removed.
Conclusion: Since the results of control imaging were normal on the 15th day, she was discharged on the 20th day.

Keywords: Feeding catheter, multiple liver abscesses, sepsis, hepatectomy

PS-39

Reconstruction of liver recipient having stenosis due to plaque in the root of the common hepatic artery with aortic bypass

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Introduction: The aim of this study was to present a patient who underwent reconstruction of hepatic artery into the abdominal aorta through bypass because of stenosis associated with a plaque in the root of the common hepatic artery in living donor liver transplantation.

Case: Liver transplantation was planned for a 63-year-old male patient due to cirrhosis associated with HBV. After all anastomoses were completed in the living donor liver transplantation without any problem, peroperative Doppler USG was performed and hepatic artery flow was evaluated to be poor. For this reason, the common hepatic artery was dissected until the celiac trunk and a 1 cm plaque causing 70% stenosis was found in the root of the common hepatic artery. Re-anastomosis was performed into the aorta by cutting the hepatic artery over the plaque. Since the postoperative control Doppler USG of the patient was evaluated to be normal, he was discharged without any problem.

Keywords: Common hepatic artery, liver transplantation, aortic bypass, plaque

PS-40

Does convalescence period after emergent splenectomy affect the frequency of post-splenectomy infectious complications?

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Introduction: While many complications can develop after splenectomies performed secondary to trauma, one of the most frightening complication is post-splenectomy sepsis. In order to protect against this complication with high morbidity and mortality, many prophylaxis methods including vaccination are used. In this study, it was aimed to analyze the effect of physically active and hard working on post-splenectomy infectious complications in cases for which all measures were taken.

Method: Twenty-four patients on whom emergency splenectomy was performed were included in this study. A report for rest was given for 20 days to the patients operated due to isolated spleen trauma and for at least 20 days depending on the general conditions of the patients operated due to multi-trauma with accompanying spleen injury. It was learned that, despite the sick report, some of the patients who visited the clinic for control examination on the postoperative 10th, 15th, and 30th days after discharge began physically hard working because of some socio-economic reasons. A comparison was done between the patients

who completed 20-day resting (15 cases) (Group 1) and who began to work before completing 20-day resting (9 cases) (Group 2) in terms of postoperative infection rate.

Results: A small infection taken under control with a simple antibiotic was observed in the incision line only in 1 patient in Group 1. However, in Group 2, incisional infection developed in 2 patients, severe atypical pneumonia requiring hospitalization in 1 patient, and severe viral gastroenteritis requiring one-day hospitalization in 1 patient. While the numbers of patients in the groups were insufficient, there is a statistically significant difference between the groups in terms of infection rate ($p<0.05$).

Conclusion: In our country, resting period after major surgical interventions is not completed till the end particularly in socio-economically backward regions. Our opinion is that, in addition to the defect of the immune system caused by major surgical intervention and splenectomy, dehydration and malnutrition secondary to hard working also contribute to high rate of infection by suppressing the immune system.

Keywords: Splenectomy, post-splenectomy, complications

PS-41

The Evaluation of the liver function tests/blood bilirubin/ amylase-lipase levels in seasonal cotton workers

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Introduction: There are very few studies about the general health status of seasonal agricultural workers who are commonly employed in the regions of Southeastern Anatolia and Black Sea in particular seasons. The lack of a certain qualification in the job and the lack of a certain standard in the permanency of the job and in working protocol do not allow systematic studies to be performed on the general health conditions of these citizens. In this study, a comparative evaluation of seasonal cotton workers was aimed in terms of hepatobiliary pathology.

Method: Eighty-four women at the ages between 18 and 50 years (Group 1), who had no general complaints and consulted to a district hospital in the Southeast Anatolia Region for typical traumatic lesions on the hands during the active cotton harvest season, were counted in the study. Patients having systemic diseases, using drugs that would affect the hepatobiliary system and pancreas, and having undergone an operation for the hepato-pancreato-biliary system disease were excluded from the study. At the time of first clinical evaluation, AST/ALT/ALP/GGT/total-direct bilirubin/amylase-lipase levels of the patients were measured. As the control group, the same measurements were also made in 72 asymptomatic healthy women who worked in homes and had the same demographic data (Group 2).

Results: Although there was no significant difference between the Group 1 and Group 2 in terms of the mean AST-ALT-ALP values ($p>0.05$), the mean values of total direct bilirubin / amylase-lipase were found to be statistically higher in Group-1 than in Group-2 ($p<0.05$).

Conclusion: While lung and liver pathologies developing secondary to pesticide exposure in agricultural workers are known, we have extremely limited knowledge about hepatobiliary-pancreatic pathologies that occur only in seasonal workers and in workers who are exposed to pesticide-cotton dust intensively and acutely. The results of this study, which has been the first in the field, have shown that pesticide or cotton dust exposure causes acute damage especially to the biliary system and pancreas. From this point of view, we think that it is very important to conduct more comprehensive studies in the light of the findings reported in our study.

Keywords: LFT, amylase, lipase, and agricultural worker

PS-42

Is there any relationship between surgical technique and iatrogenic pancreatic injury in splenectomies performed secondary to acute trauma?

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Introduction: Splenectomy is a major surgical intervention that is life-saving in the surgical treatment of blunt/penetrating splenic traumas; however, it brings along various complications. In addition to being a highly standardized procedure for the

surgical technique, pancreatic tail injuries can also be seen, especially during the dissection and attachment of the splenic hilus. In this study, the effects of the use of vessel-sealing devices during spleen hilus dissection were investigated for the occurrence of iatrogenic pancreatic injury.

Method: Eighteen patients undergoing emergency splenectomy due to splenic injury secondary to acute trauma were evaluated in the study. While seven of the patients were operated in conventional method using vicryl suture (Group 1), vessel-sealing devices were used in 11 patients (Group 2). At the post-operative 8th, 24th, 48th and 72nd hours, amylase-lipase measurements were performed both in the drain of the operation site and in the blood. Patients with severe systemic disease and hepatobiliary system pancreatic pathology were excluded from the study.

Results: While no statistically significant difference was observed between Group 1 and Group 2 in terms of the mean blood amylase-lipase levels ($p>0.05$), the values of Group 1 were statistically significantly higher than those of Group 2 with regard to the mean amylase-lipase values in the drain ($p <0.005$).

Conclusion: Considering tissue ischemia-necrosis, intraabdominal infection-abscesses, possible intraabdominal adhesions, and other serious complications, which may develop secondary to chemical trauma caused by the disseminations of pancreatic secretions into the peritoneal cavity, protection of the peritoneal cavity against contact with these enzymes seems to be extremely important. We believe that the use of vessel-sealing devices for this purpose may behave functional importance.

Keywords: Emergency splenectomy, pancreatic injury, vessel-sealing device

PS-43

A rarely seen case: Bouveret syndrome

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A 62-year-old male patient having a diagnosis of DM and no history of previous operation consulted to the outpatient clinic due to the complaints of nausea and vomiting. Laboratory analysis performed at initial examination revealed elevated values of blood glucose, HbA1C, BUN, and creatinine. Hyperemia in the antrum mucosa and in the mucosa along the pyloric canal, edema, and irregularity were observed in the gastroscopy. It was impossible to pass into the bulbus of duodenum because of luminal narrowing. Biopsy was taken. Abdominal ultrasonography revealed cholelithiasis and air in the intrahepatic biliary tracts. No pathology was detected in the CT taken in another external center. The result of biopsy was consistent with chronic gastritis. In the patient, who was decided to be operated, cholecystoduodenal fistula and biliary stone at the exit of the pylorus were detected. Cholecystectomy, primary repair to the duodenum, pyloroplasty, bilateral truncal vagotomy, gastroenterostomy, and Braun anastomosis were performed. The patient, whose gastrointestinal functions turned to normal and had serous drainage, was discharged with full recovery on the postoperative 13th day.

Keywords: Bouveret syndrome, stomach, outlet, obstruction

PS-44

The effects of low-molecular-weight-heparin administration on bleeding in elective laparoscopic cholecystectomy

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Introduction: The administration of low-molecular-weight-heparin (LMWH) as bridging treatment in thromboembolism prophylaxis by interruption of oral anticoagulant (OAC) agents before surgical procedures is a common practice in long-term oral anticoagulant use. The fact that it increases the risk of bleeding is its significant disadvantage. The aim of this study, therefore, was to investigate the effects of treatment dose LMWH on bleeding in laparoscopic cholecystectomy (LC).

Method: The cases of patients who underwent elective LC in our Department between January 2013 and May 2017 were retrospectively evaluated. The patients were divided into 3 groups. Group I covered patients who were not on any anticoagulant or antiaggregant agent, Group II included patients who were on OAC, while Group III had patients who were on antiaggregant agents (aspirin and/or clopidogrel). Factors affecting major bleeding were analyzed through univariate and multivariate analyses.

Results: There were 285 (80.7%) patients in Group I, while there were 30 (8.4%) patients on OAC in Group II, and 38 (10.7%) patients on antiaggregants in Group III. Major bleeding was seen in one patient in Group I and III (0.3%, 2.6% respectively), while major bleeding necessitating transfusion was seen in 5 (16.6%) patients on OAC in Group II ($p<0.001$). The results of the univariate analysis revealed that age >=65, ASA score >=3, BMI >=25 kg/m2, INR >= 1.2, PTZ >= 14, treatment dose LMWH (twice daily) administration, and operation time >= 60 were the factors affecting bleeding.

Conclusion: The results of the multivariate logistic regression analysis, however, showed that only treatment dose LMWH administration was an independent risk factor affecting major bleeding ($p=0.021$, odds ratio (OR); 14.49, confidence interval [CI]; 0.007-0.666). Bridging treatment with LMWH by interruption of OAC treatment increases the risk of major bleeding in LC.

Keywords: Laparascopic cholecystectomy, bleeding, low-molecular-weight-heparin

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PS-45

Laparoscopic removal of a foreign body from the liver

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Intrahepatic foreign bodies are rarely seen. Non-complicated intrahepatic foreign bodies can be followed up without any need for an intervention. On the other hand, surgical intervention by laparotomy or laparoscopy can be required for complicated intrahepatic foreign bodies. In this case, an incidentally forgotten sewing needle was detected in the liver of a 22-year-old female patient and she was followed up because she had no complication. During her follow-ups, the complaints of abdominal pain and intermittent fever developed. In the patient who was laparoscopically explored, the sewing needle, which was located in the lateral region of the right liver lobe and in the neighborhood of the gallbladder and one end of which was out of the liver, was removed with laparoscopic grasper.

Keywords: Laparoscopy, foreign body, liver

PS-46

The liver metastasis of retroperitoneal sarcoma

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Introduction: Soft tissue sarcomas constitute approximately 1% of all cancers and they are most commonly located in the extremities (59%). Other major localizations are the abdomen (20%), retroperitoneum (15%), and head and neck regions.

Case: A 70-year-old female patient consulted to the outpatient clinic of general surgery due to abdominal pain. She had a history of surgery that she underwent due to retroperitoneal mass nine years ago and the pathology was reported as undifferentiated sarcoma. It was seen in the oncologic follow-up that she had radiotherapy and she was not followed up for the last 5 years. There was no pathological feature on her physical examination. In the abdominal USG (ultrasonography), a 10 cm diameter solid mass was observed in the right lobe of the liver. In the dynamic contrast abdominal CT (computerized tomography), an approximately 13x10 cm heterogeneous mass extending to the caudate lobe at the level of the posterior segment of the right lobe of the liver was found to be consistent with metastasis with known primary malignancy. In the abdominal MRI, the 14x9 cm heterogeneous lesion in the posterior segment level of the right lobe of the liver was evaluated as a suspicious lesion in terms of metastatic involvement. The patient was operated under the elective conditions and right hepatectomy was performed. The patient in whom no postoperative complication developed was discharged on the 6th postoperative day with full recovery. The pathology was a malign mesenchymal tumor. The results of the pathology were as follows: Tumor size: 13x11x11 cm, Pleomorphism (+), Cellularity (+), Necrosis: (20%), Mitosis: 12/10 BBA, Atypical mitosis (+), Ki67: 20%, Lymphovascular invasion (-). Immunohistochemical findings were Alpha-antitripsin: (+), SMA: (+), vimentin: (+), Desmin: (-), CD34: (-), S100: (-), Heppar: (-), Glypican-3: (-), CKPan: (-). The diagnosis of undifferentiated pleomorphic sarcoma was made through immunohistochemical studies and it was interpreted as metastatic focus.

Conclusion: Retroperitoneal masses may be benign, primary malignant, or metastatic. Mostly they do not originate from the organs here and 80% of them originate from the mesoderm. Retroperitoneal sarcomas are the most common tumors of the retroperitoneum (60%). Histological grading of retroperitoneal sarcoma is the most important determinant in terms of survival, and the tumor size and depth are the other important prognostic factors. The main treatment approaches for these tumors include large local excision and radiotherapy. In some histological subtypes, chemotherapy is also added to the treatment. Despite treatment, distant metastases are seen in about half of the high-risk patients at an early stage. Metastasis is most commonly seen in the pulmonary, then in the skeletal system. Liver metastases rarely occur. Resection may be performed in some isolated metastatic cases. The cases for whom resection is planned should be selected considering the number of metastases, disease-free period, and tumor doubling time.

Keywords: Liver, metastasis, retroperitoneal sarcoma

PS-47

Preoperative diagnosis and treatment of cholecystoduodenal fistula

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Introduction: Cholecystoduodenal fistula developing secondary to chronic inflammation of bile duct stones is a rare complication. The symptoms of the patients are non-specific, and the diagnosis of the disease is usually made during the operation. When cholecystoduodenal fistula is suspected especially in pre-operative imagings of patients frequently having cholecystitis attacks, it is the most appropriate approach to plan the operation considering this situation.

Case: An 86-year-old male patient consulted to the outpatient clinic of general surgery with the complaint of abdominal pain that recurred in last 2 years. No pathology was observed in the physical examination. In the abdominal USG (ultrasonography), there were multiple calculi, the largest of which had a size of 24 mm, in the gallbladder. Thickened intestinal mucosa was observed in a local area with the localization of hepatic flexura. In the abdominal CT (computed tomography), the planes between the bile duct wall and the first part of the duodenum were disappeared and it was noted that the gallbladder was fistulized into the first part of the duodenum. There were distinct air images in intrahepatic bile ducts, cystic duct, and choledoch. In the light of this knowledge, a cholecystoduodenal fistula diagnosis was made. The patient was operated in a planned way under elective conditions. After cholecystectomy, the duodenal defect was primarily repaired. The patient was discharged on the post-operative 6th day with full recovery.

Conclusion: Bilioenteric fistulas are a rare and important complication that usually develops in association with chronic inflammation due to gallbladder stones, and they may be seen as fistulization into the stomach, duodenum, and colon. More rarely, fistulas associated with malignancy can also be seen. Their symptoms are usually non-specific. Preoperative imaging methods are generally inadequate and the diagnosis is made intraoperatively. The most important is the suspicion of cholecystoduodenal fistula in pre-operative direct X-ray, USG, CT, or endoscopy. Thus, the operative strategy is defined more clearly and the planning can be done more accurately. Surgical treatment includes the closure of fistula mouth through cholecystectomy in a laparoscopic or conventional way. Especially in cases with frequent cholecystitis attacks, this situation should be considered and treatment planning should be done in case of suspicion.

Keywords: Acute cholecystitis, complication, cholecystoduodenal fistula

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PS-48

Bouveret syndrome case presentation

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Introduction: Cholecystoduodenal fistula is a rare complication that occurs after acute cholecystitis. Bouveret syndrome is a rare clinical picture that develops when a gallbladder stone passes from the cholecystoduodenal fistula to duodenal lumen and causes gastric outlet obstruction. The main symptoms are abdominal pain, nausea, and vomiting. The endoscopic finding that suggests this syndrome is stiff mass causing the digested food to be obstructed at the exit of the stomach.

