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SHORT ORAL PRESENTATIONS

Guest Editor

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SOP-1

The Relationship Between HbA1c Level and Coronary Artery Disease Severity in Patients Undergoing Coronary Angiography

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Introduction: Coronary artery disease (CAD) occurs as a result of narrowing or occlusion of coronary arteries. Diabetes mellitus is an important risk factor for CAD. HbA1c indicates prolonged hyperglycemia. Prolonged hyperglycemia triggers vascular wall damage. In this study, we aimed to determine the relationship between HbA1c level and CAD severity.

Method: This study was conducted retrospectively. Patients between the ages of 30-90 who underwent Coronary Angiography at the Bezmialem Vakif University Medical Faculty Hospital between April 2019 and April 2020 were included. The data of the patients were collected from hospital record. An $\alpha=0.05$ is accepted as significant. The data was analyzed with IBM SPSS statistics 20.0 program.

Results: The study included 1,233 patient of 67.6% was male and 32.4% was female. Of 1,233 patients, 620 patients had HbA1c level. 64.8% of the patients were hypertensive. 15.8% patients were hyperlipidemic. 42.8% of the patients were smoking. We found a significant and positive relationship between the HbA1c value and the number of occluded vessels ($p<0.001$, $r=0.144$). It was found that CAD involvement was higher in males (1.29 ± 0.96). Apart from this, it was observed that there was a significant and negative relationship between HDL value and the number of occluded vessels. ($p<0.001$, $r=-0.213$).

Conclusion: In this retrospective study we showed a significant relationship between the HbA1c level and CAD severity.

Key words: HbA1c, coronary artery disease, diabetes

SOP-2

Measuring the Quality of Life in Turkish Women Diagnosed with Polycystic Ovary Syndrome

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Introduction: Polycystic ovary syndrome (PCOS) is an endocrine disorder affecting 5-10% of all women in the community. It is a complex, heterogeneous, multifactorial disease that may adversely affect the quality of life in the future, which may occur due to the disruption of the interactions among the central nervous system, pituitary, ovaries, adrenal glands and extraglandular tissues. In the literature, there are studies about the quality of life of patients with PCOS, using disease-specific or general scales. Although it has been shown in the literature that different markers affect the quality of life at different rates, there is no study in our country using the PCOSQ-50 scale developed specifically for PCOS. The aim of our study is to evaluate the quality of life of women diagnosed with PCOS at Bezmialem Vakif University Medical Faculty Hospital.

Method: One hundred forty seven patients who were diagnosed with PCOS and whose treatments were planned were included in the study. The PCOS Questionnaire-50 was used to measure the quality of life of the patients. Linear regression analysis was performed to assess the factors affecting health-related quality of life in this population.

Results: The mean scores for quality of life sub-sections (from the greatest to the least serious concern) were as follows: psychosocial and emotional (40.7755 ± 9.4), sexual function (36.7347 ± 7.4), fertility (30.8163 ± 4.6), obesity/menstrual disorders (29.775 ± 9.102), coping (26.73 ± 5.94) and hirsutizm (19.002 ± 5.4), respectively. The higher score represents better function. However, multivariate analysis revealed that psychosocial and emotional status had the strongest impact on the patients' quality of life ($p < 0.001$), followed by obesity/menstrual disorders ($p = 0.003$) and hirsutizm disorder ($p = 0.007$).

Conclusion: The results of the present study show that impairment of quality of life was associated with PCOS related conditions such as hirsutism, obesity and menstrual problems.

Key words: Polycystic ovary syndrome, health-related quality of life, hirsutizm

SOP-3

Evaluation of Geriatric Patients with Diabetes Mellitus According to Target Hemoglobin A1C Levels

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Introduction: Glycemic control targets in older patients should be individualized by patients' functional status and comorbidities for an optimal treatment. The aim of the study is to identify patients having tightly or poorly controlled diabetes mellitus and therefore at risk for diabetes complications.

Method: Cross-sectional analysis of geriatric patients with diabetes, who were admitted to Bezmailem Vakif University Hospital from 2019 to 2020, who were receiving diabetes medications and had a HbA1c measurement, was performed. HbA1c levels were divided into 4 groups and two of these groups were considered to be as a subdivision of a group: tight glycemic control (6.5<), acceptable glycemic control (6.5-7.5), acceptable glycemic control (7.5-8.5), and poor glycemic control (8.5>). Patients having at least one of the additional criteria, including being at the age of 80 years, being dependent, having a history of cardiovascular or vascular complications, and being diagnosed with dementia or end-stage kidney failure, were placed in the "group with high risk of hypoglycemia"

Results: Five hundred forty eight patients had diabetes. Of 548 geriatric patients with diabetes, 65.3% were receiving metformin, 33.6% were receiving insulin, 27.6% were receiving dpp-4 inhibitors, and 19.2% were receiving sulfonylurea. 53.5 percent of patients were at risk for hypoglycemia. 32.7 percent of patients had tight glycemic control and 23.7 percent of them had poor glycemic control. 23.7 percent of the patients were receiving optimal treatment. Significant association was present between the patients in the group with high risk of hypoglycemia and HbA1c groups ($p<0.01$)

Conclusion: Our research found that diabetes therapy was not individualized in the case of the frail people in geriatric population. Only small percent of patients were receiving optimal treatment based on their risk status. This indicates that more attention to their treatment regimen should be given to prevent them from possible adverse drug events.

Key words: Diabetes mellitus, tight glycemic control, geriatric population, hypoglycemia, optimal treatment

SOP-4

Retrospective Investigation of Histological Compatibility between Colposcopically Directed Cervical Biopsy and Conization Material

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Introduction: Cervical cancer is the second most common malignancy in women. In this study, we aimed to evaluate the compatibility between colposcopic diagnosis and cervical pathology and a retrospective investigation was performed.

