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SHORT ORAL PRESENTATIONS

SOP-1

Disease Severity of COVID-19 in Patients with Severe or Moderate Obstructive Sleep Apnea Syndrome

Eda SANDIK[1], Hamza OGUN[2], Banu BÜYÜKAYDIN[3]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Pulmonology, İstanbul, Turkey
[3]Bezmialem Vakıf University Faculty of Medicine, Department of Internal Medicine, İstanbul, Turkey

Introduction: Obstructive Sleep Apnea Syndrome (OSAS) is a disease characterized by recurrent obstructions of the upper airways during sleep. Metabolic disorders and cardiovascular comorbidities occur because of increased systemic inflammation. Coronavirus disease-19 (COVID-19) is more severe in people with comorbidities such as hypertension, diabetes, and cardiovascular disease. The aim of our study is investigation whether COVID-19 is severe in patients with severe or moderate OSAS.

Method: Between January 2016-December 2020, polysomnography results of patients who apply to the Bezmialem Vakıf University Hospital Pulmonology Outpatient Clinic were screened. In the case group, COVID-19 polymerase chain reaction (PCR)-positive patients diagnosed with severe or moderate OSAS according to the PSG results were included in the study. Patients who are positive for COVID-19 PCR but not diagnosed with OSAS with PSG were included in the control group. The final states of the patients in the two groups were compared: intensive care unit hospitalization; D-dimer, ferritin, lymphocyte, C-reactive protein (CRP) values in blood.

Results: The records of 310 patients were examined (control: 62, case: 248). Eight patients in the control group and 35 patients in the case group had hospitalization. There was no significant difference in terms of hospitalization (p=0.902). Median value of d-dimer was 509/337 for case/control. There was no significant difference for d-dimer (p=0.077). Median values of ferritin and CRP for case/control were 238.95/162.6 and 31.98/19.54 (p=0.451 and p=0.132). A significant difference wasn't found. Median value of the absolute lymphocyte count in the hemogram was 1.28/1.39 for the case/control. There was no significant difference (p=0.753). Additionally, this study showed that OSAS was more common in people over the age of 65 and was in men than women (p<0.001).

Conclusion: Our results showed that COVID-19 isn't more severe in patients with severe and moderate OSAS than patients not diagnosed with OSAS.

Key words: OSAS, polysomnography, COVID-19

SOP-2

Evaluation of Increase in Complications in Patients with Acute Appendicitis Due to Admission Difficulties During the COVID-19 Pandemic Process

Rümeysa ŞEVİK[1], Kamuran Cumhur DEĞER[2], Fatma Ümit MALYA[3], Ceren GÖNÜLTAŞ[4]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of General Surgery, İstanbul, Turkey

Introduction: During coronavirus disease-19 (COVID-19) pandemic, people did not take a risk by going to hospital to fear contagion. Some pandemic hospitals were referring patients to other hospitals because of the intensity. Therefore, hospital admissions for acute illnesses like acute appendicitis (AA) was delayed. We evaluate the increase in complications in AA cases due to admission difficulties during the pandemic.

Method: In this retrospective observational study, patients older than 18 years who had appendectomy with the diagnosis of AA at our hospital before (March-December 2019) versus during a pandemic (March-December 2020) were selected. Patients without imaging who had previous abdominal surgery were excluded. IBM SPSS Statistics® 22.0 was used. $p < 0.05$ is considered statistically significant.

Results: A total of 446 patients (279 prepandemic, 167 during pandemic) were identified. Prepandemic group includes 113 female and 166 males whereas 58 females and 109 males during a pandemic. Mean age is 34 ± 13 in prepandemic while 33 ± 12 in postpandemic. Time from symptom onset to patient arrival at the hospital, the number of hospital-related late admission, C-reactive protein average, appendix diameter and percentage of postoperative ileus during a pandemic is statistically significantly high ($p < 0.01$, $p < 0.01$, $p = 0.003$, $p = 0.002$, $p = 0.027$). The percentage of defense and rebound in prepandemic is statistically significantly high ($p = 0.001$, $p = 0.01$). The distribution of age and sex; the type of surgery; imagining, operation and pathological findings; the length of hospital stay and readmission have not meaningful difference. In prepandemic, the maximum length of hospital stay was 9 days whereas 19 days during a pandemic.

