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OC001

Investigation of The Suitability for Use of Hepatitis B Virus Serological Tests in Healthcare Professionals Working at The Medical Faculty

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Background Hepatitis B virus is a DNA virus that causes acute and chronic hepatitis and leads to liver cirrhosis and hepatocellular carcinoma (HCC). Since HBV infection is transmitted through blood and body fluids, healthcare professionals are at high risk in terms of infection. Therefore, HBV antigen (HBsAg) and antibody (Anti-HBs) screening tests are carried out at specific times. This study aimed to investigate the appropriateness of the tests used in HBV screening in healthcare professionals to the guidelines.

Material and Methods Prior to the commencement of the study, legal authorization and clinical practices ethics board approval were received from the relevant institution. Within the scope of the study, between January 1st, 2010 and December 31st, 2019, in-house health screening records of the healthcare professionals (physicians, nurses, medical assistants, technicians, and other service staff) working in our tertiary hospital were evaluated. HBsAg and anti-HBs tests studied in the serology unit of the central laboratory were reviewed. Due to the presence of HBV immunity in the first screening of the whole group, HBsAg and anti-HBs tests performed thereafter were evaluated as inappropriate requests.

Results When 7486 serologic tests conducted on the healthcare professionals were reviewed, it was determined that 4392 HBsAg tests and 3094 Anti-HBs tests were studied. In the evaluation of the tests, it was established that 651 HBsAg tests (9%) and 543 anti-HBs tests (7%) were requested and studied inappropriately (Table 1). In the review as per departments, it was observed that the highest rate of inappropriate request was in the neurology department with 43.6% and the second highest rate was in the department of chest diseases. The lowest rate of inappropriate request was found in the infectious diseases department with 8.65% and the second lowest in the urology clinic with 12.2% (Table 2).

Conclusions Inappropriate request and study of laboratory tests and imaging methods at the present time is one of the major medical problems seen in the world and in our country. Nonetheless, hepatitis indicators are one of the most frequently requested laboratory tests, and it is crucial for these tests to be requested in accordance with the guidelines. Inappropriate request and evaluation of both hepatitis indicators and other tests lead to increased work force and loss of cost in the healthcare system. The rate of inappropriate requests in the tests done for HBV serology in healthcare professionals in this study was observed higher compared to the current literature. Inappropriate request rate of both HBsAg (9%) and anti-HBs (7%) was over 5%, which leads to increased work force and loss of cost in the healthcare system. Primary factors affecting inappropriate request were considered as not having used diagnostic algorithms, not having checked the clinical history of the employees, and the fact that employees other than physicians (nurses, medical assistants, secretaries,

and etc.) could also request the tests. Besides, it is supportive of this view that the lowest rate of inappropriate requests was confirmed in the Infectious Diseases department. In conclusion, we believe that HBV vaccination history of the individuals, evaluation of previous tests prior to making the request, and physician-controlled requests will decrease the rate of inappropriate requests in screening tests performed on healthcare professionals. Nevertheless, we are also of the opinion that warnings regarding previous results to be issued in hospital information systems will contribute to decrease the rate of inappropriate requests.

Table 1. Evaluation of HBV serological tests studied

	Inappropriate HbsAg	Appropriate HbsAg	Inappropriate anti-Hbs	Appropriate anti-Hbs	n
Number of tests	651	3,741	543	2,551	7,486
(%)	9	50	7	34	100

Table 2. Number and rates of test requests according to units

Units	Inappropriate Test (n)	Appropriate Test (n)	Total (n)	Inappropriate (%)
Physical therapy and rehabilitation	77	208	285	27.01
Gynecology and Obstetrics	82	509	591	13.87
Infectious diseases	104	1,098	1,202	8.65
Orthopedics	19	106	125	15.20
Urology	12	87	99	12.12
Internal medicine	455	2,794	3,249	14.00
Cardiology	56	298	354	15.81
Dermatology	17	72	84	20.23
Neurology	31	60	91	34.06
General surgery	81	234	315	25.71
Cardiovascular surgery	26	176	202	12.87
Psychiatry	35	90	125	28.00
Ophthalmology	26	116	142	18.30
Plastic surgery	32	122	154	20.77
Brain surgery	46	108	154	29.87
Chest diseases	66	130	196	33.67
Otolaryngology	29	84	113	25.66

OC002

The Frequency of Thyroid Nodules According to the TI-RADS Classification in Patients with Acromegaly and Its Relationship with Disease Activity

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Background Nodular thyroid disease is very common in acromegaly. In our study, we aimed to determine the frequency of thyroid nodules and its relationship with disease activity in patients with acromegaly according to the American College of Radiology Thyroid Imaging Reporting and Data System (ACR TI-RADS) classification.

Material and Methods Methods A total of 56 patients with acromegaly (22 with active disease, 25 with well-controlled disease, 9 with newly diagnosed acromegaly) and 56 healthy control subjects matched with age, gender and body mass index (BMI) were included in our study. Patients and controls with known thyroid disease were excluded from the study. Thyroid stimulating hormone (TSH), free thyroxine (fT4), anti-thyroperoxidase antibody (anti-TPO) levels were measured in patients and controls. In addition, patients and controls were evaluated by ultrasonography to determine thyroid structure, thyroid volume and thyroid nodules and to make TI-RADS classification.

Results Thyroid nodules were present in 31 (55.4%) of 56 patients in the acromegaly group, and 20 (35.7%) of 56 subjects in the control group, and the frequency of thyroid nodules was significantly higher in the acromegaly group ($p=0.038$). The mean number of nodules in the acromegaly group and control group was 1.27 ± 1.43 and 0.48 ± 0.73 , respectively, and the mean number of nodules was significantly higher in the acromegaly group ($p=0.003$). The number of patients with TI-RADS 1, TI-RADS 2 and TI-RADS 4 nodules in the acromegaly group was higher than the control group ($p=0.026$, $p=0.049$, and $p=0.007$, respectively). The number of patients with TI-RADS 3 and TI-RADS 5 nodules was similar to the control group ($p=0.054$ and $p=0.0317$, respectively). There was no significant difference between the active disease group, the well-controlled group and the newly diagnosed group in terms of the frequency of thyroid nodules, the mean number of nodules, and the frequency of nodules according to the TI-RADS classification.

Conclusions In our study, we found that the frequency of thyroid nodules, the number of thyroid nodules and the number of TI-RADS 1, TI-RADS 2 and TI-RADS 4 nodules increased in patients with acromegaly. We also found that disease activity did not have a significant effect on the frequency of thyroid nodules, the number of thyroid nodules, and the frequency of nodules according to the TI-RADS classification.

OC003

The Evaluation of Malignancy Rate of Incidental Thyroid Nodules in Patients Who Had Undergone FDG-PET/CT

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Background 18F-fluorodeoxyglucose positron emission tomography/computed tomography (FDG-PET/CT) is widely used in the investigation and staging of malignancies. Malignancy rate is high in thyroid incidentalomas detected by FDG-PET/CT. The aim of this study was to evaluate the malignancy rate of incidental thyroid nodules in patients who had undergone PET CT.

Material and Methods The reports of 10.197 FDG-PET/CT scans performed at Necmettin Erbakan University, Meram Medical Faculty Hospital between January 2014 and May 2019 were analyzed retrospectively. The patients with incidental thyroid nodule who underwent fine-needle aspiration biopsy (FNAB) were included in the study. Patients were divided into two groups as malignant and non-malignant according to FNAB cytological results. The relationship between maximum standardized uptake (SUVmax) values, ultrasonography (USG) findings and cytological results of the biopsied nodules were investigated.

Results A total of 80 patients were included in the study. Forty (50%) of these patients were female and 40 (50%) were male and the mean age was 63.2 ± 11.4 years. FNAB result-sof 13 (16.3%) patients were evaluated as malignant. Of the patients in the malignant group, 7 (53.8%) were female and 6

(46.2%) were male, and the mean age was 60.6 ± 11.8 . There was no significant difference between the groups with or without malignancy in terms of gender distribution and mean age ($p=0.762$ and $p=0.401$, respectively). The SUVmax value of the malignant group was 15.7 (5.1-29.7) and the non-malignant group was 4.4 (0-24.1) ($p<0.001$).

Conclusions We found that the malignancy rate is high in patients with thyroid incidentaloma detected by PET CT and underwent FNAB, as in the literature. Thyroid incidentaloma cases with high SUVmax value should be evaluated further.

OC004

The Information to Patients Before Bone Marrow Aspiration and Biopsy Process Causes Effect on Anxiety

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Background Hematology patients go through many difficult times during the diagnosis process. One of the most widely used methods in the diagnosis of hematological diseases is bone marrow aspiration and biopsy (CIAB). In our study, we aimed to evaluate prospectively the effect of information given about the application before the procedure on the anxiety of patients who are planned for CIAB due to clinical indication.

Material and Methods Our study is descriptive and quasi-experimental in quantity. The sample of the study consisted of 145 patients who applied to Balikesir University Hospital Internal Diseases Department, Hematology Outpatient Clinic and those who were hospitalized in the Internal Diseases service between August 2019 and May 2020. Socio-demographic information collection form, Hamilton Anxiety Rating Scale and biopsy information form were used to collect research data through interviews and records. Study data were created by face to face interview method. SPSS 25 (Statistical Package for Social Science, SPSS Inc., Chicago, IL, USA) statistical program was used for statistical analysis of the data.

Results Within the scope of this study, 145 patients, 75 (51.7%) of which were female, were included between August 2019 and May 2020. The HADS score applied after learning that the patients who participated in the study would be performed only with CIAB was 12 (0-31) 11.43 ± 6.96 , after detailed information and signed consent, the HADS score was 4 (1-7) 4.48 ± 3.85 , and after the CIAB was performed, the HADS score was found to be 2 (1-4) 2.74 ± 2.84 (Friedman $p<0.001$). Before the informed consent form of the patients participating in the study, the HAMS score was 12 (0-31) 11.43 ± 6.96 , while the HAMS score after the detailed informed consent was found to be 4 (1-7) 4.48 ± 3.85 ($p<0.001$, Wilcoxon, Z: -9.44). After the informed consent form of the patients, the HAMS score was 4 (1-7) 4.48 ± 3.85 , while the HAMS score after CIAB was 2.74 ± 2.84 ($p<0.001$, Wilcoxon, Z: -7.05).

Conclusions Anxiety, which is perceived as life-threatening or threatening, and a disturbing sense of anxiety and fear, which patients experience from time to time and accompanied by

physiological symptoms, can also be seen in patients before CIAB. In our study, a statistically significant decrease in anxiety levels was observed when the enlightened education given to the patients who were planned to have CIAB before and after the procedure was compared. We think that providing informed consent before the application and explaining it in detail to patients with a CIAB indication will provide a significant reduction in patients' anxiety.

OC005

Is There Any Difference in Clinical and Laboratory Characteristics of Patients over 65 and under 65 Years of Age in Primary Hyperparathyroidism

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Background Primary Hyperparathyroidism (PHPT) is an endocrine disorder that causes increase in serum calcium (Ca) and parathyroid hormone (PTH) levels and causes multiple system involvement. One of the indications for the operation is that the patient is younger than 50 years old. However, osteoporosis and neuromuscular disorders are more common in patients aged 65 and over. In this group of patients, complications such as osteoporosis and nephrolithiasis are expected for the operation. In our study, we aimed to compare the laboratory and clinical parameters of patients aged under 65 and over in terms of the course of the disease. **Material and Methods** One hundred ninety-two patients with PHPT who were admitted to Yozgat City Hospital, Amasya Sabuncuoglu Şerefeddin Training and Research Hospital and Tokat State Hospital between 2018-2020 were included in the study. Serum Ca, phosphorus (P), PTH, 25-hydroxyvitamin D (25-OH-VitD), creatinine (Cr), alkaline phosphatase (ALP), 24-hour urinary Ca levels, presence of osteoporosis and nephrolithiasis were recorded retrospectively. In the statistical method, Mann Whitney U and Student t tests were used for continue data, and chi-square tests were used for categorical data.

Results The patients were divided into two groups. Patients under 65 years old were included in group one. Group two included patients aged 65 and over. Sixty eight percent of the patients were group 1 (n=130), 32% (n=62) were group 2. When the laboratory parameters were examined between the two groups, there was no statistically significant difference in serum Ca, P and PTH levels (p>0.05). The 24-hour urinary Ca level was 335.37 (±237 SD) in group 2 patients and 404.23 (±208.39 SD) in the other group, and it was statistically significantly lower in group 2 (p<0.05). Both groups were compared in terms of the presence of osteoporosis and it was found in 51.8% (n=29) of the patients in group 2 and 21.2% (n=25) in the other group. There was a statistically significant difference in the advanced age group (p<0.05). There was no difference between the groups in terms of presence of nephrolithiasis and localization of parathyroid adenoma.

Conclusions PHPT progresses with complications such as nephrolithiasis and osteoporosis as well as increased serum Ca and PTH levels. The presence of these complications cons-

titutes operation indications regardless of age. It is known that there are more neuromuscular and skeletal complications in the advanced age group. In our study, osteoporosis was found to be significantly higher in patients over 65 years of age. However, senile osteoporosis observed in this age group may also contribute to this situation. Again, it was thought that 25-OH-VitD levels might be high in this age group due to the more intense vitamin D replacement in the advanced age group. Therefore, it was concluded that urinary calcium levels may be low.

OC006

Could Hydroxychloroquine-Sulfate (HCQ) Therapy Cause QTc Prolongation in COVID-19 Patients?

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Background Liberal administration of hydroxychloroquine-sulfate (HCQ) to COVID-19 patients has raised concerns about QTc prolongation and the risk of cardiac arrhythmias, especially when prescribed with azithromycin. We evaluated the incidence of QTc prolongation and the presence of concomitant alternative causes among moderately to severely ill COVID-19 patients treated with HCQ.

Material and Methods This study retrospectively analyzed the medical data of patients who presented to emergency department, between March 1 - May 1, 2020, COVID-19 patients treated with HCQ. Clinical features and related risk factors were recorded accessed via hospital automation system. Individual patient QTc intervals were determined before and after treatment with HCQ. The primary outcome measure sought was a composite endpoint comprised of either an increase ≥60 milliseconds (ms) in the QTc interval compared with pretreatment QTc, and/or a maximal QTc interval >500 ms. All data analysed with SPSS (IBM Corp. Released 2012. IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY: IBM Corp.). Quantitative variables were compared using either the t-test or the Mann-Whitney test dependent on variable distribution. For categorical variables, the test or Fisher's Exact Test was chosen. Variables found to be associated with the dependent variable in univariate analysis (i.e. statistical significance determined as a two-sided p<0.05), were further evaluated for co-linearity in order to avoid inclusion of correlated variables as independent variables in the regression model. The association of the selected variables with the dependent variable (QTc prolongation) was studied by multivariate regression analysis.

Results 60 patients were included. Median age was 62 (IQR: 52-76) and 34 (56%) were male. twenty-seven patients (45%) were severely or critically ill. Hypertension was common (n=19, 31% each). QTc prolongation developed in 11 patients (18%). Age >65, congestive heart failure, disease severity, hypokalaemia and furosemide therapy were associated with QTc prolongation. Adjusted analysis showed that QTc prolongation was three times more likely in hypokalemia (OR: 3, 95% CI: 1.01-17) and two times more likely with furosemide treatment (OR: 3, 95% CI: 1.07-14.1).

Conclusions QTc prolongation in patients treated with HCQ was associated with the presence of traditional risk factors

such as hypokalemia and furosemide therapy. We think that modifiable risk factors should be reviewed before hydroxychloroquine-sulfate treatment in order to minimize the risk of QTc prolongation and the risk of fatal arrhythmias.

OC007

Early Onset Advanced Colorectal Neoplasia Prevalence at Colonoscopies

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Background Colorectal cancer (CRC) is a common lethal disease and the third most commonly diagnosed cancer globally. CRC constitutes 11% of all cancers. CRC screening reduces both incidence and mortality. Currently, CRC screening is recommended for the population over 50 years old at the average risk group. Recent years, incidence has decreased in the population 50 years and over; on the other hand, annual incidence has been increased by 2% in the population under 50 years old. Adenomas are considered as precursor lesions of CRCs. Adenomas were grouped as (i) advanced adenoma (any adenoma ≥ 1 cm, with high grade dysplasia or tubulovillous or villous histology); (ii) nonadvanced adenomas (<1 cm adenoma without advanced histology). In this study, we aimed to observe the prevalence of advanced adenoma and carcinomas in the colonoscopies; by comparing the patients under 50 years to the older age group and genders.

Material and Methods Retrospective chart review of patients who underwent colonoscopy between January 1, 2019, and December 10, 2020, at Ordu State Hospital. Patients were grouped as 50 years and older and under 50. The two groups were compared for gender, colonoscopy findings and histopathological evaluations. Chi-square test was used for comparison of the percent data between the two groups and $p < 0.05$ indicated significant difference.

Results 1,332 patients were included: male 50.15% and female 49.85%, mean age 57.2. 962 (72.2%) patients were 50 years and older and 370 (27.8%) were under 50. The overall prevalence of adenomas was 204 (15.3%), 61 (4.6%) for advanced adenomas, and 28 (1.2%) for CRC. Under 50 years old age group, adenoma was detected in 24 (6.5%), advanced adenoma 4 (1.1%) and CRC in 7 (1.9%). Both nonadvanced and advanced adenomas were higher in the group 50 years and older ($p < 0.01$). CRCs were 1.9% at under 50 years of age and 2.2% at 50 years and older, there was no statistically significant difference between the two groups ($p = 0.298$). Advanced neoplasia (advanced adenoma and carcinoma) were higher at 50 years and older group 8.1% ($p = 0.01$). Under the age of 50; 16 of 20 cases with advanced adenoma and 4 of 7 cases with carcinoma were in the 40-49 age group. Advanced adenomas 12.8% ($p = 0.03$) and carcinoma 2.8% ($p = 0.62$) were higher in males.

Conclusions Nonadvanced and advanced adenomas were higher in the 50 years and older group. But CRCs had a similar prevalence in the group under 50 as in the older group. Adenomas and advanced adenomas were more common in males, but CRCs were not significantly different between genders. Most of the advanced adenomas and CRCs under 50 were between 40-49 age group. Therefore, CRC screening should be considered under the age of 50.

OC008

Comparison of The Framingham Risk Scores and The Factors Affecting The Score According to Body Mass Indices in Obese Patients

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Background Although obesity has been shown to increase the risk of cardiovascular disease, it is seen that body mass index (BMI) is not yet included in cardiovascular risk scoring systems. In this study, we aimed to evaluate the relationship between Framingham risk scoring, which is a marker of obesity, and Framingham risk scoring in individuals with obesity and to evaluate and compare the factors affecting obesity.

Material and Methods 55 female patients admitted to Bursa Uludağ University Faculty of Medicine Department of Internal Medicine Endocrinology and metabolic diseases outpatient clinic between January 2010 and January 2015 were included in the study. The patients were divided into 2 groups according to their BMI: Group 1 (n=25) with a BMI of 40-50 kg/m² and Group 2 with a BMI of >50 kg/m² (n=30). The two groups were compared in terms of cardiac risk score, factors and metabolic syndrome (MS) criteria.

Results Total cholesterol, HDL cholesterol, triglyceride and fasting blood glucose values of 2 groups were compared. There was no difference between the two groups ($p > 0.05$). 24% of the first group, 36.7% of the second group and 30.9% of the whole group were smoking. There was no statistically significant difference between two groups in terms of smoking ($p > 0.05$). Mean systolic blood pressure (SBP) was significantly lower in the first group compared to the second group. There was no statistical difference between the two groups in mean diastolic blood pressure (DBP) values. Five patients (20%) from the first group and 9 (30%) patients from the second group were taking medication for hypertension. When the two groups were compared in terms of Framingham risk score, the score in the first group was statistically significantly lower than the second group ($p < 0.05$). Framingham risk score correlations were correlated with Framingham risk score ($p < 0.001$), smoking ($p < 0.001$), total cholesterol ($p < 0.001$), SBP ($p < 0.01$), HDL cholesterol. No correlation was found ($p > 0.05$). The first group had an average of 2 MS criteria and the second group had 3. There was a positive correlation between Framingham risk score and the number of MS components ($p < 0.05$). In our study, female patients with different levels of obesity; There was no difference between mean lipid and fasting glucose values. While DBP values were similar in both groups, SBP increased with increasing obesity degree. The Framingham risk score, a cardiovascular risk predictor, increased with increasing obesity. There was a correlation between the Framingham risk score and the parameters that formed it, age, total cholesterol, SBP and cigarette smoking, but not with HDL. There was a correlation between the presence and number of MS components and the Framingham risk score.

Conclusions We showed in our study that increased BMI increased the risk of cardiac disease and MS contributed to the increased cardiac risk. Losing weight can reduce the risk of

cardiac events secondary to obesity and MS and increase the quality and duration of life of the person.

OC009

An Unforgettable Pre-Diagnosis for An Elderly Patient with Renal Failure and Back Pain: Multiple Myeloma

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Background Multiple myeloma is a malignant disease that can result in organ damage due to abnormal excess plasma cells in the bone marrow and increased immunoglobulin or light chain production. It is the second most common hematologic cancer after lymphomas. It constitutes 1% of all cancers and 10% of hematological cancers. At the time of diagnosis, 25% of patients with multiple myeloma have an increase in creatinine value above 2 mg/dL. In other words, about half of the patients have kidney failure. Bone involvement is one of the most common organ damage in myeloma. Bone involvement is a feature that has diagnostic and prognostic value, indicates tumor excess, organ damage and affects the patient's quality of life. Any patient with myeloma suspicion must have a whole body bone scan. Myeloma typically causes lytic lesions, osteopenia and pathological fractures in the bones. Bone lesions are detected in 75% of myeloma cases. These lesions are most commonly found in the head bones, vertebra, ribs, sternum, proximal humerus and femur.

Material and Methods A 72-year-old male patient was admitted to the outpatient clinic due to low back pain and increased urea-creatinine.

Results In the examinations of the patient without known chronic disease urea 74 mg/dL, creatinine 3.5 mg/dL, uric acid 10 mg/dL, hemoglobin 9.6 g/dL, MCV 102 fL was detected, and 6,795 mg protein in 24-hour urine was detected. Extensive examinations were planned for the patient. ANA: negative, ANCA: negative, anemia parameters were normal, hepatic markers were normal, serum protein electrophoresis was normal. In the patient, in whom kappa-lambda was sent in urine and rectal biopsy was planned for amyloidosis, immunoglobulins were low, kappa-lambda in urine was normal, and rectal biopsy was found to be normal. The patient whose kidney biopsy was considered non-diagnostic, but had severe low back pain, anemia, and high urea-creatinine, was predicted multiple myeloma. In repeated examinations, bone marrow biopsy and peripheral smear were observed in the patient due to high lambda and low kappa in 24-hour urine and immune fixation electrophoresis. Peripheral smear and bone marrow biopsy were consistent with multiple myeloma. The treatment of the patient was started.

Conclusions With the recent advances in Multiple Myeloma treatment, the survival of patients has increased dramatically. Although new agents contribute positively to overall survival and life span without disease, they cannot prevent disease recurrence. Therefore, it should be considered in patients with back pain, anemia, and kidney failure, and treatment delay should be avoided.

OC010

Prognostic Performance of CHA₂DS₂-VASc Score for Predicting Mortality Among COVID-19 Patients: A Single Pandemic Center Experience

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Background This study aimed to investigate the prognostic performance of CHA₂DS₂-VASc scores in predicting in-hospital mortality in COVID-19 patients.

Material and Methods In total, 318 COVID-19 cases were included in the study. Baseline characteristic features were retrieved from the hospital's electronic database, and COVID-19 infection was confirmed using real-time RT-PCR testing in all cases. The CHA₂DS₂-VASc score was calculated for each subject.

Results The in-hospital mortality was 9.9% (n=32 cases). Patients who died during index hospitalization tended to be older and male. The frequency of insulin-dependent diabetes mellitus, chronic obstructive pulmonary disease, coronary artery disease, chronic renal failure, cerebrovascular disease, and smoking were significantly higher among non-survivor cases. The median CHA₂DS₂-VASc score were significantly higher in non-survivor cases [2.0 (2.0–6.0) vs. 1.0 (1.0–2.0), p<0.001, respectively]. The independent predictors of in-hospital death were established using univariable and multivariable logistic regression (LR) analysis. In a multivariable analysis, lymphocytes, albumin, and CHA₂DS₂-VASc score (OR: 1.669, 95% CI: 1.193–2.334, p=0.003) were independent predictors of in-hospital mortality in COVID-19 cases. Moreover, we found that patients with a CHA₂DS₂-VASc score ≥4 had an 8.8 times greater mortality rate, compared to those with a CHA₂DS₂-VASc score of 0, which is presumed as the reference group. In a receiver operating curve analysis, the optimal value of the CHA₂DS₂-VASc score for predicting in-hospital mortality was >2.5 (area under curve (AUC): 0.75, 95% CI: 0.64–0.86; p<0.001), with a sensitivity of 69% and specificity of 78%.

Conclusions Because the CHA₂DS₂-VASc score inc-

cludes similar risk factors, it is logical to expect a higher mortality among COVID-19 cases with higher CHA₂DS₂-VASc scores. Similarly, in our research, we found that patients with higher CHA₂DS₂-VASc scores had an 8.8 times higher mortality risk compared to those with lower CHA₂DS₂-VASc scores. Based on the study results, we think that the CHA₂DS₂-VASc score could be useful for predicting in-hospital mortality in COVID-19 patients. In short, this easily calculable score may provide us an early identification of outcomes for high-risk COVID-19 patients during a hospital stay.

OC011

Prognostic Significance of Cardiac Troponin Level in COVID-19 Patients without Known Cardiovascular Risk Factors

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Background The main aim of this study was to ascertain the prognostic significance of the admission cardiac troponin I level in coronavirus disease 2019 (COVID-19) patients without known cardiovascular risk factors.

Material and Methods In this retrospective, observational study, the data of 148 consecutive COVID-19 cases who were hospitalized in a pandemic center were collected. The study cohort was categorized into two groups according to survival status during the index in-hospital stay. The independent predictors of in-hospital death were investigated. The Kaplan-Meier analysis was performed to compare survival functions according to their admission troponin I levels.

Results During the in-hospital follow-up, 10 (6.7%) patients died. Nonsurvivor cases had significantly elevated of cardiac troponin I levels comparing to survivors (89.6±66.0 ng/L vs. 6.2±9.6 ng/L, p<0.001, respectively). In the multivariable analysis; cardiac troponin I (OR: 1.110, 95% CI: 1.025-1.201, p=0.010) was an independent predictor of the in-hospital death for COVID-19 patients without cardiovascular risk factors. In a ROC analysis, the optimal value of the cardiac troponin I in predicting in-hospital mortality was 24.2 ng/L (area under curve: 0.88, 95% CI: 0.83-0.94; p<0.01) with a sensitivity of 90.0% and a specificity of 85.0%. The Kaplan-Meier analysis revealed that COVID-19 patients with troponin I values of ≥24.2 ng/L had significantly higher rates of deaths comparing to those

with cardiac troponin I<24.2 ng/L (Log-rank test: p<0.01).

Conclusions This study finding illuminates the prognostic significance of myocardial injury in COVID-19 patients without known cardiovascular risk factors.

OC012

Coexistence of Medullary and Papillary Thyroid Carcinoma Detected Incidentally

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Background Papillary thyroid carcinoma (PTC) and medullary thyroid carcinoma (MTC) are extremely rare and constitute less than 0.5% of all thyroid malignancies. In this study, the prevalence and characteristics of patients with simultaneous PTC and MTC diagnoses were evaluated.

Material and Methods Patients with MTC who were followed up in Uludağ University Endocrinology Clinic were retrospectively analyzed and evaluated with literature reviews.

Results 31 patients diagnosed with MTC were analyzed retrospectively. Coexistence of MTC and PTC were detected in 8 patients. 7 were women and 1 was male. The average age of the patients was 60.1 in the study. Total thyroidectomy was applied to all patients. In addition, central lymph node dissection was performed in 4 patients, and lateral lymph node dissection was performed in 1 patient. None of the patients had an accompanying germline RET mutation. 1 patient was not alive. There was only one patient with distant metastases and was having a tyrosine kinase inhibitor.

Conclusions Although our results support the coincidental existence of MTC/PTC, physicians should be aware should be aware of the coexistence of these thyroid malignancies to avoid possible misdiagnosis.

OC013

Evaluation of 5-Year Follow-up Results of Patients with Post-infarction Ventricular Tachycardia

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Background The risk of death is highest in the first months/years after myocardial infarction (MI). These deaths are most frequently due to ventricular tachycardia (VT) and ventricular fibrillation (VF). Prevention of ventricular arrhythmia and sudden cardiac death in the post-MI

period will be possible by identifying risk factors and initiating early treatment. In our study, patients who developed ventricular arrhythmia after MI were followed up for 5 years, 5-year survival was evaluated according to the results of MI localization, EF status, electrophysiological study (EFD) and late potential examination results, and also the advantages of various treatments initiated were examined.

Material and Methods Our study was conducted with 49 patients who were diagnosed with MI and had VT attacks lasting longer than 30 seconds, one or more times after at least 15 days after infarction. 24-hour rhythm holter monitoring, programmed ventricular stimulation and late potential analysis were performed on the patients. In statistical analysis, continuous data were given as mean±standard deviation, and categorical data were given as percentages. Categorical data were compared with chi-square test and Fisher's exact probability test. $p < 0.05$ was considered statistically significant.

Results The study group consists of 49 patients, 44 men and 5 women, who have undergone MI. The mean age of the patients is 55.25 ± 16.05 years. MI was detected in the inferior region in 25 patients (51%) and in the anterior region in 24 patients (49%). The most common symptoms in patients due to VT are palpitations and feeling of badness. VT rate varies between 110-240/min (average 173/min). VT was stopped by medication in 9 patients (18.5%), ventricular stimulation in 5 patients (10%), and DC shock in 27 patients (55%). In 8 patients, ventricular tachycardia attacks stopped spontaneously. After the attack stopped, medical treatment, surgical treatment and ablation therapy were applied as needed. Late potentials were found positive in 35 of 49 patients. During the 5-year follow-up, 17 patients died. The number of patients whose cause of death was due to heart disease was 10. The mortality rate is 12% in the first year of the study, and 26% at the end of five years. the treatment modalities were compared, no significant difference was found between the patients using amiodarone, those using a different antiarrhythmic drug and those who underwent ablation or surgical procedures.

Conclusions Groups with the worst prognosis after MI; Those who had anterior MI, those with EF $< 35\%$, those who could create ventricular tachycardia with EFS and those with late potential. The incidence of ventricular arrhythmia is directly proportional to the size of the infarction and inversely proportional to the left ventricular ejection fraction. When treatment modalities were compared, no significant difference was found in terms of survival between patients using amiodarone and those using a different antiarrhythmic drug and those who underwent ablation or surgical procedures. Identifying high-risk patients for arrhythmia development after MI and initiating appropriate treatment in the early period will reduce morbidity and mortality.

OC014

Evaluation of Monocyte to High-Density Lipoprotein Cholesterol Ratio in Patients with Nonalcoholic Fatty Liver Disease

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Background Monocyte to high-density lipoprotein cholesterol ratio (MHR) is a newly proposed inflammatory and oxidative stress marker. The aim of this study was to investigate the inflammatory parameters in patients with nonalcoholic fatty liver disease (NAFLD) and to evaluate their possible relationship with NAFLD grade.

Material and Methods A total of 131 patients referred to the Gastroenterology outpatient clinic of Hitit University Erol Olçok Training and Research Hospital between January 01, 2019 and January 1, 2020 were included in the study. Clinical data and laboratory results of 70 patients with NAFLD diagnosis and 61 healthy individuals as control group were retrospectively investigated. MHR, neutrophil to lymphocyte ratio (NLR), liver size, along with the other tests of NAFLD were recorded and analyzed.

Results Monocyte to high-density lipoprotein cholesterol ratio ($p=0.009$), aspartate aminotransferase ($p=0.017$), alanine aminotransferase ($p<0.001$), triglyceride ($p<0.001$), fasting blood sugar ($p=0.046$) and white blood cell ($p<0.001$) levels were significantly higher in the NAFLD group than control group. There was no relationship between NLR and NAFLD ($p=0.232$). There was no correlation between MHR and liver size in patients with NAFLD ($r: 0.180, p=0.135$). Also, based on the NAFLD grades on ultrasonography, the patients were divided into 2 groups as grade 1 NAFLD patients ($n=41$), and grade 2/3 NAFLD patients ($n=29$) and compared. Grade 2/3 NAFLD patients had higher MHR levels than grade 1 NAFLD patients ($p=0.042$). And grade 2/3 NAFLD patients had higher liver size than grade 1 NAFLD patients ($p<0.001$). **Conclusions** Higher MHR which indicates an enhanced inflammation and oxidative stress was significantly associated with the presence of NAFLD. MHR may be a promising marker in patients with NAFLD.

OC015

The Pigtail Stenting Treatment For The Biliary Leakage After The Liver Hydatid Cyst Operation: A Case Report

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Background The incidental hosts of Echinococcus granulosus are humans in which the definitive hosts are canines. E. granulosus commonly involve the liver and are mostly seen in Turkey. One of the early complication following the surgery for liver hydatid cyst is biliary leakage (BL) which's incidence is 4.5-26%. Endoscopic sphincterotomy (ES) and biliary stenting are usually successful in treating BL. In this case, I'm presenting endoscopic treatment for the BL after the liver hydatid cyst operation.

Material and Methods The patient was a 43 years old man. He had upper abdominal pain for 4-5 months in September 2020. He had gone to the hospital for this complaint, and he was diagnosed with liver cyst hydatid.

Results He had no comorbid disease or medications. In his abdominal magnetic resonance imaging (MRI), the cysts were involved the right lob anterior and left lob medial segments, which were nearly 175x112x148 mm complex and multiple. He had surgery for his liver cyst hydatid on 4 November 2020. The partial cystectomy and omentopexy were done, and the cyst in the left lobe was drained externally. The patient has consulted me because of the bile ooze from the surgical drain on 24 November 2020. There was 500 cc bile from the drain. The abnormal values were direct bilirubin (DB), alkaline phosphatase (ALP), and gamma-glutamyl transferase (GGT) in his laboratory finding. DB was 0.74 mg/dL (0-0.5 mg/dL). ALP was 173 U/L (40-150 U/L). GGT was 126 IU/L (12-64 IU/L). In endoscopic retrograde cholangiopancreatography (ERCP), biliary leakage was seen in the left lobe. Choledocus was normal. The endoscopic sphincterotomy (ES) was carried out. The pig tale stent 10 Fr 8 cm was placed to the cyst distal. The albendazole 400 mg twice a day was started for a month. After one week in his follow-up, there was 20-30 cc fluid without bile in his drain. The control of the ALP, GGT and TB values were normal.