Case: A 78-year-old female patient consulted to the emergency service with the complaints of abdominal pain, nausea, and vomiting. Sensitivity in the epigastric region and distension in the abdomen were observed in the physical examination. In radiological imaging, stone image was seen in the location of pneumobilia and doudenum. In the abdominal USG (ultrasound), there were multiple stones in the bile duct lumen and there were inflammation and wall thickening in the intestinal loops at the neighborhood of gallbladder. The abdominal CT (computed tomography) revealed a stone obstructing the lumen at the end of the 1st part of the duodenum. In the gastroduodenoscopy a fistula orifice was observed in the duodenum and a large stone impacted in the lumen was detected at the distal region. The stone could not be removed endoscopically. The operation was planned under elective conditions. Primary duodenal defect repair was performed through conventional cholecystectomy after the removal of the stone from the mouth of the duodenal fistula. The patient was discharged on the postoperative 6th day with full recovery.

Conclusion: Bouveret syndrome is defined as gastric outlet obstruction caused by large bile duct stones in the stomach or duodenum after the incidence of bilioenteric fistula. This syndrome is a rare cause of mechanical intestinal obstructions and it is encountered at a rate of 1-3%. The disease is usually seen in advanced age and in women. Physical examination and laboratory findings are non-specific, and endoscopy and radiological examinations are at the forefront for diagnosis. It may cause symptoms such as abdominal pain, fever, nausea-vomiting, distention, hematemesis, and melena. In the direct abdominal radiography, which is defined as the Rigler triad, pneumobilia, intestinal obstruction, and ectopic gallbladder stones are seen in approximately 30% of patients. USG and CT are diagnostic imaging methods; however, upper gastrointestinal system endoscopy can be used both for ensuring

the diagnosis and for providing treatment advantage. Endoscopic and surgical options are used in the treatment. It is ideal surgical treatment includes laparoscopical or conventional cholecystectomy, removal of stone, and fistula repair. Recurrences can be seen in cases in which only the stone has been removed but the bilioenteric fistula has not been repaired.

Keywords: Bouveret syndrome, cholecystoduodenal fistula, obstruction

PS-49

Liver cystic disease that is concurrently caused by echinococcus granulosus and echinococcus alveoli

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Introduction: Echinococcosis is an infection caused by cestodes belonging to the taenia family. Its definitive host is dog and the intermediate hosts are sheep, cattle, and humans. This family includes four types of tapeworms. While echinococcus granulosus is responsible for common infections, echinococcus alveolaris is responsible for 3% of the echinococcal lesions in the liver, which is quite rare. Echinococcus alveolaris is the most pathologic member of this family and it often involves the liver like echinococcus granulosus. Despite being a benign disease, it can lead to infiltration into the tissues and it is malignant in terms of its results. It is usually characterized by the formation of multivesicular mass. The presence of echinococcus granulosus and echinococcus alveolaris together in the same patient is a rarely encountered condition.

Case: A 64-year-old male patient consulted to an external center due to a mild abdominal pain that sometimes occurred. The patient, in whom a cystic structure and a mass were detected in the liver in the abdominal ultrasonography was referred to our center. The patient had no active complaints and no known illness. His laboratory values were normal. In the dynamic abdominal tomography of the patient, a 10x9 cm alveolar hydatid cyst was identified in the posterior right lobe of the liver and an image that was consistent with an echinococcal hydatid cyst was detected in the segment 4A. Precaution for possible intraabdominal contamination was taken by using 20% NaCl in the operation. Cystotomy and drainage was performed in the cystic lesion on segment 4A. The cyst pouch was irrigated with 20% NaCl. The mass of the alveolar cyst hydatid in the posterior right lobe was excised, including the segments 6 and 7 together with the intact border. Because of the close neighborhood, cholecystectomy was also performed. The patient with no complaints during the postoperative process was discharged with albendazole treatment on the 7th day. There was no additional problem in the patient's long term follow-ups.

Conclusion: The primary surgical treatment in alveolar echinococcus is surgical resection. Chemotherapy can be administered alone or as an adjuvant therapy. When the disease becomes symptomatic, many patients have lost the chance of curative surgical resection. It is a rare condition that echinococcus alveolaris and echinococcus granulosus are found in the same patient simultaneously. Early detection of the lesion is very important for curative treatment.

Keywords: Echinococcus granulosis, echinococcus alveolaris, liver cyst hydatid

PS-50

Co-infection with echinococcus granulosus and echinococcus multilocularis - a rare diagnosis with therapeutic implications

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Introduction: To review the institutional experience on co-infection with *Echinococcus granulosus* and *Echinococcus multilocularis*- an extremely rare entity (only 5 cases reported previously).

Method: The charts of three patients were reviewed retrospectively.

Results: In the first case (53, F), 19 cm and 4.5 cm masses were detected in the right and left liver lobes. Percutaneous biopsy of the larger lesion revealed alveolar hydatid disease. Mild regression of both lesions was achieved with albendazole treatment. Extended right hepatectomy and pericystectomy (left lobe lesion) were performed in February 2017. The histopathological diagnosis of the smaller lesion was an *E. granulosus* cyst. She had an uneventful recovery and was under adjuvant albendazole treatment. A 61-year-old man had undergone laparotomy for cystic liver echinococcosis (Segment 4) and was referred to our institution due to suspicion of malignancy in the left lateral section. The patient developed cholangitis and pancreatitis for which endoscopic treatment was done. Later, drainage of the hydatid cyst and left lateral sectionectomy were carried out. Histological

examination showed alveolar hydatid disease in segments 2-3 and *E. granulosus* cyst in segment 4. He survived uneventfully for 12 years and died of cardiac failure. The third patient (53/F) had undergone surgery at our institution; daughter cysts had been removed from segments 6, 7 and 8; a unilocular cyst filled with bile-colored fluid but without membranes had been drained from segment 4. The patient who was lost to follow-up, returned seven years later. Computed tomography showed an 8-cm, heterogeneous mass originating from segment 4. Percutaneous biopsy revealed alveolar echinococcosis. There was no recurrence in the right lobe. The alveolar lesion has been kept under control for 6 years by albendazole treatment.

Conclusion: Considering the possibility of co-infection with *E. granulosus* and *E. multilocularis* and long-term follow up will decrease the management errors.

Keywords: *Echinococcus multilocularis*, *Echinococcus granulosus*, co-infection, treatment

PS-51

Lymphangioma in the pancreas: A rare case

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Introduction: Lymphangioma is included among the benign tumors of the lymphatic system. They develop due to congenital malformation of the lymphatic ducts. Its incidence in the abdominal region is 1/100,000 and it is mostly localized in the mesentery and retroperitoneal space.

Case: A 59-year-old female patient consulted to our clinic due to the complaints of epigastric pain, nausea, vomiting, and fever. Physical examination revealed defensive rebound tenderness in the epigastric region and right upper quadrant. Because the body mass index of the patient was 46 kg/m^2, no imaging except direct radiography was performed. Cholecystectomy was performed for the patient who was diagnosed with cholecystitis. In the exploration, a 7x4.5 cm exophytic and cystic mass with the localization of distal pancreas was detected and total excision was performed. The pathological examination of the mass was evaluated as lymphangioma.

Conclusion: Lymphangiomas with the localization of the pancreas are rare tumors that cannot be exactly diagnosed through imaging techniques, but through histopathological examination, and that are treated with complete resection.

Keywords: Lymphangioma, pancreas, tumor

PS-52

Biliary hamartoma mimicking metastasis: A rare case

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Introduction: Biliary hamartoma is a rare malformation of intrahepatic bile ducts and it is also called as von Meyenburg complex. These lesions, which are characterized by the proliferation of the bile duct, are usually asymptomatic. They are incidentally detected and require no treatment.

Case: A 57-year-old male patient consulted with the complaint of left lower quadrant pain, nausea, and constipation. There was sensitivity in the physical examination of the lower left quadrant. Computed tomography revealed a necrotic mass that significantly narrowed the lumen in a 7 cm segment at the sigmoidal colon, a suspicious 20x24 mm lesion in the liver segment 2-3, and an approximately 6 mm lesion in segment 3. The patient was taken to the operation under emergency conditions. Wedge resection, left hemicolectomy, and mass resection in the liver segment 2-3 were performed due to the presence of a nodular lesion in the small bowel. Histopathological examination revealed adenocarcinoma in sigmoid colon and small bowel and hamartoma in the liver.

Conclusion: Biliary hamartoma develops due to involution deficiency of the bile ducts during embryological period. Congenital hepatic fibrosis is thought to be associated with Caroli's disease and autosomal dominant polycystic kidney disease. It usually does not cause symptoms and does not affect liver functions. Their sizes can range from 5 to 30 mm. The most valuable imaging method for the diagnosis is magnetic resonance. Biopsy may also be required in patients with extrahepatic malignancy. They may transform into hyperplastic or adenomatous lesions at first, then into the malignancies such as cholangiocarcinoma. For this reason, follow-up should be done with advanced imaging studies. Liver metastasis, Caroli's disease, polycystic liver disease, peribiliary cyst, simple liver cyst, and microabscesses should be considered in the differential diagnosis.

Keywords: Biliary, hamartoma, liver

PS-53

Recurrent acute pancreatitis due to bile duct-associated liver hydatid cyst

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Introduction: Acute pancreatitis due to bile duct-associated hepatic hydatid cyst is a rare complication which is caused by the daughter vesicles falling into the bile duct. We aimed to present a case having the attacks of recurrent acute pancreatitis due to bile duct-associated liver hydatid cyst and having cholangitis.

Case: A 48-year-old male patient consulted to the emergency service with the complaint of abdominal pain. Physical examination revealed epigastric sensitivity and there was jaundice in the scleras. It was found out in his medical history that the patient had been prepared for an operation for the diagnosis of bile duct-associated liver hydatid cyst and had been using albendazole 800 mg/day. In the laboratory analyses, along with moderate leukocytosis and elevated transaminase and gamma glutamyl transferase (GGT), total bilirubin was found as 2,19 mg/dL, direct bilirubin as 0,54 mg/dL, amylase as 1606 U/L, and lipase as 1975 U/L. The Ranson score was 2 in 48 hours. His ultrasonography demonstrated chronic cholecystolithiasis, choledoch in normal size, and a 147x114 mm hydatid cyst of Gharbi stage 4 in the liver segment 7. The patient whose pancreatitis improved with conservative treatment was discharged without surgery at own request. One month later, the patient was admitted to the emergency service with cholangitis and recurrent pancreatitis. In the laboratory evaluation, leucocytes were 17900 K/uL, transaminases and GGT were high, total bilirubin was 3.72 mg / dL, direct bilirubin was 2.87 mg/dL, amylase was 2478 U/L, and lipase was 500 U/L. The 48th hour Ranson score was 0. In magnetic resonance imaging, cholestasis and a 122x118 mm hydatid cyst extending towards the right hepatic bile duct in the liver segment 7 were detected. In the operation of the patient whose cholangitis regressed, unroofing of the cyst, cholecystectomy, choledoch exploration, biliary tract repair, and insertion of a t-tube in the choledoch were performed. There were daughter vesicles in the choledoch lumen. Endoscopic retrograde cholangio-pancreatography (ERCP) was performed because of the presence of postoperative bile fistula. Bile duct-associated fistula was seen and a 7 fr 10 cm stent was placed. The stent was removed after the flow rate of drain decreased. No complication developed during postoperative 2-year follow-up period.

Conclusion: Surgery should be performed as soon as possible to prevent complications of bile duct-associated hydatid cyst.

Keywords: Liver, hydatid cyst, pancreatitis

PS-54

Liver transplantation in giant hemangioma with diffuse hemangiomatosis

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Introduction: Liver hemangioma is the most common benign primary liver neoplasm. Although it is generally small and asymptomatic, giant liver hemangioma is often symptomatic and requires intervention. Diffuse liver hemangiomatosis involving the whole liver is highly rare and its optimal treatment is controversial. In this study, it was aimed to present symptomatic giant hepatic hemangioma with diffuse hepatic hemangiomatosis in a patient treated with living donor liver transplantation.

Case: A 46-year-old male patient consulted to the emergency unit with the complaint of abdominal pain. His medical history revealed that he was followed up due to liver hemangioma for 2 years and treated for diabetes mellitus for 5 years and for hepatitis B for 2 years. In the laboratory analysis, creatinine value was 0.51 mg/dL, albumine level was 3.1, INR was 2.41, total bilirubin level was 3.01 mg/dL, and alpha fetoprotein was normal. MELD (model for end-stage liver disease) score was 20. In the complete abdominal ultrasonography, it was detected that severely heterogenous and hypoechoic loculated cystic areas and giant hemangiomas covered the whole liver and normal liver parenchyma could not be chosen. Abdominal triphasic computed tomography revealed hemangioma involving the whole liver. Living donor liver transplantation was performed in the patient. No postoperative complication developed. Also, an additional complication did not occur in the 5th follow-up month.

Conclusion: In this case, aggressive course of a benign hemangioma requiring liver transplantation was demonstrated. Further studies on the cause of hemangioma progression are needed to be performed.

Keywords: Hemangioma, liver, transplantation

PS-55

The role of Gd-EOB-DTPA in the definition of cystobiliary fistula before and after PAIR in liver hydatid cysts

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Hydatid cyst (HC) is a disease that is endemic in our country and it occurs due to the transmission of the larvae of the parasite Echinococcus granulosus. Cysts are localized in the liver at the rate of 50-70%. They are often located in the right lobe of the liver and they generally occur as single. Cystobiliary fistula is an important complication that increases mortality and morbidity in liver hydatid cysts. Early detection has a significant role in the selection of appropriate treatment method. Because Gd-EOB-DTPA is eliminated from the body through the biliary tracts, it is important for the detection of relationship between the biliary system and cyst. Before the procedure, MRCP, dynamic MR, and upper abdominal MR were performed with Ed-EOB-DTPA. Because contrast agent leakage was observed in 2 patients, they were operated. PAIR treatment was administered in other patients. A relationship with bile was found during PAIR in 5 patients. After the procedure, MRCP, dynamic MR, and upper abdominal MR were repeated with the contrast agent of Gd-EOB-DTPA. While 3 patients that were observed to have relationship with segmental branch were followed up, 2 patients having relationship with the main branch underwent ERCP+endoscopic stenting. MRI performed with the contrast agent of Gd-EOB-DTPA for determining the relationship of hepatic hydatid cysts with the biliary system before and after PAIR has an important role in the selection of treatment methods.

Keywords: Liver cyst, Gd-EOB-DTPA, bile, MR

PS-56

Coexistence of acute cholecystitis with stone and systemic lupus erythematosus

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Systemic lupus erythematosus (SLE) is a chronic autoimmune disease with unknown etiology. It is a connective tissue disease involving many organs and systems with immunological disorders. The clinical course of the disease includes fever, joint swelling, and erythematous rash in the skin and it affects organs and systems such as the liver, central nervous system, and lungs. The results of the ANA and Anti-dsDNA tests are observed as positive. Gallstone disease is a common disorder and laparoscopic cholecystectomy is the most frequently performed procedure for its treatment at present. The most frequent clinical picture is acute cholecystitis with stone. The coexistence of cholecystitis with stone and SLE is rare and treatment approach is same. Laparoscopic cholecystectomy is performed in the early period of acute cholecystitis with stone or surgery is planned after 4-6-week medical treatment in late period. A multidisciplinary approach with the department of rheumatology is important in terms of immunosuppression due to the drugs taken for SLE before surgery and inflammation induced by steroid usage.