Conclusion: Although it is observed a significant delay on admission to hospital; postoperative complications and hospital stay seems not to be affected. However; it is suggested to do further studies multicentric and with more patients.

Key words: COVID-19 pandemic, acute appendicitis, delayed hospital admission

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SOP-3

The Relationship Between Pregnancy and Anxiety in Patients Whos Pregnancy Process is Being Followed in Bezmialem Vakıf University Pregnancy Outpatient Clinic

Melike Sena DEMİR[1], Çağlar ÇETİN[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Gynecology and Obstetrics, İstanbul, Turkey

Introduction: Pregnancy is a period of emotional fluctuation for many women, where opposite emotions such as happiness and sadness, courage and anxiety are combined. My purpose in conducting this study; to prove that depression and anxiety are more common in pregnant women compared to the female patients in the control group, and to state that clinicians should be careful about this issue and refer these patients to the mental health and disease department.

Method: In our study, Bezmialem Vakıf University between April 2021 and December 2021 She applied to the obstetrics and gynecology outpatient clinic of the hospital; 15 to 49 years old with patients of childbearing age. Thirty-nine of them will go to the pregnancy outpatient clinic. The pregnant group consisting of women who were diagnosed with pregnancy, 39 of them were obstetrics as a control group consisting of patient women who applied to our outpatient clinic. determined. At 95% confidence level for 80% power, the minimum sample size is n1= n2=39, 78 calculated. Prepared by us for sociodemographic inquiry to the participants included in the study. questionnaire form, Beck anxiety Inventory and Beck depression inventory will be applied. Beck Anxiety Inventory in Turkish validity and reliability was established by Ulusoy.

Results: In conclusion, our findings show that the level of depression increases in all weeks of pregnancy. Considering the pregnant and control group data of Beck depression scale in the calculation of the p value made by the statistics department of our university, the value was found to be significant. P<0.0001 result was reached.

Conclusion: Depression and anxiety are higher in pregnant women compared to gynecology patients.

Key words: Depression, anxiety

SOP-4

Complete Blood Count in Patients with Generalized and Focal Epilepsy

Berna TERZİ[1], İsmail MERAL[2], Ferda USLU[3]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Gynecology and Obstetrics, İstanbul, Turkey

Introduction: Epilepsy is a disorder characterized by abnormal neuronal discharges and synchronized hyperactivity of the neurons. Epileptic seizures occur due to imbalance in excitation and inhibition mechanisms. Electroencephalogram is the most valuable test in the diagnosis and follow-up of epilepsy, but complete blood count (CBC) test is also very useful in the follow-up. There are some studies on hemogram evaluation that compares white blood cell (WBC) and red blood cell distribution width in patients with epilepsy during and after period of seizure. Even though, there are other studies comparing WBC count in patients with generalized and focal epilepsy, there has not been a study comparing the CBC in different types of epilepsy.

Methods: A total of 190 patients aging 18-65 who applied to the neurology outpatient clinic of Bezmialem Vakıf University Hospital between May 2019 and May 2020 and were diagnosed with epilepsy were included in the study. Patients with known malignancies, hematological diseases and rheumatological diseases were excluded. The patients were divided into two groups according to epilepsy types (generalized or focal), with similar characteristics to each other in terms of age and gender. Additionally, the antiepileptics used by the patients were also recorded.

Results: When the CBC parameters of patients with generalized and focal epilepsy were compared, no significant difference (p>0.05) was found. However, when the hematocrit values (HTC) of the old and new generation antiepileptic users were compared, it was found that there was a significant increase (p<0.05) in the HTC levels of the new generation antiepileptic users.

Conclusion: The results approved that both generalized and focal epilepsy did not cause a significant increase in any hemogram parameter, while new generation antiepileptics may increase some parameters.

