Oral Communications

OC001

Gamma Glutamyl Transferase (GGT) Levels in Individuals with Vitamin D Deficiency

[1]*Serhat Küçüker*
[1]*Günyüzü Public Hospital, Family Medicine Department, Eskisehir, Turkey*

Background Low serum 25-hydroxy-vitamin D levels have been associated with dyslipidemia and also cardiovascular diseases but the mechanism underlying these associations is not clear. Epidemiological studies suggests that, there is a relationship between high gamma glutamyl transferase (GGT) activity levels and coronary heart disease (CHD) or death risk due to CHD. High GGT activity level is associated with cardiovascular risk factors, metabolic syndrome, systemic inflammation, oxidative stress ; multiple cardio-metabolic risk factors including several comorbidities that have negative effect on the patient's risk profile and prognosis. In this study, we aimed to compare the GGT levels of the individuals with vitamin D deficiency and normal vitamin D levels.
Material and Methods In this cross-sectional study, data collected routinely in a general hospital laboratory database from 2020 to 2021 were used. 25-hydroxy-vitamin D and GGT levels of the patients were registered. Exclusion criteria were: <18 years, hypertension, diabetes mellitus, chronical kidney failure, alcohol users and liver function levels of more than 3 times normal. Furthermore, patients who recieved vitamin D defficiency diagnosis and took a treatment excluded from the study. Patients were evaluated as group 1 with vitamin D deficiency and group 2 with normal vitamin D levels as the control group. Group 1 was consisted of total 322 patients with low vitamin D levels (average age 54.4±12.2 years, 120 male %37.2); group 2 was the control group with total of 343 patients with normal vitamin D levels (average age 49±11.3, 125 males 36.4%). Clinical treshold levels of 25(OH)D was evaluated as deficient (<20 ng/mL), moderately deficient (≥20–30 ng/mL), and optimal (≥30 ng/mL). GGT ≥73 U/L levels was accepted as high.
Results Total 322 patients with vitamin D deficiency included in the study, 109 of the 322 patients were deficient, remaining 213 patients were detected as moderately defficient. GGT levels were significantly higher in patients with low vitamin D levels compared to the control group. (Group 1 average GGT 81±11 U/L, Group 2 average GGT 43±18 U/L) (p<0.002). GGT levels were significantly different between the patients with deficient and moderately defficient Vitamin D.(GGT levels in vitamin D deficient group: 85±13 U/L; GGT levels in vitamin D moderately deficient group: 75±12 U/L) (p<0.05).
Conclusions The relationship between Vitamin D deficiency and cardiovascular diseases has been shown previously. In the recent study; it's demonstrated that the GGT level is higher in people with vitamin D deficiency, and also this elevation increases as the vitamin D decreases. The fact that the mechanism of cardiovascular risk and vitamin D deficency is unclear suggests that increased GGT levels have a place in this mechanism. GGT may be used as a cardiovascular predictor in individuals with vitamin D deficiency due to oxidative stress and systemic inflammation. Randomized, controlled, large prospective studies are needed for this.

OC002

The Comparison of Target Variables for Secondary Prevention of Coronary Artery Disease between Smoker and Non-Smoker Patients

[1]*Tayyar Akbulut,* [1]*Faysal Saylik*
[1]*Health Sciences University, Van Regional Training and Research Hospital, Clinic of Cardiology, Van, Turkey*

Background Secondary prevention of coronary artery disease (CAD) involves both control of risk factors and therapeutic options for protecting the coronary arteries from plaque eruption. We think that people who continues smoking after coronary events are more resistance to accept advices for modifying their life styles or using drugs regularly. Thus, we hypothesized in this study that reaching optimal goal of secondary prevention in patients who continued smoking might be more difficult than those who gave-up smoking after coronary events.
Material and Methods We retrospectively collected 150 patients, who had coronary artery events in this observational study. Patients were divided into three groups, as continued smoking (CS) (n=34), gave-up smoking (GS) (n=91), and smoking again after gave-up (SAG) (n=25). The variables for secondary prevention of CAD were compared between groups.
Results SAG patients were older than CS group (p=0.036). Regularly drug use was lower in CS patients than in GS patients (p=0.009). CS patients had more frequent regularly fitness than SAG patients (p=0.009).

There were no statistically significant differences between groups with respect to weight loss, rates of diet, blood cholesterol and triglyceride levels, and HbA1c levels. In the follow-up, CS and SAG patients had more frequent coronary events than GS patients (p<0.0001).

Conclusions Patients continuing cigarette smoking were worse for regularly drug use after cardiac events. Morover, this group had more frequent cardiac events as expected. But there were no statistically significant differences between groups for other target variables of secondary prevention of CAD.

Table 1. The comparion of demographic, clinical, and laboratory characteristics between groups.

Variables	Smoking group (N=34)	Non-smoking group (N=91)	Re-smoking group (N=25)	p value
Age, years	58.7(13.3)[a]	63.2(11.7)	66.9(11.4)[b]	**0.036**
Gender male, n(%)	6(17.7)	27(29.7)	6(24)	0.382
Hypertension, n (%)	28(82.4)	73(80.2)	23(92)	0.386
Diabetes mellitus, n (%)	14(41.2)	42(46.2)	13(52)	0.711
Cerebrovascular events, n (%)	0(0)	0(0)	0(0)	NA
Thyroid dysfunction, n (%)	0(0)	5(5.5)	0(0)	0.340
Peripheral arterial disease, n (%)	1(2.9)	0(0)	0(0)	0.393
Chronic kidney disease, n (%)	0(0)	1(1.1)	0(0)	1.000
Cigarette status				
When stopped smoking?	-			0.583
in-hospital	-	60(65.9)	15(60)	
after discharge	-	31(34.1)	10(40)	
Why stopped smoking?	-			0.461
Doctors advice	-	39(42.9)	13(52)	
Family force	-	18(19.7)	6(24)	
Death fear due to MI	-	34(37.4)	6(24)	
MI type				0.133
Anterior STEMI	8(23.5)	19(20.1)	8(32)	
Inferior STEMI	16(47)	25(27.5)	7(28)	
Non-STEMI	10(29.4)	47(51.6)	10(40)	
Regularly drug use, n (%)	9(26.5)[b]	51(56)[a]	10(40)	**0.009**
Fitness regularly, n (%)	15(44)[a]	25(27)	2(8)[b]	**0.009**
Weight loss, n (%)	19(55.9)	46(59.1)	7(28)	0.078
Weight loss in kg	2.5(0-5)	2(0-5)	2.5(0-3)	0.091
Regular diet, n (%)	22(64.7)	52(57.1)	9(36)	0.077
Regular out-patient clinic control, n(%)	16(47)[a]	69(76)[b]	15(60)	**0.007**
Total cholesterol, mg/dL	165.7(56)	179.4(42)	170.4(50.5)	0.307
Triglyceride, mg/dL	100.3(72-162.6)	119.8(88.2-210.6)	101.7(84.9-124.8)	0.175
LDL cholesterol, mg/dL	102.8(69.2-129.2)	107.6(81.9-127.4)	99.8(68.7-116.1)	0.566
HDL cholesterol, mg/dL	38.9(9.2)	39.9(9.5)	41(8.6)	0.692
HbA1c, before	5.4(5-7.1)	5.6(5-7.6)	6.3(5-7.7)	0.604
HbA1c, after	5.4(5.1-6.7)	5.6(5.1-6.9)	6.1(5.3-7.9)	0.374
Events, n(%)				**<0.001**
No event	11(32)	62(68)	12(48)	
PCI, CABG, arrhythmia	23(68)	29(32)	15(60)	

MI: myocardial infarction, STEMI: ST-segment elevation MI, LDL: low-density lipoprotein, HDL: high-density lipoprotein, PCI: percutaneous coronary intervention, CABG: coronary artery bypass graft, HbA1c: glycated hemoglobin.

OC003

Investigation of Primary Care and Diabetes Attitudes of Type 2 Diabetes Patients towards the Disease

[1]*Ugur Ergün*, [2]*Ahmet Ürk*, [3]*Mustafa Eroglu*

[1]*Manisa Demirci State Hospital, Department of Internal Medicine, Manisa, Turkey*

[2]*Balıkesir University Faculty of Medicine, Department of Internal Medicine, Balıkesir, Turkey*

[3]*Balıkesir University Faculty of Medicine, Department of Internal Medicine, Department of Endocrinology and Metabolic Diseases, Balıkesir, Turkey*

Background Type 2 diabetes mellitus (DM) is a common chronic metabolic disease that can be seen at any age, characterized by insufficient insulin production, insulin resistance, or hyperglycemia resulting from both, and causes significant morbidity and mortality. DM is one of the leading causes of death from non-communicable diseases. Patients should be informed about complications due to diabetes and diabetic foot. At the same time, they must comply with the follow-up schedules defined in their outpatient clinics for compliance with medical treatment. For this purpose, it is necessary to evaluate patients' primary care and treatment behaviours for the disease. Thus, the control and management of the disease are facilitated. This study examined patients' self-care and attitudes towards type 2 diabetes disease.

Material and Methods In this descriptive and cross-sectional study, a questionnaire consisting of 13 questions was applied to 300 diabetic patients, which was developed according to the purpose of the research and based on the literature. The study included type 2 diabetes patients aged between 18 and 90 who had no hearing or comprehension problems and agreed to participate in the study.

Results Our study included 138 (46%) male and 162 (54%) female patients. The mean age was 58.9±13.5 years (58.8±12.6 in men and 59±14.3 in women). Age distributions according to gender did not differ (p=0.8). While 26 (8.7%) of the patients were illiterate; 41 (13.7%) were literate, 100 (33.3%) primary school, 35 (11.7%) secondary school, 49 (16.3%) high school, 49 (16.3%) university graduate. Again, 225 (75%) of the patients were married, and 75 (25%) were single. In the assessment of the income status of the patients, 46 (15.3%) stated that their economic status was poor, 168 (56%) moderate, and 86 (28.6%) good. The least disease duration was one year, the longest disease

duration was 50 years (mean duration 11.9±8.3). Of the participants, 164 (50%) had diabetes less than ten years, and 95 (86%) had diabetes between 10-20 years. There was no significant difference between the duration of diabetes according to gender (p=0.11). Only 110 (36.6%) of the patients were receiving insulin therapy. Of the patients, 144 (48%) received insulin administration training and 85 (28.3%) foot/pulse training. 141 (47%) patients stated that they had knowledge about vaccination and 131 (43.7%) patients about diabetes-related complications. Fifty (16.7%) patients applied to the examination every three months as recommended, and 183 (61%) less frequently than once a year. 182 (60.7%) patients had never had an eye examination. The examinations of the participants revealed that 125 (41.7%) had proteinuria screening, and 214 (72%) had electrocardiography (ECG).

Conclusions Since diabetes is a lifelong disease, diabetes education is an essential part of the disease's prevention, treatment, care, and follow-up. Primary care and awareness is the most critical part of the treatment in diabetic individuals. Considering the individual characteristics of the patients, we think that it is essential to determine the missing information and negative attitudes towards the disease, organize training to improve their knowledge and perspectives and carry out studies to increase their awareness in terms of morbidity and mortality.

OC004

The Role of Serum Magnesium Level in Metabolic Dysfunction-Associated Fatty Liver Disease

[1]*Ali Kırık*

[1]*Balıkesir University Faculty of Medicine, Department of Internal Medicine, Division of General Internal Medicine, Balıkesir, Turkey*

Background Metabolic dysfunction-associated fatty liver disease (MAFLD) is a new disease pattern that has been discussed in recent years and is stated to occur as a result of the association of non-alcoholic fatty liver disease (AFLD) with metabolic dysfunction. In the current literature, although the role of serum magnesium (Mg) level in patients with LFS is not clear, few studies emphasize that Mg may be associated with steatosis and inflammation. However, there is no study examining the role of Mg in clinic of MAFLD. In this study, we aimed to examine the role of Mg in MAFLD.

Material and Methods This cross-sectional study retrospectively screened patients who applied to the Balikesir University Faculty of Medicine Internal Medicine Clinic. In the whole group, patients diagnosed with hepatosteatosis by ultrasonography (USG) and accompanied by metabolic disorder-related conditions [obesity, diabetes mellitus (DM), metabolic syndrome (MetS)] were considered as the MAFLD patient group, and those without any pathology were considered as the healthy control group. We compared the two groups' blood glucose, HOMA-IR, Mg levels, and fatty liver fibrosis scores and performed correlation analysis of Mg with other parameters.

Results Our study included 82 (48 females, 34 males) healthy individuals with a mean age of 38.10±12.25 years and 173 (104 females, 69 males) MAFLD patients with a mean age of 39.21±10.32 years. Weight, body mass index (BMI), insulin, HOMA-IR, Mg, NFS and FIB-4 score values were measured as 71.98±15.50 kg, 25.45±4.62 kg/m^2, 8.11±10.60 U/L, 2.33±4.33, 2.05±0.36 mg/dL, -3.28±1.06, and 0.70±0.33, and 85.96±16.12 kg, 31.11±4.57 kg/m^2, 11.71±9.04 U/L, 2.96±2.52, 1.99±0.15 mg/dL, -3.23±1.27 and 0.61±0.28 in the control and patient groups, respectively. After pairwise comparison, there was a statistically significant difference between patient and control groups in weight, BMI, insulin and HOMA-IR ($p<0.05$), but not statistically significant between Mg, NFS and FIB-4 scores ($p\geq0.05$). There was no statistically significant relationship between Mg and other parameters in the patient group ($p\geq0.05$).