Conclusions Most of the postoperative hydatid cyst complication is biliary leakage. BL occurs typically within two of four weeks of surgery. Endoscopic technics such as ES and biliary stenting are commonly effective in treating the biliary fistula. As in the case, the time from ES and biliary stenting to the closure of the biliary fistula is reported to be 3-21 days.

OC016

Multiple Myeloma Case Diagnosed by the Detection of Restrictive Cardiomyopathy

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Background Restrictive cardiomyopathy is a rare cardiac muscle disease in which the heart's systolic functions and wall thickness are normal or close to normal. The diastolic volume is decreased, and the restrictive filling pattern is observed. One of the causes is amyloidosis, an infiltrative disease. The most common form of cardiac amyloidosis is immunoglobulin light chain (AL) amyloidosis. In patients with suspected cardiac amyloidosis, serum and urine protein electrophoresis, immunofixation, and serum free light chain tests should be performed to investigate the presence of monoclonal protein. Here, a case diagnosed with IgG lambda light chain multiple myeloma after detecting restrictive cardiomyopathy due to amyloidosis is presented.

Material and Methods A 66-year-old female patient presented with dyspnea. Pericardial effusion and transudate pleural effusion were detected and hospitalized.

Results Transthoracic echocardiography showed 60% ejection fraction (EF), normal left ventricular diameters and wall movements, and left ventricular concentric hypertrophic. Interventricular septum thickness was 18 mm, and right

ventricle thickness was 12 mm. It was observed that the right and left atria were enlarged. A granular puncture (amyloidosis) was detected on the left ventricular walls. Her coronary angiography was unremarkable. The right heart catheterization was consistent with a restrictive pattern. Cardiac MR showed an increase in size in both atria, thickening in the left ventricular myocardium, and global hypokinesia in the heart. All-around subendocardial staining in the left ventricle was noted in the late images. In the laboratory tests of the patient, BNP was 1,511 pg/mL, ACE was 17 U/L. Serological tests were negative. No mutation was found in the Fabry disease genetic test. The patient was diagnosed with restrictive cardiomyopathy due to amyloidosis. Rectal biopsy showed AA amyloid negative and Congo red staining positive. Hemoglobin was 10 g/dL, creatinine 1.4 mg/dL, GFR 39 mL/min, corrected calcium 9.4 mmol/L, total protein 8.0 g/dL, albumin 3.8 g/dL. Monoclonal gammopathy was detected on serum protein electrophoresis. Serum kappa light chain 0.74 mg/L, lambda light chain 6.59 mg/L, kappa/lambda ratio 0.11, IgG 27 mg/dL, IgM 0.21 mg/dL and IgA 0.61 mg/dL were measured. Monoclonal IgG lambda band in serum and lambda light chain band in urine in immune electrophoresis study were seen. Bone marrow biopsy pathology was reported as normocellular bone marrow containing neoplastic plasmacytoid cell infiltration showing monotypic lambda expression. There were no lytic lesions in bony structures in the skeletal survey. The patient was diagnosed with IgG lambda light chain multiple myeloma. Bortezomib-cyclophosphamide-dexamethasone (VCD) chemotherapy was initiated.

Conclusions Amyloidosis can involve many organs and causes very different symptoms and signs related to the affected organ. A multidisciplinary approach is required for diagnosis, as there are often false negativity and low sensitivity problems in diagnostic tests. The period from the onset of symptoms to diagnosis in this patient was 6 months. Cardiac amyloidosis should be considered in the differential diagnosis in patients who do not have common causes such as hypertension and aortic stenosis that may explain left ventricular hypertrophy and preserved EF.

OC017

The Protective Role of Enalapril on Kidney Functions in Fructose Induced Metabolic Syndrome in Rats

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Background Metabolic syndrome is an entity characterized by insulin resistance, hyperinsulinemia, hypertension, dyslipidemia, and obesity. In recent years dietary fructose consumption has been predicted as an environmental factor that causes obesity and anomalies caused by metabolic syndrome. In experimental models of fructose-induced metabolic syndrome; hypertension, hypertriglyceridemia, hyperinsulinemia, and insulin resistance were seen in rats. Traditionally,

the renin-angiotensin system (RAS) has physiological and pathophysiological effects on the renal and cardiovascular systems. By activating this system, blood pressure increases via vasoconstriction, renal tubular, and glomerular functions begin to change. By blocking this system, blood pressure drops, and renal functions are protected in nephropathic patients. Enalapril, an angiotensin-converting enzyme inhibitor, inhibits the enzyme dipeptidyl carboxypeptidase, which hydrolysis angiotensin-I to angiotensin-II. This study aims to determine the potential protective roles on kidney functions, plasma lipid levels, and some intracellular pathway markers of enalapril in an experimental model of metabolic syndrome induced by fructose in rats.

Material and Methods This study was carried out in Firat University Experimental Research Center. Ethical approval of the study was obtained from Firat University Animal Experiments Ethics Committee. 28 Wistar albino male rats (8 weeks old) were included in this study, and they were divided into 4 equal groups such as group 1 control group (fed with standard rat chow), group 2 fructose group (fed with high fructose diet [60% fructose]), group 3 enalapril group (fed with standard rat chow and enalapril [10 mg/kg/day] applied in drinking water), group 4 fructose and enalapril group (fed with high fructose diet and enalapril applied in drinking water). Rats were sacrificed after 8 weeks. Blood samples were taken for kidney and liver function tests and lipid levels; kidney and liver tissue samples were collected for western blot analysis and histopathologic examination. TGF- β , TNF- α , NF- κ B, IL-6, Smad-3 protein expressions were quantified by western blotting.

Results Administration of enalapril on high fructose-fed rats showed significant improvement in serum glucose, total cholesterol, LDL, triglyceride, AST, ALT, and creatinine levels but did not affect HDL and BUN parameters. Administration of enalapril on high fructose-fed rats caused a decrease in hepatocellular necrosis, sinusoidal dilatation, and portal inflammation in liver tissues. In kidney tissues, enalapril administration had a positive effect on tubular vacuolization, tubular dilatation, and interstitial inflammation. Administration of enalapril on high fructose-fed rats caused a decrease in TGF- β , IL-6, Smad-3 expressions but did not affect NF- κ B, TNF- α expressions.

Conclusions In conclusion, feeding with high fructose causes aggravative and destructive effects on kidney and liver function tests and histopathology, but enalapril administration showed significant improvement in these parameters. It can be said that blocking RAS may be an important treatment modality in metabolic syndrome.

OC018

COVID-19 Pneumonia Presenting with Hyponatremia

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Background Hyponatremia is the most common electrolyte disorder. One of the etiological reasons is syndrome of inappropriate antidiuretic hormone release (SIADH). SIADH is a clinical picture characterized by euvolemic hyponatremia and low plasma osmolality. Many causes such as ma-

lignancies, drugs, pulmonary diseases, sepsis, intracranial pathologies, surgical treatments, hormonal disorders lead to SIADH. Here, a case of SIADH associated with COVID-19 pneumonia presenting with hyponatremia is reported.

Material and Methods A 55-year-old female patient was admitted to the emergency room on April 7, 2020, complaining of nausea, vomiting, and weakness.

Results The patient had a previous history of hypertension, type 2 diabetes, chronic pancreatitis, and a kidney transplant from a deceased donor in 2008. She used drugs that consisted of mycophenolate mofetil (MMF) 2x180 mg, everolimus 2x1 mg, prednisolone 1x5 mg, metformin 2x1000 mg, insulin glargine 12 IU, atorvastatin 20 mg, irbesartan 150 mg, pantoprazole 40 mg, ursodeoxycholic acid 3x1. There were no signs of dehydration on physical examination. Her body temperature was 36.7 °C, pulse 82 beat/min, blood pressure 110/65 mmHg. Laboratory tests of the patient; WBC 5.65x10⁹/L, neutrophil 4.17x10⁹/L, lymphocyte 0.78x10⁹/L, hemoglobin 9.9 g/dL, platelet 210x10⁹/L, glucose 127 mg/dL, urea 34 mg/dL, creatinine 1.08 mg/dL, AST 34 g/L, ALT 21 g/L, sodium 117 mmol/L, potassium 3 mmol/L, chlorine 91 mmol/L, calcium 8.6 mmol/L, CRP 18 mg/L. In urine analysis; there were no properties except density 1005, pH 5.5, and protein +1. Significant pneumonic infiltration was not detected in the chest radiography of the patient. Upon acute symptomatic hyponatremia during his admission to the emergency department, a 3% NaCl infusion was given. After the infusion, the patient's sodium increased to 122 mmol/L. The patient was hospitalized with a diagnosis of SIADH. She had euvolemic hyponatremia, a urine density of 1005, and a serum osmolality of 252 mOsm/L. Daily fluid intake was restricted to 1500 cc. Thorax CT was performed because of subfebrile fever, lymphopenia, and high CRP in the follow-up. In thorax CT, scattered peripheral localization was observed in both lung parenchyma, especially concentrated ground glass and consolidation areas in the left lung. The COVID-19 PCR test was positive from the nose and throat swab sample. MMF has been stopped. Ceftriaxone 2x1 g, hydroxychloroquine 2x400 mg, and enoxaparin 2x0.4 U were started. After 10 days of treatment, the patient's pneumonia and hyponatremia improved, and he was discharged.

Conclusions SIADH is one of the common causes of hyponatremia. It is a clinical picture characterized by euvolemic hyponatremia (<130 mmol/L), low plasma osmolality (<270 mOsm/L), increased urinary sodium excretion (>20 mmol/L), and increased urinary osmolality (>100 mOsm/L). In this patient, euvolemic hyponatremia, low serum osmolality (252 mOsm/L), the absence of medication use such as a diuretic, etc., fluid restriction, and improvement of hyponatremia with the treatment of the primary disease supports SIADH diagnosis. SIADH should be considered in the differential diagnosis in patients with COVID-19 pneumonia and hyponatremia.

OC019

Retrospective Evaluation of The Cases with Malignant Pheochromocytoma: A Single Center Experience

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Background Pheochromocytoma is a rare neuroendocrine tumor originating from the chromaffin cells of the adrenal medulla. Approximately 10% of pheochromocytoma cases are thought to be malignant. The diagnosis of malignancy is supported by the demonstration of local invasion or the presence of metastatic disease. In this study, we aimed to evaluate the cases followed up with diagnosing malignant pheochromocytoma by our clinic.

Material and Methods We retrospectively evaluated the clinical, laboratory, radiological, and surgical data of patients who were followed up with malignant pheochromocytoma diagnosis between 2013 and 2020 by Bursa Uludağ University Faculty of Medicine, Endocrinology and Metabolic Diseases Clinic. Patients who were not followed up at our center and whose pathology results were not available were excluded from the study. The files of 5 patients whose data were available were evaluated.

Results In our clinic, 3 of 5 patients who were followed up with a diagnosis of malignant pheochromocytoma were female, and 2 were male. The mean age of diagnosis was 45 years. Three of the patients were diagnosed with pheochromocytoma after the hypertensive attack. One patient was evaluated as a pheochromocytoma after an adrenal mass was detected in imaging performed due to abdominal pain, and 1 patient due to elevated liver enzymes. Noradrenergic functionality was seen in all cases. Masses located on the left side in two patients, on the right in two patients, and bilaterally in one patient were observed. The average diameter of the adrenal mass detected in the cases was 58 mm. There was no familial pheochromocytoma syndrome in our cases. Transperitoneal adrenalectomy was performed in all cases. Periadrenal adipose tissue invasion was detected in the operative pathology in two patients, vascular invasion in one patient, and capsule invasion in 1 patient. There was an intra-abdominal lymph node accompanying at the time of diagnosis in 1 patient and metastatic focus in the liver in 1 patient. During follow-up, metastasis focus was detected in the perirenal region in 1 patient, bone in 3 patients, lymph node in 2 patients, and lung in 1 patient. Lutetium was given to two patients after adrenalectomy. Transperitoneal surgery was performed for a patient with metastasis in the perirenal area, and resection of the mass was performed. The mass resection was applied to the patient who had a mass of approximately 1.5 cm in the liver at the time of diagnosis. Two patients received radiotherapy for bone metastases. The mean follow-up period of the cases was 44 months. Three patients died during follow-up. Our clinic is still following up on two patients.

Conclusions Malignant pheochromocytoma is a rare neuroendocrine tumor. They are diagnosed with local or distant metastases and are often associated with a poor prognosis. Since there are no curative treatment options, treatment and follow-up should be planned for the case with a multidisciplinary approach.

OC020

Kappa Light Chain Myeloma: A Case Report

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Background Light chain myeloma nephropathy is the most common form of renal involvement in plasma cell dyscrasias. It usually causes tubulointerstitial kidney damage. The diagnosis is made by showing the band structures that cause obstruction in the tubule with pathology. It should be considered in the differential diagnosis in patients with unknown cause of urea, elevated creatine and anemia.

Material and Methods A 61-year-old female patient has no known chronic disease other than chronic bronchitis.

Results She applied to the external center with complaints of headache, weakness and vomiting. She was referred to us due to the high urea and creatine value in the laboratory tests. In the examinations, hemoglobin 6.9 g/dL, creatinine 5.67 mg/dL, urea 97 mg/dL, ESR 52 mm/h, IgG 3.14 g/L (7-16), IgA <0.28 g/L (0.7-4), IgM 0.17 g/L (0.4-2.3). There was 10.8 gram of proteinuria in 24-hour urine. Peripheral smear was normal. No monoclonal band was formed in serum protein and immune electrophoresis. Kappa and free kappa light chain bands were observed in Immune urine electrophoresis. A bone marrow biopsy was then performed: a mild hypercellular imprint (light chain MM) with atypical plasma cell infiltration (84%) was reported. In PET-CT, extensive metabolic activity increase was found in many bone marrow. The pathology result of kidney biopsy was compatible with cast nephropathy. The patient was taken over by hematology. Chemotherapy treatment was started with cyclophosphamide-bortezomib-dexamethasone. There was a significant improvement in the clinic of the patient, who received 4 chemotherapy cycle. Creatinine level dropped significantly from 6 mg/dL to 3.5 mg/dL.

Conclusions Light chain myeloma nephropathy is a difficult disease to diagnose. Serum protein electrophoresis, urine, and serum immune electrophoresis should be examined in case of anemia, increased urea, and creatinine of unknown cause. In suspicious circumstances, bone marrow and kidney biopsy facilitate the diagnosis.

OC021

Evaluation of Endothelial Dysfunction with Serum Endothelin-1 Levels

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Background Atherosclerosis and related diseases are the leading causes of death worldwide. Endothelial dysfunction occurs before the onset of atherosclerotic involvement in coronary arteries. It is important to diagnose atherosclerosis before organ involvement occurs. In this study, it was aimed to evaluate endothelial dysfunction by serum endothelin-1 (ET-1) levels in the subclinical period.

Material and Methods Patients who presented with a complaint of chest pain and were scheduled for an exercise stress test (EST) or myocardial perfusion scintigraphy (MPS) in terms of coronary ischemia were included in the study. Patients with known angiographically proven coronary artery disease (CAD) were excluded from the study. Before the ischemia test, blood samples were taken from the patients for serum ET-1 measurement. Those with ischemia were evaluated by coronary angiography (CAG). According to the CAG results, those with critical coronary lesions (Group 1) and tho-

se without (Group 2) were grouped. Those without ischemia were defined as Group 3.

Results A total of 48 patients (mean age: 57.4±10.9 years, and 23 [48%] females) without a known history of CAD were included in the study. 13 (27%) of the patients were diabetic, 26 (54%) were hypertensive and 10 (20%) of the patients were hyperlipidemic. While ischemia was not detected in 17 patients (35.4%) with EST or MPS (Group 3), 31 patients had ischemia and underwent CAG. Among those, critical coronary lesions were detected in 21 (67.7%) patients (Group 1), and critical coronary lesions were not detected in 10 (32.3%) patients (Group 2). Median (min-max) serum ET-1 level was 15.9 (8.8-93.4) ng/L in Group 1, 26.9 (8.5-55.5) ng/L in Group 2, and 21.8 (8.6-97.4) ng/L in Group 3. There was no statistically significant difference between the groups in terms of serum ET-1 levels ($p=0.127$).

Conclusions Serum ET-1 levels are not predictive of endothelial dysfunction in patients with suspected coronary artery disease.

OC022

The Relationship Between ACEF Score and Non-Dipper Hypertension

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Background Hypertension is a common chronic disease and can cause stroke, cardiovascular disease, and kidney disease in the future. Blood pressure is at its lowest levels during the night. A decrease of 10% or more of the value of blood pressure measured at night than the value measured during the day was defined as dipper hypertension and a drop of less than 10% as non-dipper hypertension. Non-dipper hypertension is associated with organ damage, left ventricular hypertrophy, heart failure, and kidney damage. Our aim in this study is to investigate the effect of ACEF score calculated by age, ejection fraction, and creatinine values in non-dipper hypertension diagnosis.

Material and Methods Patients with high office blood pressure (>140/90 mmHg) admitted to the cardiology outpatient clinic were included in the study. Demographic characteristics and venous blood parameters of the patients were recorded. Ejection fractions were measured by echocardiography. A 24-hour ambulatory blood pressure monitoring (holter) was performed on the patients. The patients were divided into two groups as non-dipper and dipper. ACEF score was calculated for each patient with age, ejection fraction, and creatinine values. ACEF was calculated with the formula = [Age (years)/ejection fraction (%)] + 1 (if serum creatinine >2 mg/dL).

Results 184 patients with non-dipper hypertension and 192 patients with dipper hypertension were included in the study. The gender distribution of the groups was similar. The non-dipper group patients' age was older (47.89±12.49 vs. 52.31±11.73, $p<0.001$). New diagnosis hypertension was seen in 59 (30.72%) patients in the dipper group and 89 (48.36%) patients in the non-dipper group ($p=0.017$). The hemoglobin value was 14.12±1.76 g/dL in the dipper group and 13.67±1.80 g/dL in the non-dipper group ($p=0.020$). Total cholesterol and HDL values were higher in the non-dipper group ($p=0.07$; $p=0.082$). The mean systolic blood pressure for 24 hours was measured as 125.01±12.59 mmHg in the

non-dipper group and 129.44±13.92 mmHg in the dipper group ($p=0.001$). ACEF score was significantly higher in the non-dipper group ($p<0.001$). Hemoglobin (OR: 0.720 95% CI: 0.594-0.874; $p=0.001$) and ACEF score (OR: 9.522 95% CI: 1.813-50.007; $p=0.008$) predicted the diagnosis of non-dipper in multivariate regression analysis.

Conclusions In our study, the ACEF score predicted the diagnosis of non-dipper hypertension. However, more comprehensive studies are needed on this subject.

Table 1. Demographic data, laboratory parameters, 24-hour blood pressure holter results, and ACEF score

Variable	Dipper hypertension group (n=192)	Non-dipper hypertension group (n=184)	p value
Gender, male n (%)	82 (%42.70)	66 (%35.86)	0.133
Age (years)	47.89±12.49	52.31±11.73	<0.001
Diabetes mellitus n (%)	18 (%9.37)	26 (%14.13)	0.178
Coronary artery disease n (%)	1 (%0.52)	6 (%3.26)	0.066
New diagnosis hypertension n (%)	59 (%30.72)	89 (%48.36)	0.017
Cerebrovascular accident n (%)	0 (0%)	2 (%1.08)	0.244
Smoking n (%)	56 (%29.16)	45 (%24.45)	0.250
Chronic obstructive pulmonary disease n (%)	7 (%3.64)	7 (%3.80)	0.970
Hemoglobin (g/dL)	14.12±1.76	13.67±1.80	0.020
Hematocrite (g/dL)	42.03±4.26	43.81±31.02	0.444
Leukocyte (10 ³ /μL)	7.73±1.92	7.94±2.49	0.360
Platelet (10 ³ /μL)	283.79±68.20	290.50±92.18	0.430
Glucose (mg/dL)	109.16 (70.0-269.0)	115.09 (60.0-392.0)	0.145
Urea (mg/dL)	27.54 (11.0-116.0)	28.77 (12.0-90.0)	0.440
Creatinine (mg/dL)	0.78±0.20	0.81±0.23	0.292
Low density lipoprotein (mg/dL)	135.55±33.71	141.18±37.74	0.160
Total cholesterol (mg/dL)	203.15±43.65	211.78±42.68	0.074
High density cholesterol (mg/dL)	47.88±12.96	50.36±12.42	0.082
Triglyceride (mg/dL)	173.35 (38.40-508.0)	167.64 (48.5-604.3)	0.638
Ejection fraction (%)	61.57±4.62	61.39±5.34	0.733
Office systolic blood pressure (mmHg)	151.85±16.64	153.09±17.77	0.473
Office diastolic blood pressure (mmHg)	91.26±9.07	92.11±9.78	0.370
24-hour systolic blood pressure (mmHg)	125.01±12.59	129.44±13.92	0.001
24-hour diastolic blood pressure (mmHg)	79.44±10.35	81.38±10.21	0.060
Heart rate (min)	78.82±11.89	79.13±11.54	0.789
ACEF score	0.78±0.21	0.86±0.22	<0.001

Table 1. Demographic data, laboratory parameters, 24-hour blood pressure holter results, and ACEF score

Variable	Dipper hypertension group (n=192)	Non-dipper hypertension group (n=184)	p value
Gender, male n (%)	82 (%42.70)	66 (%35.86)	0.133
Age (years)	47.89±12.49	52.31±11.73	<0.001
Diabetes mellitus n (%)	18 (%9.37)	26 (%14.13)	0.178
Coronary artery disease n (%)	1 (%0.52)	6 (%3.26)	0.066
New diagnosis hypertension n (%)	59 (%30.72)	89 (%48.36)	0.017
Cerebrovascular accident n (%)	0 (0%)	2 (%1.08)	0.244
Smoking n (%)	56 (%29.16)	45 (%24.45)	0.250

OC023

Quinolone-based Therapy is More Effective in Helicobacter Pylori Eradication

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Background The prevalence of Helicobacter pylori (HP) is much higher in underdeveloped and developing countries. HP is colonized in the gastric mucosa in humans, from asymptomatic carriage to non-ulcer dyspepsia, from chronic gastritis to gastric MALT lymphoma and gastric cancers. It is an important infectious agent that causes disease in a varying spectrum. These data reveal the fact that HP infections, their complications and hence the treatment is an important problem in our country. Various treatment protocols are used in HP eradication. Among these treatments, the standard triple therapy is the most widely used treatment in primary care all over the world, and patients are given lansoprazole, amoxicillin and clarithromycin for 10-14 days. However, drug resistance still emerges as an important problem. In this study, it was aimed to investigate prospectively whether quinolone-based triple therapy is superior to standard therapy.

Material and Methods Patients who applied to the gastroenterology outpatient clinic with dyspeptic complaints were included in our study. Endoscopy was performed in all cases, and rapid urease test was evaluated with biopsy taken from the stomach. In addition, two endoscopic biopsies were taken from the gastric corpus and antrum, the bulbous in the duodenum, and the lesion, if any, in all patients. Cases with HP bacteria were determined in the microscopic examination of the tissues taken. Patients with positive urease test and HP bacteria detected in histopathological examination were included in the study. The patients included in the study were divided into two treatment groups [2x30 mg/d lansoprazole, 2x1 g/d amoxicillin and 2x500 mg/d clarithromycin (Group 1) or 400 mg/d moxifloxacin (Group 2) for 14 days, and then 1x30 mg lansoprazole for 4 weeks].

Results HP eradication was evaluated by urea breath test 2 weeks after the completion of all treatments. There was no statistically significant difference between the group 1 and 2 in terms of mean age and gender distribution (41.79±17.1 vs. 42±13.1 years and female/male ratio: 23/11 vs. 24/10, respectively). HP eradication rates were 65% in both groups. There was no statistically significant difference in response to treatment in both groups (p=0.95).

Conclusions Treatment of HP infections has been shown to prevent the recurrence of peptic ulcer and the development of complications. Therefore, HP eradication is strongly recommended in patients. The search for new treatment protocols as an alternative to the standard triple treatment with a high rate of resistance continues. In our study, the standard treatment regimen and quinolone-based triple treatment regimens were compared, but no significant difference was found between them in terms of treatment success. This situation; It can be explained by the antibiotic resistance caused by the intense, irregular and off-label use of antibiotics, including the quinolone group, in our country. It is concluded that new and different treatment regimens are required to increase the success of HP eradication.

OC024

Retrospective Analysis of Mycobacterium Tuberculosis, Drug Susceptibility Tests and Non-tuberculosis Mycobacteria Test Results, Which Have Increased Significance in Recent Years

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Background Tuberculosis (TB) continues to pose a significant public health problem worldwide. There are 12,046 registered TB cases as of 2017 in Turkey. For mycobacteriology laboratories, it is essential to define M. tuberculosis, determine antibiotic susceptibility results, and make a differential diagnosis of non-tuberculosis mycobacteria (NTM). This study aimed to evaluate the results of the Mycobacteriology Laboratory in our region in 2020 retrospectively.

Material and Methods Various clinical samples of TB suspected patients, who were sent to the Balikesir Atatürk City Hospital Mycobacteriology Laboratory in 2020, were included in the study. Microscopy, culture procedures, and the first-line anti-TB drug susceptibility tests were performed according to the instructions.

Results The study group consisted of 64.4% were male, and 35.6% were female and whose mean age was 47.71±20.1 years (range: 17-93 years). In our study, acid-fast bacilli (ARB) positivity was detected in 195 (5.5%) of 3,518 clinical samples. Out of 2,825 clinical specimens taken into the culture, M.tuberculosis were identified in 173 (%6.1) samples, NTM were identified in 18 (%0.6) samples. Acid-fast bacilli (ARB) positivity was detected in 50.3% of 191 culture positive clinical samples. Seventy M.tuberculosis isolates were tested for drug susceptibility, and 88.6% of isolates were susceptible to all tested drugs, 11.4% were resistant to at least one drug. The rate of multi-drug resistant-TB (MDR-TB) isolate was determined as 1.4%. Regardless of single or multiple drug resistance, the total resistance rates determined for isoniazid (INH), rifampicin, ethambutol, and streptomycin were respectively; It was determined as 7.1%, 1.4%, 0%, and 7.1%.

Conclusions In our study, in agreement with the literature data, the rate of ARB positivity was 5.5%, the culture positivity rate was 6.1% for M.tuberculosis and 0.6% for NTM. Drug-resistant TB is a significant public health problem for our country as it is for many countries. Early diagnosis and treatment are essential in preventing drug-resistant TB transmission with high mortality. In our study, in agreement with the literature, it was found that the highest resistance (7.1%) developed against INH. The rate of at least one drug-resistant isolate was 11.4%, and MDR-TB rate was 1.4%. Non-tuberculous mycobacteria (NTM) are common in the environment, and they are isolated as an etiological agent, especially in immunocompromised patients. Due to their frequent resistance to classical anti-tuberculosis drugs and their increasing frequency of isolation, accurate and early diagnosis of NTM infections is fundamental in treatment success. Clinical, microbiological, and radiological findings should be evaluated together to differentiate NTM isolates, infection, contamination, and transient colonization. Laboratory specialist and clinician collaboration are required. Among the steps that may cause contamination; contamination of hospital water systems, insufficient disinfection of endoscopic materials, contamination of tampons used in laboratories. The World Health Organization aim for a 95% decrease in TB deaths and a 90% decrease in new TB cases between 2015-2035. At this point, laboratory diagnosis of mycobacteria and drug susceptibility tests are critical.

OC025

The Relationship Between HbA1c and Contrast-Induced Nephropathy in Patients with Non-ST Elevation Myocardial Infarction and Non-Established Diabetes Mellitus

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Background Diabetes Mellitus (DM) is an important cardiovascular risk factor, and 50% of newly diagnosed diabetic patients have coronary artery disease. HbA1c levels in these patients affect prognosis. The development of contrast agent-induced nephropathy (CIN) is common in patients who have undergone percutaneous coronary intervention (PCI) without ST-elevation myocardial infarction (NSTEMI) and is associated with increased mortality and morbidity. In

our study, the relationship between HbA1c and CIN development was investigated in NSTMI patients who did not have a previous diagnosis of DM and did not receive treatment.

Material and Methods In our study, 359 (189, 52.6% male) patients who underwent coronary angiography with a diagnosis of NSTEMI without DM and did not receive any treatment were retrospectively analyzed. Pre-procedure HbA1c values, pre- and post-procedure creatinine values were evaluated. CIN was defined as an increase of 25% or 0.5 mg/dL from baseline in serum creatinine measured 48-72 hours after the procedure.

Results CIN was detected in 56 (15.6%) of all patients. Among the group that developed and did not develop CIN, there was no difference between gender, contrast media amount, pre-procedure eGFR, troponin, and ejection fraction values. In the group with CIN, the patients were older, and the number of hypertensive patients was significantly higher. After coronary angiography, medical follow-up was made for 46 (12.7%) patients, a coronary stent was inserted in 271 (74.7%), and coronary bypass was undergone in 40 (11%) patients. Besides, in-hospital mortality was detected in 17 (4.7%) patients. HbA1c values were found to be significantly higher in the group developing CIN (6.1 ± 1.0 vs. $5.5 \pm 0.6\%$, $p < 0.001$, respectively). The HbA1c value was an independent predictor for CIN in logistic regression analysis (OR: 2.3, $p < 0.001$, 95% CI: 1.6-3.2).

Conclusions In conclusion, CIN was more common in patients with NSTEMI with high HbA1c, who were not diagnosed with DM and did not receive any treatment. Besides, the HbA1c value was found to be an independent predictor of CIN development.

OC026

Evaluation of Symptom Awareness in Patients with Type 2 Diabetes Mellitus

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Background Diabetes Mellitus (DM); a disease characterized by chronic hyperglycemia caused by insulin insufficiency or deficiency. Diabetes Symptom Checklist (DSC) is a 34-item scale divided into 6 categories (hypoglycemia, hyperglycemia, cardiac, ophthalmological, psychological, neurological symptoms) related to diabetes. Individuals answer "yes" or "no" to the questions and indicate whether they have experienced each symptom in the last 4 weeks. Answers in the scale are numbered from 0 to 5, and "0" is expressed as "not at all" and "5" as "excessively". In this study, we aimed to determine symptom awareness by using the Diabetes Symptoms Checklist Scale in patients followed up with type 2 DM.

Material and Methods This study was initiated after the decision of the Afyonkarahisar Health Sciences University Clinical Research Ethics Committee dated 17.06.2019 and numbered 2019/216 was taken. This study was conducted with type 2 DM patients who applied to the Afyonkarahisar Health Sciences University Medical Faculty Hospital, Internal Medicine Polyclinics between June 2019 and December 2019 for routine control. The mean scores of the 6 subgroups of DSC scale were compared with the the age, gender, comorbidity, education levels, HbA1c levels, diagnosing time and treatment of the individuals.

Results 95 patients included in the study, 44.2% (n=42) were male and 55.8% (n=53) were female. The mean age of the patients was 52.3 ± 12.2 years, the mean HbA1c levels were $8.4 \pm 1.5\%$, and the mean duration of illness was 8.25 ± 6 years. 11.6% (n=11) of the patients had no education, 65.3% (n=62) were primary school, 9.5% (n=9) were high school, 13.7% (n=13) were university graduates. 69.5% (n=66) of the patients had additional comorbid diseases such as hypertension, hyperlipidemia, and hypothyroidism. 49.5% (n=47) of the patients were receiving oral antidiabetic treatment, 10.5% (n=10) insulin treatment, and 40% (n=38) both oral antidiabetic and insulin therapy. The highest mean score was associated with hypoglycemia symptoms (1.75 ± 1.40), while the lowest mean score was found in the ophthalmology subgroup (0.52 ± 0.89). The overall mean score of the scale was 0.87 ± 0.71 . The mean score of the answers to the questions related to cardiac symptoms was 0.45 ± 0.62 in male patients and 0.89 ± 0.97 in female patients. Cardiac symptom burden was significantly higher in females ($p=0.02$). When the patients were divided into 3 groups according to HbA1c levels (<7%, 7.1-9% and >9%), there was no significant difference. When the patients were divided into 3 groups according to the date of diagnosis (<5 years, 5-10 years, >10 years), there was a significant difference was found in neurological symptom burden between the patients who were followed up for less than 5 years and more than 10 years ($p=0.017$). When the patients were divided into 3 groups according to the treatment they received there was no significant difference in the mean scores given to the questions.

Conclusions In DM patients, when it is determined that increasing symptom burden with scale studies, reducing the severity of the disease should be aimed by changing treatment modalities. This type of scale studies should be evaluated with a larger number of cases and the literature should be supported.

OC027

The Relation of QTc Dispersion and QTc Interval with Disease Severity in Patients with Non-Alcoholic Cirrhosis

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Background Cirrhosis and alcohol abuse can cause heart failure and electrocardiographic (ECG) repolarisation abnormalities. The prolongation of the QT interval representing electrical ventricular systole, increases the risk ventricular arrhythmias and mortality. Variation of the QT duration in the 12 lead ECG represents QT dispersion. In nonalcoholic cirrhotic patients there has been insufficient data on QT dispersion showing heterogeneity in ventricular repolarization. Our aim is to investigate the relation between corrected QT (QTc) interval and QTc dispersion with disease severity in patients in non-alcoholic cirrhosis.

Material and Methods In this retrospective study, sixty-three cirrhotic patients diagnosed with clinical history, physical examination, ultrasonography, endoscopy, and laboratory data and 46 healthy subjects were included in the study. Patients with a history of heart, lung, kidney disease, hypertension, diabetes and obesity, and those taking drugs that

prolong the QT interval were excluded from the study. The "model for end stage disease" (MELD) scores of all patients were calculated. In the supine position at rest, all 12 ECG leads were recorded on a graph paper at a speed of 25 mm/sec. with an electrocardiograph calibrated with 1 mv=10 mm. QT interval was measured from beginning of QRS complex to the end of T wave, and corrected for the heart rate, using Bazett's formula. In each lead QTc intervals were calculated as the mean of 3 distinct beats. The difference between the longest and shortest QTc intervals in the 12 lead ECG was considered to be QTc dispersion. An expert, unaware of the clinical status of the study participants, evaluated the electrocardiographic tracings.