Key words: Epilepsy, hemogram, antiepileptics

SOP-5

Histopathological and Clinical Findings that May Affect Recurrence in Meningiomas

Serra Nur ÖZAL[1], Ganime ÇOBAN[2]

[1]*Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey*
[2]*Bezmialem Vakıf University Faculty of Medicine, Department of Pathology, İstanbul, Turkey*

Introduction: Meningiomas are the most common primary tumors of the central nervous system. Most of these tumors show histologically benign features [World Health Organization (WHO) Grade 1]. However, there are also atypical meningiomas (WHO Grade 2) and anaplastic meningiomas (WHO Grade 3) which are related to increased recurrence. This study aims to determine the meningioma cases diagnosed in the Bezmialem Vakıf University Pathology Department and to evaluate their histopathological and immunohistochemical features in terms of recurrence.

Method: Cases diagnosed as meningioma from January 2012 to December 2020 were identified. Histopathological findings such as the presence of brain parenchymal invasion, necrosis, pattern loss, macronucleolus, small cell changes, pleomorphism, hypercellularity and mitosis number were evaluated and classified as typical, atypical, and anaplastic. Immunohistochemical markers such as Ki-67, progesterone receptor (PR), p53, EMA in the reports were also examined.

Results: 261 patients with meningiomas were included in this study. Thirty-nine patients were diagnosed with recurrence. When we classify the cases as WHO Grade 1, 2 and 3, there is a significant correlation between increased WHO Grade and recurrence risk (p=0.022). Besides as the tumor grade increases, the time for recurrence is statistically significantly shorter (p=0.03). Among the histopathological features, no significant correlation was found between brain parenchymal invasion, necrosis and increased cellularity with the presence of recurrence (p>0.05). There was a significant difference in pattern loss (p=0.003), macronucleolus (p=0.002), and small cell component (p=0.017) in cases with and without recurrence. Immunohistochemically recurrence was significantly associated with increased Ki-67 LI (p=0.01). PR positivity was found to be higher in relapsed cases (p=0.03).

Conclusion: As a result, this study showed that pattern loss, macronucleolus, presence of small cell component, mitosis, high Ki-67 and PR positivity was more predictive than other histopathological features in recurrence of meningiomas.

Key words: Meningioma, WHO Grade, recurrence

SOP-6

Evaluation of Pathologies Presenting as Suspicious for Follicular Neoplasia and Follicular Neoplasia (FNS/FN) in Thyroid Fine Needle Aspiration Biopsies

Esra Nur GÜÇLÜ[1], Yeliz Emine ERSOY[2], Beril GÜLER[3]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of General Surgery, İstanbul, Turkey
[3]Bezmialem Vakıf University Faculty of Medicine, Department of Pathology, İstanbul, Turkey

Introduction: Bethesda system is the standard for interpretation of TFNAB specimens. For the nodules "Suspicious for follicular neoplasia and neoplasia (FNS/FN)" known as Bethesda Category IV, a 15%-30% risk of malignancy is stated in the guidelines leading to difficulties for treating patients. This study evaluates the final pathologies detected in Bethesda IV nodules to contribute to the literature with data that will enable easier decision-making in patients in this category.

Method: Between October 2010 and October 2020, 120 patients who were admitted to Bezmialem Vakıf University Medical Faculty Hospital General Surgery Department with thyroid nodule and got the result of Bethesda IV after TFNAB were included in the study. Demographic characteristics of the patients and radiologic and pathologic characteristics of the thyroid nodules were investigated.

Results: Among the120 patients, 98 were women (81.66%) and 22 were men (18.33%) with the mean ages of 48.18 and 51.32, respectively. In 25 (20.83%) patients whose final pathology results were malignant, the mean age was 47 and the mean nodule size was 2.5 cm. In 95 patients (79.16%) whose final pathology results were benign, the mean age was 49.2 and the mean nodule size was 2 cm. According to the USG features of the patients whose final pathology results were benign, 50% (48/120) were hypoechoic (p<0.001) and 98.9% (94/120) had a smooth border (p<0.001). There is no significant difference between size, age, hormonal status, nodule borders, thyroiditis, and the biopsy method used in patients whose final pathology results were benign or malignant.