Conclusions Our study found no significant difference in serum Mg levels between patients with and without MAFLD. In addition, in the correlation analysis, we did not find a significant relationship between serum Mg levels and insulin resistance and fatty liver fibrosis scores in the patient group. Non-alcoholic fatty liver disease (NAFLD) is a common chronic liver disease worldwide. In the terminology of NAFLD, which occurs due to increased triglyceride load in the liver and concomitant insulin resistance, both the lack of dual etiologies and the inadequacy of the definition of the metabolic disorder have led to the necessity to define this disease as MAFLD in recent years. Mg is an essential element that has a role in intracellular transmission pathways and enzyme systems and plays a role in many physiological events such as cellular energy metabolism, DNA transcription, protein synthesis and electrolyte balance. In addition, studies in the current literature have shown that Mg also plays a role in the pathogenesis of MetS-related diseases such as obesity and DM. However, clinical studies examining the role of Mg in NAFLD patients have had mixed results, and there is no study investigating its role in MAFLD patients. Few studies have emphasized that Mg may be

associated with hepatosteatosis in NAFLD patients. In conclusion, our pioneering research investigating the role of Mg in MAFLD has determined that Mg is not directly related to this disease.

OC005

Evaluation of Diabetic Patients with COVID-19 and Determination of the Contribution of the Severity of Diabetes to COVID-19

[1]Ceren Çaltı Gür, [2]Derya Argun
[1]Istanbul Bagcilar Training and Research Hospital, Clinic of Internal Medicine, Istanbul, Turkey
[2]Istanbul Aydın University Faculty of Medicine, Clinic of Internal Medicine, Istanbul, Turkey

Background The coronavirus disease (COVID-19) continues its impact as a pandemic that threatens public health worldwide. The coexistence of COVID-19 with diabetes mellitus (DM), another global epidemic characterized by chronic hyperglycemia, systemic complications and multi-organ dysfunctions, is known to increase the severity of the disease. This study aimed to analyze the demographic and laboratory findings of diabetic patients followed and treated for COVID-19 and evaluate the severity of diabetes to laboratory findings reflecting the seriousness of COVID-19.
Material and Methods This study was carried out by retrospectively scanning the data of 122 patients with DM who were followed up with the diagnosis of COVID-19 in the internal medicine clinic. Patients with a history of acute or chronic inflammatory, autoimmune or infectious disease, haematological disease, malignancy, renal and hepatic injury, documented cardiovascular disease, and a history of major surgery or trauma excluded in the study. Clinical outcomes were recorded by grouping them as discharge from the hospital, transfer to the intensive care unit, and death. We grouped diabetic patients according to their HbA1c values (≤7.5%, 7.5-9%, and ≥9%) and calculated diabetes age (years) from the time elapsed since the first diagnosis of DM.
Results Our study was conducted with a total of 122 COVID-19 patients, 75 (61.5%) male and 47 (38.5%) female. Of the patients, 5 (4.1%) died, 9 (7.4%) were transferred to the intensive care unit, and 108 (88.5%) were discharged with good recovery. In the patient group with a discharge rate of 88.5%, 50% had HbA1c ≤7.5%, 26.2% had 7.5-9.0% and 23.8% had ≥9%. There was a statistically significant difference in age, ferritin, D-dimer, CRP, LDH and HbA1c variables between death, intensive care transfer and discharge groups ($p<0.05$). Age and LDL-cholesterol were significantly higher in the death group than in the discharge group. While ferritin, D-dimer and CRP were significantly higher in the death and intensive care unit transfer group than in the discharged group, the HbA1c value was significantly higher in the intensive care unit transfer group than in the discharged group. When HbA1c values are grouped, there is a significant difference between these three groups only in glucose ($p<0.05$). Glucose values of the ≤7.5% group were significantly lower than ≥7.5% of all groups, while the glucose values of the 7.5-9.0% group were lower than the ≥9% group. In Spearman's correlation analysis, there was a negative low-level significant relationship between HbA1c and leukocyte values (r: -0.20, $p<0.05$) and a positive high-level association with glucose values (r: 0.77, $p<0.05$). Also, there was a positive low-level relationship between diabetes age and age values (r: 0.36, $p<0.05$) and a negative low-level significant association with lymphocyte values (r: -0.20, $p<0.05$).
Conclusions DM is one of the main comorbidities that affect the course and severity of COVID-19. Our study confirms the severe course of COVID-19, especially in elderly and diabetic patients with high acute phase reactants. In addition, it shows that the severity of diabetes does not have an additional contribution to the course of the disease. More research is needed to reveal the relationship between DM and COVID-19 severity to improve clinical outcomes.

OC006

A Case of Chronic Autoimmune Atrophic Gastritis Accompanying Primary Hyperparathyroidism

[1]Ceren Çaltı Gür, [2]Derya Argun
[1]Istanbul Bagcilar Training and Research Hospital, Clinic of Internal Medicine, Istanbul, Turkey
[2]Istanbul Aydın University Faculty of Medicine, Clinic of Internal Medicine, Istanbul, Turkey

Background Although most cases of primary hyperparathyroidism (PHPT) are sporadic, it may also be a component of the MEN-1 syndrome. In addition, there is a non-hereditary and unexplained association between PHPT and chronic autoimmune atrophic gastritis (COAG). This case is presented to emphasize that COAG can develop in a patient with PHPT without the familial syndrome.
Case Report A 54-year-old female patient with known diagnoses of Hashimoto's thyroiditis and

left nephrolithiasis applied to us with complaints of weakness and widespread bone pain. The patient had a serum ionized calcium (Ca) level of 11.2 mg/dL and an inorganic phosphorus level of 3.3 mg/dL. There was no known liver or renal failure or a history of drug use affecting Ca metabolism. 25(OH)-vitamin D level was 32 ng/mL. While the Ca in 24-hour urine was 225 mg/day, the Ca/creatinine clearance was 0.06. The plasma PTH level was 115.7 mg/dL. Parathyroid scintigraphy revealed that a diagnosis of primary hyperparathyroidism was made based on parathyroid adenoma. In the bone densitometry performed on the patient, the T-score was L1-L4: -3.08. We referred the patient to general surgery for parathyroidectomy. Concurrently, we requested anti-intrinsic factor and anti-parietal antibody tests due to the patient's chronic vitamin B12 deficiency, and both antibodies were positive. After an upper gastrointestinal system endoscopy, multiple gastroscopic biopsies showed chronic atrophic gastritis, achlorhydria and intestinal metaplasia. Control gastroscopy was recommended to the patient one year later.

Conclusions There is a significant association between PHPT and COAG, and it should be kept in mind that these two clinical manifestations can coexist without MEN-1 syndrome. Although the pathological mechanisms underlying this relationship have not been fully elucidated, autoimmunity can be considered a possible cause. We may recommend screening patients with PHPT for COAG and patients with COAG for PHPT.

OC007

Investigation of Compliance with COVID-19 Hygiene Measures in Patients Undergoing Hemodialysis in a University Hospital

[1]Gülfer Pehlivan, [1]Nurcan Kop Bulmıs, [1]Aysegül Oruç, [1]Alparslan Ersoy

[1]Bursa Uludag University Faculty of Medicine, Department of Nephrology, Bursa, Turkey

Background The World Health Organization declared the COVID-19 infection as a pandemic on March 11, 2020. Infection is transmitted through the respiratory tract and close contact. For this reason, personal hygiene and social distance-mask measures are important for protection. This study aimed to investigate the compliance of patients undergoing dialysis treatment in the hemodialysis unit with COVID-19 hygiene measures during the pandemic.

Material and Methods The study included 100 (60% male, 67.8% married, 57.8% 56 years and older) patients who underwent routine hemodialysis treatment in our unit and examined the patients' compliance to the hygiene measures with the "COVID-19 Hygiene scale". We scored these categories; hygiene (H), changing hygiene behaviours (CHB), home hygiene (HomeH), social distance mask (SDM), shopping hygiene (SH), hand hygiene (HandH), and hygiene when coming home from outside (CHH) categories.

Results From the epidemic's beginning until 15.07.2021, 12 of our 65 dialysis patients had COVID-19 infection. Mean scores were high in all categories (H 85.7±18.3, CHB 18.5±4.3, HomeH 11.9±3.2, SDM 16.1±2.7, SH 12.7±4.9, HomeH 16.3±4.3, and CHH 9.3±2.9). The scores were similar between the groups when the patients were compared according to marital status, gender, and family structure. HomeH and SH scores were significantly lower in the advanced age group. Total H, SH, HomeH, CHH scores were significantly higher for those with a high education level. Total (82.4±18.6 vs 96.7±12.2, p=0.001) and other H scores (CHB 17.8±5 vs 20.9±3.7, HomeH 11.4±3.2 vs 13.8±2.4, SDM 15.7±2.9 vs 17.2±1.7, SH 11.9±5 vs 15.3±3.7, HandH 15.±4.2 vs 18.6±3.7, CHH 8.9±2.9 vs 10.8±2.1, $p<0.05$) in those with a history of COVID-19 in themselves or a relative were significantly higher.

Conclusions COVID-19 infection in dialysis patients has high morbidity and mortality. This study aimed to determine individuals' personal and general hygiene behaviours according to their socio-demographic characteristics during the COVID-19 epidemic process. Our investigation determined that dialysis patients showed a high level of compliance with individual hygiene measures. The fact that the patient or one of his relatives had a COVID-19 infection positively affected hygiene compliance. Continuing education on patients' compliance with mask, distance and hygiene rules during the pandemic will be beneficial in protecting from COVID-19 infection.

OC008

Does Megaloblastic Anemia Affect Glycated Hemoglobin?

[1]Bünyamin Aydın
[1]Kütahya Health Sciences University, Evliya Çelebi Training and Research Hospital, Endocrinology and Metabolic Diseases, Kütahya, Turkey

Background Glycated haemoglobin (HbA1c) is used as a clinical indicator of an individual's blood sugar level in the previous three months. Vitamin B12 deficiency anaemia may cause falsely high HbA1c values due to prolonging erythrocyte (RBC) survival time. In this study, we investigated whether vitamin B12 deficiency anaemia affects HbA1c.
Material and Methods We included a total of 37 patients with a diagnosis of vitamin B12 deficiency anaemia with erythrocyte volume (MCV) >100 fL and vitamin B12 <126 ng/L in the study. The patients had not been diagnosed with diabetes before and were not using any antidiabetic drugs. Fasting plasma glucose (ABG) was <100 mg/dL, HbA1c <6.5%, and hemoglobin (Hgb) <12 g/dL (female) and 13 g/dL (male) in the patients. Patients were given 1 mg/day cyanocobalamin (vitamin B12) orally for three months to treat vitamin B12 deficiency. Hgb, MCV, FPG, HbA1c, vitamin B12 and body mass index (BMI) values of the patients were measured at the beginning and the end of the 3rd month and were compared.
Results A total of 37 patients included in the study consisted of 27 women (72.98%) and ten men (27.02%). The mean age was 38.12±7.71 years in females and 46.62±8.52 in males. While the initial HbA1c value was 6.02±0.37%, the HbA1c value at three months was 5.61±0.46% and was statistically significantly lower ($p<0.001$). While initial vitamin B12 was 112.43±7.18 ng/L and Hgb 11.31±0.28 g/dL, vitamin B12 and Hgb levels at 3rd month were 408.48±119.61 ng/L and 12.26±0.33 g/dL, and the increase was statistically significantly ($p<0.001$ and $p<0.001$, respectively). MCV values statistically significantly decreased from the baseline 104.05±4.03 fL to 93.24±3.98 at three months ($p<0.001$). There was no significant difference between baseline and 3rd-month FPG and BMI values ($p=0.887$, $p=0.839$, respectively).
Conclusions Correction of vitamin B12 deficiency anaemia before any diagnosis or treatment decision is made according to the HbA1c level will prevent patients from being misdiagnosed as diabetes and prevent additional unnecessary intervention in the diabetes treatment of diabetic patients. Giving further treatment to diabetic patients with vitamin B12 deficiency according to high HbA1c will increase the risk of hypoglycemia in patients and bring additional drug costs to the state economies. Early diagnosis and treatment of vitamin B12 deficiency anaemia in diabetic patients can improve glycemic control and prevent or delay complications.

OC009

Retrospective Evaluation of Patients with Acute Leukemia

[1]Ayfer Durak
[1]Sancaktepe Sehit Prof. Dr Ilhan Varank Training and Research Hospital, Geriatrics, Istanbul, Turkey

Background Acute leukemia (AL) results from malignant transformation of myeloid or lymphoid hemopoietic progenitor cells. In this retrospective study, we aimed to examine the cases of AL over a 10-year period and to compare the obtained findings with the literature.
Material and Methods In our study, age, gender, clinical findings from the file records of 130 AL cases between 1987-1997 in Osmangazi University Faculty of Medicine, department of Hematology. Laboratory characteristics, treatment modalities, response and survival data were evaluated.
Results 130 adult AL cases were studied; 98 (75.4%) had acute myeloid leukemia (AML) 28 (21.5%), acute lymphoblastic leukemia (ALL), 4 (3.3%), acute undifferrentiated leukemia (AUL). The mean age was 43±1.7 years in AML and 30±2.6 years in ALL. 55 (56.1%) male, 43 (43.9%) female of 98 AML patients, 17 (60.7%) male of 28 ALL patients, 11 (39.3%) was a woman. The most common complaint in cases with AML and ALL was fatigue 93.6-92.9%. Sternal tenderness, lymphadenomegaly (LAM) and splenomegaly were significantly higher in patients with ALL. Extramedullary involvement (lymphadenomegaly, hepatomegaly, splenomegaly, gingival hypertrophy) was most frequently detected in the M5 subtype. The leukocyte (WBC) count was 99.303±19.990/µl in the ALL group and 47.843±6.609/µl in AML, with a significant difference ($p<0.01$). Anemia and thrombocytopenia were present in both groups, and the mean hemoglobin value was 7.45±0.21g/dL in AML and 8.8±0.47 g/dL in ALL. Thrombocytopenia was found to be 95.7% in AML and 96.4% in ALL. In AML and ALL, subgroups were recorded from the files. In AML, M5 (23.4%) followed by M3 and M2. In ALL, L2 (85.7%) followed by L1 and L3 subtypes were seen the most. Generally, it was

found that the cases entered remission with one cure. The mean time to stay in remission is 7.6±1.58 months in AML and 9.31±2.35 months in ALL. The most common site of relapse is the bone marrow. The most common cause of death in both groups, respectively sepsis and cerebrovascular accident.