Method: This study included 100 patients who underwent colposcopy and cervical biopsy or cervical conization at Bezmialem Vakif University Medicine Faculty Hospital from January 2010 to November 2020. The clinical characteristics of the patients, cervical cytology results, colposcopic diagnosis, and cervical pathology results were recorded and correlations between variables were analyzed.

Results: This study included 704 patients. The patients who had unsuitable data were excluded. The HPV types results were negative in 23 patients, type 16 and/or 18 was positive in 51 patients and other High Risk Human Papilloma Virus groups were positive in 26 patients. The cervical cytology results were available in 99 patients, including negative cytology in 10 patients, ASC-US in 21 patients, ASC-H in 17 patients, LSIL in 32 patients, HSIL in 19 patients. Colposcopy was diagnosed as benign in 5 patients, low grade lesion in 24 patients, and high grade lesion in 71 patients. The cervical pathology was reported as benign in 21 patients, LSIL in 22 patients, HSIL in 52 patients, MIC in 1 patient and invasive cancer in 4 patients. The consistency of colposcopic diagnosis and cervical pathology was matched in 56 patients. The strength of consistency with weighted Kappa statistic was 0.443. Colposcopic diagnoses are more often overestimated (30%) than being underestimated (14%).

Conclusion: Strength of consistency between colposcopic diagnosis and cervical pathology was found to be only moderate. The overestimated colposcopic diagnosis led to unnecessary conization. However, benefits of early treatment in suspected high grade lesion patients may overcome the risk of the conization process. Contradictory results between colposcopic biopsy and conization material should be considered during decision-making process.

Key words: Colposcopy, conization, abnormal smear, compatibility

SOP-5

Evaluation of Forensic Cases and Forensic Reports Appealing to Bezmialem Vakif University Emergency Department

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Introduction: Forensic reports requested by the judicial authorities and determining the medical condition of the person are frequently written in the emergency services of hospitals. In our study, we evaluated the forensic reports retrospectively. Thus, we aimed to increase the awareness of physicians working in the emergency department about forensic reports.

Method: Our study was conducted by retrospectively evaluating the forensic reports written between 01.09.2020 and 30.09.2020. A form containing all the parameters that should be in forensic reports was used in the study.

Results: A total of 199 forensic reports were examined. The rate of men was 78.9% and their mean age was 34.26 ± 11.89 years. The rate of women was 21.1% and their average age was 37.21 ± 12.54 years. Traffic accidents were in the first place among the forensic case reasons with a rate of 32.2%. Other reasons were cuts (19.6%), assaults (12.1%), blunt traumas (10.1%), falls (9.5%), poisonings (6.5%), stab injuries (4.5%), burns (2.5%), and gunshot wounds (2%). The most frequently injured body part was the upper extremity with a rate of 56.3%. Applications were made most frequently between 06:00 a.m. and 11:59 a.m. 35.2% of the reports were prepared due to work-related accidents. Only 12.1% of the reports were written as definitive reports.

Conclusion: Physicians working in emergency services need to know how to write a forensic report. There were some deficiencies that we encountered when we examined the forensic reports during our study; incident time, general condition and consciousness of the patient, physical examination findings, detailed description of the lesions were not available. In addition, in some of these reports, the existence of a life-threatening condition and the presence of a condition requiring simple medical intervention were not specified. Physicians should be constantly informed about the issue of forensic reports, both before and after graduation, and their legal responsibilities should be explained.

Key words: Forensic report, emergency, responsibility

SOP-6

Wide-Open Dorsal-Approach Septorhinoplasty and Its Effects on Preoperative and Postoperative Age Estimation in Patients

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Introduction: The most common desire for rhinoplasty is to obtain a more aesthetic appearance. It has been stated that after the operation, the person looks younger than before. Our patients had wide-open dorsal-approach septorhinoplasty (WODAR) because of their droopy noses. Face-based age estimation can be defined as estimating the age of a person by evaluating facial biometric properties. Also, in the age estimation, the nose is one of the most informative components of the face. This study aimed whether rhinoplastic interventions might affect the visual age and therefore the age estimation.

Method: The study included 12 patients who had applied to the Otorhinolaryngology Department of Bezmialem Vakif University between 2011 and 2019 and undergone WODAR. Using a face recognition software, preoperative-postoperative age estimations were determined and compared. Five rhinoplasty surgeons were asked to make an age estimation looking at preoperative-postoperative photos of these patients. Estimations by examining preoperative-postoperative photos by physicians were held 3 weeks apart.

Results: For artificial intelligence (A.I.), the preoperative estimated age ($p=0.002$) and the postoperative estimated age were significantly correlated with the actual age ($p=0.005$). For human eye, the preoperative estimated age ($p=0.002$) and the postoperative estimated age were significantly correlated with the actual age ($p<0.001$). The preoperative estimated ages for A.I. and human eye were significantly correlated ($p=0.001$) as well as the postoperative estimated ages ($p=0.001$). The postoperative estimated age was not significantly younger than the preoperative estimated age (A.I.: $p=0.055$, human eye: $p=0.787$).

Conclusion: Our findings showed that both A.I. and human eye were successful in estimating the actual preoperative and postoperative ages of patients. The A.I. is as accurate as human eye in estimating the preoperative and postoperative ages. Postoperative estimated age was not significantly younger than the preoperative estimated age.