Conclusion: because of the study, no distinctive correlation was found that could be helpful in the concretization of the treatment approach in this category of patients. Bethesda IV is a heterogeneous category and we believe that further larger studies are needed to determine a clear treatment approach.

Key words: Bethesda system, FN/FNS, thyroid fine-needle aspiration biopsies

SOP-7

Workplace Violence Against Healthcare Workers During COVID-19 Pandemic: A Qualitative Study

Cemile Canan ÖZTÜRK[1], Ahmet Ali Saad AL-EZZI[2], Bedia ÖZYILDIRIM[3]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Public Health, İstanbul, Turkey
[3]Bezmialem Vakıf University Faculty of Medicine, Head of the Department of Public Health, İstanbul, Turkey

Introduction: This study explores the evidence of workplace violence among healthcare workers (HCWs) when they served at the coronavirus disease-2019 (COVID-19) care facilities.

Method: A qualitative study was conducted between May and September 2021 at the Bezmialem Vakıf University Hospital. The data came from in-depth online-recorded interviews, which was time ranged from 30 to 60 min. All the first-line HCWs, both genders, willing to participate, had engaged and experienced some form of workplace violence in the last six months when dealing with COVID-19 patients were invited to participate in the study.

Results: Four medical doctors, one nurse and two axillary HCWs were interviewed. Primarily (the main source of violence): participants (1, 2, 3, 4, 5, 6) in the content analysis claimed that violence against HCWs could have sprung from the relatives of the patient. Insufficient information about the emergency procedure and the workplace definition; problems such as bias against healthcare staff; poor levels of education; and an inclination toward aggression were found as patient-related factors. Secondly: Five (1, 2, 4, 5, 7) of the participants stated that the "white code" ends up in the police station, where the perpetrator excuses in front of the officer or receives a fine. Four (1, 2, 6, 7) of the interviewed HCWs declared that the security personal is a help to intimidate the patients. All participants agreed that people have lost respect for HCWs, therefore most of them (2, 3, 6, 7) thought that the family physician system can be the solution. Right now there is a fee for the examination in the emergency and a triage.

Conclusion: Working in the field of health care is fraught with risks, especially in times of crisis. Therefore, attention to the safety of this segment is a priority.

Key words: Workplace, violence, healthcare workers

SOP-8

Critical Thinking Dispositions Measurement Among Medical Students

Büşra YALINKILIÇ[1], Semra ÖZÇELIK[2], Özge PASİN[3]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Medical Education, İstanbul, Turkey
[3]Bezmialem Vakıf University Faculty of Medicine, Department of Biostatistics, İstanbul, Turkey

Introduction: Critical thinking means separating thinking from prejudice and developing it. Studies demonstrated that critical thinking increases the permanence of basic science knowledge by increasing the link between basic and clinical sciences. This research aims to measure the critical thinking dispositions of Bezmialem Vakıf University (BVU) Medical Faculty students.

Method: The universe of the research consist Faculty of Medicine of BVU students. Marmara Critical Thinking Disposition Scale was used in the study. Marmara critical thinking disposition scale measures student's level of reasoning, reaching judgment, seeking evidence, seeking truth, open-mindedness, systematicity. It contains 28 items evaluated in a 5-point Likert style. The results were evaluated according to the preclinical-clinical education levels, age and gender.

Results: Two hundred thirty-two students, 123 preclinical and 109 clinical, participated in the study. A significant difference was observed between the preclinical and clinical groups in the scores of reasoning, reaching judgment, seeking evidence, seeking truth, and systematicity ($p=0.012$; $p=0.005$; $p=0.001$; $p=0.043$; $p=0.004$). The score of the preclinical group was found to be significantly higher than the score of the clinical group in theese questions. No significant difference was observed between the scores of open-mindedness questions ($p=0.286$). A significant difference was observed between the scores of the systematicity questions between the male and female groups ($p=0.013$). The score of the female group was found to be significantly higher than the score of the male group. A significant relationship was observed between age and reasoning, systematicity. As age increases, reasoning and systematicity scores decrease ($r=-0.124$; $p=0.050$; $r=-0.159$; $p=0.016$).