Results There was no difference between gender distribution (female/male ratio: 28/35 and 25/21, respectively) and mean age (47.88 ± 14.34 vs. 43.88 ± 8.41 years, respectively, $p < 0.387$) of the patient and control groups. The mean MELD score of the patients was calculated as 11 ± 3.8 . Diastolic blood pressure was lower ($p < 0.030$), QTc duration (473 ± 37 vs. 425 ± 30 , $p < 0.0001$) and QTc dispersion (31 ± 16 vs. 6.6 ± 11 , $p < 0.001$) were higher in cirrhotic patients compared to the control group. QTc interval was positively correlated with MELD score ($p < 0.001$, $r: 0.53$), total bilirubin ($p < 0.001$, $r: 0.40$) and INR ($p < 0.001$, $r: 0.46$) and negatively correlated with albumin ($p < 0.001$, $r: -0.43$) and platelets ($p < 0.001$, $r: -0.48$), but no correlation was found between QTc dispersion and these parameters.

Conclusions According to our findings, the QTc interval increased in proportion to the severity of the disease in patients with non-alcoholic cirrhosis. QTc dispersion also increased in patients with cirrhosis but did not correlate with disease severity. QTc dispersion should be investigated in further studies in patients with cirrhosis.

OC028

Factors Affecting Mortality in Type 2 Diabetes Patients: Can C-Peptide Level Predict Mortality?

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Background C-peptide is an important marker showing the beta cell reserve of the pancreas. In this study, we aimed to investigate the relationship between fasting C-peptide level and other laboratory parameters at hospital admission and mortality.

Material and Methods The data of 474 patients who were followed up from Şırnak State Hospital between 2015 and 2020 for Type 2 diabetes were retrospectively recorded. They were divided into two groups as survivors ($n=429$) and patients who died ($n=45$). The laboratory parameters that the patients first applied to the hospital were examined. The relationship between these parameters and mortality was evaluated by multivariate logistic regression analysis.

Results Mortality rate at 5-year follow-up was 9.4%. The proportion of female patients was higher in the groups, with a higher proportion of women in the surviving group (58% vs. 51%, $p > 0.05$). The median age in the deceased group was higher than those surviving group (63 vs. 55 years, $p < 0.001$). While the fasting plasma glucose median level was 237

(IQR: 149-394) mg/dL in those who died, it was found to be 183 (IQR: 139-233) mg/dL in those who survived ($p < 0.01$). Although there was no difference between the HBA1c levels between the groups, the median C-peptide level was lower in the deceased group (1.72 vs. 2.79 ng/mL, $p < 0.001$). The presence of urea, creatinine and urine protein were found to be higher in the deceased group and were statistically significant. Odds ratio was found to be 0.53 (95% CI: 0.37-0.77, $p < 0.01$) in multivariate logistic regression analysis between C-peptide level and mortality. In multivariate logistic regression analysis between laboratory parameters and mortality; fasting plasma glucose, urea, creatinine and C-peptide levels were found to be associated with mortality.

Conclusions A low C-peptide level may be a poor prognostic marker predicting mortality in patients with type 2 DM.

OC029

The Role of Endosonography in Medium and High Probability Choledocholithiasis Patients

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Background Choledocholithiasis is a clinical condition that can cause serious complications such as pancreatitis, cholangitis, obstructive jaundice, secondary biliary cirrhosis, and early diagnosis treatment are vital. The American Gastrointestinal Endoscopy Association (ASGE) published a guideline for managing patients suspected of choledocholithiasis in 2010. According to this guideline, patients with suspected choledocholithiasis were divided into 3 groups: high, moderate, and low probability. This study aimed to determine the role and diagnostic effectiveness of endoscopic ultrasonography (EUS) in patients with moderate and high probability choledocholithiasis.

Material and Methods This study included 229 patients with moderate and high risk for choledocholithiasis who were admitted to the Gastroenterology Clinic of Dışkapı Yıldırım Beyazıt Training and Research Hospital between August 2015 and August 2016. The EUS and/or Endoscopic Retrograde Cholangiopancreatography (ERCP) results and procedure-related complications of these patients were retrospectively analyzed from the hospital registry system.

Results A total of 229 patients, 129 women and 100 men were included in the study. The mean age of the patients is 62.8 years. While the number of patients in the medium-risk group is 77, the number of patients in the high-risk group is 152. Patients with common bile duct stones in EUS were taken to ERCP in the same session. ERCP was applied to 7 patients whose common bile duct stones were not detected in EUS due to high clinical suspicion. 6-month clinical and biochemical data of other patients with normal choledochus in EUS were examined. In our study, the sensitivity of EUS in detecting common bile duct stones was 89.2%, its specificity was 94.6%, its positive predictive value was 95.6%, and its negative predictive value was 86.9%.

Conclusions Today, EUS replaces diagnostic ERCP in patients with suspected choledocholithiasis because of its high diagnostic value and a less invasive diagnostic method. Reducing unnecessary ERCP transactions is one of the most important reasons why EUS is preferred.

OC030

Experience with FLT3 Inhibitor Midostaurin in Newly Diagnosed Acute Myeloid Leukemia Patients

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Background FLT3 mutation is seen in approximately 30% of newly diagnosed acute myeloid leukemia (AML) patients. It can be encountered in two different ways: internal tandem duplication (ITD) and tyrosine kinase mutation. FLT3 mutation is an important marker showing relapse and resistance to standard therapies in patients with AML. Patients with FLT3 ITD mutation or high allele burden of FLT3 ITD mutation have lower mean survival rates than patients with negative FLT3 mutation. After introducing FLT3 inhibitors in recent years, the presence of FLT3 mutation has become more important in newly diagnosed AML patients. In the RATIFY study for which midostaurin, one of the FLT3 inhibitors, was approved by the FDA, adding midostaurin to remission induction, consolidation, and maintenance therapy after consolidation resulted in a 22% reduction in mortality risk in patients with FLT3 mutations. In the light of the above information, we aimed to share our experience and experience regarding the use of midostaurin in our newly diagnosed AML patients.

Material and Methods The data of 20 patients diagnosed with AML between April 2020 and November 2020 in the Hematology Department of Bursa City Hospital and who were eligible for standard remission induction therapy were evaluated retrospectively. Patients diagnosed with acute promyelocytic leukemia or who could not receive standard remission induction therapy were excluded from the study. Standard 7+3 remission induction chemotherapy, which consists of a combination of cytosine arabinoside and an anthracycline, was applied to patients diagnosed with AML. While consolidation treatment with high dose cytosine arabinoside was applied to patients in remission, midostaurin 100 mg was added to patients with FLT3 mutation between the 8th and 21st days with high dose cytosine arabinoside. The patients' characteristics, demographic information, and response status were retrospectively scanned from their files and hospital information system.

Results Of the 20 patients included in the study, 14 were men, and 6 were women. There were 6 patients with the FLT3 mutation. The frequency of FLT3 mutation among our patients was consistent with the current literature information. 5 of the six patients with FLT3 mutation were male and 1 female. The patients' mean age is 53.8 years, the mean age of the patients with FLT 3 mutation was 49.8 years. Two of our 6 patients with FLT3 mutation died due to sepsis during remission induction treatment. In the other 4 patients, complete response was obtained with remission induction therapy, they were referred to bone marrow transplantation centers to perform allogeneic hematopoietic bone marrow transplantation using high-dose cytosine arabinoside and midostaurin for consolidation treatments.

Conclusions The use of FLT3 inhibitors in combination with chemotherapeutic agents in treating AML patients with FLT3 mutation is considered an approximate standard. However, it takes a certain amount of time for the FLT3 mutation to result. For this reason, midostaurin treatment could be added not during remission induction but consolidation treatments. Although our study included a limited number

of patients and was added during midostaurin consolidation therapy, it shows that midostaurin treatment may be important in newly diagnosed AML patients with FLT3 mutation. FLT3 inhibitors also take their place in AML treatment as an important weapon in today's world, where targeted therapies are becoming more important.

OC031

An Unusual Parameter to Predict In-Hospital All-Cause Mortality in COVID-19 Patients: Prognostic Nutritional Index (PNI)

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Background Coronavirus disease 2019 (COVID-19), which emerged in Wuhan, China, in December 2019, spread rapidly worldwide and turned into a pandemic. It has clinical pictures ranging from mild symptoms such as subfebrile fever, dry cough, and weakness to acute respiratory distress syndrome (ARDS) and multi-organ dysfunction. Currently, interim guidelines on which patients receive inpatient treatment are published by the Ministry of Health of the Republic of Turkey. This study aimed to investigate whether prognostic nutritional index (PNI) predicts in-hospital all-cause mortality for in-patients.

Material and Methods 172 consecutive patients with COVID-19 diagnosed by detecting SARS-CoV-2 RNA with real-time PCR method in accordance with the World Health Organization's (WHO) interim guidelines were included in the study. The patients were divided into two groups as survivors group and the in-hospital all-cause mortality group (non-survivors). Demographic data, comorbidities, laboratory parameters of the patients were recorded. The ejection fraction was measured by the Simpson method. The PNI was calculated as $10 \times \text{serum albumin value (g/dL)} + 0.005 \times \text{peripheral lymphocyte count (103/\mu L)}$.

Results Age was older in the non-survivors group (44 vs. 65, $p < 0.001$). GFR, hemoglobin, ejection fraction, oxygen saturation, and PNI were lower in the non-survivors group, whereas body temperature, NLR, lactate dehydrogenase, and aspartate aminotransferase were lower in the survivors group ($p < 0.005$, for all). In stepwise logistic regression analysis, PNI [OR: 0.709 (0.530-0.949), 95%, $p = 0.021$], GFR [OR: 0.938 (0.889-0.989), 95%, $p = 0.019$], and oxygen saturation [0.758 (0.600-0.957), 95%, $p = 0.020$] were independently associated with in-hospital all-cause mortality. A cut-off value of ≤ 39.9 for PNI predicted in-hospital all-cause mortality, with 90.9% sensitivity and 88.1% specificity [AUC: 0.940 (0.892-0.971), $p < 0.001$] in receiver operating characteristic (ROC) curve analysis. According to pairwise comparison of ROC curves analysis for PNI, GFR, and oxygen saturation, there was no significant difference.

Conclusions According to the present study, PNI, easy to calculate but an unusual parameter for COVID-19, predicted in-hospital all-cause mortality. Further studies are needed to clarify whether this parameter could be used for other clinical entities of COVID-19 that have not worked on it in our study.

OC032

Acute Pulmonary Embolism in COVID-19 Disease: Case Report*Yıldız OKUTURLAR¹, Ramazan GÜNEŞ², Beste Naz ÇELİK², Nijat NASIROV³, İftihar KÖKSAL³*¹*Acıbadem Mehmet Ali Aydınlar University Faculty of Medicine, Department of Internal Medicine, Istanbul, Turkey*²*Acıbadem Mehmet Ali Aydınlar University Faculty of Medicine, Istanbul, Turkey*³*Acıbadem Mehmet Ali Aydınlar University Atakent Hospital, Department of Internal Medicine, Department of Infectious Diseases and Clinical Microbiology, İstanbul, Turkey*

Background Dyspnea in COVID-19 disease is an important finding in hospital admitted patients. Anticoagulant drugs are indispensable for treatment in COVID-19. Meanwhile, the development of pulmonary embolism determines the duration of maintenance anticoagulant therapy. Here, we present a case diagnosed with pulmonary embolism during the investigation of dyspnea etiology after the diagnosis of COVID-19.

Material and Methods A 73-year-old male patient applied to the emergency department of our hospital through the emergency service due to acute respiratory distress.

Results The patient has been receiving COPD treatment for fifteen years and stated that he frequently experienced respiratory distress, especially in the autumn-winter period. The patient stated no fever, weakness, joint or muscle pain other than respiratory distress. On physical examination, room air SpO₂ was measured as 80%, respiratory rate 27/min, pulse 120/min/rhythmic, blood pressure 160/80 mmHg, fever 36.7 °C, and lung examination revealed rales and diffuse rhonchi in both lungs. In the laboratory tests performed for the further evaluation of the patient; leukocyte 16,180/mm³, neutrophil 89.3%, lymphocyte 5.1%, CRP 15.73 mg/dL, PT 13.1 sec, INR 1.1, D-dimer >35.2 ug/mL, ferritin 315 ng/mL, albumin 2.5 g/dL, lactate dehydrogenase 340 IU/L, total bilirubin 1.42 mg/dL, direct bilirubin 0.67 mg/dL, troponin I 0.303 ng/mL, B-natriuretic peptide (NT-proBNP) 4,442 pg/mL, calcium (Ca) 8.10 mg/dL and in arterial blood gas assessment, pH 7.352 mmHg, pCO₂ 32.8 mmHg, paO₂ 74.0 mmHg, HCO₃act 17.8 mmol/L, HCO₃std 19.1 mmol/L, sodium 134 mg/dL, potassium 4.52 mg/dL, Ca+2 1.16, glucose 273, and lactate 7.13. Thoracic CT was performed to evaluate for COVID-19 and COPD. Afterward, the nasopharynx swab was taken, and the COVID-19 PCR test was performed. The patient was hospitalized because the thorax CT image was compatible with COVID-19 and empirical COVID-19 treatment; favipiravir and dexamethasone were started. One day later, the PCR test was positive. Because of the patient's higher D-dimer height (>35.2 ug/mL) than expected in COVID-19, blood gas compatible with embolism and high accompanying lactic acid value (7.13). The patient's left lung was bilateral lower partial embolic filling defects were detected in the lobe lobar branches and left lung lingula branch. It was observed to be compatible with pulmonary embolism. Echocardiography was normal. When the patient and his relative were questioned again to evaluate the etiology of pulmonary embolism, the patient had a disease other than COPD, hypercholesterolemia, and inguinal hernia, and there was no coagulation disorder in the family or the patient, only the patient's father had cancer history (prostate cancer), and the patient had coronary angiography

twice It was learned that the patient had no MI, no accident history, and the patient was mobilized in his daily life. To evaluate the presence of malignancy or deep vein thrombosis, whole abdominal USG and color doppler USG of both lower extremities were performed. Thrombus material was observed in the right cruris popliteal vein branches on color doppler USG. RT-PCR test was negative on the 6th day of hospitalization. On the 17th day of his hospitalization, the patient who lost his need for oxygen was given an anticoagulant to come to the polyclinic; oxapar was discharged with 2x0.6 mg treatment.

Conclusions During the pandemic period, it is important to evaluate patients at risk for pulmonary embolism more closely, especially the rapid initiation of anticoagulation therapy from the first day of symptoms, in terms of possible thrombosis complications. The initiation of anticoagulant treatment in this patient, whose COVID-19 test was negative on the 6th day of his arrival, was due to the delay in the patient's admission to the hospital. After being evaluated with the D-dimer test, every patient over the age of 65 should receive anticoagulant treatment from the first day of symptoms.

OC033

Demographic and Clinical Features in Patients with Upper Gastrointestinal Bleeding*Şevki KONÜR¹*¹*Health Sciences University, Van Training and Research Hospital, Internal Medicine Clinic, Van, Turkey*

Background Gastrointestinal system (GIS) bleeding is among the reasons for admission to the emergency room between 0.2-1%. It is very important to evaluate these patients hemodynamically and to intervene early. Early endoscopic intervention and medical treatment provides early bleeding control in most patients. In recent studies, it is observed that duodenal ulcers are the most common bleeding focus in upper GIS bleeding. The second most common is gastric ulcers. Malignancies and varicose bleeding are other causes of GIS bleeding. In our study, we retrospectively evaluated the demographic and clinical characteristics of patients who underwent endoscopic procedures due to GIS bleeding in the endoscopy unit serving in our hospital.

Material and Methods Twenty-six patients aged 18-80 who were referred to the endoscopy unit for GIS bleeding and underwent endoscopy were included in the study. Data on age, gender, comorbid diseases, treatments received, endoscopic diagnosis, endoscopic treatment, intensive care and hospitalization data, the need for erythrocyte suspension, the patient's condition after follow-up and treatment (discharge/exitus) were collected and analyzed in detail.

Results Six (23%) of the patients were female and 20 (77%) were male. Their mean age was 52±5.7 years. Of our patients, 12 (46.1%) only non-steroidal anti-inflammatory drug (NSAID), 7 (26.9%) only acetyl salicylic acid (ASA), 5 (19.2%) only clopidogrel, 1 (3.8%) only warfarin and 1 (3.8%) heparin was used. 5 patients (19.2%) were taking ASA and clopidogrel. 2 patients (7.7%) were taking ASA and NSAIDs. There was no comorbid disease in 12 (46.1%) of the patients. 2 patients with diabetes mellitus (7.7%), 2 patients with hypertension (7.7%), 7 patients with ischemic heart disease (26.9%), 5 patients with congestive heart failure (19.2%), 2 patients with chronic renal failure (7.7%)

had. Four of our patients (15.3%) had malignancy. There were 1 patient (3.8%) with rheumatoid arthritis, 1 patient with chronic obstructive pulmonary disease (3.8%), and 1 patient (3.8%) with cerebral palsy. Bulbus ulcers were seen in 15 (57.6%) of our patients, gastric ulcers in 4 (15.3%), gastric malignancy in 2 (7.7%), and ulcers in the anastomosis area in 1 (3.8%) of the malignancy operation. Sclerotherapy or endoscopic treatment with clips was applied to 19 (77.1%) of our patients. No intervention was required in 7 (26.9%) patients (Table 1). Duration of stay in the clinic was 2.7 ± 0.9 days. Twelve (46.1%) patients received an average of 5.2 ± 1.3 days of treatment in the intensive care unit. 16 (61.5%) patients needed erythrocyte suspension. Two of our patients (7.7%) died during inpatient treatment.

Conclusions The majority of patients with GIS bleeding are patients using NSAIDs. Although the use of vital drugs such as ASA and clopidogrel is mandatory, NSAIDs are frequently used although not essential. Unnecessary use should be avoided. In addition, it should not be forgotten that there may be malignancies in the etiology of GIS bleeding. Endoscopy should definitely be performed in patients with suspected GIS bleeding.

Table 1. The endoscopic findings of patients

Endoscopic Findings	n (%)
Erosive pangastritis	5 (19.2%)
Bulbus ulcer	15 (57.6%)
Forest 1	2 (7.7%)
Forest 2	2 (7.7%)
Forest 3	11 (42.3%)
Gastric ulcer	4 (15.3%)
Antrum	3 (11.5%)
Cardia	1 (3.8%)
Malignancy	2 (7.7%)
Anastomotic ulcer	1 (3.8%)
Endoscopic treatment	
No	7 (26.9%)
Sclerotherapy	19 (73.1%)
Clip throwing	2 (7.7%)

OC034

The Relationship Between Adenoma Weight and Biochemical Parameters in Patients with Primary Hyperparathyroidism

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Background Primary hyperparathyroidism (PHPT) is an endocrine disease characterized by excessive release of parathyroid hormone (PTH) from one or more parathyroid glands, leading to a disorder in the regulation of calcium (Ca) metabolism and resulting in increased Ca levels. Parathyroid adenoma is the most common cause of PHPT. It was hypothesized that the severity of solitary parathyroid adenoma could be estimated from preoperative serum PTH, calcium, or phosphate levels. Studies have found that the severity of parathyroid adenoma is related to disease severity. The relationship between preoperative biochemical parameters and parathyroid adenoma weight and/or postoperative serum calcium is controversial in the literature. This study aimed to evaluate the relationship between adenoma weight and biochemical parameters in PHPT patients and investigate whether there was a risk factor for transient postoperative hypocalcemia.

Material and Methods In this study, 247 patients over 18 years old who were operated on with a diagnosis of PHPT in our center between 2016 and 2019 years were included. Demographic, laboratory, and pathological data of the patients were recorded by scanning files. Patients whose biochemical

data were missing and whose pathology result was compatible with parathyroid hyperplasia were excluded from the study. According to the normal distribution state, numerical variables were shown as mean \pm standard deviation or median (min-max). Categorical data were summarized using case numbers and percentages. The student's t-test was used for comparing two independent groups showing normal distribution. Mann Whitney U test was used in groups that did not show normal distribution. In the correlation analysis, Pearson or Spearman correlation analysis was used according to the normal distribution. A p-value less than 0.05 was considered significant as a statistical significance level.

Results 83.4% of the study patients were female, and 16.6% were male, and the mean age was 56.6 ± 11.7 years. There was a significant positive correlation between adenoma weight and preoperative serum Ca ($p=0.013$), PTH ($p<0.001$) and alkaline phosphatase ($p=0.037$) levels. A significant negative correlation was found between adenoma weight and serum 25(OH)D level ($p=0.018$). There was no relationship between adenoma weight and serum phosphorus, creatinine, and urine Ca. Postoperative transient hypocalcemia was detected as 36.8%, and transient hypocalcemia was more common in patients with high adenoma weight ($p=0.028$).

Conclusions Studies examining the relationship between adenoma weight and serum Ca and PTH levels in the literature contain conflicting results. Similarly, inconsistent and conflicting results are observed in studies examining the relationship between adenoma weight and postoperative hypocalcemia. The adenoma weight was positively correlated with preoperative Ca, PTH, and alkaline phosphatase levels in our study. In contrast, it was observed to be a negative correlation with a 25(OH)D level, and those with higher adenoma weight were found to have more transient hypocalcemia. In conclusion, preoperative Ca, PTH, alkaline phosphatase, and 25(OH)D levels can be given to estimate adenoma weight. At the same time, considering the weight of adenoma and preoperative serum calcium, PTH, alkaline phosphatase, and 25(OH)D levels, a temporary postoperative Ca decrease can be predicted. In multi-center studies with larger patient populations, the relationship of adenoma weight with biochemical parameters and postoperative hypocalcemia may be better elucidated.

OC035

A Peripartum Cardiomyopathy Case Treated with Bromocriptine

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Background Peripartum cardiomyopathy (PPCM) is a rare disease that is difficult to diagnose and treat. It can be mortal. Its etiopathogenesis is not fully understood. The symptoms are similar to those in the physiological course of pregnancy. In this case report, we aimed to explain the PPCM picture developing in a pregnant woman without a known risk factor for PPCM development and the use of bromocriptine in treatment.

Material and Methods The patient, who had no known history of systemic and cardiac disease and had a normal deli-

very after the first pregnancy 4 days ago, was evaluated in the emergency service with the complaints of shortness of breath, inability to lie flat, cough, and hemoptysis, which had been gradually increasing for 15 days.

Results On physical examination, he was conscious, cooperative oriented, orthopneic, blood pressure 130/95 mmHg, respiratory sounds decreased in basal, thin ral was present in bilateral lower zones, heart rhythmic, tachycardia, a systolic murmur of 3/6 intensity radiating from apex to axilla. Pretibial edema was not present. Cardiomegaly was observed in the PA chest radiography. There was sinus tachycardia in the ECG. Artery blood gas pH 7.54, pCO₂ 31.3, pO₂ 77.8, sO₂ 95.3% were found in room air. In blood tests WBC 9.51 K/ μ L, hemoglobin 8.1 g/dL, MCV 93.6 fL, MCH 30.6 pg, MCHC 32.7 g/dL, RDW 14.9%, platelet 382.4 K/ μ L, CRP 23.4 mg/L, cardiac troponin I 56.4 ng/L, BNP was 766.6 ng/L and kidney and liver function tests were normal. Contrast-enhanced thorax computed tomography revealed signs of effusion, cardiomegaly, and pulmonary edema up to 3 cm thick in the right pleural space. There was no filling defect consistent with embolism in pulmonary arterial structures. Transthoracic echocardiography (TTE) showed increased left ventricular diameters, left ventricle global hypokinetic, ejection fraction (EF) 30% larger left atrium, 3rd-degree mitral insufficiency flow was observed, 1-2. grade tricuspid regurgitation flow was monitored. According to the TF method, systolic pulmonary artery pressure was 30 mmHg. Two-dimensional (2D) speckle strain echocardiography revealed the mean global longitudinal peak systolic strain as -9.1%. Cardiac MRI revealed global hypokinesia in the left heart cavity, left ventricular cavity in wide view, and cine images in the left ventricle. No pathological staining was detected in the first pass images after contrast agent administration. Mid-myocardial staining in a patchy style was detected in the late phase images taken at 10 minutes. The patient was given iv nitroglycerin infusion, iv diuretic, and anticoagulant treatment. ACEi, beta-blockers, spironolactone, and ivabradine were started for heart failure. 2x2.5 mg bromocriptine was added to the treatment on the 3rd day, and 1x2.5 mg bromocriptine was switched after 2 weeks. Left ventricular diameters and EF were normal in TTE performed at the 1st-month control. No morphological pathology was detected in the cardiac MRI at the 6th-month follow-up. The pathologically stained myocardial area was not observed in contrast-enhanced examinations in the first pass and 10 minutes late-phase images. In 2D speckle strain echocardiographic examination, an improvement in the mean global longitudinal peak systolic strain (-14%) was observed. The patient was asymptomatic, his functional capacity was consistent with NYHA class 1, and his BNP value was found to be 15.6 ng/L.

Conclusions PPCM is an "idiopathic cardiomyopathy" picture that can occur in pregnant women without any cardiac history and is accompanied by heart failure signs. PPCM may show a rapidly worsening clinical course. In patients who do not progress mortally, the picture of heart failure may regress or be permanent. It is thought that increased pro-inflammatory cytokines and oxidative stress are the underlying factors. Some studies blame the increase in the body of 16 kDa prolactin hormone, which has antiangiogenic and proapoptotic properties. These patients may benefit from the use of bromocriptine alongside standard heart failure therapy.

OC036

The Relationship of Aspartate Aminotransferase-Alanine Aminotransferase (DeRitis) Ratio with Rehospitalization and Prognosis in Acute Decompensated Heart Failure Patients

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Background Systemic congestion and hypoperfusion due to heart failure may cause abnormal liver function tests or increase liver stiffness. Aspartate aminotransferase (AST) to alanine aminotransferase (ALT) ratio (AAR) (AAR=AST/ALT) is a routinely used marker to predict the severity of liver fibrosis disease. However, the predictive values of AAR in acute decompensated heart failure (ADHF) patients have not been fully elucidated. Therefore, in our study, we aimed to investigate the relationship between AAR and rehospitalization and prognosis in patients with ADHF.

Material and Methods Patients who were admitted and hospitalized to our hospital for ADHF between January 2018 and December 2018 were included in the study. Patients with chronic liver disease (including hepatitis B and C), acute coronary syndrome, hemodialysis, in-hospital death or those who lost during follow-up were excluded from the study. A total of 145 patients were included in the study. Clinical demographic data, medical history, echocardiography results were obtained from patients and hospital records. Blood test to calculate AAR, was performed before discharge and AAR was calculated. Patients were followed for 180 days, re-hospitalization and mortality were recorded.

Results During the follow-up, 65 (44.8%) of the patients were re-hospitalized and 32 (22.1%) had mortality. Male gender (p<0.001), history of hypertension (p=0.09), creatinine (p=0.02), estimated pulmonary artery pressure (p<0.001) and AAR (p<0.001) were found to be higher in the rehospitalization group. Pletore (p<0.001) was observed more frequently in this group. Mean (p=0.02), systolic (p=0.006) and diastolic (p=0.04) blood pressures were found to be low. When looking at the parameters for predicting mortality in univariate analysis at 180 days, AAR and rehospitalization predict mortality (p<0.001 for both). With ROC (receiver operating curve) analysis, AAR value >1.39 is associated with rehospitalization with 76% sensitivity and 78.7% specificity.

Conclusions In systemic ischemia/hypoxia, AST rises more than ALT because AST is predominantly present in the centrilobular region; therefore, AAR may be elevated due to liver congestion. In our study, high AAR was found high in patients with plethorhea and estimated pulmonary artery pressure. These findings may indicate that high AAR is associated with systemic congestion and leads to worse outcomes. This study shows that the AAR calculated at the time of discharge is a prognostic marker in predicting re-hospitalization and mortality. AAR are inexpensive laboratory tests calculated by routinely evaluated AST and ALT and may have prognostic significance in ADHF.

OC037

Evaluation of Prognostic Nutritional Index in Predicting the Presence of Carotid Artery Plaque in Elderly Patient Population

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Background Atherosclerotic plaque formation in the carotid artery is a risk factor for cerebral infarction and coronary artery disease, and the degree of stenosis increases the risk of stroke. Rupture of unstable plaque in the carotid artery is the leading cause of ischemic cerebrovascular events. The patient group aged >65 years is in the major risk group for ischemic stroke. Investigating carotid artery plaque in this atient group is recommended in terms of risk assessment of stroke and coronary artery disease. Prognostic nutritional index (PNI) is a parameter calculated from serum albumin concentration and total peripheral lymphocyte values and evaluated in many studies as a marker of immune-nutritional status. Atherosclerosis is associated with inflammatory processes and malnutrition. Our study investigated the relationship between the PNI and the presence of carotid artery plaque assessed by B-mode ultrasonography in patients >65 years of age without atherosclerotic history.

Material and Methods 136 consecutive patients who underwent carotid artery ultrasonographic imaging in our center and met the study criteria were included in our study. Patients over 65 years of age and without a history of atherosclerotic cardiovascular disease, with no active angina, malignancy, inflammatory disease, and cardiomyopathy were retrospectively included in the analysis. Demographic characteristics and fasting blood sample results of the patients were recorded. PNI was calculated according to the formula specified; $PNI = 10 \times \text{serum albumin (g/dL)} + 0.005 \times \text{Total lymphocyte amount (mm}^3\text{)}$. In evaluating the carotid artery, B-mode ultrasonography, and right and left common carotid artery, bifurcation, internal and external carotid arteries were examined with a 10.0 MHz (range 8.0-12.0 MHz) linear transducer as recommended in the guidelines. Mean common carotid artery intima-media thickness (CIMT) ≥ 1.0 mm increased in thickness; It was defined as carotid artery plaque when it was 1.5 mm.

Results A total of 136 patients were included in the analysis. Normal CIMT (less than 1.0 mm) in 69 patients, increased CIMT (range 1.0-1.4 mm) in 54 patients, and carotid plate (CIMT 1.5 mm) were detected in 13 patients. In the high CIMT patient group consisting of patients with increased CIMT and carotid plaque; The prevalence of advanced age, diabetes mellitus, and hypertension were more frequent, and C-reactive protein levels were statistically higher. PNI levels were not statistically different between groups. PNI levels were found to have no predictive value in univariate and multivariate logistic regression analysis.

Conclusions Nutritional status indicators have been associated with the atherosclerotic process and poor prognosis in cardiac patient groups such as heart failure, coronary artery disease, and many non-cardiac patient populations. Although it is not an optimal parameter that reflects nutritional status, PNI analyses have been valuable in determining the immuno-nutritional status and prognosis in many studies. Serum albumin used in PNI calculation is a negative acute phase reactant,

while lymphocyte values tend to decrease malnutrition and inflammation. The combined formulation of the two parameters was evaluated as the reflector of malnutrition and systemic inflammation. PNI measurements have been reported to be associated with malnutrition and decreased immune response secondary to it. Therefore, in cases where there is no significant malnutrition in patients, it can be thought that its relationship with the atherosclerotic process will decrease. In our study population, BMI values are within the population's average, and albumin levels are in the normal range. Relatively less obvious malnutrition may be the reason why the result was not statistically significant. C-reactive protein levels, another indicator of inflammation, were higher in the high CIMC patient group. This result raises the idea that PNI levels' significance as an indicator of inflammation should be questioned.

OC038

Acute Kidney Injury due to Mushroom Poisoning: A Case Series

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Background Mushroom poisoning can cause various organ failure, including acute kidney injury (AKI). The mushrooms responsible for most of the mushroom poisoning are the Amanita species. Among the Amanita species, the species that cause AKI are Amanita proxima, Amanita smithiana, and Amanita phalloides.

Material and Methods Here we were 3 cases of mushroom poisoning presenting with a history of eating pickled mushrooms bought from the same neighborhood market.

Results The patients had elevated urea and creatinine, moderate transaminase elevation, LDH elevation, normal INR level, metabolic acidosis, and glucosuria. Case-1: Unlike other asymptomatic family members, the patient, who did not have a known disease, drug, alcohol, and smoking history, ate a mushroom meal for two consecutive days. The patient, who developed severe nausea and vomiting, presented to the emergency service 6 days later with complaints of nausea, vomiting, hiccups, and decreased urine amount. He was hospitalized with a diagnosis of AKI. Hemodialysis (HD) was performed because of hypervolemia and metabolic acidosis. On the 2nd day of his hospitalization, the patient who had chest pain, widespread T wave negativity on ECG, and increased troponin-I developed the acute coronary syndrome, and medical treatment was started. 3 sessions of HD were done, there was no need for HD again. Urea, creatinine, and transaminase levels decreased. Case-2: The patient, who had a recent history of COVID-19, complained of severe nausea and vomiting after eating mushrooms for two consecutive days. Six days later, the patient was referred to our center due to oliguric AKI and was hospitalized from the emergency room. With the diagnosis of mushroom poisoning, hemoperfusion was performed, silibinin and n-acetyl cysteine were initiated. The patient, who developed dyspnea,

desaturation, and mixed acidosis during hospitalization, was intubated electively. Cardiopulmonary resuscitation was performed for 3 minutes in the patient who developed cardiac arrest. 1000 mg pulse steroid was applied to the patient with suspected pulmonary edema or alveolar hemorrhage in thorax CT. Continuous venous-venous hemodiafiltration (CV-VHDF) with citrate was started in the intensive care unit. The patient, who was administered 1000 mg pulse steroid for 3 days and had CVVHDF, did not need HD again. The tests for pulmonary-renal syndromes were negative. The patient was extubated. Urea, creatinine, and transaminase levels decreased. Case-3: The patient, who had a history of type 2 diabetes mellitus and coronary artery disease, ate the mushroom meal for two consecutive days, unlike other family members who were asymptomatic. He presented to the emergency service 2 days later with nausea, vomiting, hiccups, and decreased urine output. HD was performed in the oliguric patient due to metabolic acidosis and hyperkalemia. AST 334 U/L, ALT 608 U/L, INR increased to 1.8. Silibinin, penicillin, n-acetyl cysteine, and vitamin C were started in the patient. During his hospitalization, 4 sessions of HD and 2 sessions of plasmapheresis were performed. The patient's diuresis was opened. Urea, creatinine, transaminase, and INR levels decreased. Since toxicology analysis could not be performed for mushroom typing, images of possible mushroom species were shown to the patients according to clinical findings (acute gastrointestinal toxicity, late-onset AKI, and moderate hepatotoxicity). It was assumed that the possible fungal species might be *Amanita proxima*.