Key words: Age estimation, rhinoplasty, facial recognition, artificial intelligence, nose

SOP-7

Effects of Methylphenidate on Electrocardiogram and Systemic Arterial Pressure in Children with Attention Deficit and Hyperactivity Disorder

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Introduction: Attention deficit and hyperactivity disorder (ADHD) is characterized by developmentally inappropriate levels of attention, hyperactivity. In our study, we aimed to investigate the effects of methylphenidate on QTc interval and systemic blood pressure in patients diagnosed with ADHD and responded to methylphenidate (MPH) treatment according to DSM-V diagnostic criteria.

Method: In our study, physical examination and electrocardiography findings of 55 pediatric patients who applied to our pediatric cardiology outpatient clinic to start MPH treatment with a diagnosis of ADHD and who continued the treatment and received a positive response during this period were examined. Systemic arterial pressure findings before the initiation of MPH treatment and in the 6th month of treatment and QTc values in electrocardiography were evaluated retrospectively.

Results: When the basal and 6th month control values were compared, the pre-treatment systolic blood pressure values increased from 105.56 to 108.20 and there was a moderate correlation between the measured values, but it was not statistically significant. While pre-treatment diastolic blood pressure values increased from 67.36 to 69.45, there was a moderate correlation between the measured values, but it was not statistically significant. When the corrected QT values were examined, the values that were 0.401 before the treatment increased to 0.407 after the treatment, but although there was a moderate correlation, it was not statistically significant.

Conclusion: In the light of the data we had, although MPH treatment caused an increase in systemic arterial pressure and QTc values in our patients with ADHD, this increase was not at a level that required the cessation of drug therapy. However, there was nothing to prevent the initiation of MPH therapy in any of the patients we included in our study. Therefore, although the parameters we examined were not statistically significant, the slight increase in values still necessitated routine cardiac examination and electrocardiography examinations in terms of possible side effects before MPH treatment.

Key words: Attention deficit and hyperactivity disorder, methylphenidate, QTc interval

SOP-8

Risk Factors of Drug-resistant Epilepsy in Children with Cerebral Palsy

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Introduction: Epilepsy is a common neurological problem in children with cerebral palsy. In patients with resistant epilepsy, the frequency of seizures negatively affects quality of life and cognitive function. The main aim of this study is to research the risk factors of drug-resistant epilepsy in children with cerebral palsy.

Method: The study included 104 patients aged 2-17 years, with a diagnosis of cerebral palsy and epilepsy, who were admitted to the Pediatric Neurology outpatient clinic of Bezmialem Vakif University Faculty of Medicine Hospital between the years of 2018 and 2020. The patients were divided into two groups: Group I (cerebral palsy with controlled epilepsy, n=48) and Group II (cerebral palsy with drug-resistant epilepsy, n=46). They were examined retrospectively with some criteria including age, sex, gestational age, gestational weight and head circumference, history of hospitalization in neonatal intensive care unit, etiology and type of cerebral palsy, electroencephalography activity.

Results: Out of a total of 104 children with cerebral palsy and epilepsy, 5 individuals were excluded from the study because of the drug-free follow-up. Risk factors that were significantly associated with drug-resistant epilepsy included gestational age ($p=0.012$) and cerebral palsy type ($p=0.007$). There was increased risk of drug-resistant epilepsy in term (≥ 37 weeks) infants (58.7%) compared to 30-37 weeks infants (19.6%) and <30 weeks infants (21.7%). In drug-resistant patients with cerebral palsy, 60.9% of patients were quadriplegic, 26.1% were diplegic. No significant differences were found in sex, gestational weight, head circumference, history of hospitalization in neonatal intensive care unit, etiology of cerebral palsy and electroencephalography activity.

Conclusion: Our results suggested that gestational age and cerebral palsy type were risk factors for drug-resistant epilepsy.

Key words: Drug-resistant, epilepsy, cerebral palsy, risk factors

SOP-9

Assessment of Medication Adherence and Bleeding Complications in Patients Receiving Oral Anticoagulants

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Introduction: Oral anticoagulants [Vitamin K Antagonists (VKAs) and New Oral Anticoagulants] are commonly used drugs in cardiology clinics. The most common side effect of anticoagulants is bleeding. The aim of this study is to assess patient's anticoagulant drug treatment adherence, level of the knowledge and drug induced bleeding history.

Method: Patients recruited for this study were randomly selected from the list of patients using oral anticoagulants with cardiologic indication in Bezmialem Vakif Hospital Cardiology Clinic. Anticoagulation therapy adherence and knowledge levels were assessed using the 6-item Modified Morisky Medication Adherence Scale (MMAS). Patient demographics and some information about medical history were evaluated.

Results: One hundred thirty six patients completed the survey: 50% were on VKAs and 50% on NOACs. The mean age of 136 patients included in the study was 66.51 years. Of all patients, 34% of male. Among the patients, 86% showed high adherence to medication MMAS-8 score, 66% showed high knowledge levels. 30% of the patients had a history of minor bleeding (gum, nose and subcutaneous bleeding) while using anticoagulants, 5% of the patients had a history of major bleeding.

Conclusion: As we have seen in our study, the majority of patients taking oral anticoagulants had high adherence and knowledge levels. They were satisfied with their anticoagulation therapy.

Key words: Oral anticoagulant therapy, bleeding, drug adherence

SOP-10

Investigation of *Ficus Carica Plantae*' Cytotoxic, Genotoxic, Apoptotic, Antineoplastic, Anti-inflammatory, and Autophagic Effects on Breast Cancer Cells

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Introduction: Cancer is an increasing health problem worldwide. Considering the prevalence scale, the mostly seen cancer type is breast cancer. On the other hand, breast cancer is the fifth of the cancer-related deaths in the world. Depending on the excessive side effects of most treatment methods, the use of natural active herbals in cancer treatment has gained increasing attention. Our goal is to research *Ficus carica* (FC) fruit's, locally known as "İncir" in Turkey, cytotoxic, genotoxic and apoptotic effects on breast cancer at different concentrations.