Conclusion: This study showed that critical thinking skills were significantly higher in the preclinical period among medical faculty students. Reasoning and systematicity abilities decreased as the age increased and the female was more systematic.

Key words: Critical thinking, medical students

SOP-9

Effect of Music Therapy on Anxiety During the Procedure in Patients with TRUS Biopsy

Melike KARACABAY[1], Muzaffer AKÇAY[2], Emin Cenan COŞKUN[3]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Urology, İstanbul, Turkey
[3]Bezmialem Vakıf Univesity Faculty of Medicine, Department of Urology, İstanbul, Turkey

Introduction: A transrectal ultrasound scan (TRUS) -guided biopsy is a common urologic clinical examination of men with high serum prostate-specific antigen to diagnose prostate cancer. Patients who decided to undergo biopsy may experience remarkable anxiety. Music has well-established psychological effects, including the induction and modification of moods and emotions. Our study investigates the effectiveness of music therapy in patients with anxiety during TRUS-guided prostate biopsy with non-pharmacological usage.

Method: The study was included a control group (group 1, n=44) and a music group (group 2, n=44). The case-music group was included patients who listened to the music of their choice while the control did not listen to any music. Both groups were injected with lidocaine gel into the rectum before the biopsy and waited for the drug to affect before the biopsy. Patient anxiety levels were quantified using the Hospital Anxiety and Depression Scale (HADS) and the pain scale visual analog scale (VAS) was used after biopsy. HADS and VAS scores of patients, prostate-specific antigen (PSA) volumes, ultrasonography prostate volume were checked after the procedure.

Results: Patients in both groups were of similar ages (mean ± SD, 65.4±7.75 and 64.0±7.45 years, respectively; p=0.517). The anxiety score of the control group was significantly higher than the music group (p=0.02, respectively). The depression score of the control group was significantly higher than the music group (p<.001). The pain score of the music group was significantly lower than the control group (p<.001).

Conclusion: Listening to music during TRUS-guided prostate biopsy remarkably reduced patients' feelings of anxiety and pain. The study showed that music can be an effective and inexpensive adjunct to sedation during TRUS-guided prostate biopsy.

Key words: Prostate, biopsy, music, pain, anxiety

SOP-10

The effect of screen exposure duration on M-CHAT parameters of children between 1 and 3 age diagnosed with atypical autism

Esra ALTUN[1], Emel TORUN[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Pediatrics, İstanbul, Turkey

Introduction: Increased duration of use of screens may be a predisposition factor for autism. Autism spectrum disorders (ASD) is a neurodevelopment disorder characterized with problems with social relationship and communication and restricted and repetitive patterns of behavior, interest or activities. The current study compares the daily exposure to television and phone screen time between atypical autism children pre-diagnosed with The Modified Checklist for Autism in Toddlers (M-CHAT) and controls aged between 1 and 3 years.

Method: We used the M-CHAT and our daily screen exposure survey and applied to 90 children (n=90); M-CHAT is a series of questions about children's behavior for a pre-diagnose of ASD and separate the group into two small groups of 45 children (n1=n2=45). The survey about daily exposure to screens includes the evolution periods, the spending time on screens and for which circumstances (while eating, sleeping or with parents). Chi-square tests and Mann-Whitney U Test were used for statistical analysis.

Results: More than half of the Turkish children exceed the American Academy of Pediatrics screen time recommendation. Non-ASD group tend to have higher daily phone screen time (p=0.02). Non-ASD group has more play time (p=0.024). The first exposure mean time in the ASD group was 10.00 (0.00-30.00) and the second group mean time was 18 (0.00-30.00) (p=0.057). In both groups' parents are working and children are entrusted to a third reliable person (p=0.018). Data did not support the hypotheses.