Conclusions Urea/creatinine ratios of <20 support renal AKI in cases, and symptoms such as oliguria, glucosuria, hematuria, and pyuria favor acute interstitial nephritis and acute tubular necrosis. Although the presence of nausea and vomiting primarily suggests prerenal AKI, these findings may also be signs of mild hepatotoxicity together with AKI. Mushroom poisoning increases, especially in the autumn season when rains are abundant. In patients presenting with this clinical picture, the history of eating mushrooms collected from nature should be questioned.

OC039

The Relationship Between Plasma Atherogenic Index and Contrast Induced Nephropathy in Patients with ST-Elevation Myocardial Infarction Undergoing Percutaneous Coronary Intervention

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Background Coronary artery disease (CAD), especially acute coronary syndromes, is the leading cause of death in the world and in our country. The term acute myocardial infarction (AMI) is a clinical condition and laboratory findings consistent with myocardial ischemia, accompanied by or without electrocardiographic change. STEMI, on the other hand, is a clinical condition with persistent chest discomfort or other findings indicative of ischemia with ST segment elevation in two consecutive leads and requiring rapid treatment strategies such as reperfusion. STEMI is more common in young people than elderly people and men than women. With the

widespread use of percutaneous coronary intervention, both mortality and complication rates have decreased. However, there is a risk of developing contrast nephropathy after percutaneous coronary intervention (PCI), and the presence of DM, advanced age, HT, malnutrition or nephrotoxic drug use increases the risk of nephropathy. In our study, we aimed to evaluate the relationship between contrast induced nephropathy (CIN) and plasma atherogenicity index after PCI in STEMI patients.

Material and Methods 246 STEMI patients (57 patients with nephropathy) who were hospitalized in the cardiology clinic and underwent PCI were included retrospectively. CIN was defined as an increase in creatinine of 0.5 mg/dL or a 25% or more increase in basal creatinine within 24-72 hours after intravenous or intra-arterial contrast medium administration. Plasma atherogenicity index (PAI); The logarithm of the ratio of triglyceride to high density lipoprotein (HDL) cholesterol was calculated as $[\log(\text{Tg}/\text{HDL-cho})]$ (PAI risk classification is classified as <0.11 low risk, 0.11-0.22 medium risk and >0.22 high risk according to calculated values.)

Results The mean age of the patients was 59.5±12.2 years (76% male, n=187). There was no difference between the groups in terms of age, gender, body mass index, hypertension, diabetes mellitus, and smoking. Ejection fraction (EF) was lower in the group developing CIN and the difference was statistically significant (48.8±7.4, 52.2±7.4, respectively; p=0.004). The amount of contrast material used during the procedure was higher in the group with CIN than in the control group (p<0.001). When laboratory findings were compared, only median PAI was found to be statistically significantly higher in the group with CIN (p=0.006). In the multivariate logistic regression analysis, PAI and opaque amount were found to be independently associated with CIN development. In the ROC curve analysis, PAI and the amount of opaque matter were found to be independent predictors of CIN development.

Conclusions In previous studies, the relationship between CIN and many biomarkers and risk scores has been shown. In our study, we determined the relationship between high PAI and CIN. Single center and small number of patients are the most important limitations of the study. As a result, PAI is an easily calculable, practical laboratory marker in STEMI patients undergoing PCI and can provide information about the CIN risk that may develop after PCI.

OC040

Therapeutic Apheresis Use in Kidney Transplantation Practice with the Experience of a Center

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Background Therapeutic apheresis is an extracorporeal treatment method used to remove substances such as autoantibodies, cryoglobulins, myeloma light chains, or abnormal cells that play a role in the pathophysiology of various diseases. This treatment option, which is used in many indications specified by the guidelines, is also used for different kidney transplantation practice indications. This study aimed to evaluate the indications and treatment results of therapeutic apheresis in kidney transplantation in our hospital.

Material and Methods A total of 60 patient files who underwent renal transplantation in Bursa Yüksek İhtisas Hospital Transplantation Unit between July 2017 and December 2020 were evaluated. It was found that a total of 13 patients were applied therapeutic apheresis at different stages of transplantation for various reasons.

Results Of all kidney transplants, 3 (5%) were made from living donors and 57 (95%) from deceased donors. Therapeutic apheresis was performed in 13 (21.6%) deceased kidney transplant patients. Therapeutic apheresis for desensitization was not used before transplantation because it was not performed in our ABO-incompatible transplant center. Due to historical DSA positivity in 3 patients and a history of hyperacute rejection in 1 patient, a total of 4 (30.7%) patients underwent therapeutic apheresis for desensitization immediately after transplantation. A total of 8 (61.5%) patients underwent therapeutic apheresis with the diagnosis of acute creatinine increase, newly developed proteinuria, DSA positivity, and acute antibody-related rejection detected by renal biopsy at different periods after transplantation. In the follow-up of our other 2 patients, transplanted kidney biopsy performed due to an unexplained increase in creatinine showed characteristics compatible with focal segmental glomerulosclerosis (FSGS) therapeutic apheresis was applied. Post-transplantation acute rejection episode was not observed in patients who underwent plasmapheresis for desensitization, and it was observed that grafts were functional during follow-up. In patients with antibody-related acute rejection episodes, graft loss developed in 2 (15.3%) patients despite therapeutic apheresis and other rejection treatments. It was observed in other patients that the graft functions improved, and the grafts were functional in their follow-up. In 1 (7.6%) of 2 patients who underwent plasmapheresis due to FSGS, renal functions gradually deteriorated, and graft was lost despite therapeutic apheresis. In the other patient with renal biopsy compatible with FSGS, although renal functions and proteinuria regressed after the procedure, it was observed that proteinuria and serum creatinine increase developed again at a moderate level approximately 1 year after the process.

Conclusions Therapeutic apheresis applied in treating various complications that develop after kidney transplantation is a treatment method that provides successful results and positively affects graft survival.

OC041

Blood Urea Nitrogen is Associated with The Complexity and Severity of Coronary Artery Disease in Patients with Acute Coronary Syndrome

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Background Renal dysfunction is a common comorbidity among patients with acute coronary syndrome (ACS). Serum creatinine-based analyses are used to measure renal functions, frequently. Blood urea nitrogen (BUN) is a composite index of renal function and was found to be an indicator of neurohormonal activity. Owing to neurohumoral activation is associated with coronary artery disease (CAD), we aimed to investigate BUN's effect on CAD extensivity.

Material and Methods A total of 288 patients diagnosed with

ACS and who were performed coronary angiogram were included in this study. The Syntax score, an index of CAD extensivity and severity, was calculated by a tool of a website calculator. Baseline characteristics, syntax score, and laboratory findings of patients were compared with BUN levels.

Results BUN level was correlated with age ($r: 0.411, p<0.001$), syntax score ($r: 0.286, p<0.001$), and rate of male gender ($r: 0.149, p=0.012$). In multivariable regression analyze, male gender [OR: 0.116, 95% CI: 0.142-6.963, $p=0.041$], syntax score [OR: 0.165, 95% CI: 0.093-0.432, $p=0.003$], and estimated glomerular filtration rate (eGFR) [OR: 0.637, 95% CI: 0.476-0.335, $p<0.001$] predicted BUN level, independently.

Conclusions Complexity and severity of CAD was found to be related with serum BUN level in patients with ACS.

OC042

Metastatic Papillary Thyroid Carcinoma That Develops Years After Radiotherapy

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Background The thyroid gland is highly sensitive to the carcinogenic effects of exposure to ionizing radiation. In this case, I wanted to present an adult patient who received external radiotherapy to the oropharynx region due to non-Hodgkin lymphoma and developed metastatic papillary thyroid carcinoma after six years.

Material and Methods 36-year-old male patient, no family history of cancer.

Results Six years ago, he was diagnosed with diffuse large B-cell lymphoma as a result of a mass developing in the oropharynx region. He received 6 cures of chemotherapy and 36 Gy/18 fr radiotherapy was applied to the oropharynx for 18 days. After the end of the treatment, the patient was fully cured. Upon detection of thyroid nodule plus cervical LAP (lymphadenopathy) in the neck USG performed for control after six years, he was referred to the endocrinology department. USG revealed a solid hypoechoic nodule of 18x15 mm in the right thyroid lobe, and a coarse LAP with no hilus of 13x11 mm in the right level 5A. Fine needle aspiration biopsy was performed from the thyroid nodule. The biopsy result was reported as suspicious of malignancy. Thyroglobulin wash-out from the cervical LAP, and it was found as 48.62 ng/mL. Considering the presence of thyroid gland in the patient, a definitive diagnosis could not be made with the result of washing fluid. PET-CT was performed to detect possible metastases in the patient, who previously had a diagnosis of lymphoma. In PET-CT, right thyroid nodule was reported as SUV-max 2.2, right cervical LAP as SUV-max 8.7. Pathological involvement was not observed in other body parts. Although the thyroglobulin level was slightly elevated in cervical LAP washing, LAP excision was planned considering the pre-existing lymphoma diagnosis. The result of LAP excision was compatible with papillary thyroid ca metastasis. Total thyroidectomy plus central and right neck dissection was performed by the Otolaryngology clinic. The pathology result was compatible with papillary

thyroid carcinoma. Metastasis was found in 7 of 23 lymph nodes removed from the right neck dissection material, and metastasis in 2 of 5 lymph nodes removed from the central neck dissection. Radioactive iodine treatment was planned and followed up for the patient. The absence of a history of thyroid cancer in the family history, the absence of nodules in the thyroid gland during the lymphoma treatment and follow-up imaging (ultrasound, tomography, and PET-CT), and the radiotherapy to the oropharynx primarily suggested us that there was a metastatic papillary thyroid ca developing secondary to radiotherapy.

Conclusions Thyroid cancer may develop years after the radiotherapy applied to the neck. It should not be forgotten to examine the thyroid gland before considering lymphoma recurrence in the presence of cervical LAP detected in patients with lymphoma.

OC043

A Possible Contributor to Erythropoiesis-Stimulating Agent Requirement in Hemodialysis: Paraoxonase-1 Activity

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Background Anemia is one of the most prevalent complications of chronic kidney disease (CKD). In CKD related anemia, circulating erythrocytes have a decreased life span. Paraoxonase-1 (PON1) activity is one of the essential factors protecting cell membranes, e.g., erythrocytes, from lipid peroxidation under normal conditions. In this study, we investigated PON1 activity in hemodialysis (HD) patients with and without erythropoiesis-stimulating agents (ESA) therapy and the possible relationship of PON1 activity levels with the ESA dose required.

Material and Methods This study is composed of patients undergoing HD with a minimum dialysis vintage of six months. We excluded cases with an active infection, cardiovascular events and malignancy, hypo- or hyperthyroidism, central venous catheters, iron deficiency, cystic kidney diseases, nephrectomy, and routine C-reactive protein (CRP) levels higher than reference range within the last six months.

Results Baseline characteristics, laboratory parameters, oxidative stress, and systemic inflammatory indices were similar between groups. The mean PON1 activity of the ESA(+) group was significantly lower than the ESA(-) group (191.4±118.8 and 488.1±174.9, respectively, p<0.001). Cumulative ESA doses and PON1 activity were significantly and negatively correlated (r: -0.736, p<0.001).

Conclusions The results of this study suggest that lower PON1 activity in HD patients is associated with the requirement for ESA therapy, presumably due to decreased life span of erythrocytes. Further studies examining the relationship between PON1 activity and ESA treatment requirements are necessary to reveal new treatment goals for CKD-related anemia.

OC044

Venetoclax and Azacitidine in Relapsed/Refractory Acute Myeloid Leukemia and High-Risk Myelodysplastic Syndrome: Bursa Uludag University Experience

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Background This study aims to evaluate the efficacy and safety data of venetoclax+azacitidine combination, which is a new treatment modality in Relapsed/Refractory (R/R) Acute Myeloid Leukemia (AML) and high-risk Myelodysplastic Syndrome (MDS).

Material and Methods R/R AML and high-risk MDS patients aged ≥18 years were included in the study. The off-label use of drugs for each patient was received permission from the Turkish Medicines and Medical Devices Agency. Venetoclax was given orally on day 1: 100 mg, day 2: 200 mg, next days: 400 mg/day. Azacitidine 1-7. days (every 28 days) 75 mg/m² administered subcutaneously (alternatively, 50 mg/m² as 5-2-5). All patients received prophylaxis for tumor lysis syndrome (TLS) for at least three days. In patients receiving antifungal therapy that inhibits CYP3A enzyme activity, the dose of venetoclax was reduced by 75%.

Results A total of 15 patients, 14 AML and 1 MDS RAEB-1, followed in the Bursa Uludag University Hematology Department was included in the study. 60% (n=9) of these patients were female, and the median age was 65 years (32-84). 50% (n=7) of AML patients were de-novo leukemia. Fourteen patients were between ECOG 0 and 2. Fourteen were in the medium, and one was in the high cytogenetic risk group. Venetoclax+azacitidine combination was applied as the first line in only one patient. The treatment indication was salvage therapy in 13 patients and consolidation in 2 patients. Median 2 cycles (1-4) of venetoclax+azacitidine chemotherapy was applied to the patients. The median follow-up time was 1.2 months (0.1-6.5). The median time to first response with treatment was one month (0.5-5). The refractory disease was persistent in all four patients who were found to have a refractory disease at the end of the first cycle. The best responses obtained with venetoclax+azacitidine were complete remission (CR) in one patient, complete remission with incomplete hematologic recovery (CRi) in one patient, morphological leukemia-free state (MLFS) in 4 patients, and partial response (PR) in one patient. The remission duration in 2 patients with composite remission (CR + CRi) was 3.5 and 17 months. Minimal residual disease was negative in only one patient. Venetoclax+azacitidine was used as a bridge therapy to allogeneic transplant in one patient. With Venetoclax+azacitidine, erythrocyte and platelet replacement requirement decreased in only 13.3% (n=2) of the patients. Grade 3 and above hematological toxicity was observed in 14 patients. The most common non-hematologic toxicities were fatigue-anorexia (80%), pneumonia (25%), and associated with the gastrointestinal tract (40% nausea and vomiting, 13% diarrhea). 66.6% of the patients were complicated with infection. Two patients had COVID-19 infection and recovered with treatment. TLS was developed in 2 patients. One of these patients had TLS at the time of diagnosis. Venetoclax

dose reduction or an interruption was required in 60% (n=9) patients. The mortality rate in the first 30 days was 20%.

Conclusions This combination therapy is relatively well-tolerated, can improve blood counts, relieve symptoms, improve quality of life, and prolong survival. Still, more studies are needed to assess long-term disease control.

OC045

Fundic Gland Polyps in Atypical View

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Background Stomach polyps are pedunculated or sessile lesions that arise from the gastric epithelium or submucosa and project into the lumen. Most of them are detected incidentally during an endoscopy performed for another reason. Polyps in the stomach are histopathologically heterogeneous and include hyperplastic polyps, fundic gland polyps, gastric adenomas, gastric neuroendocrine tumors (carcinoids), and inflammatory fibroid polyps. Fundic gland polyps are more common in Western countries, with lower *Helicobacter pylori* (HP) infection rates and higher rates of PPI treatment. Fundic gland polyps (FGP) are usually detected incidentally as millimetric polypoid formations in the stomach's fundus. In our clinic, we aimed to present an atypical case. We saw many polyps of different shapes and sizes in the stomach than the patients in the literature and reported as FGP due to polypectomy.

Material and Methods 69-year-old male patient was admitted to our clinic with weight loss.

Results No abnormality was detected in the laboratory tests performed. In the upper gastrointestinal endoscopy, dozens of polyps were observed in the fundus and corpus. Although the polyps' sizes were different, the largest ones were about 10 mm in diameter. Randomly 4 of the polyps were removed by polypectomy snare and sent to pathology. All 4 polyps taken were reported as pathologically FGP.

Conclusions Hyperplastic polyps are the most common subtype of gastric polypoid lesions. They are usually associated with chronic gastritis or HP gastritis. Stomach polyps are most frequently located in the antrum, followed by the cardia. The incidence of fundic gland polyps has increased considerably over the years, possibly due to proton pump inhibitors' widespread use. Studies are reporting that it is the most common type of polyps in the stomach. It is accepted that FGP regresses after the cessation of proton pump inhibitors. As the frequency of HP increases, the frequency of hyperplastic polyps increases. Due to the similar appearance in patients with suspected FGP, familial polyposis syndrome should be questioned in addition to PPI use.

OC046

3-year Follow-up Results of Abant İzzet Baysal University Training and Research Hospital Patients with Pulmonary Hypertension

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Background Pulmonary hypertension (PH) is defined as the mean pulmonary artery pressure (mPAB) measured by right heart catheterization (RHC) 25 mmHg or higher at rest. Different hemodynamic PH definitions were made according to the combinations of pulmonary artery pressure measured by right heart catheterization, pulmonary artery end pressure (PCWP), cardiac output (CO), diastolic pressure gradient, and pulmonary vascular resistance (PVR). The differential diagnosis of pulmonary hypertension is at least as important as its treatment, as it is a condition that can cause many diseases.

Material and Methods In symptomatic patients with suspected PH, those with the possibility of PH echocardiographically were evaluated in our clinic with a multidisciplinary approach. Left heart diseases and lung diseases were excluded as a result of the evaluations of Chest Diseases, Internal medicine, and Rheumatology departments. Right heart catheterization was performed in our clinic between January 2018 and January 2021 to confirm the diagnosis of group 1 PH in 30 patients whose chronic thromboembolic PH (CTEPH) diagnosis was excluded by negative ventilation-perfusion scintigraphy and/or pulmonary CT angiography.

Results Considering the PH etiology of the patients; Eisenmenger syndrome due to congenital diseases in 2 patients; Group 4 PH in 7 patients; Group 2 PH in 3 patients; idiopathic PH diagnosis in 5 patients, and 5 patients were diagnosed with PH secondary to connective tissue diseases, and thus, pulmonary arterial hypertension (PAH)-specific treatment was initiated in a total of 22 patients. In our clinic, vasoreactivity test is performed with adenosine. There was no vasoreactivity response in any of the patients who underwent the vasoreactivity test. PAH was followed-up before specific treatment was initiated because of isolated postcapillary PH or the average PAP <25 mmHg in 8 patients according to RHC findings. When the treatments received by the patients were examined, 5 patients were referred to as single PH specific therapy; 14 patients dual combination therapy; 3 patients received triple combination therapy. Since there was no vasodilator response in patients who underwent vasoreactivity test during right heart catheterization, no patient was followed up with high-dose calcium channel blocker. During their follow-up, 9 of our patients were followed up in the NHYA 1, 10 in the NHYA 2, 1 in the NHYA 3, and 2 in the NHYA 4 clinic, and one of these patients started subcutaneous prostanoid treatment in an external center; 1 patient in group 2 with precapillary and postcapillary PH died in our hospital.

Conclusions A diagnosis of PH requires clinical suspicion

based on symptoms and physical examination. A series of examinations are required to determine the compliance of this suspicion with hemodynamic criteria, the etiology of the disease, and the functional and hemodynamic severity. These examinations should at least be interpreted by a multidisciplinary team of Cardiology, Rheumatology, Radiology, and Chest Diseases specialists. In our daily practice, it is necessary to raise awareness for this patient group, whose diagnosis is delayed, and the specialist referral centers should be determined and the referral chain should be operated.

OC047

Retrospective Analysis of Urinary Tract Infections in Kidney Transplant Recipients

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Background In our study, we evaluated patients' characteristics and risk factors with urinary tract infection after kidney transplantation. Also, we investigated the effects of episodes on graft and patient survival.

Material and Methods We retrospectively examined 550 patients who underwent kidney transplantation between January 2006 and May 2019 at Bursa Uludag University Medical Faculty Hospital Kidney Transplantation Center.

Results The incidence of urinary tract infection in our series was 36.4%. Female gender, the advanced age of transplantation and advanced donor age, long median dialysis time before transplantation, prolonged foley catheter and hospitalization time after transplantation, cytomegalovirus infection, histories of vesicoureteral reflux and neurogenic bladder were found to be risk factors for urinary tract infection. In survival analysis, living donor transplantation, female gender, use of tacrolimus-mycophenolate mofetil-corticosteroid combination as maintenance immunosuppressive therapy, preemptive transplants compared to patients who received peritoneal dialysis had longer life span; advanced age of transplantation, obesity, delayed graft function, acute rejection, diabetes mellitus and a history of cytomegalovirus infection was also associated with a shorter life span. Recurrent disease was detected in 37% of the urinary tract infection group. Escherichia coli was the most frequently isolated agent in both groups.

Conclusions Urinary tract infections are a common serious complication after transplantation. Therefore, risk factors should be carefully evaluated and treated effectively. Multi-center studies will be useful in managing this complication and determining treatment algorithms.

OC048

Predictors of Long-term Mortality in Diabetic Patients with Implantable Cardiac Defibrillators due to Heart Failure with Reduced Ejection Fraction

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Background Implantable cardiac defibrillators (ICD's) are recommended for both primary and secondary prevention in patients with heart failure and reduced ejection fraction (HFrEF). Diabetic patients with HFrEF are expected to have increased mortality due to arrhythmic events and pump failure. Identifying those who are at high risk despite ICD implantation is of clinical value.

Material and Methods Patients that were implanted ICD's secondary to HFrEF between 2009 and 2019 at our institution were screened by using hospital's electronic database. For the present analysis, we only included subgroup of patients who had diabetes. The diagnosis of diabetes was confirmed by national disease codes. The primary outcome of the study was all-cause mortality. Multivariate Cox regression analysis was performed for identifying predictors for long term all-cause mortality.

Results Between 2009 and 2019 overall 1199 patients were implanted ICD secondary to HFrEF. Of those 326 (27.2%) had diabetes. The mean age was 61.3±14.2 years and mean follow up duration 45±34.3 months. During this period 60 (18.4%) patients died and 96 (29.5%) had appropriate device therapy. In univariate analysis presence of New York Heart Association Class >2 symptoms, prior coronary artery bypass grafting operation, lower total blood lymphocyte count, serum albumin concentration and reduced left ventricular ejection fraction and higher blood urea nitrogen level, pro-BNP level and left ventricular end systolic and end diastolic diameters were associated with increased all-cause mortality. In multivariate analysis, only increased blood urea nitrogen, reduced left ventricular ejection fraction and prior coronary artery bypass grafting operation predicted all-cause mortality (Table 1).

Conclusions In the present study, among diabetic patients with ICD that were implanted due to HFrEF, increased blood urea nitrogen, lower left ventricular ejection fraction and prior coronary artery bypass grafting operation predicted all-cause mortality during long term follow up.

Table 1: Univariate and multivariate Cox regression analyses for long term all-cause mortality after ICD implantation

Univariate analysis	P value	HR (95% CI)	Multivariate analysis	P value	HR (95% CI)
NYHA>2	0.001	2.419 (1.408 - 4.155)	NYHA>2	0.243	0.520 (0.173 - 1.560)
Lymphocytes	0.031	0.701 (0.507 - 0.969)	Lymphocytes	0.851	0.937 (0.474 - 1.851)
Blood urea nitrogen	0.001	1.022 (1.008 - 1.035)	Blood urea nitrogen	0.043	1.037 (1.001 - 1.074)
Pro-BNP	0.030	1.001 (1.000 - 1.001)	Pro-BNP	0.855	1.000 (1.000 - 1.001)
Albumin	<0.001	0.251 (0.165 - 0.382)	Albumin	0.445	0.747 (0.353 - 1.580)
Ejection fraction	<0.001	0.913 (0.883 - 0.944)	Ejection fraction	0.046	0.932 (0.870 - 0.999)
LVESD	0.003	1.042 (1.014 - 1.071)	LVESD	0.472	0.951 (0.828 - 1.091)
LVESD	0.009	1.032 (1.008 - 1.056)	LVESD	0.227	1.086 (0.950 - 1.241)
CABG	0.001	2.365 (1.418 - 3.944)	CABG	0.036	3.485 (1.088 - 11.165)

OC049

Transition Time from Oral Antidiabetic Therapy to Insulin Treatment in Type 2 Diabetic Patients and Evaluation of the Factors Affecting This Period

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Background Insulin therapy is needed in diabetic patients at some time in their lives. Our study investigated the transition period of type 2 diabetic patients to insulin treatment and the factors that affect this process.

Material and Methods In the study, a total of 140 types 2 diabetic patients who were followed up by Internal Diseases and Diabetes outpatient clinics and using insulin were evaluated. The age, gender, educational status of the patients, age of onset of diabetes, smoking, time to start insulin treatment, body mass index (BMI), and accompanying diseases were noted. The Kendall's Tau-b correlation coefficient was applied, and regression analysis was performed to determine the relationship between the transition time to insulin treatment with other factors and the degree of influence.

Results 52 (37.1%) of 140 patients were male, and 88 (62.9%) were female. In terms of education level, 19 (13.5%) are illiterate, 28 (20%) are literate, 67 (48%) are primary school graduates, 26 (18.5%) are high school-university graduates. The number-ratio of smokers and non-smokers were 30 (21.4%) and 110 (78.6%), respectively, the number-ratio of those with and without hypertension was 35 (25%) and 105 (75%), respectively, the age of onset of diabetes was 46.58 ± 10.54 years and BMI was 29.14 ± 4.60 kg/m². The transition time from oral antidiabetic treatment to insulin treatment was determined as 9.93 ± 6.67 years. The variables of education level, age of onset of diabetes, presence of hypertension, and BMI were found to have a significant effect on the transition time to insulin treatment ($p < 0.05$); The effect of gender and smoking variables was not significant ($p > 0.05$). The higher the education level, the higher the age of onset of diabetes. The higher the BMI, the shorter the transition time to insulin therapy; Accompaniment of hypertension increases the time. When the coefficients of the factors that were found to be significant were examined, the affecting power was found as 4.606, 4.415, 1.647, and 0.23 for BMI, hypertension, education level, and diabetes onset age, respectively.

Conclusions Patients' transition time from oral antidiabetic therapy to insulin therapy was 9.93 ± 6.67 years. In this process, BMI, education level, age of onset of diabetes, and hypertension were determined as influential factors.

OC050

Bone Mineral Density in Premenopausal Patients with Prolactinoma Treated with Dopamine Agonists

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Background Patients with prolactinoma are predisposed to develop osteopenia, osteoporosis and fragility fractures as effect of hypogonadism induced by PRL excess, as well as effect of direct actions of PRL on bone cells and cal-

cium metabolism. In this cross-sectional study we aimed to evaluate bone mineral density (BMD) of premenopausal patients with prolactinoma just before menopause, to compare them with healthy controls and to determine which factors related to patient or disease effect BMD in this study.

Material and Methods Premenopausal patients with prolactinoma aged between 40-55 years and treated with dopamine agonist therapy for at least 6 months without dopamine agonist therapy resistance were enrolled from out-patient endocrine clinics of Bursa Uludağ University. Age-matched premenopausal healthy women without menstrual abnormalities and with PRL concentration in the normal range (prolactin values < 30 ng/mL) were enrolled as a control group. Data related to disease from admission to study entry were collected from patient files. Hormonal profiles including [PRL, follicle-stimulating hormone (FSH), luteinizing hormone (LH), estradiol (E2), thyroid stimulating hormone (TSH), free T4 (FT4), cortisol, insulin-like growth factor 1 (IGF-1), DHEA-S (dehydroepiandrosterone sulphate), parathyroid hormone (PTH), 25OHvit D], calcium and phosphorus were studied for all subjects at the time of the study. BMD was also measured at the lumbar spine vertebrae and proximal femur by DEXA (dual-energy X-ray absorptiometry).

Results Twenty-one prolactinoma patients with a mean age of 44.4 ± 3.4 years and 22 healthy controls with a mean age 43.1 ± 2.5 were included in the study. Mean follow-up time from admission to study entry was 118.1 ± 88 (7-288) months. The mean duration of menstrual irregularity of patients after puberty was 73.8 ± 77.3 months. Patients with prolactinoma were significantly heavier than controls and the measurement of hip circumference was higher in patients with prolactinoma than controls (27.0 ± 2.4 vs. 24.7 ± 2.8 kg/m², $p = 0.009$; 106.6 ± 7.9 vs. 100.4 ± 5 cm, $p = 0.003$, respectively). There were no significant differences in serum FSH, LH, E2, TSH, FT4, cortisol, IGF-1, DHEA-SO₄, PTH, 25OHvit D, calcium levels between controls and patients at the time of the study. We observed significantly lower phosphorus levels in patients than controls (3.2 ± 0.4 vs. 3.4 ± 0.3 mg/dL, $p = 0.032$). No significant differences were found in BMD values and Z-scores between prolactinoma patients and controls. Patients admitting with amenorrhea/oligomenorrhea were compared to patients without admitting with amenorrhea/oligomenorrhea, we found no significant differences in BMD values. No significant correlations were found between BMD values and the menstrual numbers that the patients didn't have after puberty.

Conclusions Current guidelines recommend the use of dopamine agonists to lower prolactin levels, decrease tumor size, and restore gonadal function for patients harboring symptomatic prolactin-secreting microadenomas or macroadenomas; low BMD and osteoporosis are not currently considered as indications for treatment. Although most of the prolactinoma patients had oligo-amenorrhea for a long time, they had similar BMD values compared to controls suggesting that treatment with a dopamine agonist may confer a protective effect on bone.

OC051

Atypical Hemolytic Uremic Syndrome Secondary to COVID-19 Infection: A Case Report

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Background COVID-19 infection is a disease caused by the new generation beta coronavirus (SARS-CoV2) from the coronavirus family, which has caused pandemics worldwide for the last 1 year. It causes respiratory tract infection. Also, thromboembolic complications may develop due to microangiopathy. It is known that the causative virus enters the cell via angiotensin receptors. Therefore, it is thought that these receptors can affect all systems where they are present. Here, we aimed to present a patient diagnosed with the atypical hemolytic uremic syndrome (aHUS) who developed anemia and thrombocytopenia while receiving home treatment due to COVID-19 infection.

Material and Methods A 23-year-old male patient with no known disease was admitted to the hospital with fever and cough.

Results The diagnosis of COVID-19 was made by PCR test, and favipiravir treatments were started with paracetamol. The patient admitted to the emergency department for 3 consecutive days with fever, nausea, vomiting, and diarrhea. Symptomatic treatment was given in the first two admissions, and he was discharged home. The patient was referred to our hospital after hypotension, urea, creatinine, high CRP, and thrombocytopenia were detected on his third admission. The laboratory tests revealed anemia, thrombocytopenia, high urea, creatinine, CRP, LDH, ferritin, D-dimer, and fibrinogen levels in the emergency department. Oxygen inhalation (3 L/min), iv hydration, antibiotic, low molecular weight heparin, proton pump inhibitor, vitamin C, acetylcysteine, favipiravir, and iv steroid treatments were initiated. In the peripheral smear, erythrocyte fragments consistent with hemolysis were seen. Plasmapheresis was started with the diagnosis of aHUS. ADAMTS13 came low. Eculizumab (monoclonal c5 antibody) was applied once a week in the patient who underwent plasmapheresis for 3 consecutive days, and plasmapheresis was terminated. Temporary hemodialysis (HD, short session for 3 days) was performed due to renal dysfunction, oliguria, and hypervolemia findings during follow-up. During follow-up, urine output was normalized, hemogram, renal functions, and inflammatory tests improved, and there was no need for oxygen.

Conclusions HUS is a disease with acute kidney injury, thrombocytopenia, and hemolysis associated with microangiopathy that develops after infections. aHUS clinical findings are similar to typical HUS. COVID-19 is known to cause microangiopathy, and aHUS cases related to COVID-19 have been reported in the literature. It is necessary to apply eculizumab in addition to COVID-19 treatment. COVID-19 infection can cause aHUS in patients with ADAMTS13 deficiency. The diagnosis must be made quickly, and treatment started early.

OC052

Osteosarcoma of Rib Treated with Regorafenib: A Case Report

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Background Osteosarcoma is the most common primary malignant bone tumor in young adults. It is more common in men. It often originates from the metaphysis of long bones. Primary osteosarcoma of the costa is extremely rare. Back and chest pain is the most important clinical presentation. Modalities such as surgery, chemotherapy, and radiotherapy form the basis of osteosarcoma treatment. Here, a case of osteosarcoma originating from the rib and spreading to the cervical and thoracic vertebrae was presented.

Material and Methods 23-year-old female patient was admitted to our center with back pain for a year.

Results On thoracic computed tomography (CT), a mixed density mass with bone structure originating in the cortex was detected, involving the entire posterior and lateral arch of the left 1st rib and most of the anterior angle. The mass was at the T1 vertebral level and was compressing the left lung apex. The first rib, which was expanded with the patient's mass, was totally removed by dissection. Resection material was reported as 8x8 cm osteoblastic type osteosarcoma. Surgical margins were positive. On PET CT, a hypermetabolic mass (Suv-max 12-16) with dimensions of 27x28 mm was detected in the left transverse process of the C7 vertebra and the left half of the T1 vertebra corpus. Thereupon, doxorubicin and cisplatin were started in the patient. The patient, who had a partial response on PET CT after the third cycle, was evaluated as resectable. All of the C7, T1, and T2 vertebrae and the left second rib posterior arch were removed with enbloc resection. The mass was interpreted as osteosarcoma, measuring 6x4.5 cm. Surgical margins were positive, and necrosis was 10%. Radiotherapy (45 Gy in 25 fractions) was given to the patient's cervicodorsal region, whose chemotherapy response was grade 1, and the surgical margin was positive. Since the chemotherapy response was bad, the regimen was changed, and docetaxel and gemcitabine were started. The patient was followed up after adjuvant chemotherapy. The biopsy of the nodular lesion detected in the left axilla on CT in the 4th month of the follow-up was compatible with recurrence. Increased activities were observed in nodular lesions in the left axilla and left 1st costochondral junction on PET CT. Regorafenib was started after local radiotherapy, and follow-up continues in the 9th month.

Conclusions Although malignant bone tumors located in the chest wall are most commonly originating from the ribs, the ribs' primary osteosarcoma is extremely rare. Its prognosis is worse than osteosarcoma of long bones. Enblock resection of the mass and negative surgical margin are the main factors determining the prognosis. Survival is tried to be increased with neoadjuvant and adjuvant chemotherapy. Radiotherapy can be considered in patients with positive surgical margins after

resection and those with large masses. Studies are showing the effectiveness of cytotoxic therapy and regorafenib in recurrent cases. As in our case, in patients who present with back and chest pain, the diagnosis of costal osteosarcoma is delayed because other reasons are considered first. Thus, the tumor reaches large dimensions when diagnosed. In our case, postoperative surgical margins were positive. Despite cytotoxic chemotherapy and radiotherapy, regorafenib was initiated because it progressed, and the disease was controlled with a partial response. In costa-originated osteosarcoma, survival can be prolonged with a multidisciplinary approach using surgery, systemic chemotherapy, targeted agents, and radiotherapy.