Conclusions In our study, the incidence of ALL, AML, gender distribution, infection rate, weight loss, LAM, splenomegaly, hepatomegaly, central nervous system (CNS) involvement (high in ALL) were found to be compatible with the literature. Complete remission rates, duration of stay in remission and relapse site (boneity) were the same as in the literature, but survival times were found to be shorter than in the literature.

OC010

Evaluation of Relationship between Thyroid Volume and Impaired Glucose Metabolism

[1]*Aysen Akkurt Kocaeli*
[1]*Bursa City Hopital, Division of Endocrinology and Metabolic Diseases, Bursa, Turkey*

Background Functional and morphological alterations of the thyroid gland generated by insulin resistance and related metabolic disturbances constitute the hot agenda of the endocrine research recently. Impaired fasting glucose (IFG), impaired glucose tolerance (IGT) and diabetes mellitus (DM) are basic disorders of glucose metabolism in which insulin resistance plays a prominent role. The present case-control study aimed to investigate the changes in thyroid volume and nodule prevalence in patients with disturbed glucose metabolism.

Material and Methods Patients with IFG and IGT were grouped as prediabetes (n=250). The other two groups were type 2 DM (n=141) and a control group (n=261) which consisted of cases with no known glucose metabolism disturbance. All of the patients were recently diagnosed. Body weight, waist circumference, serum TSH levels of all cases were measured. A single operator performed thyroid ultrasonography to all participants.

Results The mean TSH value was found to be significantly higher in DM group than the other two groups (mean TSH of DM group was 1.87±0.9 mIU/ml; that of prediabetes group was 1.49±0.8 mIU/ml and that of the control group was 1.47±0.8 mIU/ml; p<0.001). Mean thyroid volume was significantly different from each other in all groups. It was significantly higher in prediabetics than the control group (18.8±9.0 and 12.8±4.2 ml, respectively), in DM group than the prediabetic group (20.6±8.7 and 18.8±9.0 mL, respectively) (p<0.001). The prevalence of thyroid nodule was significantly higher in DM group than the prediabetic and the control groups, in the prediabetic group than the control group (61.0%, 44.4%, and 17.2%, respectively, p<0.001*)*. Among patients with nodular goiters, the evaluation according to the mean of maximum nodule diameter revealed significantly lower values in the control group (mean value*:* 8.1±3.8 mm*)* than the other two groups (p<0.001). The mean values were higher in DM group than the prediabetics, though not significantly (12.2±7.7 and 11.2±7.2 mm, respectively).

Conclusions: The results demonstrate that patients with DM and prediabetes have significantly increased thyroid volume and nodule prevalence according to the control group. Our findings are probably the first evidence showing prospectively morphological and functional alterations in the thyroid gland caused by a pathological course of disturbed glucose metabolism in which insulin resistance plays a basic role.

OC011

Angina Bullosa Haemorrhagica: A Case Report

[1]*Feridun Gürlek,* [2]*Fatih Coskun,* [2]*Eyyüp Tasdemir*
[1]*University of Health Sciences, Bursa Postgraduate Training and Research Hospital, Department of Internal Medicine Bursa, Turkey*
[2]*University of Health Sciences, Bursa Postgraduate Training and Research Hospital, Department of Internal Medicine, Division of Allergy and Clinic Immunology, Bursa, Turkey*

Background Angina bullosa haemorrhagica (ABH); It is characterized by recurrent hemorrhagic bullae in the oral mucosa, it is rare and the cause is unknown. It has been reported in the literature that no concomitant systemic disease has been found. The pathogenesis of the disease is unknown; intraoral local traumas are thought to be the trigger. Spontaneous resolution has been reported within 7 to 10 days. Those located close to the root of the tongue are particular importance as they may cause obstructive respiratory distress with irritation and bleeding. Herein, we presented a patient with recurrent hemorrhagic bullae secondary to local trauma in the oral mucosa.

Case Report 47-year-old female patient was admitted to our clinic with the complaint of recurrent, painless, hemorrhagic bullae in the mouth for 7 years. The lesions usually started suddenly on the floor of the mouth and under the tongue after eating lavash bread and some foods and healed spontaneously within a few days. It was learned that the patient had a history of chronic gastritis and hyperlipidemia, and had rashes on the skin due to eating strawberries and UV exposure. She had been using combined oral contraceptives and intermittent nonsteroid antienflamatuary drugs for headache complaints for a long time. Intraoral examination revealed hemorrhagic bullae on the floor of the mouth and under the tongue. In the examinations performed: IgE 151 IU/mL, CRP, INR and PT normal, aPTT 20.2 sec, fibrinogen 510 mg/dL, sedimentation rate 40/h, hemoglobin 8.4 g/dL, glucose 106 mg/dL, total iron binding capacity 543 ug/dl, ferritin 3.8 ng/mL, iron 14 ug/dL, ANA and RF (-). Thyroid function tests and vitamin B 12 was normal. Folate was 2.1 ng/mL. Anti-TPO and C4 were normal. The food prick tests and food-specific IgE tests were negative. Bullous diseases and bleeding dyscrasias were excluded by clinical picture and laboratory tests, and the patient was diagnosed with angina bullosa hemorrhagica. For treatment, the clinical course was explained to the patient, and intraoral trauma was recommended to be avoided. Oropharyngeal bulla and the possibility of airway obstruction were explained. Chlorhexidine mouthwash was recommended.

Conclusions Angina bullosa hemorrhagica is not accompanied by coagulation disorders or vesiculobullous diseases such as pemphigus. Local traumas and vascular fragility have been implicated in its pathogenesis. There are publications reporting that it is associated with long-term inhaled steroid use, glucose metabolism disorder and hypertension. In differential diagnosis; thrombocytopenia, amyloidosis, Osler-Weber-Rendu disease, fixed drug eruptions, cicatricial or bullous pemphigoid, bullous lichen planus, dermatitis herpetiformis and linear IgA disease should be considere. The bullae rupture in a short time and heal spontaneously within a week or two without leaving a trace.

OC012

Investigation of Baseline Characteristics of Rheumatology Patients Receiving Nintedanib: A Single Center Study

[1]Ali Ekin, [1]Belkıs Nihan Coskun

[1]Bursa Uludag University Faculty of Medicine, Department of Internal Medicine, Division of Rheumatology, Bursa, Turkey

Background Nintedanib is an intracellular tyrosine kinase inhibitor used in the lung involvement of idiopathic pulmonary fibrosis (IPF), systemic sclerosis, Sjögren's syndrome (SjS) and rheumatoid arthritis (RA). In our study, we aimed to examine the admission characteristics of patients with pulmonary involvement due to rheumatological diagnosis,who received follow-up nintedanib treatment from our clinic.

Material and Methods The clinical, laboratory and radiological features of 12 patients who had a rheumatological disease and lung involvement due to this disease and were started on nintedanib between January 2009 and December 2021 were examined.

Results 9 of our patients(75%) were female, mean age was 62.9±11.7 (median 66.5) years; mean age at diagnosis was 55.8±12.5 (median 57.5) years. Radiologic patterns of lung involvement was in UIP (usual interstitial pneumonia) pattern in 7 patients. There were 3 patients who developed lung involvement after the diagnosis of rheumatologic disease, and 2 patients who were diagnosed with rheumatologic disease after lung involvement. One of these two patients was diagnosed with scleroderma and the other with SjS. There was the highest number of patients with a diagnosis of scleroderma. In the final high resolution lung tomography (HRCT) before nintedanib, there were 7 patients with ground glass areas and 8 patients with honeycomb appearance. All patients had signs of fibrosis in lung. Of the two patients with negative ANA, one was diagnosed as undiferenced connective tissue disease (UCTD)+SjS and the other was diagnosed as SjS. Scl 70, Sm, nRNP/Sm antibodies of the patient diagnosed with UCTD+SjS were positive. There were 7 (58.3%) patients with pulmonary artery pressure ≥25 mmHg on echocardiography.There was no active smoker, one of our patients was ex-smoker. The percentile mean of FEV1 value was 80.0±24.4% (median 75.5%), the percentile mean of FVC value was 79.3±27.6% (median 71%), DLCO adj 43.0±17.7% (median 40%). Four of the patients with a diagnosis of scleroderma were using iliomedin treatment for

digital ulcer. The mean of cyclophosphamide used at least once in all patients was 6.0±3.2 g (median 4.5). The number of immunosuppressives used was 2.5±0.6 (median 3). Concomitant nintedanib and immunosuppressive therapy was present in 11 (91.6%) patients.There were 6 (50%) patients receiving mycophenolate mofetil (MMF)+nintedanib, 3 (25%) patients receiving rituximab+MMF+nintedanib, and 2 (16.6%) patients receiving azathioprine+nintedanib. The mean of comorbid disease was 2.5±1.3 (median 2). The mean erythrocyte sedimentation rate before nintedanib was 18.6±11.8 mm/h (median 15); The mean of C-reactive protein (CRP) was 5.5±6.7 mg/L (median 2.6). There were 2 (16.6%) patients who discontinued the drug due to side effects. The drug was discontinued due to elevated liver function tests in one patient and intolerable nausea and vomiting in the other patient. Medication side effects were observed in five patients, and the most common side effect was nausea. Vomiting, fatigue and abdominal pain were other side effects.

Conclusions Nintedanib is also used in interstitial lung diseases due to scleroderma, SjS and RA, as in IPF. In the INBULID study, regardless of the fibrotic pattern in HRCT, the rate of progression of interstitial lung disease was slower in patients receiving nintedanib than in those receiving placebo. Our observations will contribute to other studies that will use nintedanib.

OC013

A case of sinus bradycardia in a patient treated with pulse steroids for adult-onset Still's Disease

[1]Selin Ildemir, [1]Beyza Nur Ercan, [2]Ali Ekin, [2]Yavuz Pehlivan, [2]Ediz Dalkılıç

[1]Bursa Uludag University Faculty of Medicine, Department of Internal Medicine, Bursa, Turkey

[2]Bursa Uludag University Faculty of Medicine, Department of Internal Medicine, Division of Rheumatology, Bursa, Turkey

Background Adult-onset Still's Disease (AOSD) is a rare systemic inflammatory disorder characterized by fever, transient salmon-pink maculopapular rash, inflammatory polyarthritis, lymphadenopathy and sore throat. Aetiology of AOSD is currently unknown. Non-specific clinical presentation, lack of diagnostic biomarkers and rarity of AOSD often results in significant delay in diagnosis and treatment. Steroids are the basis of treatment. In this case of a patient who was diagnosed with AOSD, we investigated clinical findings, treatment and the sudden bradycardia that occurred after patient underwent pulse steroid therapy.

Case Report In November 2021, a 30 year old woman applied with transient whole-body maculopapular rash, sore throat and joint pain. Patient underwent empiric antibiotic therapy as an infection couldn't be excluded, however complaints of patient didn't regress. Rheumatological workup demonstrated normal renal and hepatic parameters, negative autoantibodies, ESR: 63 mm/h, CRP: 262 mg/L, ferritin 4,214 µg/L, fibrinogen 890 mg/dL. Preliminary findings were compatible with AOSD; thus, methylprednisolone treatment was initiated. Arthralgia and rash regressed after pulse steroid treatment, supporting AOSD diagnosis. The patient was discharged with methotrexate and prednisolone however the patient applied to hospital again with attack after 5 days and was admitted. A pulse steroid of 1 g/day methylprednisolone was planned for 3 consecutive days. After 2 days of pulse steroid treatment, patient's laboratory parameters and clinical signs didn't regress, thus Anakinra was initiated. The patient, whose pulse was within the normal range in the previous follow-ups, developed asymptomatic sinus bradycardia after 3 doses of pulse steroid therapy without deterioration of other vital parameters. The patient was monitored with Holter, however a cardiac pathology that explains bradycardia was not found and the case has been evaluated as isolated sinus bradycardia. Bradycardia of unknown etiology was considered secondary to pulse steroid therapy. The patient, whose clinical and laboratory parameters improved with pulse steroid and anakinra treatment, was discharged.

Conclusions In the literature, many cases of sinus bradycardia that developed after steroid infusion and were usually asymptomatic and resolved spontaneously after stopping the infusion were reported. Sinus bradycardia is a side effect that may occur following steroid infusion. Its etiopathogenesis has not been fully elucidated. While the blood pressure of our case was within normal limits, sinus bradycardia developed after pulse steroid therapy and spontaneously returned to sinus rhythm at normal rate within days. Although not in our patient, there are data indicating that steroid infusion rate, electrolyte imbalance or underlying cardiac pathology increase the risk of bradycardia. It is important to consider the side effects such as tachyarrhythmia and bradyarrhythmia that may develop secondary to pulse steroid therapy, monitor the patient during the infusion and administer prolonged infusion, especially in cases with underlying cardiac pathology.