Keywords: Cholecystitis with stone, SLE, treatment

PS-57

A rarely seen primary pancreatic leiomyosarcoma

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Introduction: Primary pancreatic leiomyosarcomas are rarely seen tumors. They constitute 0.1% of all pancreatic malignancies. Because they are rare and there is limited number of cases in the literature, it is important to follow up and to archive these patients. In this paper, a patient operated due to pancreatic mass in our clinic and diagnosed with primary pancreatic leiomyosarcoma will be presented.

Case: A 56-year-old female patient was examined due to abdominal pain. The results of her physical examination were normal except pain in the epigastric region. In the laboratory analyses, the values of hemoglobin and hematocrit were 10.9 g/dL and 33.3%, respectively. Liver function tests and bilirubin values were normal. The abdominal ultrasonography revealed a 65x46 mm -diametered heterogeneous lesion located in the head of the pancreas. In the examinations performed for diagnostic purpose, CA 19-9 value was 8.94 U/mL and CEA level was 1.39 ng/mL. A heterogeneous mass with the diameter of 49x43x67 mm and involving the head of the pancreas was detected in the abdominal tomography (Figure 1). In the endosonographic examination, a clear-margined lesion, which was suspected to be a gastrointestinal stromal tumor, was detected in the localization of the head of the pancreas. The results of biopsy revealed rare spindle cells and it was observed that these cells were not stained with CD117 and Dog1. Surgery was planned for the patient who was evaluated in the multidisciplinary oncology council. In the operation, pylorus-preserving Whipple procedure was applied to the patient who had a mass localized in the head of the pancreas and no finding of invasion into surrounding veins. In the paraffin examination of the specimen, the surface of the section was yellow, fibrotic, and homogenous. In the immunohistochemical examination of the well-demarcated mass, actin and desmine were positive and DOG1, CD 117, CD 34, Myogenin, and S100 protein were negative. A mass consistent with primary pancreatic leiomyosarcoma was detected. The mass was seen to be bordered with a clear capsule (Figure 2). The ki-67 index of the mass was 35% and mitotic index was 25 at magnification of 10x. In the multidisciplinary oncology council, where the results were discussed with the literature, it was decided to follow up the patient.

Conclusion: Primary pancreatic leiomyosarcoma is rarely encountered. In the literature, there are generally case reports on this disease. Surgeries performed by protecting the margins increase the chance of cure. In unresectable cases, doxorubicin-based chemotherapies can be administered as first-line treatment. However, an operation enabling R0 resection is the factor that mostly affects the survival of patient as in all sarcomas.

Keywords: Leiomyosarcoma, mesenchymal tumors, pancreas

PS-58

Our pancreaticoduodenectomy experience

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Introduction: The aim of the study was to investigate the results of pancreaticoduodenectomy, which is applied for the curative treatment of periampullary cancers, performed by the same team in a clinic with lower number of cases.

Method: This study included 24 patients undergoing pancreaticoduodenectomy performed by the same team due to periampullary region cancers in the Department of General Surgery at Samsun Training and Research Hospital between December 2015 and August 2017.

Results: There were 15 male (62.5%) and 9 female (37.5%) patients. The mean age was 66 (min: 36-max: 86) years. The mean duration of postoperative hospitalization was 17 (3-39) days. In the period after surgery, 3 patients (12.5%) died. The mean duration of follow-up was 9 (1-21) months for 21 patients that were discharged. Pancreatic anastomosis leakage developed in 3 patients (12.5%). Two of them recovered without operation. However, mortality could not be avoided in 1 patient despite being operated because of hemorrhage associated with leakage. Besides that, a total of 4 patients (16.6%) were re-operated due to bleeding from gastric anastomosis, abundant bleeding at the postoperative first hour, and gastric atony. Cheilosis fluid lasting for about 1 month and requiring no surgical intervention was observed in one patient. After discharge, a total of 7 patients (29%) died (2 patients from the development of recurrence, 2 patients from pneumonia, 2 patients from cardiac reasons, and 1 patient from the development of perforation).

Conclusion: According to the database of Social Security Institution, mortality rate across the country has been reported to be 13.4% in the first month after pancreaticoduodenectomy. In a previous study, mortality was reported as 27% in 51 patients undergoing pancreaticoduodenectomy in our hospital due to periampullary cancers between January 2008 and January 2015. Although mortality rate was not at the desired level, it decreased to 12.5% because this operation was performed by the same team.

Keywords: Pancreaticoduodenectomy, whipple, mortality, survival

PS-59

Rarely seen sigmoid-shaped gallbladder

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Introduction: The gallbladder normally directs downward from the fundus and body, narrows in the neck region that looks like a funnel, and combines with the cystic duct. Although rare, malformations of the gallbladder can be encountered. These malformations can occur as secondary to cholecystitis or congenital. In our case report, a sigmoid-shaped gallbladder anomaly, which is a very rarely seen disorder, is presented.

Case: A 55-year-old male patient consulted with the complaints of jaundice and abdominal pain. In his analyses, TB was 7.35 mg/dL, DB was 5,2 mg/dL, GGT was 1100 mg/dL, and ALP was 375 mg/dL. No pathology except cholelithiasis was found in the hepatobiliary USG. ERCP was ineffective because the papilla could not be found. MRCP revealed no pathology except cholelithiasis. In EUS, the choledoch was normal and a hyperechoic lesion was observed in the neighborhood of the choledoch. For ruling out possible malignancy in the patient whose bilirubin levels were increasing, PET CT was performed. A cystic lesion that might be originated from the small bowel was considered in the inferior region of the gallbladder and no malignancy was detected. At the beginning of the operation, it was thought that the gallbladder directly opens into the choledoch and there was a choledochal cyst. In the continuation of the exploration, it was noticed that the structure considered to be choledoch and choledochal cyst was actually the neck and body of the gallbladder and the part considered to be the whole sac was the fundus. It was found that the gallbladder was folded from two different places on itself and the sac was in the shape of sigmoid when these folds were opened. The cystic artery was 3 cm and it directly opens into the fundus. After all folds of the gallbladder were opened, its length was measured as 22 cm. No pathology was detected in intraoperative cholangiography.

Conclusion: It can be suggested that sac anomalies are more frequent than thought and asymptomatic anomalies and anomalies that are not found to be worthy of being emphasized should also be published for determining exact incidence and distribution of anomalies. Among gallbladder anomalies, malformation is rarely seen. These anomalies cannot exactly be revealed with imaging techniques. Diagnosis can be established only in surgery. Therefore, when the gallbladder appears unusual, its anatomy should be clearly examined. Otherwise, it can result in biliary tract injuries having high mortality and morbidity. Besides that, sigmoid-shaped gallbladder anomaly was not found in the literature.

Keywords: Gallbladder, malformation, sigmoid sac

PS-60

Our experiences in liver transplantation

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Introduction: End-stage liver disease is an important health concern across the world and our country. In general, the causes of end-stage liver disease include hepatitis B virus (HBV), hepatitis C virus (HCV), alcohol, nonalcoholic steatohepatitis, and hereditary metabolic defects. The definite treatment of end-stage liver disease is liver transplantation. In this study, it was aimed to clinically evaluate the patients undergoing living donor liver transplantation in our liver transplantation center.

Method: The study included 7 patients operated within the context of liver transplantation program that has been performed in our hospital since 2015. The files of the patients were retrospectively evaluated. All patients underwent living donor liver transplantation and right lobe graft was inserted in all of them. Their ages, genders, diagnoses, mortality, morbidity, and postoperative follow-ups were recorded.

Results: Of the patients, 2 (28.5%) were female and 5 (71.5%) were male. The mean age was 47 (36-66) years. Three patients had HBV, 3 patients had cryptogenic tumor-induced liver failure, and one patient had neuroendocrine tumor metastasis-induced liver failure. Postoperative lung infection developed in 2 patients and wound site infection in one patient. Mortality occurred in 2 patients at early period (on the postoperative 10^{th} day) and in the postoperative 16^{th} month, respectively. The mean duration of hospitalization was 8.7 (7-11) days. Two-year survival was calculated as 71.4%. At present, the duration of follow-up is 30 months. No acute or chronic rejection developed in any patient in the follow-ups. Stent was inserted in 2 cases (28.5%) due to biliary stenosis. The follow-ups of all patients are continuing in our clinic.

Conclusion: In our country, particularly the number of patients undergoing living donor liver transplantation is increasing day by day. Performing liver transplantation operations and the follow-ups in many centers is important for accessibility. As the Department of General Surgery, Harran University Medical Faculty, our contribution to this number will increasingly continue.

Keywords: Liver transplantation, experience, liver failure

PS-61

Complete response to neoadjuvant chemotherapy in locally advanced pancreatic adenocarcinoma: Two case reports

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Introduction: While the only curative treatment option for pancreatic ductal adenocarcinomas (PDA) is surgery currently, only 20% of them can be operated at the time of diagnosis. Although approximately 40% of the patients do not have distant metastases, these patients are considered to be in locally advanced stage. The mean survival is approximately 6 months in nonoperable patients; whereas, it is 18-26 months after the R0 resection. Surgical resectability rates after chemotherapy reported for locally advanced PDA patients are very low. In here, two cases undergoing pancreaticoduodenectomy because of receiving a complete radiologic reply after the neoadjuvant chemotherapy due to the superior mesenteric artery (SMA) invasion will be presented.

Case 1: A 41x40 mm lesion surrounding SMA for 360° in pancreas uncinate process was detected in the radiological examination of a 61-year-old male patient, which was performed for abdominal pain radiating to the back. Twelve sessions of neoadjuvant FOLFIRINOX were administered to the patient whose ductal adenocarcinoma diagnosis was confirmed through endoscopic ultrasonography-guided biopsy. The mass was observed to disappear in the radiologic examination and pathologic involvement was not seen on PET-CT imaging. With these findings, pancreaticoduodenectomy was performed to the patient. Histopathologically, no residual tumor was detected and 20 reactive lymph nodes were dissected. The patient was given adjuvant oxaliplatin-gemcitabine treatment. Eighteen months later, the patient died by the diagnosis of peritoneal carcinomatosis.

Case 2: Radiological examination was performed due to jaundice in a 45-year-old female patient and a 6 cm mass surrounding the SMA for 360° was found in the localization of the pancreas head. The patient was given 14 sessions of neoadjuvant FOLFIRINOX due to PDA diagnozed through needle biopsy. Pancreaticoduodenectomy was performed to the patient who gave a complete radiological response. Although tumor was not observed macroscopically, a 3 mm free tumor deposit was seen in the peripancreatic fat tissue. No metastasis was seen in 18 excised lymph nodes. After adjuvant CT (oxaliplatin-gemcitabine), the patient has been followed up for 30 months without disease.

Conclusion: Locally advanced PDA patients giving radiologically complete response after neoadjuvant CT should have a chance of surgery. In these patients, survival is close to that in patients with resectable tumors.

Keywords: Unresectable, pancreatic adenocarcinoma, neoadjuvant chemotherapy, complete response

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PS-62

Early results of laparoscopic distal pancreatectomy

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Introduction: Pancreas surgeries are the interventions with high morbidity and mortality. Particularly advantages of laparoscopic surgery are benefited for recovery and rapid return to daily life. Less postoperative pain and earlier mobilization are at the top of these advantages. In this study, early results of patients with tumors located in the corpus and distal region of the pancreas, who were operated laparoscopically in our clinic, will be presented.

Method: Thirty-four patients having tumors located in the body or tail of the pancreas, who were laparoscopically operated by a single general surgery team in Koç University Hospital and V.K.V American Hospital between January 2014 and August 2017, were evaluated retrospectively.

Results: The mean age of the patients was 57.8 years. Of them, 21 were female and 13 were male. While laparoscopic distal pancreatectomy and splenectomy were applied in 30 patients, spleen-preserving distal pancreatectomy was performed in 4 patients. One patient underwent robotic distal pancreatectomy and splenectomy. Laparoscopic surgery was started in 11 patients, but then it was switched to open surgery. The duration of surgery was 249 minutes in cases operated with splenectomy and 307 minutes in cases operated with spleen-preserving surgery. The mean length of hospitalization was 7.8 days. Seventeen patients were discharged with drain. Six patients were re-hospitalized in a few postoperative months and medical treatment was arranged for them. The insertion of percutaneous drainage catheter by the department of interventional radiology was needed in 4 of patients undergoing laparoscopic surgery. When pathological diagnoses were examined, ductal adenocarcinoma was detected in 19 patients and neuroendocrine tumor in 12 patients, mucinous cystadenoma in 2 patients, and mass formation associated with chronic pancreatitis in 1 patient.

Conclusion: Pancreatic fistulas seen after surgery are the most important causes of morbidity. They affect hospitalization rates or re-applications to hospital. In oncology patients, many factors such as tumor stage, comorbid diseases, and nutrition affect the

frequency of fistulas. It is important to shorten hospitalization in these patients with high morbidity. Compared to the patient group with distal pancreas tumor, who underwent open surgery performed by the same surgical team and whose mean length of hospitalization was 11.6 days, the effects of laparoscopic surgery on the length of hospitalization and patient comfort can be clearly seen.

Keywords: Distal pancreatectomy, minimal invasive surgery, pancreatic fistula

PS-63

Comparison of laparoscopic and open surgery technique in patients undergoing distal pancreatectomy

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Introduction: Distal pancreatectomy is a surgical technique that is frequently performed in our daily practice, particularly for tumors in the tail and body of the pancreas. Laparoscopic distal pancreatectomy is the most commonly preferred pancreatic resection procedure that is performed by using minimal invasive techniques.

Method: In this study, 19 patients that were performed open and laparoscopic distal pancreatectomy in the Department of General Surgery at Şişli Hamidiye Etfal Education and Research Hospital between January 2012 and June 2017 were retrospectively evaluated. Types of surgical techniques, lengths of hospitalization, the results of pathological analyses, and mortality and morbidity rates were assessed.

Results: Of the patients undergoing distal pancreatectomy, 8 were male and 11 were female. The mean age of the patients was 51.8±16.5 years. While 13 patients (68.42%) underwent laparoscopic surgery, 6 patients (31.57%) were performed open surgery. Laparoscopic surgery was started in 3 patients, but then it was switched to open surgery. Because of uncontrolled bleeding in the splenic vein in 2 patients and inability to anatomically reveal the mass on the surface of the pancreas in 1 patient, open surgery was performed. Splenectomy was decided for 5 of laparoscopic cases and for 3 of open surgery cases. The mean hospitalization duration was 4.1 days (3-6 days) for the patients who underwent laparoscopic surgery and it was 5,3 days (5-7 days) for the patients who underwent open surgery. The pathologies of the patients undergoing distal pancreatectomy were reported as insulinoma in 2 cases, adenocarcinoma in 5 cases, pancreatic pseudocyst in 2 cases, neuroendocrine tumor in 2 cases, mucinous cystadenoma in 2 cases, pseudopapillary tumor in 3 cases, serous cystadenoma in 2 cases, and gastrointestinal stromal tumor in 1 case. No mortality developed in early period in any group. Wound site infection developed in 1 of the patients undergoing open surgery, and lung infection developed in 1 of them.

Conclusion: Laparoscopic distal pancreatectomy can be considered as a safer and more effective alternative procedure than open distal pancreatectomy. Some of its superiorities over open distal pancreatectomy include intraoperatively revealing tissues more clearly, better visual inspection, having an improvable potential, increased postoperative recovery, and low rates of morbidity.