OC053

Factors Affecting the Course of COVID-19 Disease in Patients with a Diagnosis of Hypertension

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Background COVID-19 is a disease that causes respiratory tract infection caused by the new type of beta coronavirus, as well as microangiopathy and thromboembolic complications. The active virus SARS-CoV2 is known to enter the cell via angiotensin-converting enzyme (ACE) receptors. Studies have shown that the diagnosis of hypertension (HT) is associated with disease severity. The effect of drugs used in treatment on the disease continues to be discussed. This study aimed to examine the factors associated with disease severity in patients with COVID-19 diagnosed with HT.

Material and Methods Patients hospitalized in the Internal Diseases service with a diagnosis of COVID-19 with HT were retrospectively screened, and records were obtained from the system. The control group consisted of patients hospitalized with a diagnosis of COVID-19 without any additional comorbidity. Patients over the age of 18 with a definite diagnosis of COVID-19 and HT were included in the study. The patients' demographic data, the drugs used for HT treatment, laboratory values, peak and trough values of poor prognostic factors (CRP, ferritin, fibrinogen, D-dimer, troponin, lactate, lymphocyte), and hospitalization days were recorded. The relationship between these factors, clinical follow-up, and laboratory values was compared statistically.

Results There were 63 patients diagnosed with HT in the patient group and 63 patients in the control group. The mean age was 57.52 ± 11.562 years in the HT group and 51.29 ± 10.01 years in the control group. There were 22 men and 41 women in the HT group and 37 men and 2 women in the control group. Duration of hospitalization was statistically significantly higher in the group with HT ($p < 0.001$). All patients in the control group were discharged. In the group with HT, 4 patients died, 59 patients were discharged. Among the poor prognostic factors in the HT group, CRP, D-dimer, fibrinogen, lactate, and troponin were statistically significantly higher ($p < 0.05$). Lymphocyte count was significantly lower in the HT group ($p < 0.05$). In the HT group, urea, creatinine, and uric acid levels were significantly higher and sodium levels were significantly lower. When the correlation between

laboratory values and poor prognostic factors is examined, a negative correlation was found between RBC with CRP, LDH, fibrinogen, and D-dimer, between hemoglobin with CRP, fibrinogen and D-dimer, and between Ca with CRP, ferritin, troponin, D-dimer, and fibrinogen. A positive correlation was found between uric acid and troponin. In the HT group, a positive correlation was observed between ARB and diuretic use and uric acid, and there was a negative relationship between beta-blocker use with CRP and ferritin.

Conclusions HT diagnosis is directly related to the severity of COVID-19 infection. Renal function tests, inflammation, microangiopathy, and thromboembolism markers were higher in the HT group than the control group. A significant relationship was observed between ARBs and diuretics with uric acid elevation, and between uric acid and troponin. Especially the use of diuretics may increase cardiac involvement. Probably presence of atherosclerosis and nephropathy in patients with HT are effective factors in the development of systemic complications of the disease. It will be useful to conduct researches in this direction.

OC054

Levels of Urine 6-Sulfatoxymelatonin in Diabetics and with Diabetic Peripheral Neuropathy

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Background Oxidative stress plays an important role in the pathogenesis of diabetic peripheral neuropathy. Melatonin, the main hormone of the pineal gland, is a very powerful antioxidant molecule. Therefore, the role of melatonin levels in the pathogenesis of diabetes and its complications has been studied in many researches. We investigated how urinary 6-sulfatoxymelatonin levels, the main metabolite of melatonin, differed in type 2 diabetes patients with and without peripheral neuropathy compared to the healthy control group.

Material and Methods A total of 127 participants were included in the study in 3 groups: diabetic neuropathy (n=43), diabetes but no neuropathy (n=44) and control group (n=40). Neuropathy diagnosis was made using the Michigan Neuropathy Screening Instrument (questionnaire+physical examination). Melatonin levels were evaluated by measuring 6-sulfatoxymelatonin levels in 24-hour urine. 6-sulfatoxymelatonin measurement was studied by ELISA method using Biotek ELx800, USA device.

Results 44.1% of the participants were men and 55.9% were women. The mean age was 53.1 ± 9.0 years. We found a significant difference in urinary 6-sulfatoxymelatonin levels according to the 3 groups ($p = 0.023$). The distribution of 6-sulfatoxymelatonin values among all diabetic participants was significantly lower than the control group. ($p = 0.006$). However, when diabetic participants were separated into with peripheral neuropathy and without neuropathy, no significant difference was found in the 6-sulfatoxymelatonin levels ($p = 0.792$). 6-sulfatoxymelatonin levels were negatively weak correlated with fasting plasma glucose ($r: -0.211, p = 0.017$) and positively weak correlated with microalbuminuria ($r: 0.209, p = 0.023$). As a result of the multiple linear regressi-

on analysis, a significant relationship was found between age (B: 0.826, %95 confidence interval: 0.227-1.426), insulin use (B: 14.584, %95 confidence interval: 3.857-25.311), glomerular filtration rate (B: 0.248, %95 confidence interval: 0.018-0.478) variables and 6-sulfatoxymelatonin values. In diabetic patients, 6-sulfatoxymelatonin levels were significantly higher in insulin users than those who didn't use ($p=0.018$).

Conclusions In our study, we measured the levels of 6-sulfatoxymelatonin, the main urinary metabolite of melatonin. Our study is one of the first human studies examining the relationship between peripheral neuropathy in diabetes and plasma melatonin levels. As a result of our study, we found that the diabetic process and hyperglycemia in humans decreased melatonin levels, but the presence of neuropathy in diabetic patients did not affect melatonin levels. The decrease in urinary 6-sulfatoxymelatonin levels as plasma glucose increases may indicate that melatonin level decreases with hyperglycemia and that patients with diabetic processes may be deprived of the antioxidant and anti-inflammatory effects of melatonin. An important secondary result in our study is that insulin use improves melatonin levels in diabetic patients. We found that while urinary 6-sulfatoxymelatonin levels were lower in diabetic patients, the presence of neuropathy did not affect 6-sulfatoxymelatonin levels. 6-sulfatoxymelatonin levels in diabetic patients using insulin were similar to the control group and significantly higher than those who did not use it. We argue that more comprehensive human studies should be conducted on the use of melatonin as a drug in diabetic individuals and we think that melatonin applications may be among the routine treatment protocols of diabetes in the near future.

OC055

Difficulties Experienced by Geriatric Patients in Compliance with Respiratory Support Devices and Accessibility to Health Services

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Background In the treatment of chronic respiratory failure, long-term oxygen therapy at home (LTOT) and noninvasive mechanical ventilation at home (NIMV) are important components of respiratory support therapies (SDT). Age has not been reported as a criterion in indications for SDT use at home. Available data indicate an increase, especially in the elderly population. The efficacy and safety of LTOT and NIMV at home have been demonstrated in elderly patients. However, in the same patient group, difficulty in compliance and treatment failure was also reported. This study aimed to evaluate the adaptation of elderly patients treated in our intensive care unit to SDT at home and their access to health services due to pandemic conditions in the last 1 year.

Material and Methods Out of a total of 669 patients who were treated between 30.09.2019 and 30.09.2020, 109 patients aged 80 and over were identified. 29 who gave their consent and at least 3 months have passed since their discharge was followed. After questioning their compliance and

care status with SDT, caregivers were asked 6 closed questions and 6 open-ended questions according to their answers. No prompts for open-ended responses. After discharge, they were asked how many hours they used NIMV and/or LTOT devices. If not, the reasons were asked. After discharge, they were asked about the situations and reasons for giving up applying to health services, giving up on scheduled check-ups, having difficulty in getting a doctor's appointment, and giving up applying for the appointment they had made. Results The median age was 85 (80-96) years. 65.5% (n=19) of the cases were female and 58.6% (n=17) were illiterate. 86.2% (n=25) of the patients were treated with type 2 respiratory failure, 82.8% (n=24) with COPD primary diagnoses. Comorbidities of 4 or more were observed in 86.2% of all patients. It was observed that 15 patients (51.7%) using LTOT and 9 patients (81.8%) using NIMV did not use their devices as long as recommended. It was observed that 22 (75.8%) of the patients could not meet their basic needs themselves, and 21 were first degree relatives of their caregivers. 17 of the 22 cases (77.2%) were not receiving the Ministry of Health's home care service. Despite the need's emergence, it was observed that 24 patients (82.7%) stopped going to the doctor, and 20 patients (68.9%) stopped applying for scheduled doctor visits. All caregivers stated that they fear the COVID-19 pandemic and the transmission of COVID-19 disease to their patients in emergency rooms and outpatient clinics.

Conclusions NIMV is an effective treatment for the elderly. It has been reported that NIMV compliance is good in the elderly, and the usage rates are similar to other age groups. However, in our study, we found that compliance with NIMV treatment at home was mostly poor. Studies have shown that LTOT treatment has a survival benefit in COPD and chronic hypoxemia. Although chest diseases specialists comply with the correct criteria while reporting LTOT, it has been reported that patients do not use the devices at home as much as recommended and exaggerate the duration of use when asked. When asked about the reasons for the incompatibility, it was reported that there was difficulty in managing the equipment, the absence of shortness of breath, limited range of motion, fear that treatment would not work "when it was really needed," and feelings of shame. Our study observed that patients' compliance with LTOT devices was poor, and 51.7% of the patients used their devices less than recommended. There was no effect of receiving home care services on NIMV and LTOT compliance. It was determined that the cases avoided all kinds of admissions to the hospital due to the COVID-19 pandemic. It has been observed that the disruption of doctor visits and hospital admissions of elderly patients impaired their compliance with the use of SDT devices and caused a loss of motivation to use the device. Home care services structured to maintain education and motivation are required for respiratory failure patients to use their devices as recommended, not just under the restricted conditions of the COVID-19 pandemic. We think that this will increase the quality of life of the patients and decrease the disease burden.

OC056

Retrospective Evaluation of Patients with Chordoma Who Received Sorafenib Treatment: A Single Center Experience

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Background Chordoma is a rare malignant tumor of bone arising from the notochord residue. These slowly growing tumors show local invasion. They can be seen in the skull base (35%), cervical, thoracic and lumbar vertebra (15%), and sacral region (50%). The primary treatment of chordomas is surgical complete resection. Postoperative radiotherapy (RT) is often preferred due to anatomical difficulties for the surgical procedure. Systemic treatments are used in case of relapse after maximal surgery and/or RT. Here, we evaluated patients treated with sorafenib, one of the targeted systemic therapies.

Material and Methods In this study, 4 patients who were followed up with a diagnosis of chordoma and treated with sorafenib between January 2018 and December 2020 in our clinic were evaluated retrospectively.

Results All cases were male. The median age of the patients was 60 years (47-69). Three of the chordomas were located in the sacrococcygeal and one in the clivus. The median maximum diameter of the tumor was 8.5 cm (5-12). The median follow-up time from diagnosis was 73 months (46-82). When evaluated histopathologically, 2 cases had conventional chondroid, 1 case had chondroid, and 1 case had dedifferentiated chordoma. Surgical resection was performed in all patients first, and then RT was applied. Recurrence was observed in all cases. Four cases were reoperated after recurrence. 2x400 mg sorafenib treatment was initiated in cases with recurrence. In one of our patients, diarrhea developed after sorafenib, and sorafenib treatment was discontinued in the 5th month because diarrhea continued despite dose modification. When progression was detected, the patient was operated on later. In the other case, which was followed up in the 6th month of his treatment, sorafenib dose modification was performed due to nausea and vomiting, and his follow-up continues by us. In our other two cases, drug treatment was discontinued due to progression observed in the 3rd and 5th months of sorafenib treatment, and these cases were re-operated. Two of our patients who developed progression died during the follow-up.

Conclusions Chordomas are tumors of bone that rarely metastasize to distant organs. As seen in our cases, local relapse is quite common. Data on systemic treatment is limited in these patients whose primary treatment is surgery and usually receive RT after surgery due to anatomical difficulties. Additional studies with more cases are needed on systemic therapy.

OC057

CMV Infection after Kidney Transplantation: Does Each Episode of CMV Infection Have a Similar Effect on Kidney Survival?

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Background There is an increase in the frequency of viral infections after kidney transplantation. Cytomegalovirus (CMV) infection is associated with morbidity, mortality and allograft loss. Although the frequency of infection is reduced with prophylactic treatments in the first months after transplantation, CMV reactivation is seen between 4-29% after prophylaxis is discontinued, depending on the donor and recipient serology. Therefore, it may be important to identify the factors that increase the risk of CMV infection after prophylaxis and to follow-up risky patients with CMV polymerase chain reaction (PCR). The aim of this study was to determine the risk factors for CMV infection after prophylaxis is discontinued.

Material and Methods This study was conducted in Gazi University nephrology dialysis and transplantation unit between 1996 and 2019 with 312 patients who followed up regularly. All patients received triple maintenance immunosuppressive therapy (glucocorticoid, calcineurin inhibitor (CNI) and anti metabolite). The mammalian target of rapamycin inhibitor (mTORi) was given as an alternative agent to patients who could not tolerate the standard triple therapy. Risk factors for the development of CMV infection were examined by regression analysis, and the relationship between CMV infection and allograft survival was evaluated by Kaplan-Meier survival analysis.

Results The mean age of the patients was 43.8±13.1 years. The median follow-up period was 86 (IQR: 60-145) months. 105 (34%) patients received anti-thymoglobulin (ATG) as induction therapy. While the 278 (89%) of total patients received CNI, 268 of them (86%) received anti-metabolite therapy. 58 (19%) of the patients used mTORi. While 222 (71%) of the patients had hypertension, 19 (6%) had diabetes mellitus, 53 (18%) patients without diabetes mellitus developed posttransplantation new-onset diabetes mellitus (NODAT). In the follow-up, 33 (11%) patients were positive for CMV PCR, while 20 (61%) of these patients had viremia, tissue invasive CMV disease observed in 13 (39%) patients. Regression analysis showed that there was no relationship between gender, age, cadaveric transplantation, delayed graft function, ATG induction, NODAT, MMF and mTORi and the frequency of CMV infection. However, rejection episodes increased the risk of CMV infection (OR: 2.821, 95% CI: 1.299-6.125, p=0.009). On the other hand, advanced age (OR: 1.049, 95% CI: 1.008-1.093, p=0.02) and NODAT (OR: 3.467, 95% CI: 1.056-11.385, p=0.04) were risk factors for tissue invasive CMV development. In Kaplan-Meier survival analysis, CMV infection episode was found to negatively affect allograft survival (p<0.001). While the main negative effect on allograft survival was due to tissue invasive CMV infection (p<0.001), CMV viremia has limited effect (p=0.06) (Figure 1).

Conclusions CMV infection is a serious viral infection that reduces allograft survival in the post-transplant period. Tis-

sue invasive CMV infection has a more pronounced effect allograft survival. Therefore, elderly patients and patients with NODAT should be closely followed up for tissue-invasive CMV disease after prophylactic antiviral therapy is discontinued. Perhaps in these patients, intermittent CMV PCR monitoring may be appropriate. In addition, if the patients had a rejection episode, it should be kept in mind that the development of CMV activation becomes easier.

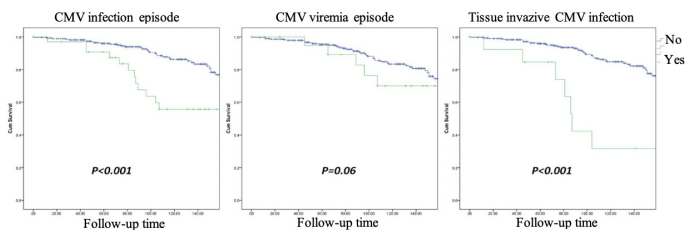


Figure 1. The relationship between allograft survival and CMV

OC058

The Two Huge Pulmonary Hydatid Cyst in The One Lobe of Lung: A Case Report

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Background The hydatid cysts disease is a parasitic cystic infection of the liver, lungs, and other organs, which is caused by Echinococcus granulosus. The big cysts that are seen in the lungs are called a huge pulmonary cyst. And it is a special clinic situation. In our case, we discussed the two huge pulmonary hydatid cysts in the upper left lobe of the lung, which was treated with thoracotomy.

Material and Methods The patient was a 38 years old man. He was mentally retarded. He had a hacking cough for 3 months.

Results He had gone to the hospital for this complaint, and he was diagnosed with left lung pulmonary hydatid cysts on posterior-anterior (PA) lung graphy. He had no comorbid disease or medications. In his thoracic computed tomography (CT) imaging, the cyst was involved the left lobe of the lung, which was nearly 10x7 cm, and on the inferior of this cyst, there was an 8x8 cm one more cyst too. On exploration, two lesions compatible with hydatid cysts in the upper lobe of the left lung and the lower lobe were found to be total atelectasis. The inferior cyst was entered with a needle connected to the suction apparatus, and 500 ml of rock water aspiration was performed. The pericystic layer was cut with electrocautery. After cystotomy, the germinative membrane was removed. Then, the same procedure was applied to the superior lesion. 600 mL of rock water was aspirated. Bronchial fistulas in both cystic cavities were closed with 3/0 prolene, and capitonage was applied with 3/0 vicryl. When the left lung was ventilated, it was observed that the upper lobe and atelectasis lower lobe were ventilated. A thoracic drain was placed, and the patient was closed, the control PA lung graphy was expanded. He was discharged on the 4th day. Pathology examinations confirmed the diagnosis of hydatid cyst. Albendazole treatment was started to prevent relapse. No recurrence was detected in the 6-month follow-up.

Conclusions Lung imagings are usually sufficient for the diagnosis of pulmonary hydatid cysts. Pathological confirmation

is required for the definitive diagnosis. In this disease, it is rare for the cyst to reach 6 cm in diameter. In the treatment of pulmonary hydatid cyst, parenchyma sparing operations are preferred more frequently. Resection of the lung should be avoided because the compressed lung parenchyma is generally healthy and expands in the postoperative period. Parenchymal protection is important when considering that hydatid cyst can grow excessively due to lung elasticity, and lung tissue re-expands after cystotomy and capitonage. Treatment with anthelmintics can cause cyst rupture. We recommend this treatment only in patients who cannot tolerate surgery and to prevent a recurrence. We suggest that the size of the cyst is not an indication for resection. The most of complications that may occur after a parenchymal sparing operation can be treated, whereas lung resection is irreversible.

OC059

Association Between Restless Leg Syndrome and Syntax Score in Patients with Coronary Artery Disease

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Background Restless leg syndrome (RLS) is a common but unthinkable disorder with an irresistible urge to move the legs. Previous studies investigated the association between coronary artery disease (CAD) and RLS. In this study, we aimed to examine the association of RLS with the severity of coronary artery disease.

Material and Methods A total of 226 patients were enrolled into the study. Standard coronary angiography was performed to all patients. Patients who have a lumen diameter of >1.5 mm and at least 50% in diameter stenosis were determined as the CAD group. Patients who have normal coronary angiography were assessed as the control group. SYNTAX score was calculated for all patients in the CAD group, and patients were divided into two groups according to SS score as low SYNTAX score group (SS score <23) and high SYNTAX score group (SS score >23). A diagnostic questionnaire developed by the International Restless Leg Syndrome Study Group was performed to patients for the diagnosis and scoring of RLS.

Results RLS and RLS score was higher in the CAD group than the control group (p=0.022 and p=0.001, respectively). High SYNTAX score group had high frequencies of RLS (p=0.046) and higher RLS score (p<0.001) than the control group. In multivariate logistic regression analysis, RLS score was an independent predictor of high syntax score (OR: 1.306, 95% CI: 1.046-1.631, p=0.018) (Table 1). High SYNTAX score was severe correlated with RLS score (correlation coefficient: 0.549 and p=0.002).

Conclusions Our study concluded that CAD patients have more frequent RLS and a higher RLS score than normal artery patients. Furthermore, a high SYNTAX score is correlated with higher RLS rates and higher RLS scores.

Table 1. Univariate and multivariate logistic regression analysis for detecting high syntax

Variables	Univariate OR(95% CI)	Univariate P value	Multivariate OR(95% CI)	Multivariate p value
RLS Score	0.046(0.026-0.065)	<0.001	1.306(1.046-1.631)	0.018
MPV	0.112(0.017-0.207)	0.021	0.560(0.169-1.854)	0.342
IVS	0.156(0.087-0.224)	<0.001	4.583(0.931-22.555)	0.061

OC060

Prognostic Biomarkers in Lung Cancer Patients in terms of Long-term Survival

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Background Lung cancer is the leading cause of cancer-related death worldwide. Non-small cell lung cancer (NSCLC) is the most common lung cancer. Drugs used in NSCLC therapy, such as paclitaxel, cause stabilization of microtubules in cancer cells, resulting in mitotic arrest followed by apoptotic cell death in a subset of cancer cells. M30 released during apoptosis and M65 released during necrosis are circulating fragments of cytokeratin 18 and are known to be important markers to evaluate chemotherapy response, especially in epithelial cancers. In this study, we aimed to investigate the predictive effect of serum M30 and M65 antigens on long-term prognosis and response to treatment in patients with advanced stage lung cancer before and after the first dose of chemotherapy.

Material and Methods Forty eight patients with advanced stage lung cancer were included in the study. Demographic data and histopathological characteristics of the patients were recorded. Serum levels of M30 and M65 were studied in 48 patients before chemotherapy, and in 43 patients both before and 48 hours after chemotherapy. Long-term survival was evaluated using Kaplan-Meier curves. The effect of high or low M30, M65 levels and M30/M65 ratio on long-term survival was investigated.

Results The mean age of the patients at the time of diagnosis was 57.52 ± 9.38 years. Forty six of the 48 patients were men. 47.9% of the patients were stage IIIA, 39.6% stage IIIB and 12.5% stage IV. The most dominant histopathological type was squamous cell carcinoma, accounting for 87.5% of the patients. The remaining 8.3% patients had adenocarcinoma and 4.2% patients had large cell carcinoma. While M30 value before chemotherapy was 163.23 ± 112.30 ; it was measured as 249.74 ± 266.67 48 hours after chemotherapy ($p < 0.001$). While M65 value before chemotherapy was 415.97 ± 214.63 , it was 656.65 ± 394.15 hours after chemotherapy ($p < 0.001$). Median survival time was calculated as 17 (2-142) months. It was found that the long-term survival of the group with a low M30/M65 ratio before chemotherapy was statistically significantly longer. It was observed that the M30/M65 ratio, or M30 or M65 alone, measured 48 hours after chemotherapy had no predictive value for long-term survival.

Conclusions The M30/M65 ratio before chemotherapy may be a prognostic factor for long-term survival in patients with advanced lung cancer.

OC061

Clinical and Laboratory Features of Patients with Spontaneous Bacterial Peritonitis

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Background Spontaneous bacterial peritonitis (SBP) is a common complication of decompensated liver cirrhosis with high mortality rates. The diagnosis of classical SBP is made with polymorphonuclear leukocyte (PMNL) $> 250/\text{mm}^3$ and positive ascites liquid culture in an acid fluid. Different from the classical SBP, SBP has three more types: culture-negative neutrocytic ascites (CNNA), monomicrobial bactericide (MNB), and polymicrobial bactericide (PMB). In this study, it was aimed to determine the factors affecting mortality in cirrhosis patients with SBP.

Material and Methods 69 cirrhotic patients were hospitalized in the Gastroenterology Clinic of Bursa Uludag University Medical Faculty Hospital between January 2013 and March 2016, and 74 SBP episodes developed in these patients were evaluated. Demographic information of these patients, admissions symptoms, additional diseases, laboratory parameters, treatment protocols, causes of cirrhosis, MELD, Na-MELD, Child-Turcotte-Pugh scores, hepatic encephalopathy, hepatorenal syndrome, esophageal varicose bleeding, hepatocellular carcinoma. Rates and their relationship to mortality were analyzed.

Results 58.1% of the patients were male. It was observed that 46 patients were alive. 17 of the dead were men, and 11 were women. The mean age of the patients in the study was 63 years (25-82). The survivors' average age was 61 years (44-82), and the average age of the deceased was 66 years (25-82). There was no significant difference between living and deceased gender and age distribution ($p = 0.131$ and $p = 0.723$). In our study, the total mortality rate in SBP was 37.8%. 5 of 18 classical SBP episodes and 23 of 29 CNNA episodes died. No one died from the MNB episode. When the relationship of SBP and its subgroups with mortality was compared, no statistically significant difference was observed. Hospital admission symptoms of all cases with SBP episodes were evaluated. The most common symptoms at presentation were abdominal swelling, abdominal pain, and change in consciousness, respectively. The most common causes of cirrhosis were found to be HBV, cryptogenic, and alcohol. hemoglobin, hematocrite, serum leukocyte, serum PMNL, INR, urea, creatinine, LDH, total bilirubin, direct bilirubin, ascites leukocyte, ascites PMNL, ascites LDH, and CRP were determined with mortality in all cases with SBP episodes. were observed to be correlated ($p < 0.001$, $p = 0.001$, $p < 0.001$, $p < 0.001$, $p < 0.001$, $p = 0.002$, $p = 0.031$, $p < 0.001$, $p = 0.023$, $p = 0.014$, $p < 0.001$, $p < 0.001$, $p = 0.024$, and $p = 0.047$). It was observed that mean values of CTP ($p < 0.001$), MELD ($p = 0.001$), and Na-MELD ($p = 0.001$) scores calculated at the time of diagnosis in cases with SBP episode were associated with mortality. When the complications of cirrhosis were considered separately, a statistically significant difference was found between esophageal varicose bleed-

ding ($p < 0.001$) and hepatorenal syndrome ($p = 0.001$) and mortality.

Conclusions All patients included in our study were being followed up with a diagnosis of SBP. In our study, the clinical and laboratory features of patients treated with a diagnosis of SBP were retrospectively reviewed, and the relationship between the results and mortality was investigated. The mortality rate was observed as 37.8%, and it was found higher than the literature. It was thought that the reason for this might be that in 67.9% of those who lost their lives, SBP was accompanied by other cirrhosis complications. In our study, similar to the literature, ascites fluid culture positivity, additional infections accompanying SBP, and other complications were associated with mortality. Since SBP causes high mortality rates, studies involving a higher number of patients are needed. It may be possible to prolong the survival of patients by determining the factors affecting mortality.

OC062

Can Non-functional Adrenal Incidentaloma be Ranked among Cardiovascular Risk Factors?

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Background We aimed to evaluate the potential association of a nonfunctional adrenal incidentaloma (NFAI) with cardiovascular risk factors.

Material and Methods Forty-three patients over the age of 40 found to have NFAI and twenty-eight healthy controls were included in this prospective study. The control group was selected from individuals who were similar in age and gender and did not contain metabolic syndrome components. Glucose, insulin, c-peptide, lipid profile, homocysteine, erythrocyte sedimentation rate (ESR), high sensitivity c-reactive protein (hsCRP), fibrinogen and 25-hydroxy cholecalciferol (25OHD3) were measured in both groups. Blood pressure, waist circumference, body mass index (BMI), and carotid artery intima-media thickness (CIMT) were measured in the patient and control groups. SPSS (IBM Corp. Released 2012. IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY: IBM Corp.) program was used for statistical analysis and a p-value of < 0.05 was considered statistically significant.

Results When the patient and the control group were compared a statistically significant difference was found between the patient and the control group in terms of waist circumference, ESR, triglyceride and CIMT measurements. Waist circumference, ESR, triglyceride and CIMT values were higher in the patient group ($p = 0.002$, $p = 0.001$, $p = 0.001$, and $p = 0.024$, respectively). BMI, glucose, insulin, HOMA, hsCRP, fibrinogen, homocysteine and LDL levels were higher but statistically not significant in the patients than the control group. It was observed that 10 of the patients (23.2%) had no suppression with 1 mg dexamethasone but suppression was

provided with 2 mg dexamethasone suppression test for 2 days, and all of these patients with autonomous cortisol secretion (ACS) had at least one comorbidity. Of the 33 patients suppressed with 1 mg of dexamethasone, 72.3% had comorbidity. While there was no significant difference between the groups in terms of the presence of comorbidity, a significant difference was found in terms of DM when comorbidities were examined one by one (90% of the patients with ACS had DM, 24.2% of those who were suppressed with 1 mg dexamethasone had DM; $p < 0.001$; Chi-square test).

Conclusions Higher waist circumference, ESR, triglyceride and CIMT values in our patients with NFAI and increased DM frequency in patients with ACS suggest that NFAI may be one of the cardiovascular risk factors.

OC063

A Case of Small Cell Neuroendocrine Carcinoma of Primary Renal Origin

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Background Most neuroendocrine carcinomas are seen in the gastrointestinal and respiratory systems. Small cell neuroendocrine carcinoma (SCNC), a subtype of neuroendocrine carcinomas, mostly originates in the tracheobronchial tree. Primary renal SCNC is very rare and accounts for less than 1% of kidney tumors. Data on optimal treatment options and survival are limited. We aimed to present a case of primary renal SCNC.

Material and Methods 66-year-old male patient applied to our center due to involuntary weight loss and weakness for 6 months.

Results On computed tomography (CT), multiple lymphadenopathies in the mediastinum and axillary region, subpleural and parenchymal multiple nodules located in the left lung lingula-basal posterior fissure (Figure 1A). In the middle-lower pole of the left kidney, a cortically located 87x73mm centrally necrotic solid lesion with irregular borders and contrast enhancement was observed, extending to the renal pelvis (Figure 1B). No metastasis was detected in cranial CT imaging. In pulmonary wedge resection, the subcarinal lymph node and 2 nodules from the right lung's upper and lower lobes were removed. The pathology result of lung lesions was reported as high-grade neuroendocrine carcinoma. In the left kidney biopsy, Ki-67 was 70%, and synaptophysin, CK7, PAX-8, NSE, CD56, and TTF-1 were positive. Pathology was evaluated as primary renal SCNC. Carboplatin and etoposide were started as systemic chemotherapy. Partial response was obtained after 3 cycles of chemotherapy. After 6 cycles, control PET CT revealed new lesions in the left lung and liver and progressed the primary mass. Irinotecan was started in the second step. 3900 cGy palliative radiotherapy was applied to the L5 vertebra, right femoral head, left acetabulum due to pain. After 4 cycles of irinotecan treatment, no lesion was detected in the abdominal CT except soft tissue appearances of approximately 6 mm thickness in the perirenal area. The patient had a complete response in all lesions except primary, and a left nephrectomy was performed after the 6th cycle. The pathologi-

cal evaluation was compatible with 1x0.4 cm renal SCNC. No lesion was detected in PET CT of the patient who continued irinotecan treatment after the 9th cure. After 17 months of irinotecan monotherapy, the patient's treatment was discontinued at an external center upon the request of the patient. Two months later, multiple nodular lesions were observed in cerebellar and cerebral hemispheres on cranial CT.

Conclusions Primary renal SCNC has been reported with limited case examples in the literature. Renal SCNC chemotherapy response is limited. Despite chemotherapy, relapse is prevalent, and the average survival time is less than one year. Our case is the first case in the literature in which a response to renal SCNC was achieved for a period of 17 months in second-line treatment with irinotecan. Performing primary surgery helped in reducing the tumor burden in our case. In metastatic patients with irinotecan complete response, discontinuation of irinotecan can lead to rapid disease relapse.

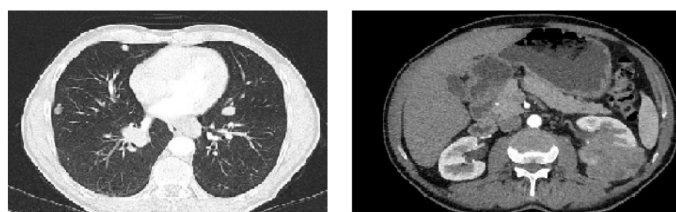


Figure 1. A: lung parenchymal nodules, B: left kidney mass

OC064

Comparison of Changes in Donor Specific Antibodies and Biochemical Parameters After Transplantation

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Background This study aimed to evaluate the relationship between the changes in donor-specific antibody (DSA) values measured in the pre-and post-transplant follow-up of patients in our transplant outpatient clinic and their clinical and biochemical parameters.

Material and Methods Demographic and clinical characteristics, pre-transplant DSA values, post-transplant DSA values, and biochemical parameter values were recorded by retrospectively examining the files of 45 renal transplant patients who were followed up in the Transplant Clinic. Preoperative (pre-transplant values), postoperative (post-transplant values in the period when creatinine value stabilizes), and follow-up (biochemical values in the post-transplant period where DSA is checked) values were recorded. Patients were grouped as decreasing, constant, and increasing according to pre- and post-transplant DSA values.

Results Forty-five renal transplant patients, 17 females (37.8%) and 28 males (62.2%), were included in our study. Before transplantation, 21 patients were DSA negative while 24 patients were positive. 23 of the patients evaluated at 27±18 months after transplantation were DSA negative, and 22 were positive. There was no significant relationship between

the groups (p=0.098). The changes in biochemical parameters were found by comparing the patients' biochemical parameters during the postop and follow-up periods. Changes in biochemical parameters were analyzed statistically for three groups as DSA decreasing, constant, and increasing. The change in GFR, creatinine, sodium, platelet, and proteinuria was statistically significant (p<0.05).

Conclusions GFR and proteinuria are currently used as a good indicator of impaired kidney function. The decreased GFR value also warns the clinician in terms of rejection during follow-up in transplant polyclinics. Despite all the studies, it is still unclear whether immunological monitoring can be performed with HLA antibody development in kidney transplant patients. Although HLA antibodies' development is a risk for rejection, graft function remains normal despite antibody development in some patients. For this reason, more detailed studies are required for the titer, type, positivity time of antibodies, and their relationship with the treatments applied.

OC065

The Relationship Between Prognostic Nutritional Index and Peripheral Artery Disease

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Background Peripheral artery disease (PAD) occurs in an advanced stage of atherosclerosis, and its comorbidities are associated with a poor prognosis. Malnutrition is associated with disease severity in persons with atherosclerotic disease and is strongly associated with increased morbidity and mortality. The prognostic nutritional index (PNI) is calculated from serum albumin concentration and peripheral lymphocyte count and represents hospitalized patients' nutritional status. This study aimed to determine the relationship between PNI and PAH in patients who underwent peripheral arterial angiography due to intermittent claudication.

Materials and Methods A total of 206 patients who underwent peripheral angiography between January 2017 and January 2020 were retrospectively included in the study. Peripheral angiography was performed in patients with intermittent claudication and in whom monophasic flow, biphasic flow, or flow was not completely monitored on lower extremity color doppler ultrasound. The patients were divided into two groups as patients with and without PAD. PNI was calculated using the formula = 10 × serum albumin (g/dL) + 0.005 × peripheral lymphocyte count (/mm³).