OC014

Malnutrition Status at Admission May Predict Post-Discharge Short Term Mortality in Palliative Care Unit

[1]*Olgun Deniz,* [2]*Nur Senem Kaya*
[1]*Geriatric Medicine Clinic, Palliative Care Unit, Bursa City Hospital, Bursa, Turkey*
[2]*Departmenf of Internal Medicine, Bursa City Hospital, Bursa, Turkey*

***Background*:** Malnutrition is an immense problem and highly prevalent in patients admitted to palliative care units. We aimed to determine the impact of nutritional status at admission and the risk factors for short-term (90-day) mortality after discharge.
Material and Methods This study included patients admitted to and discharged from the palliative care unit (PCU). Totally 118 patients were classified into two groups: patients who died within 3-month after hospital discharge and patients who survived in the same period. The nutrition status of the patients was retrospectively assessed with NRS-2002.
Results The mean age of the patients was 70.9±13.4 years. The overall post-discharge 90-day mortality was 40% (n=47). Twenty (16.9%) patients were transferred from other clinics, 17 (14.4%) from home, and 81 (68.6%) from intensive care units to PCU. Age, gender, and length of stay in PCU were similar between the two groups. With regards to chronic illnesses, chronic obstructive pulmonary disease and malignity were found to be higher in the group with 90-day mortality [9 (19.1%) vs. 5 (7%), p=0.046 and 19 (40.4%) vs. 9 (12.7%), p=0.001, respectively]. NRS 2002 (Nutritional Risk Score) and decubitus ulcer rate on admission were higher in patients with 90-day mortality [4 (3-6) vs. 3 (2-5), p=<0.001 and 36 (76.6%) vs. 34 (47.9%), p=0.002, respectively]. Seventy-six patients (64%) were discharged with enteral nutrition (percutaneous endoscopic gastrostomy/nasogastric tube), and the rest were on oral nutrition. In addition, patients had lower both systolic and diastolic blood pressure measurements on admission in the mortality group [108±12.8 vs. 118.6±14.2 mmHg, p=<0.001 and 67.2±9.5 vs. 72.8±9.5 mmHg, p=0.002, respectively].
Conclusions In addition to comorbid diseases, hemodynamic findings and nutritional status on admission may be associated with early post-discharge mortality in patients hospitalized in PCU.

Table 1. The results of the study regarding ninety day post-discharge mortality

	Ninety day post-discharge mortality		
	No (n=71)	Yes (n=47)	p
Age ± SD	70.8 ± 13.9	71 ± 12.8	0.954
Gender, female, n (%)	36 (50.7)	19 (40.4)	0.273
Length of Hospitalization in Palliative Care Unit	23 (3-75)	23 (2-107)	0.766
Length of Hospitalization in Intensive Care Unit*	42.5 (7-526)	74 (17-400)	0.007
Body Mass Index	24.5 ± 3.2	24.6 ± 2.8	0.770
Nutrition type at discharge Oral, n (%) Enteral, n (%)	 24 (33.8) 47 (66.2)	 18 (38.3) 29 (61.7)	0.618
Diabetes Mellitus, n (%)	21 (29.6)	13 (27.7)	0.822
Hypertension, n (%)	33 (46.5)	19 (40.4)	0.517
Chronic Obstructive Pulmonary Disease, n (%)	5 (7)	9 (19.1)	**0.046**
Coronary Artery Disease, n (%)	12 (16.9)	10 (21.3)	0.550
Heart Failure, n (%)	6 (8.5)	3 (6.4)	0.679
Dementia, n (%)	16 (22.5)	9 (19.1)	0.659
Atrial Fibrillation, n (%)	14 (19.7)	12 (25.5)	0.456
Parkinson Disease, n (%)			
Malignity, n (%)	9 (12.7)	19 (40.4)	**0.001**
Metastatic Cancer, n (%)	1 (10)	13 (68.4)	**0.005**
Cerebrovascular Disease, n (%)	34 (47.9)	15 (32.6)	0.102
Percutaneous endoscopic gastrostomy (*PEG*), n (%)	36 (50.7)	17 (36.2)	0.120
Decubitus Ulcer, n (%)	34 (47.9)	36 (76.6)	**0.002**
NRS 2002, median (min-max)	3 (2-5)	4 (3-6)	**<0.001**
Systolic blood pressure ± SD	118.6 ± 14.2	108 ± 12.8	**<0.001**
Diastolic blood pressure ± SD	72.8 ± 9.5	67.2 ± 9.5	**0.002**

*n:78, NRS 2002: Nutritional Risk Screening

OC015

Diabetic Rethinopathy Patients with HFpEF Left Atrial Strain Echocardiography Functions

[1]*Fatih Yılmaz,* [1]*Özgür Yasar Akbal,* [1]*Zübeyde Bayram*
[1]*Health Sciences University Kartal Kosuyolu Training and Research Hospital Cardiology Clinic, Istanbul, Turkey*

Background Diabetic retinophaty in which patients may have symptoms and signs of heart failure but preserved ejection fraction. Left atrial (LA) volume and function may impaired in these patients. Two-dimensional speckle-tracking echocardiography (2D-STE) has recently enabled the quantification of LA deformation dynamics. In this study, we evaluated the use of 2D-STE for the diagnosis of HFpEF.
Material and Methods The study included patients with suspected HFpEF. Patients were divided into two groups after HFpEF had been diagnosed according to current guidelines. Parameters of diastolic dysfunction were evaluated, including left ventricular mass index (LVMI), LA volume index (LAVI), E/A ratio, deceleration time (DT), E/E', and STE parameters such as global longitudinal LA strain during ventricular systole (GLAs-res) and strain during late diastole (GLAs-pump).
Results The values of BNP, LVMI, DT, LAVI, and

GLAs-res were significantly different between the two groups. In univariate analysis, a strong negative correlation was seen between GLAs-res and BNP (r: -0.567, p<0.001) as well as between GLAs-res and DT (r: -0.665, p<0.001), while a moderate negative correlation was found between GLAs-res and LVMI (r: -0.458, p<0.001) and GLAs-res and LAVI (r: -0.316, p=0.004). In logistic regression analysis, GLAs-res (p=0.049, OR=0.71, 95% CI: 0.451-0.99), BNP (p=0.025, OR=1.08, 95% CI: 1.01-1.14), and LAVI (p=0.042, OR=1.59, 95% CI: 1.02-2.48) were found to be independent predictors of HFpEF.

Conclusions LA function as assessed by 2D-STE is impaired in patients with HFpEF. A GLAs-res value of <17.5% can be useful for the diagnosis of HFpEF.

Table 1 demographic properties of patient group

	Overall	Group 1	Group 2	Group 3	P Value (between 3 group)
N	170	54	62	54	
Systolic BP	129±22.1	126±17.5	126±28	130±19.8	**0.011**
Heart Rate	86.3±11.7	82.3±12.7	86.1±12	91.2±10.4	**<0.001**
Age	54.5±10	52.6±9.3	54.7±9.1	56.2±11.5	0.197
HBa1c	8.0±0.43	8.0±0.43	8.2±0.48	8.2±0.48	**<0.035**
BMI	29.4±4.7	31.5±5.3	28.3±4.3	28.5±3.5	**<0.001**
TSH	1.44±0.8	1.47±0.7	1.48±1.1	1.39±0.6	**0.748**
EF-Biplan simpson	66.9±8.4	67.5±7.5	67.4±9.6	65.5±7.6	0.351
Tapse	2.3±0.3	2.3±0.2	2.2±0.3	2.3±0.4	**0.007**
Mapse	1.2±0.2	1.3±0.2	1.1±0.2	1.2±0.3	**<0.001**
e/a	0.8±0.3	0.9±0.2	0.8±0.2	0.8±0.4	**<0.001**
e/e'	9.8±4.2	9.2±3.8	10.2±5	10.1±3.5	0.315
torsion	2.8±1	2.9±1.2	2.7±0.9	2.8±0.8	0.401
LV Global Strain	-18.2±2.8	-19.3±2.1	-18.2±2.7	-16.9±3.3	**<0.001**
LAVI	46.3±17.6	40.5±13.2	46±13.3	53±23.4	**0.003**
LA-reservoir	23.9±6.7	28.6±6.2	22.1±6.1	21.2±5.1	**<0.001**
LA-Conduit	14.4±4.2	16.2±3.4	14.2±4.6	12.7±3.9	**<0.001**
LA-SRs	1.3±0.4	1.6±0.4	1.3±0.3	1.1±0.3	**<0.001**
LA-SRe	-0.99±0.6	-1.2±0.6	-0.9±0.5	-0.9±0.5	**0.028**
LA-SRa	-1.6±0.6	-1.7±0.6	-1.5±0.6	-1.7±0.6	0.167

Group 1 normal retina
Group 2 nonproligerative retina
Group 3 proliferatif retina
Basal karateristikleri yapıldıktan sonra anova ile gnup içi karşılaştırma yapıldı(p değerleri)

Table 2 statistiscal significant result chescked by post hoc by tukey test

variables	Between 1-2	Between 1-3	Between 2-3
Systolic BP	p=0.568	p=0.088	P=0.013
Heart Rate	P=0.233	p<0.001	P=0.041
HBa1c	P=0.063	p=0.067	p=0.999
BMI	p<0.001	p=0.002	p=0.935
Tapse	p=0.005	p=0.341	p=0.714
Mapse	P<0.001	p=0.067	p=0.428
e/a	P<0.030	p=0.067	p=0.428
e/e'	p=0.030	p=0.030	p=0.030
Torsion	p=0.409	p=0.914	p=0.637
LV Global Strain	p=0.034	P<0.001	p=0.061
LAVI	p=0.067	P=0.004	p=0.151
LA-reservoir	p<0.001	p<0.001	p=0.639
LA-Conduit	P=0.020	p<0.001	p=0.169
LA-SRs	p<0.001	p<0.001	p=0.004
LA-SRe	p=0.045	p=0.040	p=0.962
LA-SRa	p=0.063	p=0.067	p=0.999

Table 3 ordinal logistic regression

Variables	OR, 95% CI	P value
Systolic blood pressure	1.028 (1.004, 1.054)	0.022
Heart rate	1.01 (0.976, 1.055)	0.497
age	1.006 (0.966, 1.049)	0.765
Cinsiyet	1.364 (0.587, 3.173)	0.469
HBa1c	3.196 (1.464, 7.211)	0.004
EF (Biplan Simpson)	1.034 (0.984, 1.089)	0.193
e/e'	1.027 (0.924, 1.146)	0.614
Torsion	0.906 (-0.664, 0.438)	0.725
LV-Global Strain	1.099 (0.933, 1.300)	0.259
LAVI	1.034 (1.009, 1.064)	0.011
LA-Reservoir	0.854 (0.786, 0.924)	<0.001
LA-Conduit	0.978 (0.885, 1.081)	0.665
LA-SRs	0.088 (0.025, 0.280)	<0.001
LA-SRe	0.484 (0.200, 1.157)	0.104
LA-SRa	3.196 (1.464, 7.211)	0.004

OC016

Are the Treatment Efficacies of Domestic and Foreign Colchicine Preparations Used in Familial Mediterranean Fever Different?

[1]*Zeynep Yılmaz Bozkurt*, [1]*Ediz Dalkılıç*
[1]*Bursa Uludag University Faculty of Medicine, Department of Rheumatology, Bursa, Turkey*

Background Familial Mediterranean fever (FMF) is the most common inherited autoinflammatory disease with acute episodes of fever and serosal inflammation. Colchicine is the drug of first choice in the treatment of FMF. In this study, we aimed to investigate the benefit of changing the drug in terms of frequency and duration of attack in patients who are resistant to the domestic colchicine preparation used in the treatment of FMF.

Material and Methods Seventy-five patients who were diagnosed with FMF, used a domestic colchicine preparation in their treatment and were switched to an foreign colchicine preparation due to resistance or side effects were included in the study. The files of the patients were reviewed retrospectively. Demographic, clinical, genetic characteristics and response rates to treatment were evaluated.

Results 21 (28%) of the patients were male and 54 (72%) were female. The mean age of the patients was 39.0±11.71 years, the mean age at diagnosis was 24.0±14.58 years, and the mean time to diagnosis was 11.0±9.02 years. In patients, exon 10 mutations were detected in 45.3%, exon 2 mutations in 9.3%, exon2 and 10 mutations together in 17.3%. Renal amyloidosis was 5.3%. Preparation change due to unresponsiveness to treatment was found to be 84%. It was observed that the frequency of attacks of 7 or more per year in patients who switched from a domestic preparation to a

foreign preparation in treatment decreased from 78.7% to 30.7%, and the rate of 4-6 attacks decreased from 14.7% to 9.3%. The rate of no attack increased from 4% to 28%, the frequency of 1-3 attacks increased from 2.7% to 32.0% (p<0.001). The ratio of patients with an attack duration of 4 or more days decreased from 52% to 10.7% after switching to foreign colchicine. It was determined that the mean attack duration decreased from 4.02 days to 1.8 days (p<0.001).

Conclusions In patients who could not use domestic colchicine preparations due to colchicine resistance or side effects, there was a significant decrease in the annual mean frequency and duration of attacks with the use of foreign colchicine preparations before switching to biological treatment. For this reason, the use of different pharmaceutical preparations of colchicine is seen as an alternative and effective treatment option before switching to biological treatments which are more costly and have patient's adapting difficulties.

Table 1. Demographic and clinical characteristics of patients with familial Mediterranean fever (n=75)

Appendectomy history Family history of FMF Family history of hemodialysis	49.3% 58.7% 14.7%
Stomach ache Myalgia Fever Arthralgia Arthritis Pleuritis Erythepelas-like rash Pericarditis Orchitis	89.3% 76% 72% 70.7% 62.7% 60% 33.3% 18.7% 4%
Comorbidity	34.7%
Used foreign colchicine preparations	Italian colchicine 46.7% Spanish colchicine 14.7% French colchicine 54.7%
Reasons for switching to foreign colchicine preparation	Resistance 84% Diarrhea 21.3% Myopathy 2.7% LFT elevation 6.7% Other 10.7%
The rate of switching to biological treatment after foreign colchicine treatment	Anakinra 22.7% Canakinumab 4%

OC017

Cardiac MRI and Corrected QT Interval in Young Patients with Myocarditis

[1]Erol Gürsoy, [2]Bengül Gürsoy

[1]*Koç University Hospital, Department of Cardiology, Istanbul, Turkey*

[2]*Martyr Prof. Dr. Ilhan Varank Sancaktepe Training and Research Hospital, Department of Chest Diseases, Istanbul, Turkey*

Background Myocarditis is an inflammatory myocardial disease that can affect systolic functions and pose a life-threatening risk due to ventricular arrhythmias. In this study, we examined the relationship between cardiac MRI defined left ventricle ejection fraction (MR_LVEF) and corrected QT interval (QTc) in soldiers hospitalized and followed up with the diagnosis of myocarditis.