Method: FC-fruit obtained from Aydın Directorate of Provincial Agriculture and Forestry was extracted in methanolic and ethanolic solvent. The obtained extract was researched for antioxidant profiles by the photometric method. Heavy metal analyses were also performed in atomic absorption spectroscopy. The breast cancer cell line (MCF-7) was treated with different concentrations of FC-fruit extract for 24 hours. Cytotoxicity was measured by luminometric ATP-method, genotoxicity measured by comet assay, intracellular reactive oxygen species and mitochondrial membrane potential (MMP) levels were measured by fluorometric method, apoptosis was measured by acridine orange/ethidium bromide double staining method.

Results: Among solvents, the highest antioxidant and pro-oxidant capacities were found to be in methanol extract. FC-fruit was shown to have decreasing glutathione, and MMP in a dose-dependent manner. This caused the cells to be led to apoptosis. Cytotoxicity, apoptosis, DNA damage, and intracellular Calcium (iCa²⁺) levels were increased significantly (p<0.001). The methanolic extract included heavy metals.

Conclusion: FC-fruit has been shown to have cytotoxic, genotoxic, and apoptotic effects on breast cancer cells in a dose-dependent manner. It can be novel phytotherapeutic agent for cancer treatment. Therefore, it can be used as an adjuvant singly or combinedly in breast cancer treatments.

Key words: Ficus carica, Fig, MCF-7 breast cancer, cytotoxicity

SOP-11

Increased Osteoporosis Risk and Risk Factors in Parkinson's Patients

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Introduction: Parkinson's disease (PD) is a chronic progressive neurodegenerative disease characterised by motor and non-motor features that can lead to disability and care dependency due to various reasons. This study aims to study whether there is an increased risk for osteoporosis in patients with Parkinson's disease using biochemical markers such as vitamin D, calcium, copper, and zinc.

Method: Our research will be carried out prospectively on patients diagnosed with PD. This study included 46 patients over the age of 40 years, including 23 cases with PD and 23 normal adults as a control group (CG). 25(OH) D vitamin, calcium, zinc, and copper parameters in patients' serum samples were evaluated by biochemical methods. Then, the measurements obtained were compared using appropriate statistical methods between the patient and control groups, according to the disease severity, duration of diagnosis, and pharmacological treatments in the patient group, and the parameters related to the disease would be determined by correlation tests.

Results: The patient group had lower levels of 25(OH)D vitamin (17.37 ± 10.14 ; 26.28 ± 28.48) but it was not significant ($p=0.164$). The same was true for calcium (8.917 ± 0.35 ; 9.026 ± 0.35 , $p=0.304$), copper (101.861 ± 23.84 ; 109.99 ± 44.6 , $p=0.445$) and zinc (75.20 ± 9.8 ; 78.9 ± 7.94 , $p=0.228$) but we observed that the CG had higher levels. In the patient group, there was a negative correlation between calcium and Hoehn-Yahr Staging ($cc=-0.446$, $p=0.033$). We have observed a negative correlation among 25(OH)D vitamin, staging of the disease and duration but they were not significant.

Conclusion: 25(OH)D vitamin and calcium levels may decrease while PD is progressing. This is an issue that may be a risk of osteoporosis in the future as the life expectancy of patients increases. We think that more comprehensive studies are needed.

Key words: Parkinson's disease, osteoporosis, vitamin D, calcium

SOP-12

Relationship Between Thyroid Diseases and Breast Cancer: TSH Receptor Status Study

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Introduction: Breast cancer is a malignant neoplasia caused by an abnormal change and uncontrolled proliferation of one of the cell groups in the breast tissue. Over time, cancer cells invade nearby healthy breast tissue. It is known that hormones and receptors in glycoprotein structure are expressed in many different cancer types. Although there are many clinical studies showing the relationship between breast cancer and thyroid diseases, opposite results have also been reported. The purpose of our study is to evaluate the connection between thyroid disease and breast cancer.

Method: We retrospectively analyzed 120 female patients with breast cancer. We investigated variables including patient age, histological tumor type, hormone receptor status (estrogen, progesterone, HER2), thyroid stimulating hormone, T4, and T3 hormone from Bezmialem Vakıf University's Nucleus Database. We classified thyroid diseases as hyperthyroidism, hypothyroidism, and euthyroidism. We compared patients' ages, tumor types and receptor status based on these data.

Results: 70% of 120 breast cancer patients with an average age of 57.7 years had ductal cell tumors, 12.5% had lobular cell tumors, and 17.5% had other types of tumors. 20% of these patients had thyroid disorder. While only 1 patient under the age of 45 years had thyroid disorder, 24 patients over the age of 45 years had thyroid disorder. In thyroid patients, estrogen receptor was positive in 24 patients and negative in 1 patient, progesterone receptor was positive in 23 patients and negative in 2 patients, HER2 receptor was positive in 7 patients and negative in 18 patients. As significant relationship was not found between all cancer-related parameters and thyroid disease in patients with breast cancer ($p>0.005$).

Conclusion: As a result, comprehensive studies involving more people are required for the results to be meaningful.