Keywords: Open surgery, laparoscopy, pancreas

PS-64

The ligasure in the surgical resection of metastatic tumors of the liver

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Liver metastasis develops in patients with cancer, particularly with colorectal cancer. Liver metastasis of colorectal cancers is the most common cause of death in patients with colorectal cancer. Despite important improvements in the treatment of colorectal liver metastases, the cornerstone of the treatment is still surgery. The indications for surgical treatment have extended due to technical developments and improvements in systemic treatment choices. In our study, 12 of 15 patients had colorectal metastasis. Resections were performed through LigaSure without using the Pringle maneuver. The mean amount of blood transfusion was 1 unit. No postoperative mortality and morbidity developed. Segmentectomy can safely be performed with LigaSure in liver metastatic resections.

Keywords: Liver, metastasis, colorectal, ligasure, resection

PS-65

A rare case: Primary neuroendocrine tumor of the liver

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Introduction: Neuroendocrine tumors (NET) have a tendency to grow slowly. They are mostly seen in the intestinal system. The incidence of NET is 0.2/100.000 and they constitute 0,5% of all cancer types. These tumors, which are encountered as metastatic in the liver, rarely originate from the liver primarily. The number of cases reported in the literature is less than 200. In this study, it was aimed to present a case followed up because it was considered to be benign.

Case: A 45-year-old female patient had been followed up due to a formation in the liver defined as benign by an other medical center which she had consulted for abdominal pain 4 years ago. Because of growth in the mass and increase in the number, she was referred to our clinic. Her biochemical values were normal. In the contrast-enhanced abdominal CT, many lesions, which were firstly considered to be metastatic, were found in both lobes of the liver. MR and FDG-PET examinations demonstrated that these two lesions could be metastatic. No pathology was detected in the endoscopy and colonoscopy that were performed for investigating the primary focus of tumor. The patient was operated. Abdominal exploration revealed many tumoral masses with various diameters in the liver. There were a few lymph nodes located in the small bowel mesenterium. Some of these lymph nodes were removed with the neighboring small bowel. Moreover, one lesion was also removed from segment 3 for biopsy. In the peroperative frozen section examination, liver lesion was reported to be malignant. Intraoperative USG was carried out. Because the nature of lesion could not be identified under these conditions, the case was closed for detailed pathological examination. The patient was discharged on the postoperative 6th day. The result of pathological examination was reported as primary neuroendocrine tumor of the liver. Lymph nodes taken from the mesenterium of the small bowel were defined as metastatic. Since the patient had extrahepatic metastasis at the time of diagnosis, it was decided to continue with medical treatment.

Conclusion: The liver is an organ in which NETs often demonstrate metastases and primary cases are rarely seen. Despite developed imaging techniques, tumor markers, and immunohistochemical examinations, the diagnosis of primary liver NET is still controversial. Because primary focus of tumor could not be identified in spite of many imaging techniques, the case was accepted as primary liver NET. Although primary NET is rarely encountered, it should be considered in the differential diagnosis of masses in the liver.

Keywords: Liver, metastasis, neuroendocrine tumor

PS-66

Effective use of minimal invasive treatment modalities in a case with complicated pancreatic pseudocyst

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Introduction: Pancreatic pseudocyst is a complication that develops in 10% of patients with acute pancreatitis and in 20-40% of patients with chronic pancreatitis and that sometimes increases morbidity.

Case: A 55-year-old female patient was admitted to the emergency unit due to severe abdominal pain. Physical examination revealed tenderness and defense in all quadrants of the abdomen. In the laboratory analysis, increased leukocytosis and CRP were found. CT revealed a 16x12 cm lesion consistent with pseudocyst in the corpus/tail of the pancreas and diffuse free fluid particularly in the perihepatic region and pelvis. When her medical history and previous tomography results were evaluated, it was learned that she had had biliary pancreatitis attack 4 months ago and she had not undergone gallbladder surgery although it had been recommended. She had prepared for ambulatory surgery due to two large pseudocysts detected in the abdominal tomography 1 month ago. The current acute abdominal picture of the patient was attributed to the perforation of one of previous pseudocysts. Fluid-electrolyte balance of the patient was provided and percutaneous drainage catheter was inserted under the guidance of ultrasonography. The qualification of the drained fluid and amylase values were consistent with pancreatic fluid. Clinical and laboratory healing was observed in the patient, but control tomography demonstrated that pseudocyst was enlarged much more. The patient was referred to a center that was experienced in EUS (endoscopic ultrasonography) and advanced endoscopy. In that center, EUS-guided endoscopic cystogastrostomy was performed with two 8 mm double J pigtail catheters. In the control tomography taken one month after the procedure, pseudocyst was clearly shrunk. In the following

week, the patient underwent laparoscopic cholecystectomy in our clinic and she was discharged without any problem on the next day. Because the patient was recovered and pseudocyst was exposed to resolution, cystogastrostomy catheters were removed by the same team in 6 months after their insertion. The patient is healthy in the postoperative 6th month.

Conclusion: 50% of pancreatic pseudocysts are exposed to spontaneous resolution in a time of 6 weeks and above. Depending on clinical state, symptomatic pseudocysts can be treated with major approaches such as open surgery or minimal invasive techniques such as endoscopic/ interventional radiological/ laparoscopic procedures. In our case, the pseudocyst that was perforated into the abdomen was treated with percutaneous method, the pseudocyst that partially grew during treatment was treated with endoscopic method, and the gallstone as the etiological cause was treated with laparoscopic technique. Minimal invasive techniques can effectively and safely be used in combination in the treatment of pseudocysts.

Keywords: Cystogastrostomy, pancreatitis, pseudocyst

PS-67

Spontaneous biliocutaneous fistula

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Introduction: Acute cholecystitis attack can lead to various complications, one of which is gallbladder perforation that is rarely seen. While gallbladder perforation mostly presents with acute abdominal pain, perforations developing after chronic cholecystitis can cause the formation of fistula.

Case: A 91-year-old female patient with known history of diabetes mellitus, hypertension, and coronary artery disease was admitted to the emergency unit due to the complaint of running wound in her abdomen. In her physical examination, there was a 0,5 cm area consistent with the opening of fistula on the skin in the right upper quadrant. No additional finding was observed. Her vital signs were stable. It was learned that the area consistent with the opening of fistula in the right upper quadrant had occurred after severe abdominal pain about 2 years ago, the complaint of abdominal pain had repeated intermittently, and swelling, rash, and discharge from the wound site had been observed then. Complete blood count and biochemistry values were normal. The abdominal ultrasonography (USG) revealed calculi, the largest of which was 35 mm, in the lumen of the gallbladder. An area consistent with fistula tract was observed between the gallbladder and the skin. In the abdominal computed tomography (CT), a fistula tract was found between the gallbladder and the skin. The patient was electively applied cholecystectomy. She was discharged from the hospital with full recovery on the postoperative 2nd day.

Conclusion: Gallbladder perforation is a complication that is seen in acute cholecystitis cases at the rate lower than 10%. The localization of perforation can be to the peritoneal space, to the neighboring intestinal organs such as small bowel, colon, and stomach adherent to the gallbladder, or rarely to the skin. Gallbladder perforation is more common in patients with arteriosclerotic disease. The fundus of the gallbladder is the least vascularized region and most perforations/fistulae consist of the fundus. Comorbid diseases and cholecystitis attacks create tendency to the development of biliary fistula. Cutaneous fistulae occur as a result of recurrent cholecystitis attacks causing the adherence of the gallbladder wall to the abdominal peritoneum. Spontaneous cholecysto-cutaneous fistulae are occasionally seen. Most of those defined in the literature develop secondary to existent gallbladder and biliary tract diseases. It is frequently seen in geriatric patients or patients with psychological problems because it is troubled for these patients to reach surgery. Its treatment includes clinical follow-up and then surgery.

Keywords: Acute cholecystitis, biliocutaneous fistula, complication, spontaneous

PS-68

Celiac artery occlusion associated with median arcuate ligament compression noticed during pancreaticoduodenectomy

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Introduction: Median arcuate ligament syndrome (MALS), also known as celiac artery compression syndrome, is characterized by gastrointestinal ischemia developing secondary to the compression of the median arcuate ligament of the diaphragm over

the proximal celiac truncus (1). Its etiology is not exactly known. In normal conditions, it mostly does not present with symptoms, but it can cause life-threatening organ ischemia when the collaterals coming from the superior mesenteric artery are cut in operations such as pancreaticoduodenectomy. In this study, it was aimed to present a pancreaticoduodenectomy patient intraoperatively diagnosed with MALS.

Case: A 43-year-old male patient was admitted to our hospital due to the complaints of jaundice and itching. In the analyses, serum bilirubin level was found to be 3.2 mg/dL. The abdominal ultrasound and tomography revealed a 3x2.5 cm mass in the head of the pancreas, which created suspicion of pancreas cancer. No anomaly or invasion was reported in the arterial structures. A 10F plastic biliary stent was inserted through ERCP in the patient. Biopsy was endosonographically taken from the mass in the head of the pancreas. The result of biopsy was reported as malignant cytology. The patient, whose bilirubin level was decreased, underwent pancreaticoduodenectomy. After the patient was taken into the operation, the head of the pancreas was mobilized with the Kocher maneuver and gastroduodenal artery was ligated. It was seen that there was no flow in the hepatic artery, left gastric artery, and splenic artery. Preoperatively taken abdominal tomography was re-evaluated and complete occlusion associated with median arcuate ligament compression on the celiac truncus was observed. After cutting the median arcuate ligament, pulsatile flow was seen in the hepatic artery, left gastric artery, and splenic artery. Pylorus-preserving pancreaticoduodenectomy surgery was performed. Control tomography was taken in the postoperative period. Flow was observed in the celiac truncus and its branches. The patient was discharged without any problem on the postoperative 8th day.

Conclusion: After pancreaticoduodenectomy, the presence of stenosis or obstruction in the celiac artery can cause a problem for the blood supply to the upper abdominal organs. Before pancreas surgery, particularly before pancreaticoduodenectomy, the celiac truncus and its branches should be investigated carefully.

Keywords: Pancreoticoduodenectomy, median arcuate ligament syndrome, celiac artery occlusion

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PS-69

A rare complication due to the use of tacrolimus after liver transplantation: posterior reversible encephalopathy syndrome (PRES)

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Introduction: Posterior reversible encephalopathy (PRES) is a highly rare disorder that affects the central nervous system and can be seen in adults and children. Hypertensive encephalopathy, renal failure, preeclampsia, autoimmune diseases, and cytotoxic and immunosuppressive drugs are accused of its etiology. A few cases with PRES associated with the use of tacrolimus have been reported in the literature.

Case: A 66-year-old male patient underwent cadaveric liver transplantation due to the diagnoses of liver cirrhosis associated with hepatitis B and hepatocellular carcinoma (HCC). The preoperative MELD score of the patient was 16. The patient was initiated tacrolimus, steroid, and mycophenolate mofetil (MMF) as postoperative immunosuppressive therapy. The patient, who did not have serious problems except mildly high bilirubin level in the follow-ups, consulted to the hospital due to visual impairment and headache in the postoperative 3rd month. The patient had no other diseases such as renal failure and hypertension, which could have a role in the etiology of PRES. The vital signs of the patient, who was hospitalized, were stable. His blood pressure was 110/70 mmHg, pulse was 85 beats/minute, body temperature was 36.7°C, and respiration rate was 16/minute. No significant pathology was detected in complete blood count and biochemical analyses. His INR level was 1.2 and platelet count was 161x103/µ L. The values of sodium, potassium, and magnesium were 132 mEq/L, 3 mEq/L, and 2.5 mg/dL, respectively. One day after, brain fog began in the patient and he had generalized tonic-clonic seizures. In the MR of the brain, hyperintensity was observed in bilateral posterior parietooccipital, T2A, and cortical-subcortical regions. Immunosuppressive drugs of the patient who was considered to have PRES secondary to the use of tacrolimus were ceased and steroid therapy was initiated at the dose of 2x60 mg. During the follow-ups, the level of tacrolimus never reached toxic values (0.6-11.8 ng/dL). No hypertensive attack developed. The level of tacrolimus was 4.8 ng/dL at the time of diagnosis. Supportive therapy was begun and he was taken into the intensive care unit. Because his general condition deteriorated and respiratory failure developed, he was intubated. On the 13th day of follow-up in the intensive care unit, the patient died.

Conclusion: Neurological complications after liver transplantation are seen at a rate that is not low. One of rare neurological complications is PRES. In case of delayed diagnosis and treatment, morbidity and mortality rates increase. In patients developing neurological symptoms after liver transplantation, PRES should be kept in mind in the differential diagnosis.

Keywords: PRES, tacrolimus, liver transplantation

PS-70

Dramatic behavioral change of hydatid disease in immunosuppressed patient: diffuse intraabdominal recurrence and perforation

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Introduction: Although hydatid cyst disease generally occurs in the liver, it can sometimes exist with multiple organ involvement. In immunosuppressed cases, both possibility of recurrence and complexity rate of the disease increase.

Case: A 44-year-old male patient was brought to our emergency unit with the complaints of severe abdominal pain and fainting. In physical examination, acute abdomen findings were detected and it was understood that he was in a shock. In the inspection, a bilateral subcostal incision scar was observed in the abdomen. When his detailed history was analyzed, it was understood that he had been operated due to hydatid cyst located in the liver and spleen in the neighborhood of the left kidney at an epicenter 5 years ago and he was performed splenectomy. Laboratory analyses revealed increased leukocytosis and C - reactive protein rate. In the microbiological examinations, HIV (Human Immunodeficiency Virus) and HBsAg (hepatitis B virus surface antigen) were detected to be positive. Moreover, it was learned that he was being followed up for AIDS (acquired immune deficiency syndrome) for 5 years and he was given antiretroviral therapy for a month. The abdominal ultrasonography of the patient revealed diffuse free fluid and many cysts and he was performed emergent operation with the pre-diagnosis of recurrent hydatid cyst perforation and anaphylactic shock. In the exploration that was performed following the midline incision extending above and below the umbilicus, it was detected that there were many cysts with miscellaneous dimensions (the smallest 3 cm-the largest 20 cm) in the abdomen and a diffuse cyst fluid of a large perforated cyst (clear water and vesicles). The unaffected regions of the abdomen were protected with hypertonic serum (3% NaCl) impregnated gases and all cysts were excised by irrigating/aspirating with physiological saline solution. Postoperative period of the patient passed without any problem. He was started albendazole therapy and his consultations to the infectious diseases were completed. Then, he was discharged on the postoperative 3rd day with full recovery.

Conclusion: Hydatid cyst is still a serious infectious disease in our country. We think both positive HIV and splenectomy contributed to the recurrence of the disease in our case. Quick decision of surgery and carefully performed operation provided the patient in shock to be discharged with full recovery. Inadequate treatment, immunosuppression or negligence of surgical attention in the first surgery can lead to recurrences and complications.

Keywords: Hydatid, immunosuppression, recurrence, perforation

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PS-71

Isolated echinococcus alveolaris located in the pancreas

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Introduction: Echinococcus alveolaris mostly causes infestation that behaves as a slowly growing malignant tumor in the liver. It may involve other organs such as the lung and brain and systems with the liver. Pancreatic involvement is very rare. Here, a patient with pancreatic echinococcus alveolaris located in the head of the pancreas, which did not cause any disease in the liver, will be presented.

Case: A 29-year-old female patient was admitted to our clinic with the complaints of jaundice, abdominal pain, and nausea. Abdominal ultrasonography and tomography revealed a 6 cm-diameter mass putting pressure on the portal vein, inferior vena cava, and hepatic artery. There was cavernous transformation with portal vein thrombosis findings. The diagnosis could not be established with endoscopic ultrasound-guided fine needle aspiration biopsy. Pancreaticoduodenectomy was planned and the patient was taken into operation. As a result of the frozen section examination of the tissue sample taken peroperatively, the diagnosis of echinococcus alveolaris was established. Pancreaticoduodenectomy was performed. Because the patient had no problem after surgery, she was discharged from the hospital on the postoperative 8th day.