Material and Methods This cross-sectional study included 41 patients with myocarditis. The clinical features, comorbidities and electrocardiogram (ECG) findings of the patients were recorded. QTc was recorded from the automatic measurements of the 12-lead ECG device. The correlation between cardiac MR_LVEF and QTc was examined.

Results The mean age was 27.2±6.9 years and all patients were male. Echocardiographic mean LVEF was 58.58 ± 8.24% and cardiac MR_LVEF 56.30 ± 5.67%. Levels of cardiac biomarkers were high due to the active infection and myocardial injury. QRS_duration was 97.43 ± 12.67 ms, QTc 405.09 ± 29.45 ms, Frontal QRS-T angle 53.95 ± 43.69 respectively. Mean CK_MB was negatively correlated with LVEF (r: -0.345, p: 0.027). Mean QTc was negatively correlated with MR_LVEF (r: -0.311, p: 0.047).

Conclusions: Cardiac MRI is the gold standard test in the evaluation of cardiac functions and for diagnosis of myocarditis. The decrease in cardiac MR_LVEF and the prolongation of the QTc show a significant correlation. Decrease in cardiac systolic functions may predict cardiac electrical instability indicated by prolonged QTc interval.

Variable	Myocarditis Group
Age	27.29 ± 6.92
LVEF(%)	58.58 ± 8.24%
MR_LVEF (%)	56.30 ± 5.67%
MR_EDV (ml)	132.66 ± 28.27
MR_ESV (ml)	57.91 ± 14.41
QRS_duration (ms)	97.43 ± 12.67
QTc (ms)	405.09 ± 29.45
Frontal QRS-T angle	53.95 ± 43.69
CK_MB	51.35 ± 69.47
Trop I	4.95 ± 8.40
WBC	11.11 ± 4.29

WBC: White blood cell, EDV: End-diastolic volume, ESV: End-systolic volume

OC018

General Characteristics of Our Paradoxical Cases of Psoriasis: Single Center Experience

[1]Nihal Lermi, [1]Yavuz Pehlivan
[1]Bursa Uludag University, Department of Internal Medicine, Division of Rheumatology, Bursa, Turkey

Background Paradoxical psoriasis (PPs) is the occurrence of psoriatic skin lesions or worsening of psoriatic skin lesions in the presence of existing psoriasis after initiation of treatment with biologic agents, especially Anti-tumour necrosis factor (TNF). In this study, we aimed to reveal the characteristics and treatment choices of our patients who developed PPs and used biologic agents in their treatment.
Material and Methods 29 patients who developed paradoxical psoriasis while being followed up in our center and receiving biologic agent treatment were included in our study. The files of the patients were reviewed retrospectively. Demographic characteristics of the patients, age at diagnosis, time between diagnosis and paradoxical event, and selection of biological agents used in the treatment during the event were recorded.
Results Twenty-three patients (79.3%) were female and 6 patients (20.7%) were male. The mean age of the patients was 47.7 (25-80) years. Eleven patients (37.9%) were diagnosed with rheumatoid arthritis, 10 patients (34.4%) with axial spondyloarthritis, 3 patients with peripheral spondyloarthritis, 2 patients with psoriatic arthritis, 1 patient with enteropathic arthritis, 1 patient with vasculitis, 1 patient with adult-onset Still's disease. There was no family history of psoriasis in 7 patients whose family history could be reached. Of the 15 patients whose smoking characteristics could be reached, 10 were active smokers. The mean age at diagnosis of the patients was 33.1 (16-65) years. Disease duration of the patients was 153.6 (14-348) months. The time between disease onset and event was 122 (4-348) months. The time between starting the biological agent and the time of the paradoxical event was 19.4 (1-77) months. During the event, 9 (31%) patients were using adalimumab, 6 (20.6%) patients were using infliximab, 7 (24.1%) patients were using etanercept, 3 (10.3%) patients were using certolizumab, 2 (6.8%) patients were using abatacept, 2 (6.8%) patients were using rituximab.
Conclusions PPs may develop in all diseases for which anti-TNF is used and during the treatment of all anti-TNF agents. It can be seen in 5% of patients receiving treatment. It usually presents as palmoplantar pustular psoriasis. Although it can be seen in both sexes, it is more common in women. It may occur days or years after the start of treatment. In its treatment, the anti-TNF agent can be discontinued, switched to another biological agent, or adjuvant therapy can be added to the existing treatment and continued. Of 104 patients screened in a literature review, 53% were using infliximab, 29% were using etanercept, and 18% were using adalimumab. PPs related to adalimumab were most common in our patients. It should be kept in mind that a paradoxical event may have developed when a rash develops during the commonly used biological treatments.

OC019

Use of Thoracic Computed Tomography for COVID-19 Pandemic - Is It Early or Delayed Diagnosis of Malignancy? A Case Report and Literature Review

[1]Cansu Yazar, [1]Yücel Arman
[1]Prof.Dr. Dr. Cemil Tasçıoglu City Hospital, Department of Internal Medicine, Istanbul, Turkey

Background Coronavirus disease 2019 (COVID-19) was first reported as an unidentified viral pneumonia type in Wuhan, China and spread all over the world over time.Real-time reverse transcription polymerase chain

reaction (RT-PCR) test and thoracic imaging methods are used for diagnosis.Thoracic computed tomography (CT) has been reported as an important tool in the early diagnosis and evaluation of COVID-19 disease. CT findings are especially helpful for diagnosis when there is any limitations with RT-PCR assay. Herein a case in which a mass was detected as a result of thoracic CT imaging due to COVID-19 pandemic and the malignancy follow-up process during pandemic will be presented. The use of thoracic CT in diagnosis and follow-up and its possible advantages and disadvantages will be emphasized.

Case Report A 73-year-old male patient was admitted to the hospital with complaint of shortness of breath. He had known diagnoses of Parkinson's disease, diabetes mellitus, primary hypertension, chronic kidney disease (atrophic left kidney), benign prostatic hyperplasia. Pacemaker was inserted due to symptomatic bradycardia. He was vaccinated with two doses of inactivated vaccine (Sinovac) in February and March 2021 and one dose of mRNA vaccine (BNT162b2 , Pfizer-BioNTech) in August 2021. After detecting SARS-CoV-2 PCR positivity in the oropharyngeal-nasopharyngeal swab sample made upon his complaints, he was isolated at home. After that he presented to the emergency department of our hospital with complaints of deterioration in general condition, weakness and sudden blurred vision. In the thoracic CT performed for the purpose of screening and follow-up of suspected patients due to the COVID-19 outbreak, ground glass opacities admixed with patchy areas of consolidation were observed in the lung parenchyma starting from the upper lobes and this appearance was compatible with multifocal infiltration of early-mid period of COVID-19 pneumonia. In the right axillary and deep pectoral region conglomerate lymph node masses reaching 36x23 mm in size in the widest part and in the mediastinum and both hilar localizations lymph nodes some of which are calcified and do not exceed 1 cm in short axes are observed. The patient admitted to covid department for follow-up. However, the application for further examination of the suspicious mass was 6 months later to the internal medicine and geriatrics clinic of our hospital with complaint of palpable lump in the right armpit.On physical examination the mass in the right axilla was painless and had a rubbery consistency.Ultrasonography of the right axillary region showed a spherical shaped, 63 mm sized mass lesion with insufficient blood flow and smooth sharp contours, that lost its ovoid structure. In the inferior posterior part of this lesion 33 mm. sized second hypoechoic lesion with smooth sharp contours and insufficient blood flow was observed.This appearance was primarily evaluated in favor of benign lesions or lymph node whereas physical examination of the mass was consistent with a malignant lesion. Biopsy of the mass was reported as diffuse large B-cell lymphoma originating from the germinal center.Positron emission tomography was performed and during hematology follow-up chemotherapy was planned.

Conclusions The radiation effective dose of thoracic CT imaging varies between 1-10 mSv. This dose is 10-100 times higher than a chest radiography. Thoracic CT imaging is frequently used for the diagnosis and follow-up during COVID-19 pandemic. In order to reduce radiation exposure, it would be appropriate to perform tomography imaging using high-resolution low-dose radiation protocols. Increase in the number of thoracic CT performed due to COVID-19 pneumonia may be important in the early diagnosis of mass and related malignancies.However the decrease in services for advanced diagnosis such as biopsy delays the diagnosis and treatment of cancer.Due to this reason, cancer screening and diagnosis services should be adapted to the pandemic period and new protocols should be established accordingly.

OC020

A Rare Cause of Hypokalemia: Ectopic ACTH Syndrome

[1]Merve Tekinyıldız, [1]Sanem Kayhan, [2]Murat Çalapkulu, [1]Rıdvan Özkan, [1]Seyit Ibrahim Akdag
[1]University of Health Sciences, Ankara Diskapi Yildirim Beyazit Education and Research Hospital, Department of Internal Medicine, Ankara, Turkey
[2]University of Health Sciences, Ankara Diskapi Yildirim Beyazit Education and Research Hospital, Department of Endocrinology and Metabolism, Ankara, Turkey

Background Ectopic adrenocorticotropic hormone (ACTH) secretion is a rare paraneoplastic syndrome associated with a large group of tumours, the majority of which are neuroendocrine cell origin. It is most commonly associated with small cell carcinoma of the lung (SCLC). Although this syndrome is associated with severe hypercortisolemia findings, some findings of Cushing's syndrome such as central obesity may not be observed due to underlying malignant diseases. Especially in the presence of hypokalemia accompanying hypertension and proximal muscle weakness, if weight loss accompanies the picture, it should be kept in mind in the differential diagnosis. In this case, we aimed to present a case who developed

ectopic ACTH syndrome due to small cell lung cancer. ***Case Report*** A 66-year-old male patient with known hypertension and coronary artery disease was admitted to our outpatient clinic with complaints of weakness, fatigue, proximal muscle weakness, hoarseness and weight loss for the last 2 weeks. There was no pathological finding in his physical examination, and it was detected that he had a 40 pack/year smoking history. The patient, who was found to have hypokalemia (2.34 mEq/L) and metabolic alkalosis (pH 7.51, HCO_3 34.7 mmol/L) in the examinations, was admitted to our service to investigate the etiology. Oral and intravenous potassium replacement was started to the patient in order to correct his hypokalemia. 1 mg dexamethasone suppression (DST) was planned for the patient whose basal cortisol level was 55 mcg/dL in the tests requested for the etiology. Hypercortisolism was confirmed in the patient whose cortisol level was 45 mcg/dL as a result of DST. ACTH-dependent Cushing's was considered in the patient whose ACTH level was high, and pituitary MRI was requested to rule out pituitary causes. Ectopic ACTH syndrome was considered in the patient because adenoma was not detected in the pituitary MRI and there was no suppression of cortisol level in the high-dose DST test. On thorax HRCT imaging, a mass lesion measuring 4 cm and a soft tissue thickening of approximately 35 mm in the right hilar region were observed. The pathological examination of the biopsy taken from the mass was compatible with SCLC and the patient was referred to the oncology service for further examination and treatment.

Conclusions Ectopic ACTH syndrome is a rare paraneoplastic syndrome caused by ACTH secreting tumour. While Cushing's disease is more common in women aged 30-40 years, ectopic ACTH syndrome is mostly found in men and women at same ratio aged 45-50 years. In addition to the classical symptoms of hypercortisolemia such as fatigue, proximal myopathy, and striae, findings related to high ACTH levels such as severe hypokalemia and hyperpigmentation may be observed. Weight gain is not as prominent in ectopic ACTH syndrome as in Cushing's patients because of the accompanying malignancy. Resection of the tumour causing ectopic ACTH release is the optimal treatment method. However, chemotherapy treatment is at the forefront because SCLCs have a low resectability rate and respond well to systemic treatment. In this case, we tried to emphasize that ectopic ACTH syndrome due to malignant causes should be kept in mind in the differential diagnosis of patients presenting with resistant hypokalemia.

OC021

What is the main reason of erectile dysfunction in lymphoma patients: Chemotherapy or Depression?

[1]Cumali Yalçın, [2]Güven Yılmaz, [3]Aslan Erdogan
[1]*Division of Hematology, Department of Internal Medicine, Bursa Uludag University Faculty of Medicine, Bursa, Turkey*
[2]*Clinic of Hematology, Dr. Lütfi Kırdar Kartal Training and Research Hospital, Istanbul, Turkey*
[3]*Department of Cardiology, Basaksehir Çam and Sakura City Hospital, Basaksehir, Istanbul, Turkey*

Background Erectile dysfunction (ED) may be associated with both chemotherapy and depression in lymphoma patients. The role of depression in erectile dysfunction during chemotherapy in lymphoma patients may be more important than chemotherapy. This study aimed to determine the factor which plays a more important role in ED.

Material and Methods This study included 20 patients aged under 60 years who were admitted to the Hematology Outpatient Clinic between March 2015 and March 2016 and diagnosed with lymphoma. While the Beck Depression Inventory (BDI) was used to assess depression severity before (T1), during (T2) and after (T3) chemotherapy, the International Index of Erectile Function (IIEF) was used to assess sexual function. The Mann-Whitney U and Wilcoxon Signed-Rank tests were used for statistical analysis. A p-value of <0.05 was considered statistically significant.

Results Twenty male lymphoma patients (14 [70%] patients with non-Hodgkin's lymphoma and 6 [30%] patients with Hodgkin's lymphoma) were included in the study. The mean BDI score was 11.75±1.44 at T1, 6.60±3.61 at T2, and 3.25±2.12 at T3, respectively ($p<0.01$). The mean IIEF score was 15.25±6.12 at T1, 12.95±6.03 at T2, and 20.40±8.59 at T3, respectively ($p<0.01$). There was a significant decrease in both the mean BDI and IIEF scores between T1 and T2. However, the mean BDI score continued to decrease between T2 and T3, while the mean IIEF score tended to increase.