Key words: Breast cancer, thyroid stimulating hormone, thyroid diseases

SOP-13

Evaluation of Angio Results and 10-year Cardiovascular Risk Calculation with Monocyte/HDL Ratio in Patients Undergoing Diagnostic Coronary Angiography

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Introduction: Atherosclerotic plaques are involved in the pathogenesis of Cardiovascular diseases (CVDs) and the two main features of this are inflammation and lipid accumulation. High leukocyte level has predictive value for coronary artery disease (CAD). Monocyte level in the blood is an independent risk for CAD, while high-density lipoprotein (HDL) plays a protective role against CAD development. Recently, a new biomarker called the monocyte/HDL ratio (MHR) is thought to be associated with chronic cardiovascular events.

Method: In this retrospective study, we included 420 patients undergoing selective coronary angiography at Bezmialem Vakif Hospital between January 2017 and January 2020. According to the angio results, the patients were divided into four groups: “normal, non-critical, critical and completely occluded”. We compared these four groups considering the data, including gender, age, HDL, LDL, monocyte and comorbidity, collected from the hospital database. The parameters required for a 10-year cardiovascular risk calculation were created by the surveys taken from the Turkish Society of Cardiology. After the data were collected, we investigated whether there was a connection among the data using IBM SPSS Statistics 21.0 Program.

Results: One-hundred-five patients from each group were studied. There was a significant difference in MHR value between the groups (normal and critical, normal and fully occluded, non-critical and critical, non-critical and total occlusion, critical and in total occlusion groups) ($p < 0.001$). The 10-year CVS risk of each patient was calculated using the parameters of age, gender, HDL and LDL cholesterol, blood pressure, diabetes and smoking. 10-year CVS risk was significantly different among the groups ($p < 0.001$), and specifically, we found that this was correlated with MHR value.

Conclusion: Our results showed that the MHR value was associated with coronary artery disease. MHR value can be examined as a predictive value in patients who are planned to undergo coronary angiography. Further investigation is required.

Key words: Monocyte/HDL ratio, coronary artery disease, coronary angiography

SOP-14

The Use of Hemogram Parameters to Predict Progression of Renal Failure in Diabetic Nephropathy

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Introduction: Uncontrolled hyperglycemia lasting for a long time causes microvascular complications due to progressive vascular wall damage as a result of an inflammatory process. Diabetic nephropathy, one of the most frequently experienced microvascular complications, can progress to a final stage renal failure by passing through various stages with a silent course. We aim to retrospectively investigate the predictive effect of neutrophil/lymphocyte (NLR), platelet/lymphocyte (PLR), and mean platelet volume lymphocyte ratio (MPVLR) hemogram parameters, which are considered to be new biomarkers of systemic inflammatory responses, in practical use so that it could be possible to detect this course early and take the required precautions.

Method: Data of 174 patients (January 2011-June 2020) were investigated retrospectively through Nucleus database system and divided into three groups as follows: Group 1 (control, n=62) diabetic patients without diabetic nephropathy, glomerular filtration rate (GFR) >90 mL/min; Group 2 (n=62) patients with diabetic nephropathy, GFR =90-60 mL/min; Group 3 (n=50) patients with diabetic nephropathy, GFR <60 mL/min. In the file scan, age, sex, HbA1C, fasting blood glucose, microalbumin/creatinine in spot urine, GFR, AST, ALT, hemoglobin, leukocyte, platelet, MPV, MPVLR, NLR, and PLR values were recorded. Exclusion criteria were determined as malignancies, active infection, acute renal failure, accompanying renal disease and the presence of dialysis indication. Analyses were performed with the Kruskal-Wallis test and Dunn-Bonferroni post hoc test.

Results: There was a significant difference among the MPVLR (p=0.014), microalbumin/creatinine (p<0.001), serum creatinine (p=0.000), and hemoglobin (Hb) (p=0.002) values of the patients in Groups 1 and 2. In addition, a significant difference was found between the control group and Group 2 in terms of the values of microalbumin/creatinine (p<0.001), serum creatinine (p=0.000), Hb (p=0.003), and alanine transaminase (p=0.026). However, no significant difference was found between the groups in terms of other potential predictive NLR (p=0.112) and PLR (p=0.473) values.

Conclusion: Our results show that MPVLR is a useful parameter in the prediction of diabetic nephropathy.

Key words: NLR, PLR, MPVLR, late kidney failure, diabetic nephropathy

SOP-15

What Inflammasomes Tell Us About Multiple Sclerosis

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Introduction: Multiple sclerosis (MS) is a chronic, immune-mediated, central nervous system disease characterized by demyelination and axonal degeneration. Autoimmunity and inflammation are important factors in MS pathogenesis. Inflammasomes are multiple protein complexes in the cytoplasm and triggering of an inflammasome causes inflammation by activating the inflammatory cytokines. In this study, our aim was to measure the expression of inflammasomal markers in MS patients and control group to evaluate their roles in the disease process.

Method: Thirty eight MS patients were included in the study. The patients were categorized considering either they were in relapse (n=9) or in remission (n=29) periods. In addition, healthy people with no MS diagnosis (n=10) were included as a control group. Lymphocyte isolation was performed from the blood and the gene expressions of NLRP3, PYCARD, IL-18, IL-1 β , NLRX1 and GAPDH analyzed in the specified groups by reverse transcription- polymerase chain reaction.

Results: In the remission and relapse groups, *NLRP3* gene expression was found to be increased compared to the controls, but the increase was not statistically significant ($p=0.940$). The gene expression of interleukin (IL)-1 β was found to be increased in the remission group and decreased in the relapse group, but these were not statistically significant ($p=0.261$). In the remission and relapse groups, *PYCARD* and *IL-18* gene expressions were found to be decreased compared to the control group, but the decrease was not statistically significant ($p=0.152$ and $p=0.885$ respectively). The difference of *NLRX1* gene expressions between the groups was found to be statistically significant ($p=0.049$). There was a decrease in *NLRX1* gene expression in the relapse and remission groups compared to the controls, this decrease was more pronounced in the relapse group.