Conclusion: Infestation of E. alveolaris is rare when compared with E. granulosus . While it mostly involves the liver, it can also be found in other organs with the liver. However, pancreatic involvement is highly rare. In the literature, there is only one case report about isolated pancreatic involvement. Although it is a rare cause, it should be kept in mind in pancreatic masses.

Keywords: Pancreas, Echinococcus alveolaris, pancreas tumor

PS-72

Isolated liver tuberculosis

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Introduction: Liver tuberculosis was firstly defined approximately 200 years ago. Mycobacterium tuberculosis can cause three forms of involvement in the liver. Miliary involvement is the most common form. While it can involve the biliary tracts, it also cause nodular involvement more rarely. Particularly, if cryptic miliary lesions are in the liver, the diagnosis can be established by demonstrating tuberculosis in the liver through needle biopsy in patients without pulmonary involvement. The sufficiency of needle biopsy in diagnosis is controversial. The fact that tuberculosis leads to isolated liver involvement is not common. It is often a part of miliary tuberculosis.

Case: A 49-year-old female patient consulted to our hospital due to abdominal pain. Her vital parameters and the results of physical examination were normal. The abdominal ultrasonography revealed many lesions with soft margins in the liver. Therefore, a contrast-enhanced MR was taken and these lesions were interpreted as metastasis. Because of no diagnosis on the imaging-guided needle biopsy of the liver, which was performed twice, laparoscopic biopsy was planned. The abdomen was entered laparoscopically. No pathology from which biopsy could be taken was seen on the surface of the liver. The locations of the lesions in the liver were identified through laparoscopic ultrasonography. By covering these masses, wedge resection was performed in the segment 8 of the liver. The pathology of the removed masses was reported as chronic caseificated granulomatous inflammation and micro and macro vesicular fatty change. In liver scanning no finding on behalf of tuberculosis was found. In serology, HIV was negative. Anti-tuberculosis therapy was initiated for the diagnosis of isolated liver tuberculosis.

Conclusion: Isolated liver tuberculosis is seen quiet rarely, but the incidence of tuberculosis is increasing in the world and concordantly the rate of liver involvement will increase. In addition to metastasis and liver infections, liver tuberculosis should also be considered in the differential diagnosis. The presence of granuloma in biopsies is the most sensitive diagnostic tool. The disease can be cured with accurate diagnosis and accurate therapy.

Keywords: Liver tuberculosis, tuberculosis, mass in the liver

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PS-73

Video presentation of laparoscopic spleen –preserving distal pancreatectomy with modified Warshaw procedure

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Introduction: Distal pancreatectomy is performed for benign and malignant lesions that were localized in the body and tail of the pancreas. If possible, spleen-preserving distal pancreatectomy should be preferred for benign and malignant pancreas tumors. However, artery or vein injury can occur in cases who are performed classical technique. Spleen-preserving distal pancreatectomy was performed by protecting the splenic artery/vein or ligating and cutting (the Warshaw technique). The Warshaw technique can be performed laparoscopically, which can facilitate the works of surgeons. In this case, the spleen can be protected through unplanned Warshaw technique. In this study, it was aimed to present a patient who was planned to undergo classical spleen-preserving distal pancreatectomy but peroperatively underwent modified Warshaw technique.

Case: A 46-year-old female patient consulted to our clinic due to the complaint of abdominal pain radiating to the back. Her laboratory values were normal. However, abdominal tomography revealed a 5x6 cm mass located in the body of the pancreas and multiple stones in the gallbladder. Spleen-preserving distal pancreatectomy was considered for the mass that was radiologically and clinically evaluated to be benign in the preoperative period. Laparoscopic distal pancreatectomy (modified Warshaw) and cholecystectomy were performed in the same session. Standard trocars were entered and gastrocolic ligament was opened. The lesion in the body of the pancreas was observed and laparoscopic intraoperative ultrasonography was performed for determining macroscopic proximal border. Because of an injury in the splenic artery, the splenic artery was ligated, but gastric breves and left epiploic artery were preserved. The pancreas was divided by using stapler and distal pancreatectomy was performed. And then, standard laparoscopic cholecystectomy was performed. The specimens were removed with endobag. The length of the operation was 140 minutes and total blood loss was 220 mL. There was no need for intraoperative blood transfusion. The patient was discharged on the postoperative 3rd day. The histopathological diagnosis was reported as mucinous cystadenoma.

Conclusion: The Warshaw technique, which is performed in an unplanned way, is an alternative method that can be applied in patients that will undergo spleen-preserving technique.

Keywords: Warshaw, distal pancreatectomy, spleen-preserving technique

PS-74

Retrohepatic vena cava resection and graft repair due to the metastasis of squamous cell lung carcinoma to the retroperitoneal space

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Introduction: Retrohepatic vena cava resection is a rarely performed surgical procedure. It is performed to primary vena cava sarcoma, retroperitoneal tumors, and metastatic tumors.

Case: A 55-year-old male patient had undergone lobectomy due to squamous cell carcinoma in the lower lobe of the right lung 2 years ago. Then, the patient receiving chemotherapy, was consulted to our clinic due to a retroperitoneal mass lesion detected in his follow-ups. Physical examination and laboratory parameters were within normal reference intervals. In the computed tomography, a 9x6 cm mass with 4 cm retrohepatic vena cava invasion was revealed. Tumor thrombus extended from the right renal vein to the juxta-hepatic region. Right nephrectomy, caudate lobectomy, cholecystectomy, and retrohepatic vena cava resection were performed. And vena cava reconstruction was performed by using GORE-TEX vascular graft. The left renal vein was re-implanted to the vena cava by graft. The duration of surgery was 320 minutes and total amount of bleeding was 620 mL. Patient was discharged on the postoperative 8th day. Pathological examination of the specimen was found to be consistent with the metastasis of squamous cell carcinoma. No tumor was detected in surgical margins.

Conclusion: It is known that R0 resections for squamous cell lung carcinomas prolong survival in patients. Cases with large vein invasion should not be considered as unresectable. Surgical choice should be tried if R0 resection would be performed. In this case report, a patient thatwas performed retrohepatic vena cava resection due to squamous cell lung carcinoma was presented.

Keywords: Vena cava resection, graft repair, squamous cell lung carcinoma, adrenale metastasis

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PS-75

Primary inflammatory myofibroblastic tumor of the spleen

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Introduction: In this study, a patient who was radiologically performed splenectomy due to primary spleen tumor and pathologically diagnosed with inflammatory myofibroblastic tumor was presented.

Case: A 42-year-old male patient consulted to our hospital due to abdominal pain. Radiological examinations revealed a 7.5 cm diameter mass in the upper pole posterior of the spleen. In the radiological evaluation, it was reported that there could be some diagnoses such as hemangioma, hamartoma, lymphoma, or angiosarcoma in the differential diagnosis of the mass. Hematological, immunological, and biochemical parameters of the patient were normal. Based on these findings, splenectomy was performed due to the suspicion of malignancy. In the immunohistochemical examination, SMa, Caldesmon, CD 34, and CD31 for fibroblastic or myofibroblastic spindle cells and CD68, CD3, CD20, and CD8 for vascular structures were positive,but SMM, Desmin, S-100, Calponin, CD30, CD21, D2-40, and ALK were negative. In addition, no apparent mitotic activity and necrosis and EBV in situ hybridization was detected. Inflammatory lymphoid cells were non-neoplastic. The patient was discharged without taking any additional therapy. In his 1 year- follow-up, no recurrence, metastasis, and/or any negative condition was encountered.

Conclusion: Inflammatory myofibroblastic tumors are the tumors that generally present with nonspecific complaints and they are detected in various places of the body, particularly in the lung, through imaging techniques. Primary inflammatory myofibroblastic tumor of the spleen constitutes 1% of all benign and malignant tumors. Surgery is the only curative choice. It has been reported that it can cause metastasis and behave aggressively at the rate of 11% in non-pulmonary cases. In conclusion, primary inflammatory myofibroblastic tumor of the spleen, which is rarely seen, should be kept in mind in the differential diagnosis.

Keywords: Spleen, primary inflammatory myofibroblastic tumor, follow-up, treatment

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PS-76

Cholestatic jaundice due to fasciola hepatica; management by ERCP

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Introduction: Fascioliasis is an infestation caused by fasciola hepatica, which is a trematode with a length of about 3 cm. In endemic regions, it is among the pre-diagnoses in cholestatic patients who have dyspeptic nonspecific symptoms. The parasite hosts in ruminant animals and mollusks and rarely in humans. ERCP plays an important role in the diagnosis and treatment of fascioliasis. We wanted to share a case that we managed in our clinic.

Case: A 65-year-old female patient with no features except for myomectomy in her history consulted with the complaint of a pain that started in the right upper quadrant. It had a slightly icteric appearance. She did not have fever. In physical examination, there was mild sensitivity at the area where she felt pain in palpation. In the ultrasonography, the diameter of choledoch was 10 mm and multiple stones, the largest of which was 4 mm, were reported to be in the choledoch lumen. Partial sphincterotomy was performed in the patient who was hospitalized for ERCP. The choledoch was tried to be cannulated; however, the procedure was postponed because the patient could not tolerate it. The diameter of the choledoch was measured as 16 mm in the ERCP that was repeated after one week, and the intrahepatic ducts were observed to be slightly dilated. Sphincterotomy was completed and a parasite that was 25 mm long and 12 mm wide was extirpated from the choledoch. The patient, who had no problems in the clinical follow-up and in the laboratory values after the procedure, was discharged on the first day, when the oral intake was recovered. In the laboratory values of the patient, CRP was 30.13, ALP was 246, GGT was 351, T/D Bil was 2/1, and the hemogram values were normal.

Conclusion: By consuming the foods washed with drinking water contaminated with the parasite or consuming undercooked liver, humans take the metacercariae form that is found on water plants. The parasite is released in the duodenum and immature parasites migrate between the duodenum walls. From here, they pass to the proximal bile ducts through the Glisson's capsule and the liver parenchyma cells, and they can lead to clinical pictures such as cholangitis. Common early symptoms such as fever, loss of appetite, abdominal pain, and nausea mimic other diseases. It does not give a disease-specific biochemical symptom except for the increase in liver enzymes and bilirubin. The disease has three stages: acute/liver phase, chronic / biliary phase, and ectopic/pharyngeal involvement. Apart from periductive fibrosis that occurs due to the inflammation that it creates in bile ducts, the parasite itself may cause obstruction and cause cholestasis, but the biliary phase usually progresses asymptomatic. The image seen on ultrasonography and computed tomography is sometimes confused with malignancy or stones. In addition to the use of various medicines, surgical treatment may be necessary and ERCP provides great benefits in terms of both diagnosis and treatment.

Keywords: ERCP, Fasciola hepatica, choledoch obstruction

PS-77

The case of biliary papillomatosis treated by left hepatectomy

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Introduction: The etiology of biliary papillomatosis (BP) or intraductal papillary neoplasm (IDPN) is unknown. It is a rarely seen premalignant lesion that may cause biliary obstruction in the intrahepatic and/or extrahepatic biliary tracts. It is characterized by multiple papillary tumors and it leads to the development of adenomatous carcinoma. Although they are multifocal, surgery is the only curative treatment.

Case: A 49-year-old male patient consulted to the hospital with the complaint of abdominal pain. In the examinations, WBC was found as 17,000/mm^3, CRP as 178 mg/dL, and D. Bil as 0.44 mg/dl. A dilatation and a 3x2 cm mass were detected in the left biliary duct in the ultrasonography and computed tomography (CT). Then he was referred to our hospital. Surgery was planned with the pre-diagnosis of a left intrahepatic resectable mass like that intrahepatic cholangiocarcinoma. Preoperative antibiotherapy was initiated. The result of frozen section analysis of the patient who underwent left hepatectomy was interpreted as a papillomatosis with a benign surgical margin. The patient was discharged without any problems on the postoperative 6th day. The pathology was reported as biliary papillomatosis, which commonly contains high grade dysplasia.

Conclusion: Biliary papillomatosis (BP) is a rare lesion of bile ducts which is reported to have a 40-80% malignancy potential in recent publications and which emerges with the obstruction of biliary ducts, jaundice, and recurrent attacks. It is more common in the sixth to seventh decades in men. Our case was a 49-year-old male patient. The patient had abdominal pain and leukocytosis at the time of admission to the hospital, but there was no obstructive icterus. Biliary papillomatosis (BP) is detected in ultrasonography and CT as dilatation in the intrahepatic and extrahepatic bile tracts and as a mass in the bile duct. In comparison to MRCP, ERCP has superiorities such as therapeutic biliary drainage, stent placement, and providing biopsy opportunity. Drainage can be preoperatively performed in patients with cholangitis with ERCP and PTC. Since our patient had no obstructive icterus and his symptoms regressed with parenteral antibiotic therapy, direct resection was performed without the need for preoperative drainage procedure. Survival is better in BP than cholangiocellular carcinoma, and the percentage and depth of the invasive

component are related to the presence of lymphovascular invasion. Resection is recommended in the treatment. The 5-year survival rate is 81% with curative resection. The factors affecting resectability include the malignancy and recurrence of the tumor and whether or not it is multifocal. Pancreaticoduodenectomy, hemihepatectomy, bile duct resection, segmental liver resection, and liver transplant are the surgical procedures that are performed.

Keywords: Biliary papillomatosis, hepatectomy, bile ducts

PS-78

The chylous leakage that is a rare complication of pancreaticoduodenectomy and its management

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The lymphatic leakage in the peritoneal cavity is defined as chylous acid. Chylous leakage is a rare complication that is seen after aortic surgery, esophagectomy, gastrectomy, vagotomy, liver (L) resection, heart and L transplantation, laparoscopic Nissen fundoplication, gynecological malignancies, and after abdominal surgeries such as urological surgery and pancreatic surgery. If milk-like fluid comes more than 100 cc per day from the drains due to the chylous accumulation in the peritoneal cavity after the surgical intervention, chylous leakage should be suspected. The treatment of chylous leakage can be classified as conservative, interventional, and therapeutic surgical approaches. Total parenteral nutrition (TPN), diet that is rich in medium chain fatty acids, and octreotide infusion can be used in conservative treatment. Bipedal lymphangiography and radiotherapy can be used in chylous leakage that is resistant to conservative treatment. Transabdominal catheterization and peritoneovenous shunting are among the interventional methods that can be used. In this article, we aimed to present a patient, who underwent pancreaticoduodenectomy due to a distal choledochal tumor and in whom postoperative chylous leakage developed, in terms of the approach to the conservative treatment modalities. On the postoperative 3rd day, it was observed that there was a total of 1500 cc of milk-colored chylous leakage coming from the drains in the 73-year-old male patient who had been started to be fed through the jejunostomy on the same day after pancreaticoduodenectomy. Methylene blue was given through the jejunostomy to make sure it was a lymphatic leakage. There was no color change in the drains. The patient's jejunostomy feeding was stopped. On the 6th postoperative day, the total amount of the fluid coming from the drains was 1200 cc in the patient in whom TPN was started. Octreotide infusion was initiated in the patient given fat-free diet. After the octreotide infusion given along with TPN for 3 days, the infusion was stopped because there was no change in the amount and feature of the fluid coming from the drains. The oral intake of the patient was regulated as a water-and-protein-rich and fat-poor enteral feeding solution, and TPN infusion was continued. On the 14th postoperative day, oral feeding was started because the total amount of the fluid coming from the drains dropped to 200 cc and it gained a serous characteristic. On the 16th postoperative day, the drains were removed when the total amount coming from the drains dropped to 50 cc. The patient who had no additional problem was discharged on the 21st postoperative day. Chylous leakage is one of the rare complications that are encountered after pancreatic surgery. Treatment is possible with early diagnosis. It is important to proceed from the conservative treatment to the invasive treatment. The important thing is to be able to act in a multidisciplinary manner when encountered.