Conclusions It is not possible to suggest a single cause when considering the multifactorial etiology of ED in lymphoma patients. However, our study clearly showed that depression and related psychological factors are the main cause of ED in lymphoma patients.

OC022

Ground Glass Appearance During the Pandemic Period: Everolimus Induced Interstitial Pneumonia

[1]Sidelya Ecem Yigit, [1]Iffet Beril Gökmen, [1]YıldızOkuturlar, [2]Ibrahim Yıldız
[1]Acıbadem University Faculty of Medicine, Department of Internal Medicine, Division of General Internal Medicine, Istanbul, Turkey
[2]Acıbadem University Faculty of Medicine, Department of Internal Medicine, Division of Medical Oncology, Istanbul, Turkey

Background The mammalian target of rapamycin (mTOR) plays a regulatory role in cell proliferation and growth. mTOR activity is frequently found to be increased in cancers. Since mTOR inhibitors cause tumour cell apoptosis, cell division cycle arrest, signal transduction inhibition, mTOR becomes a therapeutic target in diseases where cell regulation is impaired such as cancer. Everolimus inhibits mTOR functional complex 1 as an allosteric mTOR inhibitor and is used in ER+ breast cancers. The ground glass appearance is a nonspecific finding that can be seen in COVID-19 lung involvement, which we see the most today, in etiologies such as chronic interstitial disease, acute alveolar disease or infection. Here, we wanted to present one of the etiologies that can be confused with the ground glass appearance, which is one of the radiological findings of COVID-19 pneumonia.

Case Report: A 48-year-old female patient with known breast cancer and bone metastasis and using hormonal therapy and chemotherapy admitted to us with low saturation, dyspnea and worsening of general condition. The patient had fever, cough and sputum. On physical examination, her general condition was good, he was conscious, oriented, and cooperative. On lung auscultation, basal and midline fine rales were present. In the abdominal examination there were no tenderness, rigidity and rebound. Oxygen saturation was 97% with 3 liter/min oxygen support from nasal cannula and 85% at rest in room air. The patient was started on teicoplanin and ciprofloxacin as antibiotic therapy. Lung computed tomography (CT) on 23.06.2021 has been reported as "In addition to the covid-19 sequelae identified in the examination on 12.06.2021, ground-glass consolidations in the lung parenchyma from the apex to the basal and vascular-bronchial clarifications in these areas are compatible with the second COVID-19 infection and active inflammation and it appears to be progressive compared to the examination on 12.06.2021." The suspected COVID-19 infection in the patient and the previous COVID-19 infection could not be proven by PCR. All PCR results were negative. Previously, COVID-19 treatment was given, considering it was a CT-positive COVID-19 case. We ruled out COVID-19 when the SARS-COV-2 antibody test and PCR test were negative on 24.06.2021. She had been using everolimus for the past four months. The reason for the ground-glass appearance in low-dose thoracic CT was thought to be related to interstitial pneumonia and was investigated. The patient, who was evaluated together with the department of oncology, was considered as everolimus induced interstitial pneumonia. Interstitial lung involvement, occasional pneumonic consolidation, ground glass appearances and hyperaeration findings suggested bronchiolitis and interstitial pneumonia in the patient who was consulted with the department of lung and chest diseases. Bronchoscopy, transbronchial biopsy and/or bronchoalveolar lavage were recommended to the patient in order to detect the pathogen and also to understand whether there is a drug-related lung pathology. The patient refused. The patient was started on 100 mg of methylprednisolone. The patient was warned not to use everolimus. In the tests taken from the patient, CMV IgM was negative and IgG positive. Candida beta-glucan antigen was negative. Aspergillus Galactomannan antigen was negative. On the 4th day of the patient's use of 100 mg methylprednisolone the patient's room air saturation was 91% and there were no rales or rhonchi on lung auscultation. The patient's admission CRP was 33.05 mg/dL, and the CRP value, which decreased significantly after starting methylprednisolone, was 1.31 mg/dL at the patient's discharge. The patient was ordered 100 mg of prednol for 7 days on hospitalization, and the patient, who showed significant improvement and did not get desaturated at room air, was discharged with the recommendation to continue using 32 mg methylprednisolone for 15 days at home.

Conclusions: The patient was diagnosed with everolimus induced interstitial pneumonia because infectious causes were excluded, the clinical status of patient improved with steroid therapy, and the radiological and clinical findings were consistent with drug induced pneumonitis. It is important to consider other etiologies in the differential diagnosis, especially during the pandemic period, as the ground glass appearance leads clinicians to the diagnosis of COVID-19.

OC023

Anxiety and Sleep Problems in Intensive Care Patients

[1]Meryem Melike Osta, [1]Hicran Yıldız
[1]Bursa Uludag University, Health Science Faculty, Bursa, Turkey

Background Intensive care units are very comprehensive units where the vital functions of critically ill patients are monitored and maintained, special treatment.
Material and Methods The detailed and complex care applications are made.
Discussion For these reasons, these units are environments where patients encounter many physical and psychosocial stressors. Patients hospitalized in intensive care units experience psychosocial problems as a result of encountering many stressors such as being threatened, unusual medical devices, a strange environment, monotonous and frightening sounds, being away from their families and relatives, inability to meet their self-care needs and addiction, the seriousness of their illness and the feeling of being close to death. Anxiety and sleep problems are the leading ones. The presence of anxiety also delays recovery by causing sleep problems, reveals different physiological and psychological problems and increases the existing anxiety even more. In order for individuals to be in good physical, mental and psychological well-being, their sleep needs must be met regularly and in a balanced way. Many researchers examining the sleep of patients hospitalized in the intensive care unit have revealed that these patients' sleep is adversely affected in terms of duration and quality, their sleep structure is disrupted, and sleep problems are experienced frequently.
Conclusions For this reason, nurses should be able to identify patients' anxiety and sleep problems in the early period, reduce existing stressors, create a therapeutic environment for quality sleep and make necessary environmental arrangements and practices. In this way, possible problems that may arise due to anxiety and sleep disorders will be prevented.

OC024

Pulmonary Embolism Developing Despite the Use of Anticoagulants in COVID-19 Pneumonia: A case report

[1]Iffet Beril Gökmen, [1]Sidelya Ecem Yigit, [1]Yıldız Okuturlar, [2]Gül Dabak, [3]Iftihar Köksal
[1]Acıbadem Mehmet Ali Aydınlar University Faculty of Medicine, Department of Internal Medicine, Division of General Internal Medicine, Istanbul
[2]Acıbadem Mehmet Ali Aydınlar University Faculty of Medicine, Department of Chest and Lung Diseases, Istanbul
[3]Acıbadem Mehmet Ali Aydınlar University Faculty of Medicine, Department Infectious Diseases and Clinical Microbiology, Istanbul

Background COVID-19 pneumonia is one of the diseases that can cause hypercoagulability. It is not uncommon to encounter arterial or venous thromboembolic events during COVID-19 infection. Therefore, the importance of usage of anticoagulant therapy and the follow-up of coagulation parameters, especially in inpatients, is obvious. In this case, we wanted to present a case of pulmonary embolism due to COVID-19 infection, which developed despite the usage therapeutic dosage of anticoagulants.
Case Report A 41-year-old male patient with no comorbidities other than a diagnosis of diabetes mellitus admitted to our clinic with complaints of cough and headache lasting for 7 days. The patient 's saturation was 95% at room air. Heart rate was 95 beats/min, arterial blood pressure was 155/87 mmHg, and respiratory rate was 19 per minute. There were bilateral widespread crackles in all zones on auscultation of the lungs. The abdomen was not defensive to palpation and there was no rebound tenderness. There were bilateral ground glass consolidations on obtained thorax computed tomography (CT). The patient was not vaccinated against COVID-19. The patient, who was found to have a positive COVID-19 PCR test with a nasal and throat swab, was admitted to our clinic for treatment and supportive care. In the laboratory tests performed on the first day of his hospitalization, D-dimer was found to be 1.03 mg/L. CRP was determined as 10.87 mg/dL, INR 0.9, and fibrinogen as 731 mg/dL. Along with steroid treatment, inhaler interferon treatment and supportive treatment, 2x6,000 IU enoxaparin treatment was initiated to the patient who weighed 78 kilograms. Since the patient developed hemoptysis on the 3rd day of follow-up, enoxaparin was started to be administered as a single dose of 6,000 IU and was used as a single dose for 2 days. On the 5th

day of follow-up, the patient, who was being supported with 4 lt/min nasal oxygen support, developed sudden respiratory distress and showed an increase in oxygen demand. The patient was then started being supported with 8 lt/min reservoired oxygen mask. The patient's d-dimer value increased abruptly to 35.2 mg/L (Figure 1). With the current clinical and laboratory findings and a preliminary diagnosis of pulmonary embolism, the dose of enoxaparin was increased to 2x8,000 IU and pulmonary CT angiography was performed. Pulmonary CT Angiography showed multiple bilateral partial filling defects in subsegmental pulmonary arteries, mainly in posteroinferior segment of left lung compatible with pulmonary embolism (Figure 2). Patient showed no signs of discoloration, temperature increase, tenderness, swelling or pain in his lower extremities. There was no finding of deep vein thrombosis in the lower extremity venous doppler ultrasonography. The patient continued to use 2x8,000 IU enoxaparin, and the d-dimer value gradually decreased to 4.05 mg/L in the follow-ups. The treatment of the patient who did not have deep vein thrombosis and had pulmonary embolism foci in the subsegmental areas was arranged in consultation with the department of Cardiovascular Surgery and Chest Diseases. The patient was discharged after his clinical condition improved and there was no desaturation at room air on the 14th day with supportive, steroid and anticoagulant treatment and continiued his prescribed treatment to be later seen at office visits.

Conclusions Keeping in mind that COVID-19 infection can cause arterial and venous thromboembolic events in patients followed up with COVID-19 pneumonia, increase in oxygen demand, sudden dyspnea, deterioration in general condition or in patients with a significant increase in serial D-dimer follow-ups as in our case, diagnoses such as pulmonary embolism, obstructive cerebral disease and myocardial infarction should also be considered in differential diagnosis. Therefore, prophylactic anticoagulation should be initiated in hospitalized patients, attention should be paid to signs of bleeding, and dose adjustment should be made by monitorization of coagulation parameters.

OC025

COVID-19 Presenting with Diabetic Ketoacidosis: A case report

[1]Iffet Beril Gökmen, [1]Sidelya Ecem Yigit, [1]Yıldız Okuturlar, [2]Behiye Ören
[1]Acıbadem Mehmet Ali Aydınlar University Faculty of Medicine, Depertment of Internal Medicine, Division of General Internal Medicine, Istanbul, Turkey
[2]Acıbadem University Atakent Hospital, Department of Anesthesiology and Reanimation, Intensive Care Unit, Istanbul, Turkey

Background Diabetic ketoacidosis (DKA) is one of the most common complications of diabetes with the highest mortality rate among hyperglycemic emergencies. Intervening infections, medication non-compliance, cerebrovascular events, and acute coronary syndromes can be counted as facilitating factors for DKA. DKA has been reported in COVID-19 infection as well as in other intercurrent serious infections. The expected DKA mortality in patients without COVID-19 with confirmed diagnosis is approximately 3% to 8%, with a 2020 small case series reporting a mortality rate as high as 50% in patients with COVID-19. In this case, a case of diabetic ketoacidosis caused by Covid-19 infection will be discussed.

Case Report A 71-year-old female patient with a known diagnosis of type 2 diabetes mellitus, whose blood sugar was not regulated, was admitted to the emergency service with weakness and general condition deterioration. On physical examination, she had clouding of consciousness. There were no rales and rhonchi on auscultation of the lung sounds. On abdominal palpation no rigidity or rebound tenderness was spotted. Oxygen saturation in room air was 97%. The patient had sinus tachycardia and was prone to hypertension. Arterial blood pressure was 140/75 mmHg, heart rate was 123 bpm. There was severe metabolic acidosis with increased anion gap in the obtained venous blood gas sample. The pH was 6.8, the bicarbonate was 5 mmol/L. There was leukocytosis in the laboratory examinations on arrival. D-dimer 4.12 mg/L FEU, blood glucose 740 mg/dL, creatinine 2.04 mg/dL, sodium 121 mmol/L, potassium 5.39 mmol/L, chlorine 88 mmol/L, C reactive protein (CRP) 1.60 mg/dL, and hemoglobin A1c were obtained as 15.4%. In the complete urinalysis, glucose was 3+ and ketone was 3+. After the patient's COVID-19 rapid antigen test was positive, polymerase chain reaction (PCR) test was taken and it was confirmed that the patient was positive for COVID-19. The patient was not vaccinated

against COVID-19. Low-dose thorax computed tomography (CT) revealed bilateral mild ground-glass infiltrates. Aggressive hydration, bicarbonate infusion and insulin infusion were started to the patient. Blood glucose, blood gases, electrolyte and kidney function tests were obtained with short intervals. During the close follow-ups, the metabolic acidosis of the patient, who was not desaturated in room air, was conscious and oriented, cooperative, and normouric, regressed, and the creatinine value decreased to 1.12 mg/dL. The patient, whose general condition and ketoacidosis improved, was followed up with COVID-19 supportive treatment and steroid treatment. Insulin infusion was stopped and quadruple subcutaneous insulin therapy was started. However, on the 9th day of the COVID-19 infection, the patient whose oxygen demand increased, was transferred to the intensive care unit and intubated. The patient, who was intubated for 23 days, was then transferred to the internal medicine ward and was discharged 52 days after her first hospitalization, due to her general condition improving.

Conclusions Diabetic patients are at severe risk for COVID-19 infection. DKA is one of the diabetic complications, and COVID-19 may present with DKA as the first symptom. Corticosteroids used to manage COVID-19 disease aggravate hyperglycemia and become difficult glycemic control in DKA. In our patient, we started 250 milligrams of methylprednisolone during COVID-19, which resulted in the patient becoming hyperglycemic again and DKA redeveloping. Therefore, close follow-up with frequent blood gas control should be provided in patients whose glycemic control can not be achieved.