Conclusion: As we know from the literature, NLRX1 has anti-inflammatory effects. In the future, it can also be used as a biomarker of MS relapses, but larger studies and validation of the results are needed.

Key words: NLRP3, PYCARD, IL-18, IL-1 β , NLRX1, inflammasome, multiple sclerosis

SOP-16

Evaluation of Biochemical Parameters and Imaging Methods in the Management of Patients with Renal Colic

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Introduction: Acute renal colic is one of the common causes of emergency admissions. In the diagnosis of renal colic, imaging methods are used after taking anamnesis and physical examination. Changes in biochemical parameters (urea, creatinine) of patients are often expected.

Method: Patients who presented with acute renal colic, who had imaging results, and who had ureteral stones in Bezmialem Vakif University Hospital emergency service between January 2013 and March 2020 were included in the study. The results of the laboratory (creatinine) and imaging (CT) at the time of first admission with the acute symptoms, which were recorded in the hospital system of the patients, were compared with the imaging results on re-admission to the outpatient clinic. The correlation of biochemical changes with the imaging results obtained during and after stone dropping of patients whose acute renal colic symptoms disappeared during follow-up were evaluated, and the place of computed tomography in follow-up was evaluated. The discharge of patients with improved symptoms and laboratory values without computed tomography and other imaging methods were retrospectively investigated. The study was conducted with 62 people.

Results: Considering the mean differences between first time creatinine and control creatinine measurements, a statistically significant difference was found between them ($p < 0.001$). The median value of first arrival creatinine (0.80-1.25) was 0.20 units higher than the median value of control creatinine (0.71-0.93). 61% of the patients in the study were men and 39% were women. The average age of the patients was 44.62 years.

Conclusion: The results of the present study show that follow-up of renal colic patients with biochemical parameters is as significant as follow-up with imaging methods. It is possible for patients to be discharged by considering their creatinine values.

Key words: Renal colic, creatinine, urinary stone

Comparison of Cytotoxic, Genotoxic and Apoptotic Effects of Broccoli (*Brassica Oleracea var. Italica*) and Cauliflower (*Brassica Oleracea var. Botrytis*) Extracts on Colon Cancer Cells

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Introduction: Recently, especially in cell culture studies, it has been reported that broccoli and cauliflower extracts show antiproliferative and apoptotic impacts and pro-oxidant activity on cancer and normal cells by causing an increase in reactive oxygen radicals (ROS). The aim of this study is to investigate the cytotoxic, genotoxic and apoptotic impacts of broccoli and cauliflower extracts on *in vitro* colon cancer and normal cell lines and their relationship with intracellular ROS production levels.

Method: Colon cancer (HT-29) and normal cell lines (CCD-18Co) were cultured in suitable mediums. Broccoli and cauliflower vegetables sprouts were extracted. Then, the total antioxidant capacity (TAC), phenolic content and flavonoid values were determined through photometric methods. Cell Titer-Glo Luminescent Cell Viability Test Kit (Promega) was used to measure cell viability level. Apoptosis induction was detected by flow cytometric and acridine orange (AO/EB) staining methods.

Results: ABTS antioxidant activity values of broccoli and cauliflower were 11 ± 1 mgAA/100g and 6 ± 1 , respectively. The total phenolic values of broccoli and cauliflower were found to be 1,426 mgGAA/100 g and 1,425 mgGAA/100 g, respectively. Total flavonoid values of broccoli and cauliflower were 607 and 128 mgQUEeq/100 g, respectively. According to the cytotoxicity assay for the highest dose of extracts, cell viability decreased to 26% for broccoli and 44% for cauliflower applied cells after 48 hours of incubation. IC_{50} was found 7.5 mg/mL for broccoli. The cauliflower extract was not able to reduce cell viability for all concentrations tested.

Conclusion: Cauliflower and broccoli extracts increased TAC in a dose depended manner. At the same concentrations, broccoli had higher TAC than cauliflower. It was determined that broccoli and cauliflower showed really close activity to each other for the total phenolic content, broccoli showed higher activity for the total flavonoid content. Flow cytometry and AO/EB results showed that broccoli had more apoptotic effects than cauliflower.

Key words: *Brassica oleracea*, sulpharopan, antiproliferative, ROS, colon cancer

SOP-18

The Relationship Between Preferred Sleep Position and Heart Rate, Arterial Blood Pressure, Respiratory Rate and Peripheral Oxygen Saturation

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Introduction: Sleep is the unconscious phase in which a person can be awakened by stimulus. Sleeping position is crucial for falling asleep and maintaining sleep. Studies have been conducted to determine preferences for sleeping positions for specific groups of people, and it has been found that certain positions are preferred more often. However, a study on our subject of research has not been conducted in the young adult group. Our aim is to investigate the relationship between parameters such as heart rate, arterial blood pressure, respiratory rate and peripheral oxygen saturation and preferred sleep position.

Method: The study included 30 female and 30 male students between the ages of 18 and 23 years, with a body mass index below 25, and studying at Bezmialem Vakif University. The individuals included were considered to smoke less than 1 pack per day and to have no illness. Participants' information was recorded with a questionnaire, and visuals were given. The students were placed in supine, prone, starfish, right lateral decubitus, left lateral decubitus and fetal sleeping positions. Measurements were made at the end of a 5-minute adaptation period following each sleeping position, with an electronic blood pressure meter, a finger-type pulse oximeter, and respiratory rate by observing.