Results 206 patients (85.9% male) were included in the study. PAH was detected in 164 (79.6%) of the patients. Chronic kidney disease, coronary artery disease, diabetes mellitus, hyperlipidemia, and smoking were significantly higher in the patient group with PAD, while eGFR, HDL, and albumin were lower (Table 1). Ankle-brachial pressure

index (ABI) and walking distance were higher in the group with PAD, but PNI values were significantly lower in the group with PAD. Parameters determined to be significant in univariate analysis were evaluated in multivariate analysis, and independent predictors were tried to be determined. PNI, diabetes, hyperlipidemia, and smoking were independent variables in predicting the presence of PAD (Table 2). The ROC curve analysis determined that PNI <47.95 value predicted PAD with 69% sensitivity and 62% specificity (AUC: 0.686, 95% CI: 0.594-0.779) (Figure 1).

Conclusions A strong correlation was found between PNI and PAD. It may be a rational approach to consider the presence of PAD more strongly in patients with low PNI and describing claudication.

Table 1. The baseline characteristics, anatomic and laboratory results of all patients, and patients with and without PAD

	All patients (n: 206)	Patients without PAD (n: 42)	Patients with PAD (n: 164)	p value
Male gender, n(%)	177 (85.99)	31 73.80%	146 89.00%	0.075
Age, years	69.1 ±12.12	66.5 ±12.52	69.77 ±11.96	0.164
Coronary Artery Disease, n(%)	150 72.81%	23 54.76%	127 77.43%	0.003
Chronic Kidney Disease, n(%)	26 12.60%	1 2.40%	25 15.20%	0.001
Atrial Fibrillation, n(%)	19 9.20%	3 7.10%	16 9.80%	0.602
Heart Failure, n(%)	47 22.80%	8 19.00%	39 23.80%	0.514
Hypertension, n(%)	139 67.47%	25 59.52%	114 69.51%	0.218
Diabetes Mellitus, n(%)	63 30.58%	4 9.52%	59 35.97%	0.001
Hyperlipidemia, n(%)	69 33.50%	8 19.04%	61 37.20%	0.026
Smoking, n(%)	103 50.00%	14 33.30%	89 54.30%	0.015
Glucose, mg/dL	131.16 ±65.13	130.86 ±78.92	131.24 ±61.38	0.352
eGFR	83.55 ±25.87	88.70 ±17.11	82.23 ±27.56	0.001
Creatinine, mg/dL	1.28 ±3.51	.86 ±0.24	1.38 ±3.92	0.003
Triglyceride, mg/dL	134.14 ±68.87	124.57 ±72.19	136.59 ±68.01	0.109
HDL, mg/dL	39.35 ±11.46	43.43 ±13.83	38.31 ±10.57	0.025
LDL, mg/dL	106.11 ±34.63	101.02 ±34.92	107.41 ±34.54	0.170
Total Cholesterol, mg/dL	173.22 ±42.53	170.00 ±40.63	174.04 ±43.08	0.605
C-Reactive Protein, mg/dL	1.938 ±3.272	.955 ±2.11	2.189 ±3.469	0.001
White Blood Cell, 10 ³ /μL	8.17 ±3.03	7.85 ±2.74	8.25 ±3.11	0.495
Hemoglobin, g/dL	14.29 ±2.28	14.68 ±2.09	14.20 ±2.32	0.344
Platelet, 10 ³ /L	236.51 ±83.28	232.15 ±71.23	237.63 ±86.26	0.820
Albumin, g/dL	3.82 ±0.48	4.12 ±0.44	3.74 ±0.47	0.001
RDW	15.57 ±2.59	15.62 ±2.53	15.56 ±2.62	0.633
Lymphocyte, 10 ³ /μL	2 ±1.75	2.10 ±1.49	1.97 ±1.82	0.252
ABI, mean	0.68 ±0.14	.90 ±0.06	.63 ±0.1	0.001
Walking Distance, meter	199 ±98	346 ±70	161 ±61	0.001
PNI median	47.6 (43.9-51.9)	51.51 (47.0-54.8)	47 (43.18-50.13)	0.001
Rutherford Stages				
Stage 0	0 0.00%	0 0.00%	0 0.00%	
Stage 1	45 21.80%	40 95.20%	5 3.00%	
Stage 2	28 13.60%	2 4.80%	26 15.90%	
Stage 3	70 34.00%	0 0.00%	70 42.70%	
Stage 4	45 21.80%	0 0.00%	45 27.40%	
Stage 5	7 3.40%	0 0.00%	7 4.30%	
Stage 6	11 5.30%	0 0.00%	11 6.70%	
TASC-II classification				
TASC A + TASC B	32 15.50%	0 0.00%	32 19.50%	
TASC C	65 31.60%	0 0.00%	65 39.60%	
TASC D	67 32.50%	0 0.00%	67 40.90%	

Abbreviations: ABI, ankle brachial index, eGFR, estimated glomerular filtration rate, HDL, high density lipoprotein, LDL, low density lipoprotein, PAD, peripheral artery disease, PNI, prognostic nutritional index, RDW, red blood cell distribution width, TASC-II, Trans-Atlantic Inter-Society Consensus

Table 2. Univariable and multivariable logistic regression analysis for the prediction of severe PAD

	Univariable analysis		Multivariable analysis	
	p value	OR (95% CI)	p value	OR (95% CI)
PNI	0.032	0.959(0.923-0.996)	0.015	0.954(0.919-0.991)
Diabetes mellitus	0.002	5.3385(1.816-15.695)	0.02	3.887(1.236-12.226)
Hyperlipidemia	0.030	2.517(1.095-5.788)	0.042	2.648(1.036-6.764)
Smoking	0.017	2.373(1.165-4.834)	<0.001	5.973(2.337-15.266)
Coronary artery disease	0.004	2.835(1.395-5.764)	-	-
Albumin	<0.001	0.116(0.044-0.306)	-	-
C-reactive protein	0.048	1.241(1.002-1.536)	-	-
HDL	0.012	0.963(0.935-0.992)	-	-

All clinically relevant parameters were included in the model. Abbreviations: PAD, Peripheral artery disease, PNI, Prognostic nutritional index, HDL, high density lipoprotein.

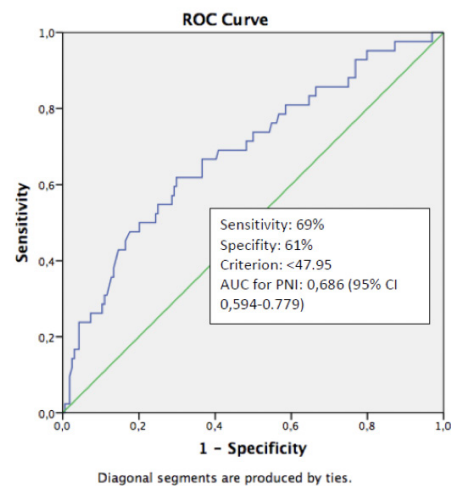


Figure 1. ROC curve analysis of PNI in prediction of PAD

OC066

Cardiac Amyloidosis in a Patient Presenting with Symptoms of Heart Failure

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Background Amyloidosis is a disease caused by the accumulation of amyloid proteins, which have incorrectly folded beta chains in tissues. There are 4 types of amyloidosis: primary, secondary, familial, and senile amyloidosis. Cardiac amyloidosis occurs when amyloids accumulate in myocytes. Cardiac amyloidosis can be seen in both primary and secondary types. However, it is more common in primary amyloidosis. Although diffuse myocardial involvement mostly causes restrictive cardiomyopathy, it may rarely cause constrictive pericardial picture by causing pericardial involvement in some cases. Much more rarely causes cardiac tamponade.

Material and Methods 61-year-old male patient with persistent shortness of breath and headache was referred to our cardiology outpatient clinic by neurology.

Results It was determined in the detailed medical history of the patient that there was hypotension. On examination of the patient, his general condition was moderate, heart rate 125 bpm, and arterial blood pressure 100/65 mmHg. On cardiac auscultation, a second-degree systolic murmur in the mitral focus and a pansystolic murmur in the tricuspid focus, and rales in the lower zones on lung examination were detected. The patient had bilateral +1 pretibial edema. Voltage loss and atrial fibrillation (AF) were detected in the electrocardiography (ECG) taken before the examination. In the biochemical tests performed on the patient at that moment, creatinine 1.2 mg/dL, potassium 5.5 mmol/L, and NT-proBNP 1250 pg/mL were found. No abnormal values were found in other biochemical parameters. Echocardiography revealed left ventricular hypertrophy, left atrial dilatation, and 2nd-degree mitral insufficiency. There was 1-2 tricuspid regurgitation in the right ventricular evaluation of the patient. With these findings, heart failure with preserved ejection fraction (PEF HF) was initially considered in the patient. On the other hand, cardiac amyloidosis was suspected

due to left ventricular hypertrophy in echocardiography, and low voltage in the precordial leads inconsistently with left ventricular hypertrophy. Diuretic therapy, 90 mg diltiazem 2x1, and anticoagulation were initiated. Primary amyloidosis was diagnosed as a result of rectal biopsy.

Conclusions Echocardiography shows thickening of the left ventricular wall, non-dilated left ventricular cavity, diastolic dysfunction, and enlargement of the atria. On the contrary, the most common abnormality in cardiac amyloidosis on electrocardiography is low voltage. Amyloidosis in cardiac involvement most often leads to restrictive cardiomyopathy, leading to decreased early diastolic filling and peripheral edema findings. For a definitive diagnosis, an endomyocardial biopsy may be considered only if an abdominal fat biopsy is negative. Another clinical picture that may be caused by cardiac amyloidosis is congestive heart failure. Orthostatic hypotension can be seen more rarely due to nephrotic syndrome caused by vascular involvement and renal involvement. It has also been reported that it may cause arrhythmias and sudden death by involving the Purkinje, one of the cardiac conduction pathways. Treatment in primary amyloidosis is chemotherapy and bone marrow transplantation. Many cases of amyloidosis are not suitable for cardiac transplantation due to significant non-cardiac amyloidosis. However, transplantation can be applied in selected patients after chemotherapy and bone marrow transplantation in primary amyloidosis.

OC067

Mortality in Geriatric Patients in COVID-19 Infection: A Single Center Study

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Background SARS-CoV-2 disease, which emerged in Wuhan, China, in December 2019, has become a health problem affecting the whole world. While the mortality rate was reported as 2.3% in China, it was observed that this rate increased up to 7.2% in Italy. Mortality rates due to SARS-CoV-2 infection are even higher in the geriatric population. The first case in our country was detected on 11 March 2020. In a study, the population's mortality rate over 60 years of age was reported as 18% in those who were hospitalized and 6% in those who were not hospitalized. In this study, we aimed to investigate the demographic data and mortality rates of the elderly group compared to young people to understand better and evaluate the geriatric population, a susceptible population, in COVID-19 infection.

Material and Methods This retrospective cohort study included patients diagnosed with COVID-19 who were admitted to our pandemic reference hospital between 20.03.2020 and 15.05.2020. Demographic data, PCR and imaging results, treatments received, length of stay, mortality, and intensive care status were recorded. Appropriate statistical procedures were used for data analysis.

Results The study included 1,820 patients admitted to the hospital and received inpatient treatment within the specified date range. Table 1 shows the demographic and clinical characteristics of the patients according to age groups. Of the 1,820 patients, 807 (44.3%) had COVID-19 infection confirmed by PCR. Others were patients who were clinically and/or laboratory-confirmed to have COVID-19. Approximately one-third of the patients were in the geriatric age group. PCR-confirmed infection was significantly less common among geriatric patients. The two groups did not differ in terms of gender distribution. Hydroxychloroquine and favipiravir use were more common in geriatric patients. Geriatric patients had higher mortality rates, intensive care unit (ICU) hospitalization and long-term hospitalization, and longer hospital stay compared to patients under 65 years of age. The mortality rate of geriatric patients was 14.7%, and this rate was approximately 7 times more than the young group and more than 2 times the whole population.

Conclusions Our study has shown that compared to young people, older people with COVID-19 infection stay in the hospital for longer periods, stay in ICUs more, and have a mortal course.

Table 1. Demographical and clinical characteristics of the patients by age group

Patient characteristic	All patients n=1820	Age ≥65 n=578 (31.8%)	Age <65 n=1242 (68.2%)	p
Demographics				
Age (year), mean±SD	53.6±19.1	76.1±7.4	43.2±12.9	<0.001
Female gender	914 (50.2%)	301 (52.1%)	613 (49.4%)	0.280
PCR confirmed disease	807 (44.3%)	161 (27.9%)	646 (52.0%)	<0.001
Medications				
Hydroxychloroquine	1813 (99.7%)	575 (99.7%)	1238 (99.8%)	0.655
Azithromycin	1191 (65.7%)	402 (70.0%)	789 (63.7%)	0.008
Enoxaparin	1143 (62.8%)	346 (60.0%)	797 (64.2%)	0.084
Oseltamivir	904 (50.1%)	266 (46.9%)	638 (51.5%)	0.068
Favipiravir	222 (12.3%)	103 (18.2%)	119 (9.6%)	<0.001
Plasma	12 (0.7%)	6 (1.0%)	6 (0.5%)	0.213
Tocilizumab	8 (0.4%)	2 (0.4%)	6 (0.5%)	1.000
Outcomes				
Hospitalization (days), mean±SD	6.7±5.1	7.9±6.7	6.1±3.9	<0.001
Mortality	112 (6.2%)	85 (14.7%)	27 (2.2%)	<0.001
ICU admission	95 (5.2%)	73 (12.8%)	22 (1.8%)	<0.001
Prolonged hospitalization*	772 (42.4%)	294 (50.9%)	478 (38.5%)	<0.001

Unless otherwise stated, data presented as n (%). Since data is missing in a small number of patients, valid percentages are shown. *≥5days. Abbreviations: ICU, intensive care unit; SD, standard deviation

OC068

The Relationship Between CRP/Albumin Ratio and Long-Term Clinical Outcomes in Lower Extremity Peripheral Artery Patients Treated with Endovascular Intervention

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Background Peripheral artery disease is a consequence of progressive atherosclerosis and is associated with cardiovascular morbidity and events leading to mortality and limb loss. It is also known that inflammation plays a role in the pathogenesis of atherosclerosis. It has been reported that high C-reactive protein (CRP) alone and low albumin levels

are associated with peripheral artery disease. The CRP/albumin ratio, which is a combination of these two parameters, is thought to be a more accurate inflammatory response indicator. This study aims to discuss the role of the CRP/albumin ratio in peripheral artery disease prognosis.

Material and Methods 148 patients who underwent percutaneous intervention due to lower extremity peripheral artery disease in our hospital between January 2015 and January 2020 with successful results were included in the study. The patients' information in the study was obtained from the data obtained from our hospital's electronic file system. The primary endpoint of the study was mortality and amputation. Routine 3-month polyclinic controls of the patients were performed. The outcome data of patients who were not followed up in our hospital were obtained by calling them. The mean follow-up period of the patients was 22 months. Patients were divided into two groups according to the median values of CRP/albumin ratios.

Results In our study, the mortality rate was 14.1%. The amputation rate was 12.1% in a mean follow-up of 22 months in patients who underwent successful percutaneous intervention with peripheral artery disease. The group with a higher CRP/albumin ratio had a higher rate of diabetes mellitus. At the same time, it was observed that the patients in this patient group were older, the creatinine, platelet, and CRP values were higher, and the albumin and hemoglobin values were lower. Other demographic data were similar between the two groups. The multivariate analysis showed that the CRP/albumin ratio (HR: 1.596, 95% CI: 1.371-1.859, $p < 0.001$) was an independent variable in predicting the primary outcome. The multivariate analysis included age, female gender, congestive heart failure, Rutherford class, infrapopliteal disease, ankle-brachial pressure index, diabetes mellitus, walking distance, and hemoglobin level, CRP/albumin ratio is still an independent predictor of mortality and amputation.

Conclusions Our study showed that the CRP/albumin ratio might be an independent predictor of long-term mortality and amputation in peripheral artery disease. CRP/albumin ratio, a simple calculation method, can be used in risk assessment in peripheral artery disease in clinical practice.

OC069

Effect of Malnutrition Scores on Right Atrial Functions

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Background Malnutrition regardless of body mass index is prevalent hospitalized patients and associated with poor prognosis. Malnutrition is also related with immunstatus of patients. Malnutrition is overlooked diagnosis in daily practice. We aimed to show malnutrition scores such as; prognostic nutritional index (PNI), controlling nutritional status (CONUT) score and nutritional risk index (NRI) associated with right atrial functions.

Material and Methods Study population comprised 170 diabetes mellitus patient without end organ damage admitted to cardiology outpatient clinic. The demographical, laboratory and echocardiographic parameters of patients were evaluated retrospectively. CONUT, PNI and NRI scores were calculated

and their relationship with right atrial function parameters were examined.

Results Patients were divided into two groups according to malnutrition status (CONUT score ≥ 2). median age was 49 (55-61), 73 (42.9%) of patients were male. Creatinine and HbA1c values were statistically different between groups [0.8 (0.7-0.95), 0.98 (0.7-1.3); $p=0.04$ and 8.2 (7.2-10.1), 8 (6.8-8.9); $p=0.03$, respectively]. Right atrial reservoir function which shows atrial diastolic compliance function was lower in malnutrition group [20 (17-26), 25(20-29), $p=0.01$] (Table 1). ROC analysis for predict optimal cut-off value 22 for malnutrition according to highest youden index we found sensitivity 68%, specificity 55% (Figure 1). We also used PNI and NRI scores to support the CONUT score accuracy, which we used for malnutrition diagnosis, and we determined that these scores also confirmed our grouping parameter.

Conclusions Our study showed that malnutrition, which was defined by CONUT, PNI and NRI was associated with decreased right atrial compliance in diabetes mellitus patients. The use of malnutrition scores might be considered for cardiac assessment in diabetic patients.

Table 1. Characteristics of patients

Variables	Malnutrition - (n:119)	Malnutrition + (n:51)	p value
Age	54 (47-60)	57 (53-62)	0.06
Gender (male) (n%)	43 (36.1)	30 (58.8)	0.08
Glucose	206 (150-271)	181 (145-234)	0.10
Hemoglobin	13.1 (12.3-13.8)	12.8 (11-14.3)	0.42
Neutrophile	4.6 (3.8-5.7)	3.8 (3.5-5)	0.05
Lymphocyte	2 (1.7-2.5)	1.5 (1.2-1.6)	<0.001
Creatine	0.8 (0.7-0.95)	0.98 (0.7-1.3)	0.04
Albumine	4.4 (4.3-4.7)	4.3 (3.9-4.7)	0.008
HbA1C	8.2 (7.2-10.1)	8 (6.8-8.9)	0.03
Systolic blood pressure	140 (126-152)	130 (126-140)	0.05
End diastolic diameter	4.5 (4.2-4.8)	4.8 (4.6-5.1)	<0.001
End systolic diameter	2.8 (2.5-3.1)	3.3 (2.7-3.4)	0.01
left ventricular ejection fraction	67 (61-72)	66 (60-72)	0.39
Right atrial conduit	13 (12-16)	12 (10-16)	0.17
Right atrial reservoir strain	25(20-29)	20 (17-26)	0.01
Right atrial contractile strain	10 (5-14)	8 (5-12)	0.11
Right atrial strain rate S	1.2 (1-1.7)	1.3 (1.2-1.8)	0.03
Right atrial strain rate E	-0.9 (-1.2, -0.6)	-1.1 (-1.4, -0.7)	0.06
Right atrial strain rate A	-1.5 (-2,-1.2)	-1.4 (-2.5,-1)	0.88
TAPSE	2.2 (2-2.3)	2.3(2.1-2.7)	0.03
RAVI (Right atrial volume index)	42 (31-49)	51 (43-69)	<0.001
PNI	55.5 (53-58)	51 (46-55)	<0.001
NRI	107 (106-112)	106 (99-112)	0.008

Malnutrition was defined as CONUT score is equal or more than 2 point is malnutrition +

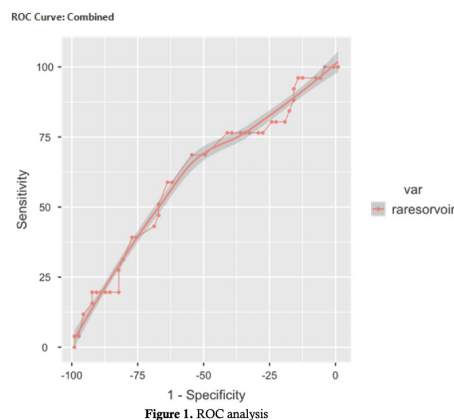


Figure 1. ROC analysis

OC070

Heart Failure Related to Large Hiatus Hernia*Ali EROL¹, Nizameddin KOCA¹, Fatma Özlem ARICAN ÖZLÜK²**1Health Sciences University, Yüksek İhtisas Training and Research Hospital, Internal Medicine Clinic, Bursa, Turkey**2Health Sciences University, Yüksek İhtisas Training and Research Hospital, Department of Cardiology, Bursa, Turkey*

Background Heart failure is a disease that may present with various presentations depending on different etiological factors. External pressure on the heart is one of the rare causes that can cause heart failure. A hiatal hernia is the herniation of organs in the abdominal cavity to the supradiaphragmatic region through the esophagus's transition point in the diaphragm. Concerning age, it is more commonly secondary to erosion due to phreno-oesophageal membrane degeneration. Here, we present a 73-year-old female patient with inoperable endometrial cancer who developed heart failure due to hiatal hernia compression.

Material and Methods The 73-year-old patient who was followed up in the palliative ward diagnosed with inoperable endometrial cancer was evaluated because his blood pressure remained low despite adequate fluid and inotropic therapy.

Results On physical examination, blood pressure 80/50 mmHg, pulse 90 beat/min, respiratory rate 15/min, temperature 36.3 °C, and respiratory sounds in lung basal were decreased. Peripheral edema was not observed, and there was a small amount of vaginal discharge with hemorrhagic content coming intermittently. In their examinations, CRP was 18 mg/L, hemoglobin 12.4 g/dL, glucose 79 mg/dL, sodium 141 mmol/L, potassium 3.5 meq/L, cortisol 34 mcg/dL, fT3 1.3 pg/mL and fT4 0.7 ng/dL. Echocardiography revealed a mass compressing the heart. The tomography observed that the patient's hiatus hernia and herniated structures put pressure on the heart. After nasogastric decompression, the patient's need for inotropic therapy decreased, and it was stopped completely. No pathology was found in the repeated echocardiography with a nasogastric catheter inserted. The patient who became stable was discharged with supportive treatment recommendations.

Conclusions Hiatal hernia, whose incidence increases with age, can be diagnosed by barium imaging or computed tomography. Treatment is surgical, but conservative approaches such as eating less, not sleeping on a full stomach, and lying with a few pillows are recommended. Although they are generally asymptomatic, larger ones may present with different clinical pictures. Anaphylaxis, adrenal insufficiency, hypothyroidism, sepsis hypovolemia, or hemorrhage were excluded in the differential diagnosis of treatment-resistant hypotension in our patient. In the cases reported in the literature, dyspnea on effort, ST-T changes in ECG, arrhythmia, and acute heart failure were not present in our case. However, he had additional complaints such as rancidity and early satiety. In this rare clinical situation, early initiation of effective treatment is important.

OC071

Distribution of COVID-19 Patients by ABO Blood Type*Melike YAZICI¹, Vildan GURSOY², Suna AVCI³, Selime ERMURAT⁴, Ali EROL¹**¹Bursa Yüksek İhtisas Training and Research Hospital, Internal Medicine, Bursa, Turkey**²Bursa Yüksek İhtisas Training and Research Hospital, Hematology, Bursa, Turkey**³Bursa Yüksek İhtisas Training and Research Hospital, Geriatrics, Bursa, Turkey**⁴Bursa Yüksek İhtisas Training and Research Hospital, Rheumatology, Bursa, Turkey*

Background The new coronavirus disease, which first appeared in Wuhan, China, in December 2019 and spread rapidly worldwide, continues to be a global health problem despite the scientific world's efforts. COVID-19 infection has a wide range of severity, and the influence of host factors in determining the course of the disease is important. Genetic factors, such as ABO blood groups, are thought to be effective in addition to the host thrombo-inflammatory response.

Material and Methods This retrospective cohort study was included patients hospitalized in our pandemic reference hospital between 15.03.2020 and 15.05.2020 and whose blood group data were available. ABO blood groups were divided into 4 groups as A, B, O, and AB. The distribution of patients according to ABO blood groups and age groups, Rh status, demographic data, presence of comorbidity, hematological and inflammatory parameters, PCR and imaging results, discharge treatments, and death rates were analyzed. Patients under 18 years of age, outpatients, and patients whose data could not be reached were excluded.

Results 969 patients were included in our study. The mean age was 53.4±19 years. Half of the patients were women, and one third were over 65 years old. Distribution of patients according to ABO blood group; 461 type A (47.6%), 279 type O (28.8%), 145 type B (15%) and 84 type AB (8.6%). Hypertension (HT) was the most common 42.5% of the patients. There was no significant difference in the distribution of co-morbid diseases according to blood groups. While 81.4% of the patients did not have lymphopenia, 18.6% of them had lymphopenia, 3.3% of them severe. There was no significant difference in hematological/inflammatory parameters at the time of admission according to the ABO blood group. Thorax computed tomography images were obtained. 96.5% of 508 patients had imaging findings consistent with COVID-19. When the presence of lung involvement was evaluated according to blood groups, no significant difference was observed. Hydroxychloricine 99.4% and oseltamivir 50.1% were used most frequently during the treatment process. Enoxaparin was administered in 60.8% of the patients during their hospitalization period (Table 1).

Conclusions Individuals' ABO blood type is considered to have no significant efficacy in the treatment process when evaluated together with all patients' clinical characteristics, as shown in our study.

Table 1. Demographic and characteristic findings according to blood groups

	A (n=461, 47.5%)	B (n=145, 15.0%)	0 (n=279, 28.8%)	AB (n=84, 8.7%)	TOTAL (n=969, 100%)
Age median (min-max)	52 (18-92)	49 (20-93)	55 (18-95)	53 (22-93)	53 (18-95)
<65 year	n=316, 68.5%	n=101, 69.7%	n=184, 65.9%	n=64, 76.2%	n=665, 68.6%
≥65 year	n=145, 31.5%	n=44, 30.3%	n=95, 34.1%	n=20, 23.8%	n=304, 31.4%
Gender					
Female	n=240, 52.1%	n=63, 43.4%	n=132, 47.3%	n=41, 48.8%	n=476, 49.1%
Male	n=221, 47.9%	n=82, 56.6%	n=147, 52.7%	n=43, 51.2%	n=493, 50.9%
Co-morbidities					
Diabetes mellitus	n=101, 21.9%	n=25, 17.2%	n=64, 22.9%	n=19, 22.6%	n=209, 21.6%
Hypertension	n=195, 42.3%	n=51, 35.2%	n=121, 43.5%	n=44, 52.4%	n=411, 42.5%
Chronic renal failure	n=26, 5.6%	n=7, 4.8%	n=16, 5.7%	n=5, 6%	n=54, 5.6%
Ischemic heart disease	n=90, 19.5%	n=18, 12.4%	n=61, 21.9%	n=8, 9.5%	n=177, 18.3%
COPD	n=36, 7.8%	n=11, 7.6%	n=33, 11.8%	n=5, 6%	n=85, 8.8%
Laboratory findings at the time of application					
White-cell count (x10 ⁹)	7 (1-47.7)	7.7 (1-32.6)	7 (0.4-121.1)	6.8 (1.1-22.6)	7.1 (0.4-121.1)
cells/ μ L	8.1±4.7	8.5±4.6	8.9±10.3	7.8±3.9	8.4±6.8
Neutrophil count (x10 ⁹)	4.2 (0.3-41.9)	4.7 (0.6-31.1)	4.3 (0.1-32.5)	4.2 (0.2-19.3)	4.3 (0.1-41.9)
cells/ μ L	5.5±4.4	6.2±4.6	5.8±4.8	5.1±3.6	5.7±4.5
Lymphocyte count (x10 ⁹)	1.7 (0.18-196)	1.6 (0.06-3.7)	1.6 (0.22-5.5)	1.8 (0.24-4.4)	1.7 (0.06-196)
cells/ μ L	2.3±9.2	1.7±0.82	1.7±0.87	1.9±0.99	2.3±4.4
Platelet count (x10 ⁹)	228 (11-1333)	238 (56-498)	215 (28-779)	217 (11.3-597)	225 (11-1333)
cells/ μ L	240±97.3	242±80.6	232.8±91.8	238.5±86	238±92.4
CRP (mg/L)	16.5 (3-403)	18.8 (3-319)	16.4 (3-439)	12.1 (3-341)	16.5 (3-439)
	42.4±58.1	50.2±62	45.5±65	44.1±68.6	44.7±61.7
D-dimer (μ g/mL)	0.6 (0.2-263)	0.7 (0.2-24)	0.6 (0.2-74)	0.6 (0.2-30)	0.6 (0.2-263)
	2.7±14.3	2.2±4	1.9±5.6	2.2±5.1	2.3±10.6
Ferritin (ng/mL)	129.3 (4.6-16 830)	126.2 (5.6-2000)	132 (8-3141)	116.3 (9.7-1744)	128.3 (4.6-16 830)
	347.1±1182.2	278.5±426.6	297.1±478	266.1±424	316±885.2
Fibrinogen (mg/dL)	438.5 (44-900)	447 (140-900)	437 (48-900)	411 (228-900)	438 (44-900)
	460.7±169.2	482.4±191.4	462.7±172.3	460.1±187.9	464.5±175
Troponin (pg/mL)	4.7 (3-2411)	6 (3-5936)	6.2 (3-983)	4.1 (3-996)	5 (3-5936)
	53.2±217.1	92.7±579.2	34.7±93.2	35.3±120.5	52.3±277.6
CK-MB (U/L)	2 (0.4-345)	1.8 (0.6-25.1)	2.3 (0.3-204)	1.7 (0.8-22.3)	2 (0.3-345)
	7±33.9	3±4.5	7±26.2	3.3±5.2	6.2±27.6
Anemia					
Yes	n=209, 46%	n=62, 43.4%	n=136, 49.1%	n=36, 42.9%	n=443, 46.2%
No	n=245, 54%	n=81, 56.6%	n=141, 50.9%	n=48, 57.1%	n=515, 53.8%
Thorax CT involvement					
Yes	n=229, 95.8%	n=76, 96.2%	n=138, 97.9%	n=47, 95.9%	n=490, 96.5%
No	n=10, 4.2%	n=3, 3.8%	n=3, 2.1%	n=2, 4.1%	n=18, 3.5%
Treatments applied					
Hydroxychloroquine	n=456, 99.3%	n=145, 100%	n=276, 99.6%	n=82, 97.6%	n=965, 99.4%
Osetamavir	n=235, 51.9%	n=64, 44.1%	n=136, 50%	n=43, 51.2%	n=478, 50.1%
Azithromycin	n=302, 65.8%	n=90, 62.1%	n=180, 65.7%	n=56, 66.7%	n=628, 65.3%
LMWH	n=271, 58.8%	n=97, 66.9%	n=169, 60.8%	n=52, 61.9%	n=589, 60.8%
Favipiravir	n=56, 12.4%	n=29, 20%	n=39, 14.2%	n=10, 12%	n=134, 14%
Tosilizumab	n=2, 0.4%	n=2, 1.4%	n=2, 0.7%	n=2, 2.4%	n=8, 0.8%
Mortality	n=38, 8.4%	n=14, 9.3%	n=17, 7.8%	n=4, 8.0%	n=73, 8.3%

OC072

Single Center Experience in Patients with a Diagnosis of Nodular Lymphocyte Predominant Hodgkin Lymphoma

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Background Nodular Lymphocyte Predominant Hodgkin Lymphoma (NLPHL) is a rare hematological malignancy with an excellent prognosis. It is about 5% of Hodgkin lymphoma cases. The incidence of the disease is 8-9 per 10 million. In this study, we planned to evaluate the clinical features and prognosis of patients diagnosed with NLPHL in the last ten years followed in the hematology department.

Material and Methods In our study, the data of 10 patients who were diagnosed with NLPHL between January 2010 and December 2020 in Bursa Uludag University Faculty of Medicine, Department of Hematology, were evaluated retrospectively.

Results 2.2% of 450 Hodgkin Lymphoma-diagnosed patients were diagnosed with NLPHL, in 10 years. 80% of patients were male. Median age was found 36 (28-60). At the time of diagnosis, all patients had ECOG score of 0 and 80% of the patients were at early stage. According to International Prognostic Score (IPS), patients were low risk. All patients who applied to the hospital, complained about palpable lymphadenopathy at first. None of the patients had B symptoms. Hemograms and biochemical parameters were in reference intervals at the time of diagnosis. Immunohistochemical staining of the biopsies showed that all specimen were positive for CD20, but just one of them positive for CD30. Eight patients were administered ABVD (doxorubicin, bleomycin, vinblastine, dacarbazine) chemotherapy as first-line therapy.

On the other hand two patients received coadministration of radiotherapy (RT) with ABVD. Two patients who were refractory first-line therapy, took DHAP (dexamethasone, cytarabine, cisplatin) as salvage chemotherapy regimen. Patients, completed remission after treatment, had autologous stem cell transplant (ASCT) after completion of BEAM (carmustine, etoposide, cytarabine, melphalan) conditioning regimen. One of our transplant patients recurred 5 months after the transplant. Gemcitabine chemotherapy was given to the patient who developed recurrence. He died due to sepsis in the third cycle of the treatment and in the 10th month of the transplant. Other patient is still alive and followed up in remission. Kaplan meier survival analysis computed 4-year survival rate 80%. Overall survival could not be estimated. Median survival time was 42.2 months.

Conclusions NLPHL is a less common disease that differs from classical Hodgkin lymphoma in histology, course, and treatment. There are no randomized controlled trials with its treatment due to its rarity. All treatment options are based on retrospective studies involving a small number of patients. In early-stage disease, untreated follow-up, surgery, and involved area radiotherapy are preferred. In advanced-stage disease, radiotherapy can be added to chemotherapy and chemioimmunotherapy. Due to the slow course of the disease, long-term side effects should be observed. NLPHL patients diagnosed in our clinic are incompatible with the incidence rates stated in the literature. It is suitable to discuss and compare with difference between our data and other data, that has been reported from Turkey.