Conclusion: Working parent's children are more tend to be exposed to screens because of the lack of control. Unfortunately, there was no significant evidence that children with ASD differ in their screen time from other normal growing children. So, the hypotheses of early exposure to screens prone to ASD is invalid.

Key words: Autism, screens, M-CHAT

SOP-11

The Effect of Maternal Body Mass Index on Neonatal Umbilical Vein Blood Gas Parameters

Mercan Nisa AYKAÇ[1], Emel TORUN[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Pediatrics, İstanbul, Turkey

Introduction: Children born from overweight mothers are at increased risk of, diabetes, cardiovascular problems, cognitive disorders and congenital defects. This study aimed to examine maternal obesity's effect on the baby's venous cord blood gas parametres, by comparing the venous cord blood gas parametres of the babies who were born from obese mothers with the ones born from normal weight mothers.

Methods: Among the 574 pregnants who were enrolled in the study, 248 pregnants were included. Pregnant were divided into 3 groups according to body mass index (BMI) measures: BMI <24.99 kg/m² were in group 1 (n=39), BMI levels = 25-29.99 kg/m² were in group 2 (n=127) and, BMI >30 kg/m² were in group 3 (n=82). Cord blood gas parameters (pH, PCO2, PO2, HCO3, BE (B), BE (ecf), SO2 and lactate levels) were measured. The software SPSS was used for statistical analyses, the non-parametric parameters were compared with Kruskal-Wallis, Spearman correlation test; the parametric values were compared with Man Whitney U, Chi-Square, and Fisher Freeman Halton test, and a p-value of less than 0.05 was considered statistically significant.

Results: There was no significant relationship between BMI and pH levels (p= 0.661) nor between BMI and lactate levels (p= 0.870). Also there were no significant relationships between BMI and PO_2, PCO_2, HCO_3, BE (B), BE (ecf), SO_2 levels (p>0.05). There were significant relationships between delivery type with lactate levels (p<0.001), and pH values (p<0.006). Also there were significant relationships between gestation weeks with HCO3 (p<0.001), BE (B) (p<0.004) and BE (ecf) (p<0.003) levels.

Conclusion: Maternal BMI levels do not affect the babies' blood gas parameters. However, delivery type and gestation week were related to blood gas parameters in our study. Further research is needed for understanding relationships between delivery type and gestation week with the babies' blood gas parameters.

Key words: Obesity, blood gas, BMI, lactate, neonatal

SOP-12

Assessment of Depression, Hopelessness and Health Anxiety Levels in Bezmialem Vakıf University Medical Faculty Students During the COVID-19 Pandemic Period

Serdar ERGENÇ[1], Havva AFŞAROĞLU[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Psychiatry, İstanbul, Turkey

Introduction: Psychiatric disorder can be defined as significant changes in thinking, emotion, and/or behavior and distress and/or problems functioning in social, work, or family activities. Health anxiety is worrying excessively about becoming seriously ill. Depression may be described as feelings of sadness or anger that interferes with a person's everyday activities. Hopelessness is defined as having negative expectations regarding oneself and one's future and a negative emotional state characterized by the lack of finding a solution for one's problems. This study aims to examine the effects of coronavirus disease-2019 (COVID-19) on health anxiety, depression and hopelessness in medical faculty students.

Method: The study was conducted using an online questionnaire. The research was completed by 180 Bezmialem Vakıf University medical students. For this study, Sociodemographic Data Scale, Beck Depression Scale, Health Anxiety Scale and Beck Hopelessness Scale were applied to volunteer medical students. The relationship between these psychiatric complaints and age, gender, academic year, taking courses at the hospital, where they lived during this period, the student's or their family's past COVID-19 infection was investigated.