Keywords: Pancreaticoduodenectomy, chylous leakage, complication

PS-79

Our ALPPS experience in two cases with the liver metastases of colorectal tumors

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Introduction: One of the most important reasons preventing the resectability of primary or metastatic tumors of the liver is a probable liver failure after resection. This risk is higher especially in patients who received preoperative cytotoxic chemotherapy. Portal vein embolization and ALPPS (associative liver partition and portal vein ligation for staged hepatectomy) methods can be used in order to increase remnant liver volume and resectability. Here, we planned to present our experience of ALPPS method that we used for liver resection in two patients who underwent chemotherapy due to the liver metastases of colorectal tumors.

Case 1: Our first case is a 50-year old female patient. Her body mass index is 38 kg/m^2. Lower anterior resection had been performed with the diagnosis of rectum tumor after neoadjuvant chemoradiotherapy in an external center two years ago. Following the ad-

juvant chemotherapy, chemotherapy including FOLFOX and FOLFIRI-B protocols was applied upon the detection of bilobar liver metastases in the follow-ups. The patient was referred to our clinic when tumor progression was observed despite chemotherapy. Liver MRI revealed a large number of lesions, which were consistent with metastasis and located in segments 1-2-4-6-7, which could not be distinguished in T2 weighted series, which were hypointense in T1, and which could be poorly contrasted in dynamic series. The volume to remain after resection was less than 30%. In the patient, in whom ALPPS procedure combined with microwave ablation was performed, an increased volume was provided at a rate of 60% two weeks after the first stage and R0 resection was made. No recurrence was detected in the 10-month follow-up of the patient whose chemotherapy was continued.

Case 2: A 50-year-old male patient, whose BMI was 33 kg/m^2, underwent metastasectomy along with right hemicolectomy in April 2014 due to liver metastasis and caecum tumor. Bilateral metastases were detected in the follow-up period of the patient who received FOLFOX B treatment after the operation. The volume to remain after the resection was less than 35%. In October 2015, in the first stage of ALPPS procedure, caudate lobe resection was performed in addition to right portal vein ligation and metastasectomy was performed for segment II and III lesions. An increase of more than 60% was provided in the volume two weeks later and the second phase was completed. There was no recurrence in the 23-month follow-up of the patient whose adjuvant chemotherapy was continued.

Conclusion: In the surgical treatment of liver metastases of colorectal tumors, ALPPS procedure should be kept in mind in selected patients in addition to portal venous embolization for increasing resectability.

Keywords: Liver metastasis, ALPPS, liver resection

PS-80

Afferent loop obstruction in HPB surgery

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Introduction: Afferent loop syndrome (ALS) is a rare complication following Billroth 2 reconstruction operations after distal gastrectomy. Afferent loop syndrome may also occur more rarely after the obstruction of bilateral / pancreatobiliary afferent loop following the reconstructions made in HPB surgery. This is an evaluation of the cases who had afferent loop obstruction associated with HPB surgery and who were treated for two years in the HPB Unit of General Surgery Department at Ege University School of Medicine.

Method: The cases that were operated in HPB Unit between September 2015 and September 2017 were scanned retrospectively. Their demographic data, clinical course, and surgical treatments were evaluated.

Results: A total of five patients underwent surgical treatment for afferent loop obstruction in a two-year period. Four of the five cases had the complaints of jaundice and abdominal pain. Patients' examinations were consistent with obstructive cholangiopathy. Surgery was planned for the patients because sufficient drainage could not be provided from the afferent loop. "Enteroenterostomy" was performed in all of the patients as an elective surgery. All the cases had the recurrence of locoregional malignancy and pathology was confirmed through biopsy. As a basic principle of enteroenterostomy, enteroenterostomy was performed side-by-side between the most appropriate jejunal loop and the bilateral / pancreatobiliary small bowel in an antecolic way in patients with unresectable malignant stenosis in the place where the afferent loop passed transverse mesocolon. The mean duration of postoperative hospitalization was 10 days. All of the patients were discharged with recovery.

Conclusion: ALS after Billroth 2 is a rare complication with an incidence reported between 0.2% and 2%. In addition to the fact that it causes cholangitis, the etiology of which is difficult to find out in HPB surgery, its management can also be difficult because either hepaticojejunostomy stenosis or ascending cholangitis is first considered for the etiology of cholangitis in this group of patients. Delays may occur in the diagnosis in the follow-ups of especially oncology and gastroenterology departments. Biliary catheterization may be required preoperatively for biliary drainage in patients with a diagnosis of afferent loop obstruction. However, this type of drainage procedures may be necessary only in the treatment of cholangitis, but its place in treatment is controversial. Enteroenterostomy performed for malignant afferent loop obstructions provides effective palliation. The role of the HPB surgeon and the evaluation of the cross-sectional radiological images with the surgeon's view are also important in the diagnosis and treatment of patients with this clinical picture.

Keywords: Afferent, obstruction, biliary

PS-81

Surgical interventions in the treatment of esophageal variceal hemorrhages

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Introduction: Gastroesophageal variceal hemorrhage, which is one of the causes of upper gastrointestinal hemorrhage, is still one of the most important mortality and morbidity problems of portal hypertension requiring urgent surgical intervention. Patients in whom hemorrhage control cannot be made endoscopically and patients who also have additional diseases need to be operated under emergency conditions. We aimed to present the retrospective evaluations and results of the surgical intervention options that we performed to patients with gastroesophageal variceal hemorrhage that could not be stopped endoscopically in the last 2 years.

Method: Successful surgical methods performed in six patients with variceal hemorrhage in the Department of General Surgery at Antalya Education and Research Hospital between September 2015 and August 2017 were evaluated in our study. Patients' age, gender, preoperative diagnosis, surgical procedure, duration of hospital stay, mortality and morbidity rates were obtained and evaluated retrospectively.

Results: Of 6 patients, 3 were female and 3 were male. The mean age was 58.5 (39-79) years. Two male patients had a history of liver cirrhosis due to chronic alcoholism, 1 female and 1 male patients had a history of portal vein thrombosis, and 2 female patients had a history of cirrhosis due to HBV. All patients had a history of therapeutic endoscopy and massive erythrocyte replacement before the surgery. Stage 3 esophagus was found in four patients in the preoperative emergency endoscopy, stage 1-2 esophagus and varicose vessels in cardia were found in 2 patients, and recurrent endoscopy and band ligation were performed in all of the patients due to active hemorrhage. Gastric devascularization was performed in two patients with chronic alcoholism, mesocaval shunt was performed in a female patient with portal vein thrombosis, emergency cadaveric liver transplantation was performed in a male patient because he was in the list of transplant, and primary suture procedures of the varices were performed in HBV-related cirrhotic patients for the purpose of control surgery. The mean duration of hospital stay was 14.83 (8-31) days. The 79-year-old patient with a history of chronic alcoholism died in the second postoperative month although the hemorrhage was stopped after gastric de-vascularization. No intraoperative mortality was observed in any of the patients.

Conclusion: Timely surgical intervention to be performed in the gastroesophageal variceal hemorrhages, which is one of the most serious one among the upper gastrointestinal system hemorrhages, is life saving. We present the results of the interventions performed for the gastroesophageal variceal hemorrhages in the last two years in the General Surgery Department of Antalya Training and Research Hospital.

Keywords: Gastroesophageal variceal hemorrhage, surgery, results

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PS-82

The effect of RAMPS technique on the lymph node count

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Introduction: In the resection of tumors located in the distal region of the pancreas, the standard retrograde pancreatosplenectomy (SRPS) technique, in which the posterior region of the pancreas was resected from the tail to the body firstly with an approach from left to right, was used for many years. Radical antegrade modular pancreatosplenectomy (RAMPS), which was firstly performed by Strasberg, defines pancreas resection modification by advancing from right to left after pancreas neck transection with vascular control. In this study, it was aimed to compare the pathological results of patients undergoing distal pancreatosplenectomy in the last 10 years in the Unit of HPB in Department of General Surgery Ege University School of Medicine.

Method: The cases in which distal pancreatosplenectomy was performed by the Unit of HPB in Department of General Surgery Ege University School of Medicine between the years of 2008 and 2017 were evaluated retrospectively. Demographic data, surgical recordings, and pathological results of the patients were statistically analyzed.

Results: Conventional SRPS was performed to 17 patients and RAMPS was performed to 13 patients. The mean age was 58.5 years in the conventional group and 59,6 years in the other group. The female/male ratios were 7/10 and 7/6, respectively. The mean diameters of the tumors were 5.4 and 4.1 cm, respectively. In the conventional group, surgical margin positivity was observed in 3 patients. On the other hand, surgical margin positivity was not found in the RAMPS group. The mean excised lymph node counts were 3.7 and 12.2, respectively. Except 2 patients, all patients were discharged from the hospital.

Conclusion: Considering the results that were obtained in our center, the RAMPS procedure revealed more superior results in terms of surgical margin positivity and excised lymph node count compared to conventional distal pancreatectomy . Both tech-

niques are similar with regard to perioperative mortality and morbidity. The medical approach in patients planned to undergo distal pancreatosplenectomy is the preference of a technique that is more effective for revealing the anatomy and more superior in terms of dissected lymph node count.

Keywords: Distal, pancreatectomy, lymph node

PS-83

Pancreas-preserving duodenectomy in a patient with duodenal polyposis

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Introduction: After the colon cancers, duodenal cancers are the second most common cause of death in familial polyposis coli syndrome. Close follow-up or surgery is recommended for the high-risk group of duodenal polyposis due to increased risk of cancer development. Surgical options include pancreaticoduodenectomy or pancreas-preserving duodenectomy. Thanks to the development of diagnostic methods and better understanding of the anatomy of the pancreaticoduodenal region in recent years, performing duodenectomy by preserving the pancreas has become available, although it is technically difficult. We aimed to present a case who had familial polyposis coli (FAP) syndrome and who underwent pancreas-preserving duodenectomy in our clinic upon the detection of high-risk duodenal polyposis.

Method: A pancreas-preserving duodenectomy was planned for a 39-year-old female patient who consulted to our clinic due to duodenal polyposis and was considered to have high risk according to the Spigelman Classification. Open surgery was preferred for the patient who had a history of total colectomy and a history of 3 surgeries due to desmoid tumor. The necessary written informed consent was obtained from the patient after informing her about the follow-up and treatment risks.

Results: Cholecystectomy was performed following the access to the abdominal cavity. A 6 Fr feeding tube was placed into the duodenal cavity through the cystic duct. Duodenum was carefully separated from the pancreas with the help of ultrasonic dissection bipolar cautery to reach the level of the choledoch and pancreatic duct. The duodenum was divided at the antrum level in the proximal side and at the proximal jejunum level in the distal side. Duct-to-mucosa anastomosis was performed in the pancreatic duct and choledoch jejunum over a single layer with a no. 6 non-absorbable PDS suture. The stomach and jejunum were anastomosed over two layers. The feeding-tube that was placed in the pancreatic duct was taken to the drainage from the skin. The duration of the operation was 360 minutes. During the operation, total blood loss was recorded as 200 cc. The patient in whom grade A fistula developed according to the International Study Group of Pancreatic Fistula classification in the postoperative follow-ups was discharged on the 7th day without any problems. Multiple tubulovillous adenomas, the largest of which was 1.2 cm and which contained moderate dysplasia, were detected in the pathology. No additional pathology was observed in the 13-month postoperative follow-ups. The digestive functions of the patient were normal and no weight loss was observed.

Conclusion: Pancreas-preserving duodenectomy is a safe method in duodenal polyposis. Because of its better functional outcomes, it may be the surgery method to be preferred in appropriate cases.

Keywords: Duodenal polyposis, pancreas-preserving, duodenectomy

PS-84

A perforated hydatid cyst case with the clinical picture of anaphylactic shock

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Introduction: Hydatid cyst disease is a serious health concern in developing countries. Our country is among the endemic regions for the disease. The clinical course of the disease depends on the size of cyst, stage, and organ involvement. Intraperitoneal rupture is a rare but important complication that can lead to life-threatening allergic reactions. Perforation can develop due to trauma or increased intracyst pressure. In this study, it was aimed to present a patient admitted for anaphylactic shock associated with spontaneous perforation of a giant hydatid cyst that grew exophytically in the posterior region of the liver.

Method: A 28-year-old female patient consulted to the emergency unit of our hospital with the complaints of severe abdominal pain, urticaria, shortness of breath, tachycardia, and hypotension.

Results: After the first intervention, her abdominal tomography was performed and it revealed intra-abdominal diffuse fluid and a 27x15 cm exophytic cystic lesion with impaired wall integrity, which could be consistent with hydatid cyst, in the right lobe pos-

terior of the liver. She was taken into an emergent operation with the pre-diagnosis of perforated hydatid cyst. Following access to the abdominal cavity with midline incision, 2500 cc intra-abdominal clear water-like fluid was aspirated. In the exploration, a cyst including daughter vesicles and germinative membrane was detected between posterior segment 6 of the right lobe of the liver and diaphragm. There was a major rupture in the cyst. The content of the cavity was emptied. Hypertonic saline solution was applied into the cyst pouch for 15 minutes following partial cystectomy. The abdominal cavity was washed with physiological saline solution. Because no postoperative complication developed, the patient was discharged on the postoperative 3rd day. After 6-month albendazole 10 mg/kg therapy, no recurrence was observed.

Conclusion: In liver hydatid cyst, anaphylaxis secondary to spontaneous rupture is rarely encountered. Early diagnosis and emergent surgical intervention are very important for this life-threatening complication.

Keywords: Perforated hydatid cyst, anaphylaxis, urgent surgery

PS-85

Posttraumatic intraperitoneal alveolar echinococcosis perforation

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Introduction: Alveolar echinococcosis is an endemic zoonotic parasitic disorder seen in the Eastern Anatolia Region of Turkey including Erzurum. This disease having a malignant course mainly affects the liver. The lesion develops as a tumor and its metastasis can occur in various tissues, particularly in the lung and brain. Alveolar echinococcosis demonstrates a multivesicular (alveolar) proliferation in the tissue that it affects. Large, irregular, and solid partial necrotic masses develop. Surgical resection is the primary treatment method. However, the patients, in whom the disease is found to locally invade the liver hilus structures and the vena cava at the time of diagnosis, are evaluated as non-resectable in most of cases. Liver transplantation is the only treatment method in non-resectable patients with no distantte organ metastasis. In this study, it was aimed to share a patient who was preoperatively thought to have hydatid cyst perforation of the liver, but then detected to have liver alveolar cyst perforation that had a course of cystic necrotic change in the liver but was treated with a completely different method from hydatid cyst.