OC026

Comparison of Clinical Progress of COVID-19 Patients Followed in the Hospital by Vaccination Status

[1]Sidelya Ecem Yigit, [1]Iffet Beril Gökmen, [1]Yıldız Okuturlar, [2]Iftihar Köksal

[1]Acibadem Mehmet Ali Aydınlar University Faculty of Medicine, Department of Internal Medicine, Division of General Internal Medicine, Istanbul, Turkey

[2]Acibadem Mehmet Ali Aydınlar University Faculty of Medicine, Infectious Diseases and Clinical Microbiology, Istanbul, Turkey

Background Although COVID-19 vaccines cannot prevent infection with SARS-CoV-2, they do allow infected people to have a milder illness. In unvaccinated people, the disease progresses more severely and the disease can be fatal. Both inactivated (Sinovac) and mRNA (BioNTech-Pfizer) vaccines are used in Turkey. In this retrospective study, clinical course, radiological involvement and some laboratory parameters that are important for COVID-19 were compared in unvaccinated and vaccinated patients who were infected and followed up in the hospital.

Material and Methods Patients between the ages of 17-95 who were hospitalized in the COVID-19 isolation wards between June 2021 and November 2021 were included in the study. Patients' symptoms, hematological and biochemical test *Results*, radiological findings, clinical course, length of hospital stay, and negative time for COVID-19 polymerase chain reaction (PCR) were scanned retrospectively from the hospital registry system.

Results 68 patients were included in the study. However, 14 patients with unknown vaccination status were excluded from the study. The female male ratio included in the study was 24/30. 55.6% of the patients were male, and the mean age of all patients was 50.76±16.82. The mean age was lower in male (47±18.39) patients than in female (55.46±13.58) patients (p=0.06). When the vaccination status of the patients was evaluated, 26 (48.1%) patients were unvaccinated, 5 (9.3%) patients were single Sinovac, 3 (5.6%) patients were single BioNTech, 11 (20.4%) patients were double or more Sinovac and 7 (13%) patients had double BioNTech, 2 (3.7%) patients had mixed vaccine protocol. 2 (3.7%) patients were exitus. One of these patients was unvaccinated and the other had a mixed vaccine protocol. Group 1 (34 patients) was determined as single vaccinated and unvaccinated, and Group 2 (20 patients) as double vaccinated or mixed vaccinated. The rate of women gender in Group 1 and Group 2 did not differ (44.1% vs 45%, respectively, p=0.950). There was no difference in the mean age, highest fibrinogen, D-dimer, ferritin, creatinine, interleukin-6 values, the time taken for the COVID-19 PCR test to turn negative and antibody levels between groups. The patients in Group 2 were discharged significantly earlier than Group 1 (7.8 vs 12.69 days, p=0.046). There was a significant difference in low-dose thoracic computed tomography (CT) findings between both groups (p= 0.023). Severe bilateral involvement of lungs was 58.8% in Group 1 and 25% in Group 2. 17 (50%) patients in Group 1 and 9 (45%) patients in Group 2 had comorbidities. (20.6% vs 20%, 8.8% vs 10%, 26.5% vs 15% type 2 diabetes mellitus, cancer, and hypertension, respectively). Other comorbidities

such as asthma, rheumatologic, neurologic, cardiac and thyroid diseases were seen at lower rates. When all comorbidities were compared, no significant difference was found between the two groups.

Conclusions Our results showed that regardless of the type of vaccine, vaccination against COVID-19 reduces hospitalization rates, length of stay and prevents serious involvement in the lungs.

OC027

Pembrolizumab Induced Hypothyroidism: A Case Report

[1]Sidelya Ecem Yigit, [1]Iffet Beril Gökmen, [1]Yıldız Okuturlar, [2]Elif Senocak Tascı, [2]Leyla Özer

[1]Acıbadem University Faculty of Medicine, Department of Internal Medicine, Division of General Internal Medicine, Istanbul, Turkey

[2]Acıbadem University Faculty of Medicine, Department of Internal Medicine, Division of Medical Oncology, Istanbul, Turkey

Background The importance of monoclonal antibodies as immune checkpoint inhibitors, in the field of oncology is increasing day by day. Since these drugs inhibit the inhibitory mechanism on the immune system, their side effects may also be autoimmune diseases that occur due to excessive immune response. When these side effects occur, it is important to discontinue the drug and start steroids. In checkpoint inhibition, Programmed Cell Death 1 (PD-1), PD-1 ligand (PD-L1) receptors and Cytotoxic T Lymphocyte Associated Protein 4 (CTLA-4) are among the targets. Pembrolizumab and Nivolumab targeting PD-1, atezolizumab, avelumumab and durvalumab targeting PDL-1 are used in many malignancies in various indications. The most common clinical presentations of thyroid injury induced by pembrolizumab are destructive thyroiditis and overt hypothyroidism. In this case, we wanted to present a case of pembrolizumab induced hypothyroidism.

Case Report A 64-year-old male patient with a known diagnosis of metastatic non-small cell lung cancer was admitted to the general internal medicine outpatient clinic with complaints of swelling in the legs, weakness, enlarged tongue, constipation, slowing of speech and dyspnea. He had no history of thyroid disease. Gemcitabine, cisplatin and pembrolizumab were started for the patient, who was diagnosed six months ago, for combined chemotherapy and immunotherapy. The patient received 7 cycles of pembrolizumab treatment. On physical examination, temperature was 36.3 degrees Celsius and heart rate was 89 beats/min. He was conscious, oriented and cooperative. The patient had no hair and nail changes, and his skin looked pale yellow. Macroglossia was present. There were no rales or rhonchi on auscultation of the lungs. In the abdominal examination, the abdomen was slightly distended, there was no defense or rebound. Bilateral pretibial edema +++/+++ was present. The thyroid stimulating hormone (TSH) value measured before the patient's pembrolizumab use was 2.96 uIU/mL. In the laboratory tests of the patient at admission, TSH was 122 uIU/mL (reference values: 0.25-4.55 uIU/mL), free T3 <0.3 pmol/L, free T4 1.86 pmol/L. Pembrolizumab was discontinued and chemotherapy was continued. The patient was started on 100 mcg of levothyron. Later, the dose of levothyron was gradually increased to 125 mcg. Simultaneously, 20 mg methylprednisolone was started and the patient was discharged with levothyron treatment. Seven weeks later, the patient's TSH value was found to be 20 uIU/mL.

Conclusions With the use of immune checkpoint inhibitors such as pembrolizumab, non-specific side effects such as weakness and fatigue often occur. In a meta-analysis of 38 studies and 2,551 patients, it was reported that the frequency of endocrinopathy induced by immune checkpoint inhibitors was 10% and hypothyroidism was the most common endocrinopathy. Pembrolizumab induced autoimmune thyroid disease may present as primary hypothyroidism due to thyroiditis or hyperthyroidism due to Graves' disease. In this context, it should be considered that these side effects may occur in malignancy patients using immune checkpoint inhibitors, and hypothyroidism should be included in the differential diagnosis.

OC028

Early Ophthalmological Findings in Type 2 Diabetes Mellitus Cases

[1]Ulviye Kıvrak, [1]Burak Tanyıldız
[1]Dr. Lütfi Kırdar Kartal City Hospital, Ophthalmology Department, Istanbul, Turkey

Background Type 2 diabetes mellitus (DM) is a chronic metabolic disease that is seen quite frequently nowadays. Retinal neurodegeneration, choroidal vascular changes and diabetic retinopathy (DR) are important complications of the disease. In this study, we compared the peripapillary retinal nerve fiber layer (pRNFL) and central macular thickness (CMT) of newly diagnosed patients with type 2 DM without DR finding and healthy individuals. Thus we aimed to detect CMT and pRNFL changes that are presumed to occur before the visible signs of DR occur in Type 2 DM patients and to reveal the early retinal involvement of the disease with the help of Optical coherence tomography (OCT).
Material and Methods 53 newly diagnosed patients with DM without DR and 54 healthy control groups admitted to Lütfi Kırdar Kartal City Hospital Ophthalmology Department between January 2021 and January 2022 were included in the study. The best corrected visual acuities of the cases were measured, and anterior and posterior segment biomicroscopic examinations were performed. Mean and four quadrants (superior, inferior, nasal, temporal) CMT and pRNFL thickness measurements were performed with a Spectral-Domain optical coherence tomography (spectralis OCT) device.
Results 53 eyes of 53 newly diagnosed DM patients without DR and 54 eyes of 54 control group were included in the study. Age, gender, spherical equivalent, best corrected visual acuity, intraocular pressure and axial length values were compared between the two groups. No significant difference was found between the two groups. There was no significant difference in the mean and four quadrants (superior, inferior, nasal, temporal) CMT measurements in the newly diagnosed DM group compared to the control group. (respectively, p=0.327, p=0.276, p=0.217, p=0.605, p=0.916). In the pRNFL analysis, no statistically significant difference was found in the newly diagnosed DM group compared to the control group in the mean, superior, nasal and temporal quadrants (respectively, p=0.131, p=0.234, p=0.110, p=0.863). The statistically significant difference was observed in the inferior quadrant (p=0.0.46) and inferior quadrant were found to be significantly thinner. In addition, it was observed that there was a significant thinning in all quadrants of the pRNFL values of two patients diagnosed with diabetic neuropathy.
Conclusions When the data of our study is evaluated, it seems possible to say that thinning of the pRNFL can occur in newly diagnosed DM patients without DR findings, especially in the inferior quadrant. OCT for type 2 DM patients; we think that it can be a helpful method for the early detection of retinal neurodegeneration from the diagnosis.

OC029

Does COVID-19 Affect Prostate Specific Antigen Level?

[1]Soner Çoban, [1]Anıl Erkan
[1]Bursa Yüksek Ihtisas Egitim ve Arastırma Hastanesi, Bursa, Turkey

Background The coronavirus enters the body with the help of the angiotensin-converting enzyme 2 receptors and can target many organs where this receptor is located. One of these organs is the prostate, and if it is affected, the prostate-specific antigen level (PSA) may change. Our study aimed to reveal how the PSA level is affected in patients with active COVID-19 infection.
Material and Methods We recorded total PSA, free PSA, international prostate symptom score (IPSS) and the number of nocturia on the day of hospitalization in patients hospitalized in the COVID-19 service between April 2021 and June 2021. Total and free PSA levels and suprapubic prostate volume of the patients were examined in control of the urology outpatient clinic three months after discharge. Total and free PSA values of the patients with COVID-19 were compared to the baseline values.
Results The mean age of 33 patients included in the study was 61.7±10.7 years, IPSS 14.9±.8, nocturia number 2.6±1.6, prostate volume 47.7±27.3 g. Eighteen patients (55%) were receiving alpha-blocker drug therapy. While the total and free PSA values of the patients hospitalized due to COVID-19 were 2.05±2.3 ng/mL and 0.47±0.61 ng/mL, respectively, they were calculated as 1.99±2.1 ng/mL and 0.57±0.67 ng/mL at the after three-month control. While there was no statistical difference in the total PSA value measured after discharge (p=0.371), free PSA was found to be statistically significantly increased (p<0.001).
Conclusions While COVID-19 infection in the last three months does not affect the total PSA level in a

patient who applied to the urology outpatient clinic due to lower urinary tract symptoms, care should be taken to increase the free PSA level. This change may cause delayed diagnosis of a malignant formation by affecting the free/total PSA ratio, which can be used as a marker of prostate cancer.

OC030

Comparison of Aortic Elasticity Parameters with Transthoracic Echocardiography Measurements and Treadmill Exercise Test Data in Healthy Adults

[1]Betül Cengiz Elçioglu, [1]Saide Aytekin
[1]Koç University Hospital, Department of Cardiology, Istanbul, Turkey

Background The elastic properties of the aorta are affected by many conditions, such as age, hypertension (HT), diabetes mellitus (DM), dyslipidemia, and smoking. Studies have shown that increased stiffness in the aortic vessel wall is associated with increased cardiovascular (CV) mortality and morbidity in various patient groups. In this study; It was aimed to compare aortic elasticity parameters with transthoracic echocardiography (TTE) measurements and treadmill exercise test (TET) data in individuals without known CV disease.

Material and Methods105 (mean age 40.19±9.06, 49.5% male) participants who applied to the cardiology outpatient clinic with various complaints or for check-up, had no known CV disease, were scheduled for TTE and TET were included. Patients with known DM, HT, moderate and higher degree of heart valve disease, congenital aortic valve or vascular anomaly, aortic dilatation, rhythms other than sinus and conduction defects on electrocardiography and patients with positive TET were excluded from the study. Aortic elasticity parameters (aortic strain, stiffness, and distensibility) were calculated with the relevant formulas from the M-mode images taken from the ascending aorta, in addition to the traditional measurements of cardiac structure and functions with TTE. These parameters were compared with the data obtained from TET (metabolic equivalents, maximum heart rate, exercise test duration, maximum systolic and diastolic blood pressure, percentage of predicted maximal heart rate, recovery time).

Results There was a significant negative correlation between age and aortic strain and distensibility (r= -0.561, p<0.001; r= -0.553, p<0.001, respectively), and a significant positive correlation with aortic stiffness (r=0.555, p<0.001).). A significant positive correlation was observed between aortic strain and metabolic equivalents (METs), which reflects effort capacity, maximum heart rate reached during exercise test (MHR) and exercise test duration (ETD) (r=0.238, p=0.016; r=0.373, p<0.001; r=0.227, p=0.22, respectively). A significant negative correlation was found between aortic stiffness and METs and MHR (r= -0.201, p=0.043; r= -0.396, p<0.001, respectively). In addition, a significant negative correlation was observed between aortic strain and distensibility and septum thickness, left atrial diameter and E/A values, and a significant positive correlation was observed between aortic stiffness and the same parameters. In the multivariate linear regression analysis, it was determined that all three parameters showed an independent correlation with age.