OC073

Relationship Between Vitamin D and Insulin Resistance According to Obesity Level

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Background Obesity and metabolic syndrome are universal health problems of recent years. It has been shown that vitamin D has an effect on many systems other than just calcium-bone metabolism in the literature. There is increasing evidence that vitamin D deficiency is a risk factor in the development of insulin resistance (IR). This study was aimed to investigate the relationship between vitamin D level and IR in obese patients.

Material and Methods The study included 95 adult obese patients without hypertension, diabetes mellitus and hyperlipidemia. Fasting blood glucose, insulin, 25OH-vitamin D and serum lipid (triglyceride, HDL- and LDL-cholesterol) levels were measured and the HOMA-IR level was calculated. The patients were divided into 3 groups according to their obesity level.

Results Seventy-eight (82.1%) of patients were female and mean age was 40.4 (18-75) years. 39 (41.1%) of all patients had metabolic syndrome. The mean HOMA-IR level of women/men were 3.84/4.68. There was no statistically significant difference in terms of HOMA-IR levels between both sex (p=0.283). Vitamin D deficiency was found in 77.9% of

the patients. When the groups with and without vitamin D deficiency were compared, no difference was found in terms of age, gender and BMI. The median HOMA-IR level of the group with vitamin D deficiency (<20 ng/mL) was 3.57, and the HOMA-IR median level of the group without vitamin D deficiency was 2.39. The median HOMA-IR level of the vitamin D deficiency group was statistically significantly higher than the group without vitamin D deficiency ($p=0.029$). When vitamin D deficiency and IR (HOMA-IR >2.5) were compared, vitamin D deficiency was statistically significantly higher in the group with IR ($p=0.005$). The mean age of the group with IR was statistically significantly lower than the group without IR ($p=0.003$). There was no significant difference between the groups according to gender, BMI and vitamin D levels. The patients were divided into 3 groups according to their BMI (obese, morbid obese and super obese). No difference was found between these groups in terms of age, gender, and vitamin D level. However, while insulin level and IR level increased significantly in morbid obese patients, this relationship could not be demonstrated in super obese patients.

Conclusions This study is the first study investigating the relationship between vitamin D-HOMA-IR in morbid and super obese patients. No statistically significant linear correlation was found between vitamin D and HOMA-IR level, but vitamin D deficiency was more common in the group with IR. There is increasing evidence that vitamin D level is inversely related to BMI and IR. It is thought that factors such as improper food intake, decreased sun exposure due to lack of mobility, and decreased bioavailability of the vitamin. However, the effect of vitamin D supplementation on IR is limited and insufficient. Additional studies are needed to explain the relation between level of obesity and the effect of vitamin D on IR.

OC074

Frequency of Cholecystectomy and Investigation of Related Factors in Asymptomatic Gallstones

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Background While cholecystectomy is recommended for the treatment of symptomatic gallstones in current guidelines, surgery is not recommended in asymptomatic cases. In this study, we aimed to investigate the frequency of cholecystectomy and the factors affecting the approach to asymptomatic gallstones in clinical practice.

Material and Methods This study was designed as a prospective survey study. In this study, cases who had undergone cholecystectomy for gallstones in the past were evaluated. The survey was administered by face-to-face interview method and each patient was asked questions about surgical indication, medical information and symptoms.

Results In this study (n=212), 75 (35.4%) cases had asymptomatic gallstones and were operated for prophylactic purposes. 137 (64.6%) cases were found to have been operated due

to certain indications (presence of dyspeptic symptoms, acute cholecystitis, porcelain gallbladder, etc.). In the surgical decision with inappropriate indication; it was observed that the departments of general surgery (64%), internal medicine (29.3%) and gastroenterology (4%) played a role. However, in some of the cases, it was found that dyspeptic complaints such as abdominal pain, bloating, nausea and epigastric burning continued after the surgery.

Conclusions Today, inappropriate surgical treatment in asymptomatic gallstones is common, and approximately one out of every three patients is decided to undergo surgery. Therefore, it is considered that the medical and legal adverse situations that may occur can be prevented by reconsidering the issue by the relevant fields of speciality.

OC075

Relationship between Triglyceride-Glucose Index and Subclinical Left Ventricular Dysfunction in Hypertensive Patients

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Background Essential hypertension (HT) is a serious public health problem, one of the leading causes of mortality and morbidity worldwide. HT is associated with a significantly increased risk of adverse cardiovascular and renal outcomes such as left ventricular hypertrophy, heart failure, ischemic and hemorrhagic stroke, ischemic heart disease, and chronic kidney disease. It is well known that both lipid and glucose abnormalities are associated with HT. In previous studies, dyslipidemia has been reported in 50% to 80% of hypertensive patients. The main pathogenic pathways linking diabetes mellitus, dyslipidemia, and HT are thought to be through insulin resistance (IR) and the sympathetic nervous system and increased activity of the renin-angiotensin-aldosterone system and increased renal sodium reabsorption. In hypertensive patients, IR increases the risk of both overt heart failure and subclinical left ventricular dysfunction. In this study, we aim to investigate the relation of triglyceride-glucose (TyG) index, which is a new index showing insulin resistance obtained from lipid and glucose parameters, with subclinical left ventricular dysfunction in hypertensive patients.

Material and Methods 95 patients who applied to the cardiology outpatient clinic and were diagnosed with essential hypertension were included in our study. A detailed history, physical examination, fasting blood tests, and transthoracic echocardiography were performed on all patients. The TyG index was calculated according to the formula 'TyG index (mg/dL) = $\ln[\text{fasting triglyceride (mg/dL)} \times \text{fasting blood glucose (mg/dL)} / 2]$ '. Subclinical left ventricular dysfunction was defined according to speckle tracking echocardiography results, the left ventricle global longitudinal strain value was defined as <-18% values.

Results According to the results of speckle tracking echocardiography, subclinical left ventricular dysfunction was not observed in 58 patients (Group 1), while subclinical left ventricular dysfunction was observed in 37 patients (Group 2). Compared to Group 1, Group 2 is older, male sex ratio is higher, the mean duration of hypertension is longer, the glucose level is higher, triglyceride level is higher, TyG

index is higher, E/e' values are higher, and left ventricular global longitudinal strain values were statistically significantly lower. Multivariate logistic regression analysis was performed to determine the independent predictive parameters of subclinical left ventricular dysfunction in our patient population, and statistically significant parameters were added to this analysis. Male gender (OR: 0.062, 95% CI: 0.015-0.252, $p<0.001$), HT history duration (OR: 1.329, 95% CI: 1.127-1.566, $p=0.001$), TyG index (OR: 5.420, 95% CI: 1.850-15.879, $p=0.002$) and E/e' value (OR: 1.650, 95% CI: 1.117-2.437, $p=0.012$) were determined as independent predictive parameters for subclinical left ventricular dysfunction in the hypertensive patient group.

Conclusions Glucose and lipid abnormalities are frequently encountered in hypertensive patients. Insulin resistance causes both overt heart failure and subclinical left ventricular dysfunction in the hypertensive patient group. Reflecting the newly developed insulin resistance, the TyG index is one of the independent risk factors for subclinical left ventricular dysfunction in hypertensive patients.

OC076

Empagliflozin added to Monotherapy Positively Affects Ventricular Repolarization Parameters in Patients with Type 2 Diabetes with Insufficient Glycemic Control

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Background Sodium Glucose Co-transporter (SGLT) 2 inhibitors are oral antihyperglycemic agents that act independently of insulin. Empagliflozin has been shown to reduce major cardiovascular events and mortality in patients with type 2 diabetes mellitus (DM) who are at high risk for cardiovascular disease. However, its effect on ventricular arrhythmia parameters is not clearly known. Recent studies have shown that the prolonged T-peak and the end (Tp-e) interval on electrocardiography are associated with an increased risk of cardiovascular mortality. The Tp-e/QT ratio is a reliable index of long-term ventricular repolarization. In this study, we examined the effects of adding empagliflozin to metformin treatment on the electrocardiographic indices of ventricular repolarization.

Material and Methods 108 type 2 DM patients who applied to our clinic's endocrinology and internal medicine outpatient clinics and who used metformin and had insufficient glycemic control were included in the study. These patients were switched from monotherapy to combination therapy with dual oral agents due to insufficient glycemic control. Sulfanylurea (SU) was added to 56 patients and empagliflozin was added to 52 patients. Electrocardiographic records of the patients were obtained before the combination therapy and after 6 months of combined therapy. Tp-e intervals, QT intervals, QTc and Tp-e/QT, Tp-e/QTc ratios were calculated and analyzed.

Results The mean age of the study group was 63.57 ± 16.84 years (61 women, 47 men). After six months of follow-up, there was a significant decrease in Tp-e and QT interval in

patients using empagliflozin as add-on to metformin compared to SU (80.5 ± 11.41 ms vs. 72.2 ± 10.7 ms, $p<0.001$ and 397.8 ± 24.1 ms vs. 381.4 ± 29.4 ms, $p<0.05$). Also, the Tp-e/QT and Tp-e/QTc ratios were significantly lower in the empagliflozin group compared to the SU group (0.202 ± 0.031 vs. 0.190 ± 0.031 , $p<0.05$ and 0.201 ± 0.042 vs. 0.179 ± 0.032 , $p<0.05$, respectively).

Conclusions Our data showed that the use of SGLT2 inhibitors as an add-on treatment to metformin positively changed the ventricular repolarization indices in patients with type 2 DM compared to the SU group.

OC077

Effect of Resistant Hypertension on Mortality in Patient Hospitalized with COVID-19

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Background Resistant hypertension (RHT) is defined as the failure to achieve the recommended office blood pressure (BP) targets despite the use of three antihypertensive drugs from different classes at optimum doses or achieving BP targets with four or more drugs. Studies have shown that cardiovascular events are seen at a higher rate in RHT than in regulated hypertension. Hypertension has been found to increase the risk of mortality in COVID-19 patients, and there is no study on the effect of RHT on mortality. In this study, we aimed to examine the effect of RHT on in-hospital mortality in patients hospitalized due to COVID-19.

Material and Methods Patients hospitalized with COVID-19 were assessed in this single-center retrospective study. 1988 patients, whose diagnosis was confirmed using real-time PCR, were included in the study. Patients with negative real-time PCR data, patients with missing data, and patients with no known hypertension but with BP levels $>130/80$ mmHg were excluded from the study. Clinical characteristics and demographic data were obtained from electronic health records. RHT was defined as a BP $>130/80$ mmHg despite optimal use of three antihypertensive drugs, including a diuretic, or reaching a target BP ($<130/80$ mmHg) with 4 or more antihypertensive drugs. BP level was determined as the average of the blood pressure values measured on the first day of hospitalization. The patients were divided into three groups as RHT (n=112), regulated hypertension (n=579), and nonhypertensive group (n=1,283). Multivariate logistic regression analysis was used to identify independent predictors of in-hospital mortality.

Results The median age was 61 years (49-72 IQR) and 1,032 (52 %) of patients were male. The baseline characteristics, clinical and laboratory findings of the pa-

tients are presented comparatively in Table 1. In a multivariable analysis, RHT was independently associated with a significantly increased risk of in-hospital mortality of COVID-19, while no significant increased risk was observed with regulated hypertension (Odds ratio (OR): 2.00, 95% Confidence Interval (CI): 1.018-3.943, p=0,044, OR: 1.55, CI: 0.773-3140, p=0.215, respectively) In addition, age, gender (male), neutrophil-lymphocyte ratio, C-reactive protein, creatinine and SpO2 levels were determined as independent predictors of in-hospital mortality (Table 2).

Conclusions COVID-19 continues to affect the world and remains an important cause of mortality. Studies have found that hypertension is the most common comorbidity in hospitalized patients with COVID-19 and that patients with hypertension have an increased risk of in-hospital mortality, intensive care need, and disease severity. RHT is associated with increased risks of cardiovascular morbidity and mortality in hypertensive populations. There are no studies on the effect of RHT on in-hospital mortality in COVID-19 patients. In a study of COVID-19 patients, in-hospital poor BP control was found to be associated with poor outcome. In our study, it was found that RHT was an independent predictor of mortality in patients hospitalized for COVID-19. In regulated hypertension, there was no significant increase in-hospital mortality. The increased risk of mortality shown in COVID-19 patients with hypertension in previous studies may be due to RHT. In conclusion, resistant hypertension is an independent risk factor for in-hospital mortality in COVID-19.

Table 1. Demographic characteristics, clinical and laboratory finding of patients

Variables	All patients (n=1974)	Non-hypertensive patients (n=1283)	Regulated HT (n=579)	Resistant HT (n=112)	p value
Age, years	61(49-72)	56(43-67)	68(60-77)	70(62-75)	<0.001
SBP, mmHg	115(110-120)	110(110-120)	120(110-130)	130(120-137)	<0.001
DBP, mmHg	70(70-80)	70(70-80)	70(70-80)	80(70-80)	<0.001
Male gender, n(%)	1032(52.2)	746(58.1)	248(42.8)	38(34.0)	<0.001
CAD, n(%)	260(13.1)	77(6.0)	139(24.0)	44(39.2)	<0.001
CHF, n(%)	73 (3.9)	44(3.4)	19(3.2)	10(8.9)	0.010
Diabetes mellitus, n(%)	442(22.4)	157(12.2)	244(42.1)	41(36.6)	<0.001
COPD, n(%)	135(6.8)	75(5.8)	53(9.1)	7(6.3)	0.031
Stroke, n(%)	73(3.7)	21(1.6)	40(6.9)	12(10.7)	<0.001
CRF, n(%)	66(3.4)	30(2.3)	33(5.6)	3(2.7)	0.001
Atrial fibrillation, n(%)	60(3.0)	17(1.3)	37(6.3)	6(5.4)	<0.001
Creatinine, mg/dL	0.8(0.7-1.16)	0.8(0.7-1.05)	1.0(0.81-1.50)	1.0(0.83-1.50)	<0.001
Sodium, mEq/L	136(134-139)	137(134-139)	136(133-139)	136(133-138)	<0.001
Potassium, mEq/L	4.1(3.86-4.52)	4.13(3.87-4.46)	4.20(3.83-4.60)	4.13(3.68-4.69)	0.158
Calcium, mg/dL	8.3(7.9-8.7)	8.3(7.9-8.7)	8.2(7.9-8.7)	8.4(7.9-8.8)	0.306
C-reactive protein, mg/dL	73.1(33.1-122.0)	68.9(30.9-117.0)	77.6(36.7-130.0)	86.6(35.4-137.8)	0.006
AST, IU/L	32(23-47)	34(23-50)	31(23-43)	27(22-36)	<0.001
ALT, IU/L	25(17-40)	27(18-47)	23(16-34)	20(15-28)	<0.001
LDH, IU/L	322(254-420)	322(255-423)	325(255-420)	306(246-397)	0.389
Ferritin, ng/ml	411(207-819)	428(203-856)	399(214-734)	292(148-592)	0.023
D-Dimer, ng/ml	250(169-411)	241(166-391)	276(183-465)	282(175-424)	0.001
Procalcitonin, ng/ml	0.10(0.05-0.21)	0.09(0.05-0.18)	0.11(0.06-0.29)	0.13(0.06-0.35)	<0.001
Troponin, ng/L	0.10(0.10-0.10)	0.10(0.10-0.10)	0.10(0.10-0.10)	0.10(0.10-0.10)	<0.001
WBC, 10 ⁹ /L	6.80(5.09-9.45)	6.49(4.96-9.30)	7.16(5.30-9.66)	7.23(5.45-10.43)	0.005
Neutrophil, 10 ⁹ /L	5.01(3.55-7.71)	4.75(3.45-7.65)	5.46(3.82-7.74)	5.50(4.00-8.45)	<0.001
Lymphocyte, 10 ⁹ /L	1.08(0.75-1.46)	1.12(0.79-1.47)	1.00(0.70-1.41)	1.04(0.76-1.35)	0.002
Hemoglobin, g/dL	13.5(12.2-14.6)	13.7(12.5-14.7)	13.2(11.9-14.3)	12.9(11.8-14.0)	<0.001
Platlet, 10 ⁹ /L	207(161-258)	210(164-257)	201(159-263)	207(157-256)	0.583
NLR	4.58(2.87-8.36)	4.30(2.69-7.81)	5.30(3.20-9.05)	5.54(3.42-8.90)	<0.001
High fever, n(%)	473(23.9)	357(27.8)	102(17.6)	14(12.5)	<0.001
Dyspnea, n(%)	1381(70.0)	891(69.4)	409(70.6)	81(72.3)	0.860
Cough, n(%)	845(42.8)	577(45.0)	224(38.6)	44(39.3)	0.030
Weakness, n(%)	1135(57.5)	818(63.7)	274(47.3)	43(38.4)	<0.001
Admission SO2 %	90(85-95)	90(86-94)	88(81-91)	87(80-90)	<0.001
Nasal O2 prong, n(%)	1285(65.0)	755(58.8)	458(73.6)	90(80.4)	<0.001
Need for NIMV, n(%)	289(14.6)	141(10.9)	125(21.2)	25(22.3)	<0.001
Need for MV, n(%)	310(15.7)	149(11.6)	141(24.3)	20(17.9)	<0.001
Need for ICU, n(%)	490(24.8)	238(18.5)	214(36.9)	38(34.0)	<0.001
ARDS, n(%)	262(13.2)	96(7.4)	138(23.8)	28(25.0)	<0.001
Hospitalization time, day	8(6-12)	7(6-11)	9(6-12)	9(7-12)	0.202
Death, n(%)	344(17.4)	164(12.7)	158(27.2)	22(20.0)	<0.001

Data are expressed as median interquartile range and count(percentage)
Abbreviations: ALT: Alanine transaminase, ARDS: Acute respiratory distress syndrome, AST: Aspartat transaminase, CAD: Coronary artery disease, CHF: Chronic heart failure, COPD: Chronic obstructive pulmonary disease, CRF: Chronic renal failure, CRP: C-reactive protein, DBP: Diastolic blood pressure, HT: Hypertension, ICU: Intensive care unit, LDH: Lactat dehydrogenase, MV: Mechanical ventilation, NIMV: Noninvasive mechanical ventilation, NLR: Neutrophil/Lymphocyte ratio, SBP: Systolic blood pressure, SO2: Oxygen saturation, WBC: White blood cell.

Table 2. Multivariate analysis of possible predictors for in-hospital mortality

Variables	Odds ratio	95% Confidence Interval	p value
Regulated Hypertension	1.558	0.773 – 3.140	0.215
Resistant Hypertension	2.004	1.018-3.943	0.044
Gender (male)	1.533	1.057-2.223	0.024
Age	1.060	1.044-1.076	<0.001
Neutrophil/Lymphocyte ratio	1.025	1.002-1.048	0.030
C-reactive protein	1.003	1.000-1.005	0.042
Oxygen saturation	0.810	0.789-0.833	<0.001
Creatinine	1.052	1.003-1.103	0.038
Coronary Artery Disease	0.791	0.491-1.273	0.334
Congestive Heart Failure	1.336	0.503-3.116	0.503
Chronic Renal failure	1.228	0.532-2.836	0.631
Atrial Fibrillation	0.930	0.396-2.181	0.867
Serebrovascular Event	0.986	0.471-2.064	0.970
Diabetes mellitus	0.960	0.654-1.409	0.834
Chronic obstructive pulmonary disease	1.255	0.683-2.308	0.465
Ferritin	1.000	1.000-1.000	0.121
Procalcitonin	1.021	0.996-1.046	0.105
D-dimer	1.000	1.000-1.000	0.068
Troponin	1.008	0.897-1.132	0.900

OC078

May The Neutrophil Lymphocyte Ratio be a New Marker for Uveitis Development in Ankylosing Spondylitis?

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Background Ankylosing spondylitis (AS) is a group of chronic, systemic, inflammatory diseases affecting the spine, sacroiliac and peripheral joints. Neutrophil-lymphocyte ratio (NLR) is a marker that has been researched in recent years to be used as a marker of inflammation. The aim of our study is to evaluate the NLR in AS patients with uveitis, which is an extraarticular involvement, while having uveitis and to compare it with the NLR at the time of initial admission.

Material and Methods Ninety patients with uveitis and diagnosed with AS according to the modified New York Criteria were included in the study. The files of the patients were analyzed retrospectively. Demographic data and laboratory parameters were recorded. NLR was calculated arithmetically using neutrophil and lymphocyte values in complete blood count.

Results 53 (58.9%) of the patients were male, 37 (41.1%) were female. The mean age was 42.51±9.23 years in male, 45.84±9.78 years in female, the mean duration of diagnosis was 14.53±10.34 years in male, 10.84±6.01 years in female, and the mean body mass index (BMI) was 27.61±3.53 kg/m2 in male and 25.82±3.12 kg/m2 in female. There was no significant difference between the genders in terms of age, duration of diagnosis, and BMI (p=0.104, p=0.073,

$p=0.557$, respectively). No significant difference was found between genders in terms of NLR values at the time of initial admission and at the time of uveitis ($p=0.016$). The aim of our study was that there was a significant difference between the NLR values (1.660 ± 0.67 and 2.623 ± 1.293 , respectively) in both genders at initial admission and at the time of uveitis ($p<0.001$).

Conclusions As a result, we found that NLR increased when having uveitis compared to the time of initial admission. NLR may be a new marker for evaluating increased inflammation and disease activity in AS patients.

OC079

Multiple Intelligence Profile in Internal Medicine Residents

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Background Multiple intelligence theory was first proposed by Gardner and according to this theory, people have 8 different intelligence areas (verbal-linguistic, logical-mathematical, visual-spatial, musical-rhythmic, bodily-kinesthetic, social-interpersonal, intrapersonal, and naturalistic). Aim of the study to determine the multiple intelligence profile of Internal Medicine Residents and to raise awareness about their multiple intelligence features. Due to the lack of previous studies on this subject in the literature, determining this profile may be a guide for educators in choosing more effective teaching methods in medical education and for residents in choosing more effective learning techniques individually.

Material and Methods Training in the Department of Internal Medicine, Uludağ University School of Medicine and gave informed consent were included in the study. The "Multiple Intelligence Inventory" used in similar studies was applied to the residents as a questionnaire between March - August 2020. In this questionnaire, the residents answered 10 questions in each of the 8 intelligence areas according to their self-assessment as follows; "Not at all true=1", "Slightly true=2", "Partially true=3", "Quite true=4" and "Exactly true=5". Then, the mean score for each of multiple intelligence areas, also the most dominant intelligence areas and whether there was a difference between multiple intelligence areas by gender were investigated. SPSS 22 package program was used for data analysis. Pearson chi-square and Fisher's exact chi-square tests for comparison categorical variables; and Mann-Whitney U test was used to compare continuous variables between 2 groups. After obtaining the approval of the local ethics committee, residents who receiving specialization.

Results A total of 60 residents, 34 (56.7%) female and 26 (43.3%) male, participated in the study. The mean age was 27.3 ± 2.1 years, median age was 27 (range: 24-31) years. No significant difference was found between the mean scores of multiple intelligence areas by gender (Table 1). When multiple intelligence areas are classified according to their level of development were found as follows; well developed (41-50 points); 15.6%, developed (31-40 points); 56%, moderately

developed (21-30 points); 26.7%, underdeveloped (11-20 points); 1.6% and not developed (0-10 points); 0%. In 98.3% of the residents, the scores of multiple intelligence areas were well developed-developed-moderately developed levels. Among multiple intelligence areas, logical-mathematical intelligence was found to have the highest mean score in both genders.

Conclusions It is known that education based on multiple intelligence theory increases student educational success. Logical-mathematical intelligence is the ability to use numerical, abstract and logical reasoning to solve problems by establishing a cause-effect relationship. trainers should use the most effective teaching strategies for this as follows; methods of measurement and calculation, classification, emphasizing similarities and differences and scientific thinking logic methods. It is recommended that residents should use the most effective learning techniques individually as follows; to brainstorm to generate ideas, to prepare charts, to make classifications, to categorize objects, to organize events in a certain logical relationship, to make the problem into a flow chart, to show the steps of the problem by drawing figures, to identify key words and distinguishing important and unimportant information.

Table 1. The mean scores of multiple intelligence areas of Internal Medicine Residents according to gender

Multiple Intelligence Areas	Female	Male	Total
Verbal-Linguistic	29.9 ± 5.3	30.1 ± 6.1	30.0 ± 5.7
Logical-Mathematical	38.1 ± 5.1	36.1 ± 4.8	37.2 ± 4.9
Visual-Spatial	33.2 ± 6.2	34.8 ± 5.9	33.9 ± 6.0
Musical-Rhythmic	29.7 ± 6.5	32.4 ± 8.1	30.9 ± 7.6
Bodily-Kinesthetic	34.9 ± 5.4	35.7 ± 5.5	35.2 ± 5.4
Social-Interpersonal	34.4 ± 4.9	33.6 ± 5.8	34.7 ± 5.3
Intrapersonal	34.7 ± 6.1	35.0 ± 6.2	34.9 ± 6.1
Naturalistic	33.7 ± 7.7	34.3 ± 6.5	34.0 ± 7.1

OC080

Evaluation of Death Rates of Patients in The Deceased Kidney Waiting List of Bursa Uludağ University Faculty of Medicine According to Years by Gender, Age, Blood Group and Dialysis Types

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Background According to the 2019 registration data of the Turkish Nephrology Association, the number of patients who received renal replacement therapy is 64,633 [the number of hemodialysis (HD) patients: 61,341, and the number of peritoneal dialysis (PD) patients: 3,292]. The number of patients with chronic kidney failure and deceased kidney waiting list in our country is 22,953. Our retrospective study aimed to evaluate the features of patients who died on the deceased kidney waiting list of our transplant center.

Material and Methods The data of the patients' year of death, gender, age, blood group type, and dialysis type were obtained using TDIS (Transplantation, Dialysis and Monitoring Systems of Health Ministry). The data of patients who died on the deceased kidney waiting list of the transplant center were analyzed retrospectively according to the year of death, gender, age, blood group type, and dialysis type.

Results The number of patients who died on the our transplant center kidney waiting list is 350. The distribution of patients on the deceased kidney waiting list by death years, age and blood groups was examined. The number of female patients was 134 (38.2%), and the number of male patients was 216 (61.8%). The distribution of patients according to renal replacement therapy was HD 273 (78%), PD 73 (20.9), and 4 (1.1%) who did not receive renal replacement therapy. When we look at the mortality rates of patients on the kidney waiting list by years, the number of patients who died in 2020 was the highest, with 13.7% of all deaths. Patients who died after kidney transplantation were not included in this analysis. The age group with a high mortality rate of the patients was between 50 and 59. It was observed that blood group A constituted the majority in its distribution according to blood type.

Conclusions As a result, it was observed that mortality rates during the pandemic increased in moderate and elderly patients on the deceased kidney waiting list. Although this increase is thought to be related to the COVID-19 disease, it cannot be supported by concrete findings.

OC081

Evaluation of Patients on The Deceased Kidney Waiting List of Bursa Uludağ University Medical Faculty According to Distribution of Gender, Age, Blood Group and Renal Replacement Therapies

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Background The number of patients with chronic kidney failure and the deceased kidney waiting list is 22,953. (0.27% of Turkey's population). According to the 2019 registration report of the Turkish Nephrology Association, the number of patients receiving hemodialysis (HD) and peritoneal dialysis (PD) treatment is 64,633 (0.76% of Turkey's population). In our country, the incidence of chronic kidney disease is increasing day by day. This study aimed to evaluate patients' retrospective distribution on the deceased kidney waiting list of our transplant center by gender, age, blood group type, and dialysis type.

Material and Methods Gender, age, blood group type, and dialysis type data were obtained using TDIS (Transplantation, Dialysis and Monitoring Systems of Health Ministry), and the data were evaluated retrospectively.

Results The number of patients on the deceased kidney waiting list in our center was 420. The number of female patients was 162 (38.6%) and the number of male patients was 258 (61.4%). Distribution of patients by age range 0-9 [5 (1.1%)], 10-19 [13 (3%)], 20-29 [19 (4.4%)], 30-39 [49 (11.6%)], 40-44: [84 (20%)], 50-59: [103 (24.4%)], 60-69: [113 (26.8%)], 70-79: [33 (7.8%)], and 80-89: [1 (0.2%)]. Distribution of the patients according to their blood groups; 0 Rh (+) 112 (26.7%), 0 Rh (-) 13 (3.1%), A Rh (+) 182 (43.3%), A Rh (-) 24 (5.7%), B Rh (+) 46 (11%), B Rh (-) 7 (1.7%), AB Rh (+) 34 (8.1%), and AB Rh (-) 2 (0.5%). The distribution of patients according to renal replacement therapy was HD 301 (71.6%) and PD 24 (5.7%), and those who did not receive renal replacement therapy were 95 (22.6%).

Conclusions Male patients were more than female patients on the deceased kidney waiting list. The number of patients in the 60-69 age range was the highest. It was found that the number of patients receiving HD treatment was higher than the PD patients. The distribution of blood groups of patients was similar to the general population, Turkey.

OC082

General Characteristics of The Patients Diagnosed with Enteropathic Arthritis (EnA) Whose Treatment Have Been Performed with Biological Agents

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Background Spondylarthritis (SpA) comprises multiple divergent forms of inflammatory arthritis. It has got extraarticular symptoms like uveitis, psoriasis and IBD. EnA (in another naming, arthritis due to inflammatory bowel diseases (IBD) ranks in SpA group because of the similarity of clinical features and the common genetic susceptibility as well. Sometimes arthritis might originate before the diagnosis of IBD. NSAID, corticosteroids, sulfasalazine, anti-TNF agents can be used in the treatment of the patients. It is aimed to present the features of 33 EpA cases which have been being monitored in our clinic, in this study.

Material and Methods Demographical and clinical features, presentation forms, family histories, smoking habits, HLAB27 positivities of the 33 EpA cases who sought medical service in our polyclinic and diagnosed with EnA and treated with biological agents, have been recorded. Their peripheric arthritis, dactylitis, enthesitis, uveitis, and psoriasis stories have been picked. It has been interrogated before biological agents treatment whether conventional DMARDs (disease-modifying antirheumatic drugs) were used.

Results Sixteen of the patients (48.4%) have been females, whereas 17 of them (51.6%) have been males. Eleven of the patients (33.3%) have been diagnosed with Crohn's disease, whereas 22 of them (66.7%) with ulcerative colitis. Eighteen patients (54.5%) have presented with joint complaints, 13 of them (39.4%) with bowel complaints, and 1 of them (3%) has presented with simultaneous joint and bowel complaints. Families of the 2 of the 18 patients (6.1%) whose family

stories could have been achieved had rheumatic disease background. Fourteen of the 26 patients (42.4%) whose smoking characteristics could have been identified, have been active smokers. HLAB27 of the 12 patients (36.4%) have been positive. Sacroiliitis have been identified in the graphics of the 26 patients (78.8%). Thirty-four patients (93.9%) had axial skeleton involvement whereas 11 of them (24.2%) had joint involvement. Eight of the patients (24.2%) had peripheral arthritis, 2 of them (6.1%) had enthesitis, 6 of them (18.2%) had heel pain. The inquiry of the pre-treatments before the biological agents among the patients whose data could have been achieved presented that 6 of them (18.2%) used methotrexate, 16 of them (48.5%) used steroids, 16 of them (48.5%) used azathioprine, 16 of them (48.5%) sulfasalazine, 23 of them (69.7%) used nonsteroid anti-inflammatory drug (NSAID). Seventeen of the patients (51.5%) have used NSAID after IBD diagnosis whereas 4 patients (12.1%) had IBD inflammation symptoms as bleeding and diarrhea due to NSAID use after IBD diagnosis.

Conclusions Since there is a close link between SpA and EnA, patients should also be monitored in the aspect of bowel symptoms during the SpA course. Even if it is rare, the initial seeking way of the patients with IBD might be joint complaints. It is needed to take into account the activation of intestinal symptoms as well, while deciding on the treatment of the patients with enteropathic arthritis.

OC083

Evaluation of Clinical, Genetic and Treatment-Related Characteristics in FMF Patients by Gender Distribution

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Background Individuals with familial Mediterranean fever (FMF) may be exposed to stress due to gender-related differences and consequently the frequency of attacks may be different. For example, FMF attacks can be triggered in women during menstrual periods. The aim of this study is to investigate the differences between males and females in clinical findings, hereditary characteristics, treatment responses and pathogen Mediterranean fever (MEFV) gene phenotype frequencies in FMF patients.

Material and Methods The charts of 213 patients who were followed up in the rheumatology outpatient clinic with a diagnosis of FMF were retrospectively reviewed. The data of 105 patients (70 females, 35 males) whose charts were available for all research data were evaluated. While evaluating the clinical findings, the age of attack onset, attack character (typical, atypical), dominant attack location (peritoneum, pleura, synovia, isolated fever), presence of recurrent fever, appendectomy history, family history (first degree, second degree) were evaluated. While evaluating the treatment response, the response (complete, partial, unresponsive) to colchicine treatment was questioned. The phenotype frequencies of the pathogen variations (M694V, V726A, M680I,

E148Q) in the MEFV gene were determined. Findings were compared between groups.

Results The median age (minimum-maximum) in women and men was 37.5 (19-62) and 30.0 (19-59) years, respectively ($p=0.148$). The frequency of individuals with typical attack character was 71.4% in women and 82.9% in men. The frequency of the predominant attack localization with peritoneum was 90% in women and 88.6% in men. The frequency of recurrent fever in women and men was 67.1% and 65.7%, the frequency of appendectomy was 34.3% and 42.9%, and the presence of a family history was 75.7% and 76.1%, respectively. The proportion of those with colchicine response was 92.8% and 85.7% in women and men, respectively. Clinical findings and colchicine response were not different between genders. The phenotype frequencies of pathogen MEFV gene mutations were 62.7% and 88.6% for M694V ($p=0.006$), 22.4% and 14.3% ($p=0.328$) for V726A, 20.9% for M680I in women and men, respectively, and 22.9% ($p=0.819$) and 14.9% and 14.3% ($p=0.931$) for E148Q.

Conclusions Clinical findings and treatment responses are not different in individuals with FMF disease. The frequency of the M694V mutation, which has high penetration and is associated with important complications such as amyloidosis, is higher in men. There is a need for studies to evaluate FMF activity according to gender distribution.

OC084

The Value of Malnutrition Scores in Determining The Non-dipper Pattern in Ambulatory Blood Pressure Measurement

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Background Normally, blood pressure shows a circadian rhythm, in line with this, blood pressure (BP) at night falls by 10% compared to daytime blood pressure. Studies have shown that non-dippers have an increased mortality of cardiovascular and cerebrovascular morbidity. Malnutrition and obesity are associated with an increased risk of cardiovascular disease, that can cause mortality in the general population. This study was conducted to evaluate the value of controlling nutritional status (CONUT) and nutrition risk index (NRI) malnutrition scores in predicting of non-dipper status, compared with other measurements.