Results: Pulse and respiratory rate were not related with positions ($p>0.05$). Systolic, diastolic arterial pressure, and oxygen saturation were affected by positions ($p=0.01$, $p=0.02$, $p=0.007$).

Conclusion: As a result of the tests performed, it was found that the distribution of systolic, diastolic arterial pressure, and oxygen saturation were affected by positions. Therefore, the distribution of pulse and respiratory rate values was found to be the same across all positions.

Key words: Sleep position, heart rate, blood pressure, oxygen saturation

SOP-19

Evaluation of Ferritin, Transferrin, Myelin Basic Protein, and Myelin Oligodendrocyte Glycoprotein Parameter in CSF Samples Taken from Multiple Sclerosis Patients

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Introduction: Multiple sclerosis (MS) is a demyelinating neurodegenerative disease of the central nervous system. Advances in magnetic resonance imaging (MRI) have greatly increased accuracy in the diagnosis and staging of MS but misdiagnosis can still be made. Therefore, one of the most critical needs regarding the disease is to find an objective and applicable test. Some studies show that ferritin and transferrin values measured in the cerebrospinal fluid (CSF) can help the diagnosis of the disease. This study aimed to determine the levels of ferritin and transferrin in the CSF of patients with MS and to compare the results with the control group.

Method: MS patients were diagnosed according to the McDonald criteria and Relapsing-Remitting MS, Primer Progressive MS, and Seconder Progressive MS patients were included in the study. Totally 31 samples were collected from MS patients. For the control group, 45 samples were collected from patients with lumbar puncture indications due to headache and hydrocephalus. Samples were taken into a 15 mL polypropylene test tube with the help of a Spinocan needle, centrifuged at 2000 rpm for 10 minutes, and stored in the freezer at -80 degrees until the day they were to be studied. For measurement, samples thawed at room temperature; parameter levels were measured by using ELISA kits.

Results: Seventy six samples were studied. There were 52 female (68.4%) and 24 male (31.6%) samples, the mean age was 41 years for the whole group, 35 years for MS patients, 43 years for the control group, 35 years for women, and 52 years for men. No significant difference was found for CSF ferritin ($p=0.265$), transferrin ($p=0.176$), myelin basic protein ($p=0.649$), and myelin oligodendrocyte glycoprotein ($p=0.529$) levels between the MS patients and control group.

Conclusion: The findings of our study did not indicate a significant difference in ferritin and transferrin levels of MS patients compared to the control group. Due to the different results from previous studies and our project, more studies are needed to reach an overall conclusion.

Key words: Multiple sclerosis, ferritin, transferrin, cerebrospinal fluid

Assessment of QTc Dispersion in Children with Familial Mediterranean Fever

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Introduction: Familial Mediterranean Fever (FMF) is the most common hereditary autoinflammatory disease in the world, manifested by inflammatory attacks such as self-limiting fever, pleuritis, peritonitis, arthritis, and serositis. The studies have shown that chronic inflammation can cause increased cardiovascular disease and arrhythmia in adult FMF patients, but there are very few studies on this issue in pediatric FMF patients. The results of studies conducted in childhood are still controversial. Twelve-lead surface electrocardiogram (ECG) is still prevalently and routinely used in the diagnosis of arrhythmias. QTc dispersion is defined as the difference between the longest QTc interval and the shortest in superficial electrocardiography and is shown among the methods used to determine the risk of arrhythmia. This study aimed to assess the susceptibility of cardiac arrhythmia for pediatric patients diagnosed with FMF by QTc dispersion and other ECG markers.

Method: In this preliminary prospective study, the patient group composed of 45 patients with FMF. Forty-five healthy children of the same age and gender formed the control group. For patients in the control and patient groups, P wave, P wave dispersion, QT dispersion, and QTc dispersion were designated for each patient, and then 12-lead surface ECG was calculated for each patient in both groups.

Results: We compared the ECG findings of the study group with those of the control group in terms of all electrocardiographic markers. QT dispersion and QTc dispersion were found to be significantly higher in the patient group ($p < 0.001$). Furthermore, patients had greater P wave, P wave dispersion than healthy patients ($p < 0.001$, respectively).

Conclusion: Pediatric patients with FMF might be prone to atrial and ventricular arrhythmias due to their prolonged electrocardiographic markers. Also, we recommended doing an ECG examination routinely for pediatric patients with FMF.

Key words: Familial Mediterranean Fever, QTc dispersion

SOP-21

Information and Thoughts of the Families Who have Applied to Bezmialem Vakif University Pediatric Emergency Room and Pediatric Polyclinics for Childhood Vaccinations

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Introduction: Vaccines are made for prophylaxis in diseases caused by viruses and bacteria and they help the body develop an immune response against these diseases. Vaccinations starts with birth. The childhood vaccination program implemented by the Ministry of Health includes many vaccines. Vaccination opposition has led to a decrease in vaccine acceptance rates and an increase in vaccine-preventable disease outbreaks. We planned to collect information about the awareness and opinions of the families who applied to the Pediatric Emergency Service and Pediatric Polyclinics of our hospital, and to investigate whether the patients who applied were vaccine opponents and the reasons.

Method: A 15-question questionnaire study was prepared using the literature, to be applied to the families who applied to the Pediatric Emergency Service and Pediatric Polyclinics. Chi-square test was used for categorical test. Frequency analysis was used for descriptive statistics. The sample size was set to 150. Data were analyzed in IBM SPSS Statistics 20.0 program.