Results: According to the results of the depression scale, 33% of the participants had mild symptoms, 20% had moderate and 5% had severe symptoms. When we compared according to gender, symptoms were found to be significantly higher in males. Depressive symptoms were found to be higher in those with chronic diseases. The level of hopelessness was found to be significantly higher in the participants who had an infection (p=0.034). Also, health anxiety was found to be high in patients chronic disease (p=0.061).

Conclusion: Participants showed that about 5% of them need urgent psychiatric support. Universities should help their students overcome such challenging situations.

Key words: Health anxiety, medical student, depression, COVID-19, hopelessness

SOP-13

Relationship of Migraine (with/without aura) with Endothelial Dysfunction

Berkcan PİŞET[1], Vildan GÜZEL[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Neurology, İstanbul, Turkey

Introduction: Migraine is a chronic disease that affects approximately 15% of the population worldwide. Migraine is characterized by recurrent severe headaches. Because of these symptoms social and economic functioning of a migraineur suffer greatly. Although it's fairly common illness people suffer from, there is no clear evidence as to what causes it. Our research is aimed at better understanding the etiology of migraine and contributing to future prophylaxis, treatment and etiology studies by obtaining information about the mechanisms by which migraine is effective.

Method: Migraineurs according to the International Headache Society ICHD-3 criteria (n=80) and healthy volunteers (n=40) who applied to our polyclinic participated in our study. The first group included migraneurs with (n=29) and without aura (n=41). The second group included volunteers. Blood samples were taken from both groups. Coagulation and inflammation markers were examined from the samples. To observe the coagulation, Prothrombin time (PT), Activated Partial Prothrombin time (aPTT) levels were measured. C-reactive protein (CRP) levels were used as a biomarker to measure inflammation in the endothelium. All collected results were recorded for comparison between groups.

Results: After evaluating the samples of CRP levels and PT a significant difference between migraineurs and control groups was found. Serum CRP levels were increased in migraineurs compared with controls (p=0.0207). The mean and standard deviation of CRP in migraineurs was found 1.63±1.42 in the control group it was 1.02±1.12. In contrast to CRP, prothrombin times were decreased in migraineurs compared with controls (p=0,004). PT mean and standard deviation for migraineurs and control groups are respectively 13.82±0.67 and 14.33±0.83. Another marker in our study aPTT value was statistically insignificant between both groups (p=0.57).

Conclusion: The results of this study suggest that migraine disease severely impairs endothelial function by damaging coagulation and inflammation mechanisms. This impairment may lead migraineurs to become more susceptible to cardiovascular problems.

Key words: Migraine, endothelium, dysfunction, migraineur

SOP-14

Perceived Stress Among Medical Students in Virtual Classrooms During the COVID-19 Outbreak in Bezmialem Vakıf University

Yusuf Kerem ÖZDEŞ[1], Saad Ahmed Ali AL-EZZI[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Public Health, İstanbul, Turkey

Introduction: The latest outbreak of the new severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), also called coronavirus disease-2019 (COVID-19) has major impacts on human health. Since the previous research has also shown that disease outbreaks affect individual well-being and mental health, the aim in this study is to measure the perceived stress level among medical students.

Methods: This is a web-based cross-sectional study that included a questionnaire including sociodemographic factors and perceived stress scale (PSS), in which 138 students studying in the 1st and 2nd year of Bezmialem Vakıf University Faculty of Medicine participated.

Results: Totally 138 Student participated in this study. 30 students have had COVID-19. Fourty-seven students answered yes to question if their relatives had COVID-19. Twenty-nine students lost a relative due to COVID-19. Participants answered PSS questionnaire that has 10 questions and scores between 0 and 4 whose sum is in the range of 0–40. The mean PSS score was 21.11. 14.5% of students were at low, 63% were at moderate and 22.5% were at high perceived stress level. There was no significant difference between the stress levels of students who had and did not have COVID ($p=0.054$). A statistically significant difference was found between high stress levels and losing a relative due to COVID-19 ($p=0.006$) or having a relative who has COVID-19 ($p=0.001$).

Conclusion: This study demonstrated moderate and high perceived stress levels, significantly among students who had a relative with COVID-19. It is also significant that students who lost a relative due to COVID-19 were at higher stress levels.