Case: A 28-year-old male patient consulted to the emergency unit due to the complaint of abdominal pain. His abdominal examination revealed tenderness, muscular defense, and rebound in all quadrants. His laboratory findings were as follows: CRP: 140, WBC: 11.00, AST: 104, ALT: 82, LDH: 298, and GGT: 33. In the computed tomography of the abdomen, an approximately 221x168 mm well-circumscribed lesion without contrast enhancement and consistent with type 1 hydatid cyst, which filled the right lobe of the liver almost completely, was viewed. In the emergent exploration of the patient, approximately 500 cc infected fluid was aspirated from the abdomen. As the cystic content of the right lobe of the liver, about 3000 cc purulent matter was aspirated. Cystotomy was performed for the liver cyst. Because the wall of the cyst was viewed as granular, preoperative frozen section was studied. Since the result of the frozen section analysis was reported as alveolar cyst, resection was decided to be performed in the patient. Right hepatectomy was performed with ultrasonic surgical aspirator (CUSA) in accordance with the procedure. Biliary leakage control was done with physiological saline solution from the cystostomy and cholangiography was taken. The patient, whose postoperative follow-ups were unproblematic, was discharged with full recovery. No recurrence was observed in the 3rd follow-up year of the patient who was given postoperative albendazole therapy.

Conclusion: Echinococcus alveolaris can be radiologically confused with type 1 hydatid cyst lesions because of necrotized center.

Keywords: Echinococcus alveolaris, cyst perforation, right hepatectomy

PS-86

Right portal vein ligation due to massive liver right lobe injury

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Introduction: The mortality rate of grade 5 liver injuries is approximately 15-20% and its most important cause is bleeding. Complications developing in late postoperative period are abscess and sepsis. In this study, the treatment of a patient who had grade 5 liver injury and whose bleeding was taken under control with the ligation of the right portal vein was presented.

Case: An 18-year-old female patient was admitted to the emergency unit due to the picture of acute abdominal hypovolemic shock associated with in-vehicle traffic accident. Her general health condition was poor and she had somnolence. The analysis of her vital findings revealed that the arterial pressure was 53-32 mm/Hg and the pulse was 126/min. Tenderness and muscular defense were observed in the right upper quadrant of the abdomen in physical examination. Laboratory values were as follows: PH: 7.16, lactate: 6.1 mmol/L, hemoglobin: 8.6 g/dl, hematocrit: 26.9 g/dL, AST:687 U/L, ALT:709 U/L, and LDH:1569 U/L. In the exploration of the patient, who was taken into emergent surgery, 3000 cc hemorrhage in the abdomen, locally amputated liver tissues in the right lobe of the liver, and diffuse bleeding from the parenchyma of the liver were observed. The hilum of the liver was applied the Pringle Maneuver and the suprahepatic and infrahepatic vena cava were clamped. During clamping, injuries in the right and middle veins were repaired. Because bleeding continued when clamping was removed, the right portal vein was ligated at the level of the hilum. Packing tamponade was applied in the liver. In the patient who was re-operated after 36 hours, de-packing was performed and it was observed that the liver was congested and there was no active bleeding. Right hepatectomy was not performed in the patient whose general condition was poor. She was discharged on the postoperative 32nd day. In the computed tomography (CT) examinations performed in the 1st, 3rd, and 6th months, atrophy in the right lobe of the liver and hypertrophy in the left lobe were observed.

Conclusion: For taking the bleeding under control in major injuries of the liver, the Pringle maneuver, inferior vena cava clamping, and packing tamponade can be performed. The ligation of the right portal vein can be carried out as a surgical alternative for preventing hypovolemic shock and massive transfusion in well-selected early-stage multi-trauma patients.

Keywords: Massive liver injury, right portal vein ligation, hypovolemic shock

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PS-87

Liver surgery experience of the Department of Hepatobiliary Surgery in Bezmialem Vakıf University

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Introduction: A rapid improvement has occurred in liver surgery as well as in technology, anesthesia and intensive care conditions, and imaging methods for well-understanding of the liver anatomy in recent years. In this study, it was aimed to present our experience in liver surgery performed in our clinic.

Method: The prospectively recorded data of 119 patients operated in our clinic between January 2011 and January 2017 were retrospectively evaluated. Patients' demographic features, tumor types, preoperative surgical evaluation criteria, duration of hospitalization, amount of bleeding during surgery, postoperative mortality and morbidity, and pathological results were assessed. Three-phase abdominal tomography and dynamic magnetic resonance imaging of the upper abdomen were used in preoperative evaluation. The volume of the residue liver was determined with volumetric evaluation in patients planned to undergo major resection and the targeted volume of the residue liver was 40% in patients receiving chemotherapy and having cirrhosis and 25% in the presence of healthy liver tissue. Moreover, indocyanine test was used for the evaluation of function. Cardiac functions of the patients for whom major resection was planned were routinely assessed with echocardiography. Evaluation through intraoperative ultrasound was performed in all metastatic patients. In multiple metastases, intraoperative radiofrequency ablation was applied in lesions that were inappropriate for resection.

Results: The study included 119 patients undergoing liver surgery between January 2011 and June 2017. Of the patients, 55 were female and 64 were male. Their ages were between 35 and 72 years. 68 (57.1%) of the patients were those operated due to metastatic tumor. Major hepatectomy was performed in 20 of these patients. Two of patients undergoing major hepatectomy were preoperatively performed portal vein embolization and the volume of residue liver was increased. Intraoperative radiofrequency ablation therapy was administered in 15 of patients that were performed metastasectomy. 35 patients (29.4%) were operated due to primary liver malignant tumor and 12 patients (10%) were operated due to benign liver tumor. Postoperative wound site infection developed in 4 patients. Hypertensive heart failure was observed in one patient. In one patient, mortality due to postoperative liver failure occurred on the postoperative 35th day. Total morbidity and mortality were calculated as 4.2% and 0.8%, respectively.

Conclusion: Surgery of liver tumors can be performed with appropriate preoperative evaluation and perioperative care at low mortality and morbidity. A multidisciplinary approach is important for treating complicated cases.

Keywords: Liver tumors, surgery, metastatic tumors

PS-88

Non-operative treatment of severe jaundice developing after coronary artery surgery

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Introduction: Jaundice is a rare condition seen after coronary artery operations and total bilirubin levels rarely rise above 5 mg/dL. Ischemia, excessive blood transfusion, or long hospitalization in intensive care unit may lead to this condition and bilirubin levels usually return to normal levels spontaneously.

Case: A 61-year-old male patient was evaluated due to "gradually increasing direct bilirubin levels" in the intensive care unit of cardiovascular surgery upon the consultation requested from our "liver-pancreas-biliary tract surgery" unit. It was found out that the patient underwent by-pass surgery for 3 arteries due to coronary artery disease 2 weeks ago, he was urgently re-operated due to myocardial infarction at the night of operation, and he was followed up as connected to the ECMO (Extra-corporeal Membrane Oxygenation) device for the next 5 days. The direct/total bilirubin levels of the patient, whose bilirubin levels increased gradually for 2 weeks, were 24/27 mg/dL. It was detected that 7 units of whole blood, 16 units of erythrocyte suspension, 18 units of fresh plasma, and 15 units of platelet (apheresis) were transfused to the patient during this period. The viral hepatitis of the patient with normal liver enzyme levels was also negative. Intra- and extrahepatic bile ducts were normal in the bedside Doppler ultrasonography and no pathology was detected in the liver vascular flows. There was no hepatotoxic agent in the medications included in his treatment and no growth was observed in the cultures. The patient was given plasmapheresis in 2 sessions with one-day interval. Direct / total bilirubin levels of the patient, whose bilirubin levels gradually regressed and the clinical condition rapidly improved, decreased to 1/2 mg/dL on the postoperative 40th day, and the patient was discharged with full recovery.

Conclusion: Jaundice after coronary artery surgery is a condition that is rarely seen and that mildly progresses and usually recovers spontaneously. Factors such as ischemia, excessive use of blood products, viral hepatitis activation, drug-induced toxic hepatitis, prolonged hospitalization in intensive care, and the formation of gallbladder sludge are included in its etiology. It has also been reported in some recent publications that ECMO device, which is increasingly used in heart surgeries in recent days , may cause jaundice in some cases due to its adverse effects on the liver. In situations in which the bilurubin levels do not recover spontaneously and in which surgical necessities are excluded, the option of "liver support devices/plasmapheresis" is an effective and safe method that should be considered in the treatment.

Keywords: ECMO, hyperbilirubinemia, coronary, plasmapheresis

PS-89

Pancreas resections in M1 pancreas cancers

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Introduction: In M1 pancreas adenocarcinomas, the indication for pancreatic resection is generally not available. However, metastasectomy with pancreas resection after neoadjuvant therapy can be appropriate for selected patients having low risk of surgical morbidity. In this study, it was aimed to present patients who had M1 pancreas adenocarcinoma according to the TNM classification and whose primary tumor was resectable.

Method: Clinico-pathological parameters of patients who were proven to be grade 4 and who underwent the resection of the pancreas with the liver, neighboring organ, or peritoneal metastases between January 2014 and December 2016 were evaluated retrospectively.

Results: A total of 14 patients (9 male and 5 female patients; the mean age: 59 years) were included in this study. According to the location of tumor in the pancreas, 4 cases had poximal localization (28%) and 10 cases had distal localization (72%). Lymph node involvement and liver metastasis were seen in all patients. Moreover, metastasis was observed in the peritoneum in 3 patients (21%) and in the lung in one patient (1.7%). In all patients, primary tumor was resected with metastasectomy. While pylorus-preserving pancreatoduodenectomy was performed in 4 patients, distal pancreatectomy was performed in 10 patients. Perioperative morbidity was 35% and no mortality was observed. For M1 patients, the mean general survival time was calculated as 11.8 months and one-year expected survival rate was calculated as 43.7% (95% confidence interval).

Conclusion: Pancreas resection and metastasectomy can be performed in selected patients with M1 pancreas cancers. However, surgical indication should be established by considering the features of patient.

Keywords: Pancreas cancer, M1 metastasis, liver metastasis

PS-90

Evaluation of the long-term results of small-for-size grafts in living donor liver transplantation

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Introduction: The GRWR (Graft-Recipient Weight Ratio) parameter based on the graft weight and body weight of recipient in living donor liver transplantation (LDLT) is very important for the selection of adequate graft and successful surgical results. In the recipients of GRWR<0.8, the risk for small-for-size (SFS) syndrome characterized by prolonged hyperbilirubinemia, prolonged coagulation parameters, and acid increases. For the safety of recipient, GRWR is recommended to be larger than 0.8 in the selection of graft.

In this study, it was aimed to evaluate the results of liver transplantation in patients for whom GRWR<0.8 grafts were used in LDLT.

Method: The LDLT surgical data of 90 adult patients between January 2013 and July 2017 were examined. The patients were put into two groups as GRWR<0.8 and GRWR>=0.8 grafts. The data of these two groups were compared in terms of early mortality, the length of hospitalization in the postoperative intensive care unit, total length of hospitalization in the intensive care unit, duration of intubation, duration of hospitalization, and survival.

Results: The study included a total of 90 patients; 80 in the GRWR>=0.8 (large graft, LG) group and 10 in the GRWR<0.8 (small graft, SG) group. The mean age was 48.9 years (Min-Max: 35-60) in the SG group and 44,9 years (Min-Max:1-70) in the LG group (p=0.86). While the mean body mass index was 28.8 (Min-Max: 22.5-34.6) in the SG group, it was 25.4 (Min-Max: 14,5-39) in the LG group (p=0.54). The mean length of hospitalization was 5.75 days (Min-Max: 2-14) in the SG group and 5.08 days (Min-Max: 1-29) in the LG group (p=0.59). The mean duration of intubation was found to be 4 days (Min-Max: 1-15) and 1.92 days (Min-Max: 1-10) in the SG and LG groups, respectively (p=0.20). The mean duration of hospitalization was 28.71 days (Min-Max: 11-81) in the SG group and 26.25 days (Min-Max: 12-61) in the LG group (p=0.61). According to the Kaplan-Meier analysis, the mean expected survival was found to be 35.6 months (Min-Max: 25.2-46.01) and 42.1 months (Min-Max: 36.5-47.8) in the SG and LG groups, respectively (p=0.6). In the analyses, the confidence interval 95% was selected. Early mortality developed in 1 patient in the SG group and in 6 patients in the LG group.

Conclusion: No significant difference was detected in terms of postoperative monitorization, hospitalization length, and long-term survival between GRWR<0.8 grafts and transplantations performed with large grafts in the living donor liver transplantation.

Keywords: Living donor liver transplantation, small-for-size graft, transplantation

PS-91

Preoperative and intraoperative graft volumetries in living donor liver transplantation

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Introduction: Computed tomography (CT) is used in the preoperative measurements of graft volumes in living donor liver transplantation. One of main factors affecting the results of patient is the relationship between graft volume and recipient's volume. For elevating the accuracy of preoperative measurements, software processing CT data and automizing volumetry can also be preferred. In this study, it was aimed to compare the results of manual CT volumetry obtained by adding two-dimensional section areas of the grafts, volumetric results determined by surgeon using volumetric software, and intraoperative real volume and weight measures for finding the correlation among them.

Method: The grafts of 84 donors that accepted to be liver donors for liver transplantation in Ankara University İbn-i Sina Hospital between January 2016 and August 2017 were measured preoperatively and intraoperatively. Manual CT volumetry and Myrian® (Intrasense, Montpellier, France) medical software were used for preoperative volumetric measurement. Intraoperative weight measurements were performed with a weighing scale and water replacement method was used for the measurement of volumes. Intraclass correlation coefficient was employed for evaluating the consistency of measurements performed with different groups. After testing the compliance of the measurements with different techniques to normal distribution, the difference among the techniques was evaluated with the Kruskal-Wallis test.

Results: The mean and median CT volumetries were 842.3±257.5 cm^3 and 895 cm^3 (min: 280 cm^3, max: 1302 cm^3), respectively. The mean Myrian volumetry was 783.6±257.3 cm^3 and the median value was 756 cm^3 (min: 246 cm^3, max: 1245 cm^3). The mean operation volumetry was 726±250.3 cm^3 and the median value was 710 cm^3 (min: 250 cm^3, max: 1500 cm^3). The mean and median operation weights were 759.2±244.2 g and 850 g (min: 272 cm^3, max: 1468 cm^3), respectively. Intergroup correlation was 0.903. CT and operation weight compliance was 0,861 and Myrian and weight compliance was 0.945, which suggests a high level of compliance ($p<0.001$).

Conclusion: Accurate graft volumetry is a determinant of donor selection in the preoperative evaluation for living donor liver transplantation. Although CT volumetry gives results similar to intraoperative measures, re-calculation of CT data by surgeon using specific volumetry software increases the sensitivity of measurement and demonstrates a high correlation with intraoperative weight measurements of graft.

Keywords: Living donor liver transplantation, computed tomography, volumetry, graft, transplantation

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PS-92

Isolated pancreas injury and non-operative, minimal invasive treatment management and literature review

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Introduction: Isolated pancreas injury secondary to blunt trauma is rarely seen, but it has high mortality. The rates of pancreatic injury after abdominal trauma are reported to be between 2% and 12% in various studies. According to the American national trauma database, pancreas injury was observed at the rate of 3.1% in 388117 blunt abdominal trauma patients in 5-year review. Of them, 0.7% was isolated pancreas injury. Its being rare and not being isolated in general cause the lack of a definite algorithm in the management of treatment.