Results: Totally 150 people participated to our study. Twenty of the participants were university graduates (47%), 31 of them were high school (20.8%), 28 of them were secondary school (18.8%), and 20 of them were primary school graduates (13.4%). Ninety-two of the participants knew the Ministry of Health Childhood Vaccination Schedule (61.7%). Based on our data, there was a strong connection between education level and knowledge of the vaccination schedule ($p=0.001$). 14.1% of participants were vaccine opponents, 34.2% were partly opponents and 51.7% were not vaccine opponents. There was a significant relationship between education level and vaccine opposition ($p<0.001$).

Conclusion: As a result of this study, it was found that there was a significant correlation between education level and knowledge of vaccine schedule and vaccine opposition.

Key words: Vaccine opposition, education level

SOP-22

Determination of the Reference Range of Zinc and Copper Trace Elements in Turkish Society

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Introduction: Zinc and copper trace elements are two elements that must be present at certain levels in the human body to perform their functions. Since the reference values show variation among different populations, determining the reference values of trace elements in our population is of great importance for detecting the presence of a disease and the following-up the stages and effects of a treatment. Therefore, we aimed to determine the reference range of zinc and copper by using the automated kit that was developed in our university and to contribute to the clinicians and the scientific world.

Method: In our study, the reference range was determined by direct sampling method. Samples taken from individuals who applied to the outpatients clinics of Bezmialem Vakif University Health Application and Research Center (BVU-HARC) for several reasons and whose laboratory results turned out not to point a disease were included in the study after the desired tests were performed.

Results: As the result of the power analysis, it was found that at least 120 male and 120 female healthy volunteers between the ages of 16 and 60 years, who applied to the BVU-HARC from the Turkish community, would be sufficient in determining the reference range. We used automated colorimetric zinc and copper kit that was produced by our university to measure zinc and copper levels in appropriate samples. By using IBM SPSS statistics, we found the mean and SD for both elements - Cu (mean =111.27±17.88), Zn (mean =80.17±13.38). Therefore, our reference ranges were Cu 70-150 ug/dL and Zn 60-120 ug/dL.

Conclusion: The reference range we found is in parallel to that in the literature, which indicates that the kit we use in our university is healthy and useable.

Key words: Zinc, copper, reference range

Evaluation of Hair Loss After COVID-19

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Introduction: The new coronavirus infection has caused a global pandemic all over the world. Due to the psychological and other side effects of the pandemic, there has been an increase in the number of patients visiting dermatology outpatient clinics with the complaint of hair loss. It was observed that some drugs used in the treatment of the disease and high fever could increase hair loss in those who had coronavirus disease-19 (COVID-19) infection. We aimed to examine the change profiles of patients with hair loss complaint during the summer months of the COVID-19 pandemic considering the same period of the previous year.

Method: We included a total of 105 patients who applied to our hospital with hair loss in the summers of 2019 and 2020 in our study. We questioned whether our patients had COVID-19 and whether there was an increase in their complaints during the pandemic process. We evaluated the results of their blood tests such as hemoglobin, ferritin, folic acid, thyroid stimulating hormone, anti-thyroid peroxidase, zinc, biotin, vitamin B12, and vitamin D.

Results: There were 67 female (63.8%) and 38 male (36.2%) patients and 18 of them had COVID infection (17.1%). During the pandemic, 51 patients' complaints increased, and 12 of them were those with COVID infection. According to the Fisher-Freeman-Halton Exact test, there was a statistically significant and positive association between COVID-19 infection and hair loss ($p=0.001$). There was not any positive correlation between COVID infection and abnormal blood results ($p>0.05$)

Conclusion: According to the results of our study, COVID-19 infection causes an increase in the complaint of hair loss in patients, and an increase in hair loss is observed in patients who do not have an infection but increased stress during the pandemic process.

Key words: COVID-19, hair loss

Questioning of Ibs Symptoms And Defecation Habits Among 4th and 5th Years Medical Students of Bezmialem Vakif University

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Introduction: Irritable Bowel Syndrome (IBS) is a functional disease of gastrointestinal tract, characterized by chronic abdominal pain and altered intestinal habits. Abdominal pain related to IBS is periodic and cramp style. Belching and abdominal bloating are common symptoms. In this study, we aimed to evaluate the IBS complaints, nutrition and defecation habits among 4th and 5th year medical students of Bezmialem Vakif University.

Method: In our study, we evaluated the relationship among nutrition habits, defecation habits and IBS symptoms among 4th and 5th year medical students. One hundred eighty nine students were included. Examination was done by an online questionnaire created. In the questionnaire, we examined stool characteristics, existence of abdominal bloating, type of dietary intake and consumption of fibrous nutrients. Analysis were made by using SPSS 20.0 statistical program. The Shapiro-Wilk test was used to determine whether data were equivalently ranged or not. Categorical data were analyzed by the chi-square test and parametrical data by the t-test. Non-parametrical data were analyzed by the Mann-Whitney U test.

Results: Students who consumed 1-2 slices of whole wheat, bran and rye bread weekly (51.4%) had never visited a gastroenterologist before. Students who consumed 1-2 portion of bulgur (40.1%) defined their defecation habits as variable. One-two portion of bulgur consumer students (42.2%) declared that they never had abdominal bloating. Those who had relaxation after defecation (46.8%) did not have abdominal bloating.

Conclusion: Our study has showed that consumption of fibrous nutrients as vegetables and fiber-rich bread decreases the appeal to gastroenterologist. Fiber-rich bread and bulgur consumption is useful to have less abdominal bloating. Bulgur is also seen with a variable defecation habit without any problem. As a result, we can say that fiber is utile to have better defecation habits and to see less IBS symptoms.

Key words: IBS, nutrition, defecation, fiber