Conclusions In our study, a significant correlation was observed between aortic stiffness and strain values and age, exercise capacity and left ventricular diastolic parameters in healthy adults. The data we obtained showed that age is the most important factor affecting the aortic elasticity parameters, and that there is a relationship between these parameters and diastolic functions and cardiac structural changes. Low exercise capacity may also increase CV risk by affecting aortic elasticity.

Table 1. Demographic and laboratory features of the study group.

Variables	Values	Variables	Values
Age (years)	40.19±9.06	LDL cholesterol (mg/dL)	135.39±36.09
Male gender (%)	49.5 (n=52)	HDL cholesterol (mg/dL)	52.58± 13.97
BSA (m^2)	1.89±0.21	Total cholesterol (mg/dL)	198.72±38.95
Heart rate (bpm)	74.07±9.11	Hyperlipidemia (%)	40 (n=42)
SBP (mmHg)	109.14±10.03	Smoking (%)	15.2 (n=16)
DBP (mmHg)	68.42±7.14		

BSA: body surface area, bpm: beat per minute, SBP: systolic blood pressure, DBP: diastolic blood pressure, LDL: low density lipoprotein, HDL: high density lipoprotein.

Table 2. Echocardiographic measurements and treadmill exercise testing data of the study group.

Echocardiographic measurements			
Parameters	Values	Parameters	Values
LVEF (%)	60.6±1.77	IVRT (ms)	87.82±7.92
LVEDD (m)	45.73±4.52	DT (ms)	177.98±17.55
LVESD (mm)	29.74±3.22	E' (cm/s)	14.36±2.89
LA diameter (mm)	35.83±1.61	E/E' ratio	6.54±7.31
RA diameter (mm)	34.88±1.73	AoS (mm)	29.89±2.84
RV diameter (mm)	32.85±2.26	AoD (mm)	26.1±3.1
sPAP (mmHg)	22.09±3.13	Aortic strain (%)	14.62±3.56
E wave velocity (cm/s)	80.69±12.92	Aortic stiffness	3.38±0.91
A wave velocity (cm/s)	65.53±11.38	Aortic distensibility (cm^2.dyne-1.10^3)	7.32±2.09
E/A ratio	1.24±0.20		
Treadmill exercise testing data			
METs	9.73±1.34	Maximal DBP	86.85±9.93
Percentage of predicted MHR	96.4±13.26	Exercise test duration (s)	520.74±93.02
MHR with treadmill testing (bpm)	169.18±16.14	Recovery time (s)	187.14±57.63
Maximal SBP	144.66±13.66		

LVEF: left ventricular ejection fraction, LVEDD: left ventricular end diastolic diameter, LVESD: left ventricular end systolic diameter, LA: left atrium, RA: right atrium, RV: right ventricle, sPAP: systolic pulmonary artery pressure, IVRT: isovolumic relaxation time, DT: deceleration time, AoS: systolic aortic diameter, AoD: diastolic aortic diameter, METs: metabolic equivalents, MHR: maximal heart rate, SBP: systoic blod pressure, DBP: diastolic blood pressure.

Table 3. Statistically significant correlations between the parameters.

Parameter	r value	p value	Parameter	r value	p value
Age			Aortic strain		
Aortic strain	-0.561	<0.001	Age	-0.561	<0.001
Aortic stiffness	0.555	<0.001	BSA	-0.279	0.028
Aortic distensibility	-0.553	<0.001	E/A ratio	0.357	<0.001
LDL	0.247	0.021	A velocity	-0.277	0.006
Total cholesterol	0.252	0.019	e' velocity	0.279	0.008
E/A ratio	-0.462	<0.001	IVRT	-0.338	0.001
A velocity	0.355	<0.001	IVS	-0.394	<0.001
e' velocity	-0.380	<0.001	LA diameter	-0.274	0.005
IVRT	0.388	<0.001	METs	0.238	0.016
LA diameter	0.213	0.029	MHR with exercise	0.373	<0.001
SBP	0.217	0.026	Exercise test duration	0.227	0.022
IVS	0.296	0.002			
MHR with exercise	-0.323	0.001			
Aortic stiffness			Aortic distensibility		
Age	0.555	<0.001	Age	-0.553	<0.001
E/A ratio	-0.200	0.048	BSA	-0.250	0.012
e' velocity	-0.264	0.013	e' velocity	0.263	0.013
IVRT	0.281	0.05	A velocity	-0.265	0.008
IVS	0.239	0.016	E/A ratio	0.273	0.006
LA diameter	0.211	0.034	IVRT	-0.320	0.001
METs	-0.201	0.043	IVS	-0.319	0.001
MHR with exercise	-0.396	<0.001	LA diameter	-0.329	0.001
			MHR with exercise	0.298	0.002

BSA: body surface area, LDL: low density lipoprotein, IVRT: isovolumic relaxation, IVS: interventricular septum thickness, LA: left atrium, MHR: maximal heart rate, METs: metabolic equivalents.

OC031

The Importance of Family Support in the Treatment Process of Dialysis Patients

[1]Hüsne Hilal Katırcı, [1]Hicran Yıldız
[1]Bursa Uludag University, Bursa, Turkey

Background Chronic diseases are irreversible, long-lasting, slowly progressing diseases that cause physical and functional disorders. One of the chronic diseases frequently seen in the world and in our country is chronic kidney failure. Many systems are affected due to the irreversible loss of kidney functions in chronic kidney failure.

Discussion In these patients, it is tried to ensure that they can live more comfortably and longer with dialysis treatment. Hemodialysis treatment brings many problems experienced by patients. These individuals enter the machine 2 or 3 days a week, a fluid they need to control constantly, the diets they need to follow, the drugs they need to use and the symptoms they have to deal with for life limit their daily activities. Most of the patients cannot continue their work because they are on dialysis on certain days a week. For these reasons, patients who undergo dialysis think that they are dependent on other family members and their psychological stress and anxiety levels increase due to role changes in the family. In all these processes, families have a role in ensuring the compliance of individuals with treatment. Families are one of the most important social support groups for these individuals.

Conclusions In this context, this review study aims to provide information about the importance of family support that dialysis patients receive during the treatment process.

OC032

Potentially Inappropriate Medication Use According to STOPP Criteria in Elderly Patients Admitted to the General Internal Medicine Outpatient Clinic

[1]Celaleddin Demircan, [1]Ulviyya Hasanzade, [1]Mustafa Tatar
[1]Bursa Uludag University School of Medicine, Department of Internal Medicine, Bursa, Turkey

Background The number of drugs used and the health risks related to drug use have increased in the elderly. In this study, it was aimed to determine the prevalence of potential inappropriate medication (PIM) use according to STOPP version 2 criteria in elderly patients admitted to Bursa Uludag University Hospital General Internal Medicine Outpatient Clinic.

Material and Methods It was planned as a prospective cross-sectional study. The patients' sociodemographic characteristics, diagnoses, concomitant chronic diseases, and drugs they used were recorded in detail, through face-to-face interviews with patients, in the pre-prepared questionnaire. Then, PIMs were determined according to STOPP version 2 Criteria. SPSS 21 package program was used for data analysis. In the comparison of categorical variables; Pearson x2 and Fisher's exact x2 tests, Kruskal-Wellis test was used to compare more than two independent groups, and Mann-Whitney U test was used to compare two independent groups.

Results Between March 1 and July 31, 2021, 411 (61.8% female, 38.2% male) patients aged 65 and over who agreed to participate in the study were interviewed, their files were examined and their disease and drug information were confirmed. The mean age of the patients was 71.5±5.9 years. (71 in women, 72.3 in men). The most common concomitant chronic diseases were hypertension (67.1%) and diabetes mellitus (39.8%). 93.7% of the patients were taking at least 1 drug per day. The rate of polypharmacy (using ≥5 drugs per day) was 55%, and the rate of excessive polypharmacy (using ≥10 drugs per day) was 11.2%. A total of 198 (48.2%) patients had PIM use according to the STOPP version 2 criteria (Table 1). Inappropriate use of proton pump inhibitors was the most common PIM (13.4%).

Conclusions In this study, it was observed that the rates of polypharmacy and PIMs were increased in the elderly, and the most common PIM was inappropriate use of PPI group drugs. Therefore, in order to reduce the potential risks related to drugs in the elderly, a comprehensive geriatric assessment should be performed for all patients, drugs should be prescribed in according to rational drug use recommendations, drugs used should be reviewed in terms of PIM use, and drugs should be questioned carefully in terms of adverse effects.

Table 1. Distribution of the number of drugs used and potential inappropriate medication use according to STOPP version 2 criteria by gender and geriatric age groups.

	Gender		Total	Age group	
	Female	Male		65-74 year-old	≥75 year-old
Number of patients	254 (61.8%)*	157 (38.2%)	411	306 (74.5%)*	105 (25.5%)
Number of drugs used					
No drug	13 (5.1%)	13 (8.3%)	26 (6.3%)	21 (6.9%)	5 (4.8%)
1-4 drugs	90 (35.4%)	69 (43.9%)	159 (38.7%)	118 (38.6%)	41 (39%)
5-9 drugs	120 (47.2%)	60 (38.2%)	180 (43.8%)	138 (45.1%)	42 (40%)
≥ 10 drugs	31 (12.2%)	15 (9.6%)	46 (11.2%)	29 (9.5%)	17 (16.2%)
Potential inappropriate medication use					
STOPP v2	130 (51.2%)	68 (43.3%)	198 (48.2%)	140 (45.8%)	58 (55.2%)

* p<0.05

OC033

Medication Errors and Potentially Inappropriate Medication Use in Elderly Patients Admitted to the General Internal Medicine Outpatient Clinic of a University Hospital

[1]Ercan Pesen, [1]Celaleddin Demircan, [2]Deniz Sıgırlı
[1]Bursa Uludag University School of Medicine, Department of Internal Medicine, Bursa, Turkey
[2]Bursa Uludag University School of Medicine, Department of Biostatistics, Bursa, Turkey

Background The frequency of chronic diseases, number of drugs used, and number of medication errors have increased in the elderly. In this study, we aimed to determine the prevalence of potentially inappropriate medication use and medication errors in elderly patients admitted to a university hospital and to identify the influencing factors.
Material and Methods In this prospective cross-sectional study, the patients' characteristics, drug use patterns, and medication errors were recorded in detail. Following this, potential inappropriate medication use was assessed according to the 2015 Beers criteria.
Results A total of 721 elderly patients (60.9% female and 39.1% male) were included in this study. 94.9% of the patients had at least one concomitant chronic disease, and the most common chronic diseases were hypertension and diabetes mellitus. The mean number of drugs used by the patients per day was 4.6 ± 2.8 and the rate of polypharmacy was 49.4% and it was higher in women. The rate of medication errors was 54.2%, potentially inappropriate medication use was 30.1%, and adverse drug reactions was 22.5%; and these rates were higher in patients with polypharmacy. The most common medication error, potential inappropriate medication use, and adverse drug reaction were the omission of a daily dose (36.5%), inappropriate use of proton pump inhibitors (10%), and gastrointestinal system-related symptoms (7.7%), respectively (Table 1). Diabetes mellitus and depression were found to be independent factors associated with medication errors.
Conclusions In the present study, patient-related medication errors, potentially inappropriate medication use, and adverse drug reactions were more frequently observed in elderly patients with polypharmacy. In addition, medication errors were more commonly observed in elderly with diabetes mellitus and depression. Therefore, to reduce the potential risks in the elderly, a comprehensive geriatric assessment should be performed for all patients, drugs should be prescribed according to rational drug use recommendations and patients should be explained in detail about how to use their drugs. Following this, at each visit, patients should be carefully questioned how they use the drugs and about drug-induced adverse effects.

Table 1. Distribution of the number of drugs used, medication errors and potential inappropriate medication use by gender and geriatric age groups.

	Gender		Total	Age group	
	Female	Male		65-74 year-old	≥75 year-old
Number of drugs used					
1-4 drugs	178 (%40.5)	152 (%53.9)	330 (%45.8)	255 (%44.7)	75 (%50)
5-9 drugs	222 (%50.5)*	91 (%32.3)	313 (%43.4)	251 (%44)	62 (%41.3)
≥ 10 drugs	25 (%5.7)	18 (%6.4)	43 (%6)	32 (%5.6)	11 (%7.3)
Medication errors					
Dose omission error	165 (%37.6)	98 (%34.8)	263 (%36.5)	206 (%36.1)	57 (%38)
Wrong time error	137 (%31.2)	69 (%24.5)	206 (%28.6)	163 (%28.5)	43 (%28.7)
Wrong dose error	29 (%6.6)	22 (%7.8)	51 (%7.1)	35 (%6.2)	16 (%10.6)
Wrong drug error	4 (%0.9)	4 (%1.4)	8 (%1.1)	7 (%1.2)	1 (%0.6)
Total**	250 (%56.9)	141 (%50)	391 (%54.2)	314 (%55)	77 (%51.3)
Potentially inappropriate medications					
Table 2-related PIMs	121 (%27.6)	70 (%24.8)	191 (%26.5)	122 (%21.3)	69 (%46.0)*
Table 3-related PIMs	12 (%2.7)	7 (%2.5)	19 (%2.6)	12 (%2.5)	5 (%3.3)
Table 4-related PIMs	14 (%3.2)	8 (%2.8)	22 (%3.1)	3 (%0.5)	19 (%12.7)*
Table 5-related PIMs	18 (%4.1)	10 (%3.5)	28 (%3.9)	20 (%3.5)	7 (%5.3)
Table 6-related PIMs	3 (%0.7)	1 (%0.4)	4 (%0.6)	3 (%0.5)	1 (%0.7)
Total ***	136 (%31.0)	81 (%28.7)	217 (%28.3)	127 (%20.8)	90 (%56.7)

* p<0.001, ** Some patients have more than one medication error, *** Some patients have more than one potentially inappropriate medication use.