Case: A 21-year-old male patient consulted to the emergency unit due to blunt trauma in the epigastric region. His general health condition was good. In the abdominal USG, no emergent pathology was detected except an area suggesting 26 mm hypoechogenic pancreatic injury in the corpus of the pancreas. Signs consistent with hematoma were observed in the peripancreatic region in the abdominal CT. Acute abdominal findings did not develop in the follow-ups of the patient. On the 3rd day of hospitalization, HGB was 13,7 and ASLT, ALT, ALP, GGT, and bilirubin levels were normal. However, amylase level progressively increased. With rapid growth of the loculated region, which reached the size of 105*85 mm at the end of the 4th week, vomiting caused splenic congestion. Because cystic wall did not develop yet, percutaneous drainage was considered to be appropriate before cystogastrostomy. In the patient undergoing percutaneous drainage, the amount of pancreatic fluid was observed to be approximately 400 cc per day. Because the amount of fluid from the percutaneous drainage catheter did not decrease, ERCP and sphincterotomy were performed. Following ERCP, the fluid coming out from the drainage catheter was stopped. Because loculated region was observed to be reduced (25 mm*15mm) in the ultrasonography, percutaneous drainage catheter was removed. Since the cyst reached the diameter of 10 cm again in the ultrasonographic examination performed about one month later, it was concluded that the pseudocyst wall was mature and endoscopic cystogastrostomy was performed. Biochemical and hemogram values of the patient, whose complaints regressed after the procedure, were within normal intervals. In the 3rd month follow-up, he had no complaint and the sizes of cyst were reduced (23*20 mm).

Conclusion: Surgical interventions performed in pancreas injuries, such as laparotomy and drainage, partial pancreatectomy, pancreatic repair, and total pancreatectomy, are the procedures with high morbidity and mortality. In the treatment management of isolated pancreas injuries, conservative management with minimal invasive treatment methods (ERCP, percutaneous drainage, endoscopic cystogastrostomy, etc) can provide successful outcomes if hemodynamics of the patient is stable and there are no accompanying septic findings.

Keywords: Blunt, pancreas, trauma

PS-93

Approach to liver metastases of breast cancer

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Introduction: In our daily clinical practice, 20% of patients diagnosed with breast cancer are encountered after the development of metastases. Approximately 50% of these patients have metastatic focus in their livers and this causes shortened median survival in these patients. Particularly in centers where hepatobiliary surgery and breast surgery teams are in cooperation, the management of these patients is very important.

Method: In this study, patients that were operated due to breast cancer in the last 5 years, followed up in our hospital, and referred to our outpatient clinic of hepatobiliary surgery due to liver metastases were evaluated.

Results: Six patients, who were operated in our hospital or in an external center due to breast cancer between 2012 and 2017 and whose treatment management was done in our department for liver metastasis, were evaluated. All of patients were female. The mean age was 51.3±13.8 years. The location of metastases was only segment 7 in 2 patients, segment 4A and segment 6 in 1 patient, only between segment 2 and 4A in 1 patient, segment 6 and segment 8 in 1 patient, and all segments in 1 patient. The procedures performed in the patients were metastasectomy in the patient with a 16 mm*15 mm lesion in segment 7, left hepatectomy and choleystectomy in the patient with 3*4 cm lesion between segment 2 and 4A, RF ablation in the patient with 12*23 cm lesion in segment 7, and microwave ablation in the patient with 29*31 mm lesion in segment 6 and 22*23 mm lesion in segment 8. For the patient having 26 mm lesion in segment 6 and 7 mm and 33 mm lesions in segment 4A, metastasectomy cholecystectomy was applied for the lesion in segment 6 and radiofrequency ablation was performed for the lesions in segment 4A. One patient had the complaint of icterus at admission to the outpatient clinic and multiple metastases were detected in the liver. This patient was directed to chemotherapy after consulting the tumor council.

Conclusion: A retrospective study for the management of breast cancer metastases that are appropriate for surgical treatment and that are relatively rarely encountered in our daily practices will provide benefits for obtaining better results in clinical decisions for new patients.

Keywords: Liver, breast, metastasis

PS-94

Simultaneous laparoscopic resection in colon cancers with liver metastasis

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In patients having colon cancer with liver metastasis, it is known that 5 and 10-year survival rates improve with hepatic metastasectomy at the rates of 40% and 20%, respectively. In this study, it was aimed to emphasize that major and minor liver surgeries could be simultaneously and laparoscopically performed with primary tumor surgery. Six patients having colon cancer with liver metastasis underwent laparoscopic colon resection and liver resection simultaneously in our department between 2014 and 2017. The distribution of sexes was equal and the mean age was 55.8±8.0 (45-68) years. Three patients were perfomed laparoscopic colorectal resection with liver metastasectomy. One patient was performed right hepatectomy and one patient was performed left hepatectomy. Right hepatectomy following the ALPPS procedure was performed in one patient. Preserving ileostomy was opened only in one patient. The mean duration of surgery was 540±136.8 (420-780) minutes. While the specimen was removed through suprapubic incision in 4 patients, it was removed with transvaginal technique in one patient and with transanal technique in one patient. The mean length of hospitalization was 17 days. In one of the patients, postoperative pleural effusion and intraabdominal abscess developed and it was drained percutaneously. Postoperative biliary fistula developed in the patient undergoing the ALPPS procedure and no intervention was required during follow-up. In one patient who was performed right hepatectomy, biloma developed and it was laparoscopically drained. No mortality occurred in any of patients. In colon cancers with liver metastasis, the timing of primary tumor and metastasis surgery is controversial. While minor liver resections are generally recommended with primary tumor surgery simultaneously, no consensus has been achieved for major resections. Despite our restricted number of patients, we suggest that major liver resections can also be simultaneously performed with primary tumor surgery in experienced centers.

Keywords: Liver resection, metastasis, colorectal cancer

PS-95

Frey procedure applied for chronic pain associated with chronic pancreatitis, biliary obstruction, and vascular complications

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Introduction: The treatment of chronic pancreatitis includes replacement of endocrine and exocrine deficiencies, use of analgesics , and endoscopic and surgical interventions when needed. Surgery becomes more difficult in cases with increased complications due to the effect of chronic pancreatitis on the surrounding structures. In this study, it was aimed to present two operated cases with a history of previous abdominal surgeries, intractable pain and biliary complications associated with chronic pancreatitis, and portal thrombosis and accordingly cavernous transformation.

Case 1: A 51-year-old male patient diagnosed with chronic pancreatitis had been planned to be performed pancreas resection for chronic pain and laparotomy had been done in an external center. However, resection had not been performed because of portal hypertension and cavernous transformations. In our clinic, he was planned to be performed pancreaticoduodenectomy again but pancreaticoduodenectomy was given up and it was decided to perform the surgery with the Frey procedure because of the same reason. Moreover, pancreaticojejunostomy and hepaticojejunostomy were also added. Three units of erythrocyte suspension were given to the patient intraoperatively. In the follow-up, he was discharged with full recovery.

Case 2: A 58-year-old male patient that was followed up for alcohol-related chronic pancreatitis had the complaints of persistent pain, which caused him to use opioid for the last one year, and jaundice going on for 3-4 months. His CT revealed portal thrombosis and cavernous transformations. The diameter of the choledoch was 27 mm. The Frey procedure was planned for the patient. The surgery was very difficult because of previous operations. The Frey procedure was done to the patient who had undergone Ladd operation previously and had malrotation. Hepaticojejunostomy (HJ) was also added. The amount of bleeding was 100 cc in total. Hemobilia developed in early postoperative period. Postoperative leakage developing from HJ and GE anastomoses was treated conservatively.

Conclusion: Although previous surgeries, portal thrombosis, biliary obstruction, and cavernous transformations made the operation more difficult, the Frey procedure was performed in both cases. Bilioenteric anastomosis was needed in both cases. We suggest that the Frey procedure can be preferred in chronic pancreatitis patients with portal hypertension, portal venous thrombosis /stenosis, or cavernous transformations.

Keywords: Chronic pancreatitis, resection, pancreatectomy

PS-96

Providing biliary continuity with left ducto- duodenectomy in a patient undergoing near-total subtotal gastrectomy and Roux-en-y gastrojejunostomy with right hepatectomy and extrahepatic bile tracts resection

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Introduction: Roux-en-y hepaticojejunostomy is a preferred method for reconstruction in operations necessitating bile duct excision. We wanted to share a case of left ducto-duodenostomy that we performed to duedenum stump of a patient in whom performing Roux-en-y gastrojejunostomy was necessary due to near-total subtotal gastrectomy and a second jejunum loop would approach liver hilus tensely for certain.

Case: A 76-year-old male patient consulted us due to vomiting what he had eaten. In the endoscopy, there was an obstruction not allowing the passage of endoscopy in the pylorus. Biopsy could not be conducted due to anticoagulant usage in the patient with pacemaker. In the laparoscopic exploration, there was an image consistent with gallbladder tumor obstructing pylorus and having a view of eaten apple in the Glisson capsule. The stomach had a very dilated and cascade appearance. Laparotomy was decided since it was consistent with adenocarcinoma as a result of frozen section. Hilus dissection of the liver was carried out. Extrahepatic bile ducts were resected with right hepatectomy. Near-total subtotal gastrectomy and Roux-en-y gastrojejunostomy were performed due to cascade stomach. A second loop was wanted to be pulled to the liver hilus for biliary reconstruction. However, it was seen that anastomosis would be tense. Thereupon, anastomosis was conducted between left ductus hepaticus and duedenum stump. Despite not having a postoperative intraabdominal problem, the patient was lost due to cardiac problems.

Conclusion: We have an opinion that duodenum stump can be used when necessary for biliary continuity in the patients who are performed near-total gastrectomy and who need Roux-en-y gastrojejunostomy.

Keywords: Bile duct, Roux-en-y, bilioenteric anastomosis

PS-97

Gossypiboma mimicking mesenteric cyst after cholecystectomy

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Introduction: Gossypiboma is a rare case seen particularly after intra-abdominal surgical interventions and it can lead to serious results for both the patient and the surgeon. It is a term used to define a mass found in the body that comprises a cotton structure. Although it is reported that it can be seen at the rates changing between 1/3000 and 1/5000, it is considered that this rate may be higher due to legal, medical problems and that some patients may be asymptomatic. Most commonly forgotten foreign body is surgical tampons. As they can cause serious complications such as intra-abdominal abscess in the early period, they can also be detected incidentally because they remain asymptomatic for years and they appear aspseudo tumors. Although surgery is recommended for an alternative treatment, the main point is to take necessary precautions for avoiding this surgical mistake.

Case: A 57-year-old female patient consulted due to right upper quadrant abdominal pain. She had a history of an open cholecystectomy performed 20 years ago. She had no additional disease. In the physical examination, there was tenderness and defense in the right upper quadrant and no rebound. Tomography revealed a soft tissue density with 4 cm circumference with calcified regular margin at the level of ascending colon and a suspicion of a calcified mesenteric cyst. In the contrast-enhanced MR, a 5-cm sized, bilobular, and sharply circumscribed mass originating from the mesenterium was reported. Patient was operated with the pre-diagnosis of mesenteric cyst. It was observed that the mass that was intraoperatively considered to be arising from the ascending colon meso was associated with colon lumen. Right hemicolectomy and side to side style ileo-transversostomy were performed. The patient having no postoperative problem was discharged with full recovery on the 5th day. Pathological diagnosis was reported as foreign body in lamina propria and muscularis propria, and calcification and granulation tissue developing in association with this.

Conclusion: Gossypiboma is an unwanted, preventable, and life threatening surgical complication. Gossypiboma, which is rarely seen in patients with mesenteric cyst and a history of previous surgery, should be taken into consideration for differential diagnosis.

Keywords: Open cholecystectomy, gossypiboma, mesenteric cyst

PS-98

Solitary fibrous tumor in HPB surgery

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Introduction: Solitary fibrous tumor (SFT) is rarely encountered in the hepatopancreatobiliary region. It is a tumor with mesenchymal origin that primarily involves the mediastinum and pleura. Although SFT is primarily seen in the respiratory system, it can involve the pancreas, liver, kidney, breast, and salivary glands. In this study, it was aimed to present two patients with solitary fibrous tumors, which are quite rarely encountered in HPB surgery practice.

Method: Patients that underwent surgical treatment in HPB Unit of the General Surgery Departmetn in Ege University, Medical Faculty were evaluated retrospectively. Patients who were pathologically diagnosed with solitary fibrous tumor were presented.

Case 1: Computed tomography showed a 11.7x7.8x9.5 cm tumor and duodenal pressure at the pancreas head of a 56-year-old male patient who consulted with the complaint of abdominal upper quadrant pain. Serum tumor markers were normal. Pancreaticoduodenectomy was performed in the patient who was diagnosed with mesenchymal tumor through fine needle biopsy taken with endoscopic ultrasound and the patient was discharged on the postoperative 8th day. Pathologic diagnosis was reported as SFT.

Case 2: In a 43-year-old female patient who had pain in the right upper quadrant of the abdomen for the last six months, a mass was detected in the liver during cholecystectomy operation performed in an external center. The patient was referred to the HPB surgical unit. The right upper quadrant pain of the patient who consulted to our hospital 6 months after the first operation has been continuing with normal serum tumor markers. In the MRI, a hypervascular tumor with a size of 9x8 cm was detected in segment 4-5. The patient who was performed extended resection of segment 4-5 was discharged on the postoperative 16th day. Pathologic diagnosis was reported as SFT.

Conclusion: In addition to the rare occurrence of SFTs in the HPB system, unclear and nonspecific clinical findings make the diagnosis difficult. It can also be difficult to distinguish it from other HPB lesions through radiological methods. Although fine needle aspiration biopsy assists in diagnosis, histological examination and immunohistochemical studies are required for definite diag-

nosis. In this sense, SFT should absolutely be kept in mind for the differential diagnosis. Extrapleural SFT therapy includes the removal of the tumor with negative surgical margins.

Keywords: Pancreas, liver, mesenchymal, solitary fibrous

PS-99

Duodenal gastrointestinal stromal tumor mimicking pancreatic mass

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Introduction: Gastrointestinal stromal tumors (GISTs) are mesenchymal tumors that are primarily located in the gastrointestinal system and abdomen. Normally, there are interstitial Cajal cells in the intestinal wall, which regulate the peristalsis of the gastrointestinal system is. These cells are found in and around the myenteric plexus in the intestines of an adult. GISTs are thought to be mesenchymal tumors originating from the precursors of Cajal cells. They may be all over the gastrointestinal tract, but they are most commonly seen in the stomach (50%) and then in the small intestines (25%). They may occur in the retroperitoneum or abdomen (3%) independently from colorectal (10%), omentum / mesentery (7%), esophagus (5%), and rarely gastrointestinal tract. They are seen in duodenum at a rate less than 5%. Primarily surgical resection performed with negative margins and then medical treatment that prevents recurrence are recommended in the treatment. In GISTs originating from the duodenum, local resection, segmental resection, and pancreaticoduodenectomy can constitute the variety of treatment according to the localization.

Case: A 62-year-old female patient consulted with the complaint of abdominal pain. Contrast-enhanced abdominal tomography of the patient, who did not have any additional diseases and previous surgery, revealed a solid mass lesion in the inferior region of the pancreas uncinate process, with unclear borders with pancreas and duodenal loop and located in retroperitoneum. No pathology was found in the upper gastrointestinal system endoscopy. Routine hemogram, biochemical examinations, and tumor markers were normal. Surgery was planned for the patient diagnozed with a retroperitoneal mass. In the operation, the exploration revealed a 4x4x3 cm well-circumscribed solid mass with a medium stiffness, which was independent from the pancreas, associated with the duodenum wall at a certain point, and was located between the 3rd and 4th segments. The mass was totally excised along with the duodenum and proximal jejunum at the distal region of the third part of duodenum, and continuity was provided with duodenojejunostomy anastomosis. The pathology of the patient was reported as gastrointestinal stromal tumor.

Conclusion: GIST is a rare tumor and GIST originating from the duodenum is very rare among these tumors. In the literature, it is seen that various surgeries ranging from local resection to pancreaticoduodenectomy are carried out in the GISTs originating from the duodenum. The characteristic of our case is that GIST originating from the duodenum is rare, and segmental resection, which is a minor surgical technique compared to pancreaticoduodenectomy, was performed in the treatment.

Keywords: Gastrointestinal stromal tumor, duodenum, pancreas

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