Material and Methods In this retrospective study, 167 patients who had ambulatory BP measurements in our hospital were included in the study. 109 patients were patients with existing hypertension, 58 patients were included in non-hypertensive patients. CONUT and NRI scores were calculated and correlated with the patients being dipper and non-dipper.

Results Patients were divided into two groups according to dipper or non-dipper presence. The median age of the patients with dipper and non-dipper were 69 (67-

72, IQR) and 51.5 (45-60) years, respectively. In addition, 109 (65.2%) subjects was hypertension. Non-dipper was seen in 93 (57%) patients. Maximum, night BP and mean night BP were higher in non-dipper group [144 (134-160) mmHg, 133 (119-140) - 126 (115-137) mmHg; 111 (101-120) mmHg, $p<0.001$, respectively]. NRI was lower (low value denotes malnutrition) in non-dipper group (59 (55-63), 60.5 (56-72), respectively, $p=0.008$). CONUT score according to any grade was 25 (26.9%) and 32 (43.2%) ($p=0.027$) (Table 1). ROC curve analysis for optimal cut-off predict non-dipper hypertension showed the optimal cut-off value was 0.297, analysis cut-off value 57.9, sensitivity 71%, specificity 58.06%, positive predictive value 57.61%, and negative predictive value 72% according to the Youden index (Figure 1). **Conclusions** Our study showed that malnutrition status defined by CONUT or NRI scores were associated with non-dipper hypertension pattern.

Variables	Dipper (n:74)	Nondipper (n:93)	p value
Age	50 (45-55)	51.5 (45-60)	0.84
Sex (male) (n,%)	45 (48.4)	41 (55.4)	0.36
Ht (n,%)	58 (62.4)	51 (68.9)	0.37
Dm (n,%)	14 (15.1)	10 (13.5)	0.77
Max night BP	133 (119-140)	144 (134-160)	<0.001
Max day BP	153(145-164)	157 (145-168)	0.39
Mean night BP	111 (101-120)	126 (115-137)	<0.001
Mean day BP	129 (122-132)	126 (119-134)	0.58
Ace/arb (n,%)	36 (38.7)	31 (41.9)	0.67
Beta bloker (n,%)	17 (18.3)	20 (27)	0.17
Diuretic (thiazide or indapamide) (n,%)	18 (19.4)	13 (17.6)	0.77
Ca canal bloker (n,%)	35 (37.6)	19 (25.7)	0.10
Wbc	8.1 (6.4-10.0)	7.3 (6.1-8.2)	0.02
lymphoside	2 (1.6-2.4)	2.2 (1.63-2.5)	0.34
hbgt	13.4(12.2-14.9)	13.5 (12.5-15.4)	0.35
Plt	257 (223-353)	263(224-338)	0.78
CRP	0.3 (0.3-3)	0.4 (0.3-3)	0.57
Ast	18 (15-24)	21 (17-28)	0.004
alb	4.5 (4.2-4.8)	4 (3.7-4.4)	<0.001
cr	0.76 (0.64-0.97)	0.77 (0.67-0.90)	0.75
Total chol	213 (154-238)	201 (166-253)	0.97
Ldl	136 (91-152)	129 (100-159)	0.73
BMI	29.7 (27.3-33)	27.3 (26-32.9)	0.02
NRI	60.5 (56-72)	59 (55-63)	0.008
CONUT (any degree) (n%)	25 (26.9)	32 (43.2)	0.027

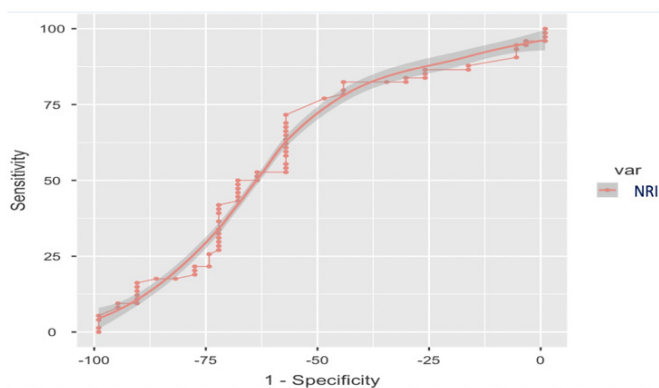


Figure 1. ROC analysis

OC085

Comparison of Obese and Non-obese Persons in Terms of Food Addiction

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Background While the term 'addiction' was used only to describe excessive alcohol and substance abuse, it has recently been noticed that some behaviors have neurobiological bases similar to alcohol and substance addiction. Food addiction is one of these behaviors. In many studies, it has been suggested that there is food addiction, especially in obese and overeating people. Our study aimed to compare the rates of food addiction in obese and non-obese people who applied to obesity and family medicine outpatient clinics.

Material and Methods This study was carried out in volunteers (body mass index <30 kg/m²) and patients (body mass index >30 kg/m²) who applied to family medicine and obesity outpatient clinics between 15.01.2019 and 30.06.2019. A sociodemographic form questioning the individuals' age, gender, weight, height, and smoking status was given. Besides, we used the "Yale Food Addiction Scale" developed by Gearhardt et al. to determine addiction symptoms to certain food types and adapted into Turkish by Bayraktar et al.

Results 195 non-obese and 403 obese individuals were included in the study. While the rate of food addiction in the obese group is 33.7%, this rate is 14% in the non-obese group. The rate of food addiction was found to be significantly higher in obese individuals compared to non-obese individuals ($p<0.001$) (OR: 3.13, 95% CI: 2.09-4.68).

Conclusions Food addiction is a widely discussed concept in these times. Food addiction should be considered as a behavioral addiction, and addiction treatment should be applied. It is more common in obese individuals than in non-obese individuals. Therefore, food addiction should be screened and treated in obese individuals.

OC086

Serological Markers That Can Be Used in Activity Determination in Ulcerative Colitis

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Background Ulcerative colitis is an inflammatory bowel disease with periods of exacerbation and remission, with inflammation of the superficial colonic mucosa starting from the rectum and diffusing along the colon. Disease activity determination is crucial in deciding treatment and evaluating response to treatment. Among the determination methods, endoscopy and biopsy are invasive and expensive procedures, unlike clinical and serological methods. Our study aimed to determine serological markers that can predict endoscopic activity, that is, mucosal healing.

Material and Methods Colonoscopy procedures of patients diagnosed with ulcerative colitis performed in our center in 2019 and 2020 were examined. Disease activity and the extent of disease were noted from colonoscopy reports. On the day of the colonoscopy, the patients' demographic characteristics, laboratory values, smoking, and alcohol use were recorded from the file data.

Results A total of 175 patients with ulcerative colitis were included in the study. 63 (36%) of them were women, 112 (64%) were men. Their median age was 39 years for women and 47 years for men. Among those whose disease activities could be determined, 36 patients were in remission, while 122 patients were in the active period (Rachmilewitz endoscopic activity score >4). When patients in active and remission periods are compared, leukocytes (8.9 vs. 7.39, $p=0.003$), neutrophils (5.97 vs. 4.36, $p<0.001$), monocytes (0.8 vs. 0.65, $p=0.002$), RDW (15.26 vs. 13.94, $p=0.006$), thrombocyte (345 vs. 277, $p=0.001$), CRP (2.65 vs. 0.77, $p=0.002$), sedimentation rate (33 vs. 14, $p=0.008$) values in active period were found to be significantly higher than those in remission period. Hemoglobin (12.6 vs. 13.4, $p=0.02$), MPV (8.2 vs. 8.8, $p=0.002$), basophil percentage (0.54 vs. 0.72, $p=0.01$), albumin (3.85 vs. 4.27, $p<0.001$) values was lower. Gender, smoking and alcohol were not associated with disease activity.

Conclusions Since there is no ideal marker that can determine the activity index of ulcerative colitis, a combination composition including clinical examination, serology, endoscopic findings, and histological examination is used. It was determined that hemogram, acute phase reactants, and albumin, which are non-invasive and inexpensive serological markers used in the diagnosis and treatment follow-up of the disease, can reliably reflect the endoscopic activity index and mucosal healing.

OC087

Polypharmacy and Potential Inappropriate Drug Use in The Elderly Admitted to The General Internal Medicine Outpatient Clinic

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Background The frequency of chronic diseases, the number of drugs used and drug-related inappropriateness have increased in the elderly. In this study, we aimed to investigate the rates of polypharmacy and potential inappropriate medications (PIMs) in elderly patients who admitted to General Internal Medicine Outpatient Clinic of Uludag University Hospital.

Material and Methods It was planned as a prospective cross-sectional study. The sociodemographic characteristics, diagnoses, concomitant chronic diseases and the drugs they used were recorded in detail through face-to-face interviews with the patients on the previously prepared questionnaire form. After than, the drugs used by the patients were evaluated in terms of PIMs according to the 2015 Beers Criteria. SPSS 21 package program was used for data analysis. Pearson chi-square and Fisher's exact chi-square tests were used for comparison of categorical variables. The Kruskal-Wellis test was used to compare more than two independent groups, and the Mann-Whitney U test was used to compare two independent groups.

Results A total of 304 patients (58.9% female, 41.1% male) aged 65 and over who agreed to participate in the study between September 1 and December 31, 2020 were included in the study. Patients' files were examined and disease and medication information was confirmed. The mean age of the patients was 71.5 ± 5.2 . 95.8% had at least one chronic disease, the number of concomitant chronic diseases was 2.7 ± 1.6 and the most frequently concomitant chronic diseases were hypertension (67.1%) and diabetes mellitus (39.8%). The mean daily number of drugs used by the patients was 4.9 ± 3.3 and the rate of polypharmacy was 52.9%. A total of 124 PIMs were observed in 104 (34.2%) patients, and this rate was higher in patients with polypharmacy ($p<0.05$). The most common PIM was the use of drugs that should be avoided in the elderly (Table 2 related PIMs; 28.3%), and the most common drug of these group was the inappropriate use of proton pump inhibitors (PPIs) (9.9%).

Conclusions In this study, we observed that the number of chronic diseases, polypharmacy and PIMs rates were high in the elderly, and there was a linear correlation between polypharmacy and PIMs, and PPIs were the most commonly used PIMs. Therefore, in order to reduce the possible risks that may occur in the elderly, patients should be examined by a comprehensive geriatric assessment, drugs should be prescribed according to rational drug use recommendations, the drugs used in terms of PIMs should be reviewed, and patients should be explained in detail how to use their drugs. Then, at each visit, they should be carefully questioned in terms of how they use the drugs and drug adverse effects.

OC088

Does Lymphocyte/CRP Ratio Predict Disease Progression in COVID-19 Patients with Myocardial Injury?

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Background This study aimed to reveal whether the lymphocyte-C-reactive protein ratio (LCR), a systemic inflammatory marker, predicts the progression of the disease in COVID-19 patients with myocardial injury.

Material and Methods The files of 172 patients over 18 who were hospitalized due to COVID-19 between April 2020 and May 2020 in our hospital were retrospectively scanned. Hemoglobin, leukocyte, lymphocyte, neutrophil, thrombocyte, AST, ALT, creatinine, lactate dehydrogenase, albumin, ferritin, triglyceride, procalcitonin, C-reactive protein (CRP), fibrinogen, D-dimer, troponin, LCR values of the patients were recorded. LCR ratios were amplified at x100. The patients were divided into two groups as with and without myocardial injury. IBM SPSS Statistics 21.0 program was used for statistical analysis. Statistically, $p < 0.05$ was considered significant.

Results 172 patients included in the study were divided into 2 groups as with and without myocardial injury. The patients' mean age was 68.56 ± 13.43 and 58.46 ± 16.67 years, respectively ($p = 0.002$). There was no difference between the groups in terms of clinical severity of the disease, severity of lung involvement on computed tomography, coronary artery disease, diabetes mellitus (DM), history of chronic obstructive pulmonary disease and malignancy, lymphocyte, CRP, LCR ratio, ferritin, D-Dimer, fibrinogen (all $p > 0.05$). Hypertension (HT) and chronic renal failure (CRF) were more common in the group with myocardial injury ($p < 0.01$ and $p < 0.01$). Procalcitonin and creatinine levels were statistically significantly higher in the group with myocardial injury ($p = 0.002$ and $p < 0.001$). Correlation analysis of parameters associated with a myocardial injury with troponin was performed. Troponin level correlated well with CRF ($r: 484, p < 0.001$), moderate correlation with procalcitonin ($r: 274, p < 0.001$), and poor correlation with age ($r: 180, p = 0.18$) and HT ($r: 159, p = 0.37$). DM and D-dimer did not correlate with troponin ($r: 0.55, p = 0.472$) ($r: 0.72, p = 0.345$). In the multivariate regression analysis, the CRF [Odds ratio (OR): 11.062, 95% confidence interval (CI): 1.866-65.580] and reference procalcitonin levels (OR: 1.183, 95% CI: 1.014-1.379) predicted myocardial injury.

Conclusions Our study found that LCR did not predict the progression of the disease in COVID-19 patients with myocardial injury.

OC089

Can Speckle Tracking Echocardiography Predict Left and Right Ventricular Systolic Dysfunctions in Patients With Scleroderma?

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Background Scleroderma is a rheumatological disease that has been shown to increase the risk of cardiovascular disease, including pulmonary hypertension and heart failure. Applications to detect subclinical ventricular dysfunction in these patients without significant heart failure are not clear-

ly defined. Speckle tracking echocardiography enables early detection of subclinical left ventricular systolic dysfunction (LVSD) and subclinical right ventricular systolic dysfunction (RVSD). In this study, we evaluated left and right ventricular systolic functions with speckle tracking echocardiography strain imaging in patients with scleroderma.

Material and Methods Seventy-six scleroderma patients (female/male: 52/24) and 81 healthy (female/male: 55/26) control subjects diagnosed for at least one year were included in this study. Echocardiography was performed on all patients and healthy control subjects. Left ventricular ejection fraction (EF), diastolic functions, TAPSE, left ventricular global longitudinal strain (LV-GLS) and right ventricular global longitudinal strain (RV-GLS) were evaluated.

Results The mean ages of scleroderma patients and control subjects were 51.7 ± 11.2 and 52.9 ± 11.4 years, respectively ($p = 0.5$). Female patients were more common in both groups. LV-GLS ($-16.6 \pm 4.2\%$ vs. $-17.1 \pm 2.1\%$, $p = 0.36$), EF ($59 \pm 5.2\%$ vs. $61.1 \pm 7.6\%$, $p > 0.05$) and TAPSE ($17 \pm 5.9\%$ vs. $18.8 \pm 5.4\%$, $p = 0.26$) were similar scleroderma patients and normal subjects, respectively. RV-GLS ($-15.9 \pm 5.3\%$ vs. $-20.4 \pm 3.2\%$, $p < 0.001$, respectively) was lower in patients with scleroderma compared to normal subjects.

Conclusions Although there was no significant difference between the groups in LV-GLS and TAPSE values, patients with scleroderma had lower RV-GLS compared to healthy patients. Global longitudinal strain imaging with echocardiography can detect early right ventricular myocardial dysfunction in scleroderma.

OC090

Increased Serum Rheumatoid Factor Levels Predicts No-reflow Phenomenon in Patients with ST Segment Elevation Myocardial Infarction

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Background In this study, we aimed to evaluate the relationship between serum rheumatoid factor (RF) levels and no-reflow phenomenon in patients with ST segment elevation myocardial infarction (STEMI) undergoing percutaneous coronary intervention (PCI).

Material and Methods This study is a single center, cross-sectional study. A total of 71 consecutive patients diagnosed with STEMI and treated with PCI were included in the study. All demographic parameters were recorded. Initial serum troponin, creatinine, AST, ALT, hemoglobin and RF levels of all patients were measured. No-reflow phenomenon diagnosis was defined as TIMI II or less flow without dissection, mechanical occlusion, significant residual stenosis, or other possible causes. Patients were divided into reflow group ($n = 50$) and no-reflow group ($n = 21$) according to the angiographic characteristics of TIMI flow of the infarct-related artery.

Results No-reflow phenomenon was detected in 7.9% of the patients. The median RF level was significantly higher in the no-reflow group than in the reflow group [15.2 ($8.0-34.1$) vs. 7.7 ($5.1-34.6$), $p < 0.001$]. In multivariate regression analysis;

diabetes ($p=0.02$), presence of coronary ectasia ($p<0.001$), presence of coronary intraluminal thrombus ($p<0.001$), echocardiographic left ventricular segmenter wall motion defect ($p<0.001$) and increased baseline RF level (OR: 1.178, 95% CI: 1.107-1.275, $p<0.001$) were determined as independent predictors of the no-reflow phenomenon.

Conclusions The findings suggest that initial increased serum RF concentrations in STEMI patients undergoing PCI may be independently associated with the no-reflow phenomenon.

OC091

The Relation Between Ischemia Modified Albumin Levels and Renal Functions in Autosomal Dominant Polycystic Kidney Disease (ADPKD)

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Background It is known that many factors such as oxidative stress (OS) contribute to development of cysts in the pathogenesis of ADPKD. There are many studies showing that prostaglandins (PG), nitric oxide (NO), asymmetric dimethylarginine (ADMA), homocysteine, S-adenosyl homocysteine (SAM), which are among the markers of OS, are increased in ADPKD even in the earlier stages. Recently, Ischemia Modified Albumin (IMA) has been used as a marker of OS in renal failure. In our study, we aimed to compare the serum IMA levels in the ADPKD group with the healthy control group and patients with hypertension, to show the relation with renal functions and investigate the role of IMA as a new marker in the end-stage renal disease.

Material and Methods Our study is a prospective cohort study. A total of 135 patients were included in our study as 50 ADPKD, 35 hypertension (HT) and 50 healthy group. The relation between renal functions and serum IMA levels were evaluated between the groups. The first and 6th months serum IMA levels of ADPKDs were compared, and its correlation with renal functions were examined. ADPKD and HT groups were grouped as those with and without the RAAS blockers. The difference in serum IMA levels between the patients who received RAAS blockers and not, were investigated.

Results Serum IMA levels were 0.42 (0.17-0.80) in ADPKD, 0.28 (0.04-0.51) in the HT and 0.31 (21.00-73.00) ABSU in the healthy group. The lowest IMA level was in the HT group. When the first and 6th month values of ADPKDs were compared, serum IMA levels in the 6th month were significantly lower ($p=0.002$). ADPKD and HT groups were divided into two groups as RAAS blocker and non-RAAS blocker and serum IMA levels were compared. In the HT group, serum IMA was 0.24 ± 0.10 in the RAAS blocker group, 0.36 ± 0.11 ABSU in the non-RAAS blocker group, and it was significantly lower ($p=0.004$) in the RAAS blocker

group. In ADPKD, 28 patients at baseline received a RAAS blocker, while the RAAS blocker was added and/or the dose was increased in 17 patients. 39 patients were using RAAS blockers in the 6th month of ADPKD. Serum IMA level of patients who received RAAS blockers was mean 0.41 ± 0.11 , while 0.33 ± 0.14 ABSU, for non-RAAS blocker group. Serum IMA level was significantly lower ($p=0.038$) in the RAAS blocker group. In 17 patients who were added to the RAAS blocker and whose dose were increased, the serum IMA levels were significantly lower ($p<0.001$) at the 6th month. While no significant correlation was found between serum IMA levels and urea and creatinine in ADPKD, a positive significant correlation was found between spot urine microalbumin / creatinine ($r: 0.339$, $p=0.016$).

Conclusions In our study, it was aimed to investigate the relationship between IMA level and oxidative stress in ADPKD. Although it is predicted that the level of IMA in ADPKD may be related to oxidative stress, it has been determined that RAAS blockers are effective in reducing OS and ischemia, and significantly reduce OS in both ADPKD and HT patients.

OC092

Evaluation of Dialysis Initiation Durations of Hemodialysis and Peritoneal Dialysis Patients in The Deceased Kidney Waiting List of Bursa Uludag University Faculty of Medicine

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Background There are 22,953 patients with chronic kidney disease in the deceased kidney waiting list in our country. According to the 2019 registration report of the Turkish Nephrology Association, the number of patients receiving hemodialysis (HD) and peritoneal dialysis (PD) treatment is 64,633. Two-thirds of the patients who received dialysis treatment were not on the deceased kidney waiting list. Therefore, this study aimed to retrospectively evaluate the dialysis durations of HD and PD patients registered on the deceased kidney waiting list in our center.

Material and Methods Dialysis type and dialysis initiation time of the patients were obtained using TDIS (Transplantation, Dialysis and Monitoring Systems of Health Ministry), and the data were evaluated retrospectively. Out of 420 patients on the deceased kidney waiting list of our center, 301 HD and 24 PD patients were included in the study.

Results Dialysis duration calculated by years was given below; number of patients between 0-1 year: 22 (6.8%), 1-2 years: 28 (8.6%), 2-3 years: 44 (13.5%), 3-4 years: 38 (11.7%), 4-5 years: 44 (13.5%), 5-6 years: 36 (11.1%), 6-7 years: 27

(8.3%), 7-8 years: 24 (7.4%), 8-9 years: 14 (7.4%), 9-10 years: 10 (3.1%), 10-11 years: 6 (1.8%), 11-12 years: 5 (1.5%), 12-13 years: 4 (1.2%), 13-14 years: 6 (1.8%), 14-15 years: 2 (0.6%), 15-16 years: 3 (0.8%), 16-17 years: 1 (0.3%), 17-18 years: 2 (0.6%), 18-19 years: 1 (0.3%), 21-22 years: 3 (0.9%), 23-24 years: 2 (0.6%), 29-30 years: 1 (0.3%), 33-34 years: 1 (0.3%), and 34 and 35 years: 1 (0.3%).

Conclusions When the patients on the deceased kidney waiting list were evaluated in our center, the number of patients undergoing dialysis between 1 and 10 years is 293. The number of patients who received dialysis treatment for 10 years or more is 32. The low rate of patients receiving dialysis treatment for 10 years or more on the deceased kidney waiting list may be related to the older patients not being sent to the transplant center by dialysis centers and/or the increase in mortality as the dialysis period prolongs.

OC093

The Relationship Between Coronary Artery Disease and Hs-Troponin T Changing During Exercise Stress Test

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Background This study aimed to investigate the relationship between coronary artery disease and high sensitivity troponin T (hs-TnT) values measured before and after exercise stress test (EST) in individuals with suspected coronary artery disease.

Material and Methods Sixty-eight patients who underwent coronary angiography after positive EST were included in the study. The hs-TnT values of all patients were measured before EST and at 4 hours after EST. All patients underwent coronary angiography, and patients were divided into 2 groups as those with [CAD (+)] or without [CAD (-)] coronary artery stenosis of 50% or more. Clinical and demographic characteristics and hs-TnT values measured before and after EST were compared between two groups.

Results Among the 68 patients evaluated, 26 patients (39.3%) were determined as CAD (-) and 42 patients (61.7%) as CAD (+). The mean age of the patient group with CAD (+) was 58±9 years, and a statistically significant difference was observed compared to the CAD (-) group (53±7 years) (p=0.024). There was no significant difference between the two groups in the hs-TnT and Δhs-TnT values before and after EST. There was a significant correlation between hs-TnT before EST and systolic blood pressure (SBP) before EST (r: 0.313, p=0.009), and between hs-TnT after EST and peak SBP during EST (r: 0.398, p=0.001). However, a strong negative correlation was found between the duke treadmill score (DTS) [exercise duration (min.) - (5xST deviation) - (4xangina index)] calculated by the exercise test parameters and the SYNTAX score indicating the prevalence and severity of coronary artery disease (r: -0.521, p=0.0001).

Conclusions As a result, our study was showed that hs-TnT values, which were measured serially during EST, did not contribute to coronary artery disease diagnosis. However, a strong negative correlation was found between DTS and the extent and severity of coronary artery disease. DTS evaluation performed before invasive coronary angiography can provide important information about coronary artery lesion complexity.

OC094

Relation between Microvascular and Macrovascular Hemodynamics in Normal Epicardial Coronary Arteries

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Background Cardiovascular risk factors both affect macrovascular and microvascular systems, resulting in negative results on the entire vascular tree. Aortic stiffness causes augmented systolic pressure, increased pulse pressure, increased myocardial oxygen demand and consequently, coronary blood flow diminishes because of decreased diastolic augmentation. The aim of our study is to investigate the relation between macrovascular and microvascular hemodynamics.

Material and Methods We were included 58 consecutive patients (29 male, age 54 [34-71]) without any epicardial coronary stenosis in coronary angiography. Macrovascular and microvascular parameters were calculated with the measurements of tonometry, coronary flow reserve, and microvascular resistance.

Results Carotid-femoral pulse wave velocity (PWV) and subendocardial viability ratio (SEVR) had an inverse correlation (r: -0.328, p=0.007). The main reason of this correlation was priorly positive correlation between PWV and systolic pressure-time integral (SPTI) (r: 0.465, p<0.001). A positive correlation was noted between augmentation index (AI) and PWV (r: 0.352, p=0.010); and an inverse significant correlation was noted between AI and SEVR (r: -0.383, p=0.003). PWV had a positive correlation with diastolic/systolic coronary flow velocity (r: 0.42, p=0.04) and microvascular resistance (MR) (r: 0.44, p=0.03) and a negative correlation with hyperemic mean coronary flow velocity (r: -0.416, p=0.043) and coronary flow reserve (CFR) (r: -0.419, p=0.04) in diabetic patient group (n=27). AI was inversely related to CFR (r: -0.41, p=0.04) in diabetic patient group. SEVR and CFR were well correlated in the same direction (r: 0.569, p<0.001). SEVR was significantly lower in the patients with lower CFR (1.41±0.23/1.58±0.24, p=0.01). SEVR had a significant negative correlation with MR (r: -0.321, p=0.016). SEVR was associated with delta MR which is the difference between the hyperemic and basal microvascular resistance values (arteriolar resistance index=ARI) (r: 0.413, p=0.002).

Conclusions Cardiovascular events appear as a combined result of the pathologies of the macro and microvascular levels. Increase in the severity of aortic wall arteriosclerosis-induced aortic stiffness determined by central hemodynamic parameters is associated with a decrease in subendocardial perfusion (SEVR) despite normal coronary perfusion pressure (patients with normal coronary arteries). So, central aortic hemodynamic properties affect subendocardial microvascular perfusion. PWV, an expression of the degree of arterial stiffness, is related to the structural and functional status assessed by objective parameters of coronary microcirculation in the diabetic patient group (CFR, ARI, MR). Increased aortic stiffness in diabetic patients affects microvascular hemodynamic parameters negatively despite normal epicardial coronary arteries. SEVR, which is an indicator of myocardial supply/demand balance and therefore particularly subendocardial perfusion, is related to the structural (MR) and functional (ARI) characteristics of the coronary microcirculation. Decrease in subendocardial perfusion ratio is associated with an increase in coronary microvascular resistance and a decrease in coronary flow reserve.

OC095

Hepatitis B and Hepatitis C Seroprevalance in Patients with Rheumatoid Arthritis

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Background Hepatitis B virus (HBV) and hepatitis C virus (HCV) infections are viral infections that have the potential to become chronic and affect most of the world. Our country is located in the middle endemic region for hepatitis B infection. Especially individuals who have had HBV infection before carry the HBV virus in their bodies for life, even if the viral infection has not become chronic. Rheumatoid arthritis (RA) is a chronic polyarthritic and autoimmune disease that frequently involves the synovial membranes, and it is a disease in which many immunosuppressive drugs are used simultaneously. These treatments can induce concurrent viral reactivation in patients with previous HBV or chronic HCV infection. The aim of this study is to determine the seroprevalence of HBV and HCV in RA patients and to investigate its distribution according to demographic structure.

Material and Methods The charts of 1,054 patients who were being followed up in the rheumatology outpatient clinic with a diagnosis of RA were retrospectively reviewed. Data from 492 patients (378 females, 114 males) whose HBV surface antigen (HBsAg), HCV antibody (anti-HCV), hepatitis B core antibody (anti-HBc IgG) tests were accessible were included in the study. RA patients were divided into 2 groups as anti-HBc IgG positive and negative. Demographic data (age and gender) were compared between groups.

Results The mean age in the study population was 57.53±13.82 years. In the study population, HBsAg test results were positive in 11 (2.2%) patients, anti-HBc IgG in 164 (33.3%), and anti-HCV in 5 (1.0%) participants. In the study population, 47 of 371 patients whose anti-HBs test results could be reached were found to be positive. The mean ages of anti-HBc IgG positive and negative patients were 60.34±12.46 and 56.12±14.25 years, respectively (p=0.001). Of the anti-HBc IgG positive and negative patients, 72.6% and 79.0% were women, respectively (p=0.113).

Conclusions Anti-HBc IgG positivity, which is an indicator of the past HBV infection is common, but HBsAg positivity, which is an indicator of chronic HBV infection, and anti-HCV positivity, which is an indicator of chronic HCV, are rare in RA patients. HBV and HCV seropositivity in RA patients is similar to HBV and HCV seropositivity in our society. In RA patients, those who have had HBV infection are older than those who have not had HBV infection before, but there is no difference according to gender.

OC096

Relation of Kidney Disease with Duration of Hospitalization and Mortality in COVID-19 Patients

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Background Coronavirus disease 2019 (COVID-19) has been recognized as a pandemic by the World Health Organization. Although diffuse alveolar damage and acute respiratory failure are the main features, extrapulmonary involvement such as stomach, liver, cardiovascular system, and renal involvement have been reported. But there are fewer studies on more kidney involvement. This study aimed to determine the frequency of kidney damage in patients hospitalized with a diagnosis of COVID-19 and investigate whether existing kidney damage was associated with hospitalization duration and mortality.

Material and Methods In our study, 4,064 COVID-19 patients hospitalized in the internal medicine pandemic service between March 10, 2020, and December 10, 2020, were analyzed retrospectively. We investigated the relationship between the group with and without high creatinine at baseline, in-hospital mortality, length of hospital stay, and other poor prognosis factors. t-test for bivariate analysis, χ^2 test, Cox regression, and logistic regression analysis for multivariate analysis were used.

Results At admission, serum creatinine and blood urea nitrogen (BUN) were high in 26.3% and 26.27% of patients, respectively. Patients entering the hospital with elevated serum creatinine were predominantly male and older (p<0.001). Patients with high baseline serum creatinine showed lower lymphocyte and platelet counts. Besides, abnormalities such as higher D-dimer, ferritin, and CRP were more common in patients with high baseline serum creatinine (p<0.001). The hospitalization duration was longer in the group with increased baseline serum creatinine (p<0.001). Patients with kid-

ney abnormalities such as high-onset serum creatinine and BUN had a higher mortality rate ($p < 0.001$).

Conclusions Few studies have been reported linking kidney disease (or abnormal kidney function) with an increased risk of hospital mortality in patients hospitalized with COVID-19. In accordance with our study, another study found that kidney disease is associated with in-hospital mortality. The mechanism of kidney disease involvement in COVID-19 patients is still unclear. Its etiology is probably multifactorial. COVID-19 may have direct cytopathic effects on kidney tissue and indirect effects on kidney tissue such as virus-induced cytokines, hypoxia, shock, and rhabdomyolysis. Pulmonary fibrosis has been reported in patients following recovery from COVID-19. It is not yet known whether there is renal fibrosis in patients who have recovered. For these reasons, more studies should be done in patients hospitalized with the diagnosis of COVID-19 during hospitalization and follow-ups. As a result, our findings show that kidney disease on hospitalization is associated with length of stay and in-hospital mortality in patients with COVID-19. Therefore, awareness of kidney disease in COVID-19 patients will contribute to both treatment management and follow-up in the period after COVID-19.

OC097

Pericardial Effusion in COVID-19 Patients

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Background The new coronavirus disease (COVID-19), which has been considered a pandemic since March 2020 and is caused by the SARS-CoV2 coronavirus, has infected 92 million people to date and caused the death of 2 million people. Typical clinical findings in COVID-19 disease are fever, cough, and shortness of breath. Although it is mild in most cases, it causes severe acute respiratory failure in some patients. Although it commonly involves the pulmonary system, cardiac involvement, including myocarditis, acute myocardial infarction, heart failure, and cardiac rhythm disturbances, can be observed in the infection. Our study aimed to investigate pericardial effusion as cardiac involvement in COVID-19 patients followed up in intensive care unit.

Material and Methods Baseline characteristics, demographic histories, and laboratory findings of the patients with COVID-19 were recorded. The diagnosis of COVID-19 was made with a real-time polymerase chain (rRT-PCR) applied with the help of nasopharyngeal swab and/or computed thoracic tomography and laboratory findings. Echocardiographic examinations were performed with the EPIQ 7 (Philips Healthcare, Andover, Massachusetts, USA) device to diagnose pericardial effusion. American Echocardiographic Association guidelines were used, and views were made through a standard parasternal long and short axis and apical 5, 4, and 2 cavity and substernal windows. Patients with pericardial effusion of 10 mm or more were included in the study as a patient group.

Results 59.5% of the patients with pericardial effusion were male ($n=22$). There was no difference between the groups

in diabetes mellitus, hypertension, chronic obstructive pulmonary disease, coronary artery disease, heart failure, and malignancy. The respiratory rate was statistically significantly higher in the pericardial effusion group (20 ± 4 vs. 18 ± 3 , $p=0.041$). While CRP, troponin I, D-dimer, BNP, and procalcitonin were higher in the pericardial effusion group than the control group, total protein was significantly lower. Univariate and multivariate logistic regression analyzes were performed to determine independent predictors of pericardial effusion. Age, CRP, troponin I, D-Dimer, BNP, total protein, and procalcitonin were significant in univariate analysis. However, in the multivariate regression analysis, only CRP (HR: 1.007, 95% CI: 1.002-1.015, $p=0.007$) was found to be significant as an independent predictor of pericardial effusion.

" It is known that coronaviruses cause myocardial damage and cardiac complications due to systemic inflammatory response and hypoxia. Our study supports the relationship between elevated procalcitonin and CRP and systemic inflammation findings, and pericardial effusion. The prognostic significance of troponin elevation, one of the indicators of cardiac damage, has been shown in previous studies. In our study, high troponin values were found to be associated with pericardial effusion. In conclusion, it is known that myopericarditis and pericardial effusion develop after viral infections. In patients with coronavirus infection, pericardial effusion may develop with a 3-4-fold elevation of systemic inflammatory biomarkers such as CRP and myocardial specific troponin. These patients should be followed closely with echocardiography. In our study, high CRP was determined to be a predictor for pericardial effusion. Larger patient groups are needed to show that this has clinical significance.