Key words: COVID-19, virtual class, pandemic, students, stress

SOP-15

Polycystic Ovary Syndrome and Its Psychological Effects in Young Women

Sena AŞCI[1], Taha TAKMAZ[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Gynecology and Obstetrics, İstanbul, Turkey

Introduction: Polycystic ovary syndrome (PCOS) is a set of symptoms due to elevated androgens in females. PCOS is associated with many diseases including depression and anxiety. In this study we investigate, the association between depression, anxiety, stress levels and polycystic ovary syndrome in young women.

Method: This prospective case-control study includes 120 female patients between the ages of 18-24 who applied to Bezmialem Vakıf University Gynecology. Our study group consists of 60 patients diagnosed with PCOS. The other half consists of the healthy control group from the same population. Anthropometric measurements including sociodemographic data, living habits, menstrual cycle data, hair growth levels (according to Ferriman-Gallway scale), abdominal circumference, acne level and body mass index (BMI) were performed. Depression, Anxiety, Stress Scale-21 (DASS-21) was administered to all participants. After all, higher scores are associated with higher depression/anxiety/stress levels.

Results: The mean ages of patients with PCOS and control groups are 21.32, 21.92, (p=0.067). There was no statistically significant difference between the groups in terms of BMIs (23.71±3.96, 22.62±3.59, p=0.157, respectively). The abdominal circumference was found to be higher in the study group (77.3, 72.5, p=0.003, respectively). There was no significant difference between the FG scores of the groups (9,12, 8,35, p=0,183, respectively). No significant difference was observed between the two groups in terms of hirsutism degree and acne score (p=0281, p=0.702, respectively). There was a significant difference in depression, anxiety and stress scores between the two groups (p=0.001, p=0.001, p=0.001, respectively).

Conclusion: As a result, the abdominal circumference was found to be significantly higher in the PCOS group. Additionally, an increase in depression, anxiety and stress levels was observed in patients with PCOS. A relationship observed between the increase in abdominal circumference and depression anxiety stress.

Key words: Polycystic ovary syndrome, depression, anxiety, stress

SOP-16

Computer-aided Drug Design on Glioblastoma Multiforme: Investigating Possible Inhibitors Against Factor H

Muhammed Miran ÖNCEL[1], Rümeyza KAZANCIOĞLU[2], Mohammad Asif KHAN[3], Mustafa Aziz HATİBOĞLU[4], Atilla AKDEMİR[5]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Division of Nephrology, İstanbul, Turkey
[3]Bezmialem Vakıf University Institute of Life Sciences and Biotechnology, İstanbul, Turkey
[4]Bezmialem Vakıf University Faculty of Medicine, Department of Neurosurgery, İstanbul, Turkey
[5]Bezmialem Vakıf University Faculty of Pharmacy, Department of Pharmacology, İstanbul, Turkey

Introduction: Factor H acts as an inhibitory molecule in the complement activation pathways. Certain cancers express Factor H to escape the harmful features of the immune system. Here, we carried out high-throughput docking to determine a candidate inhibitor for Factor H-C3d binding. Hypothetically, the candidate inhibitor may serve as a possible additional therapeutic for certain cancers including glioblastoma multiforme (GBM).

Method: Two approaches to computer-aided drug discovery were used. "Heuristic method" employed Factor H's binding pocket to construct counterpart molecules. "Comprehensive strategy" screened existing libraries for a potential inhibitor. Possible inhibitor molecules (target leads) were obtained from the Zinc20 database for the in silico, virtual screening purpose. Molecules that pass the Kd threshold were further analyzed by Molecular Dynamics simulations.

Results: Three molecules were identified to be a suitable fit to inhibit Factor H in silico settings after a detailed investigation using both Heuristic and Comprehensive approaches. The molecule AQKQ had the smallest overall Root-mean-square deviation value. Molecule ARRE provided the best total energy (62,675 kJ/mol) for the system environment among the MD simulations performed. AQKQ-Factor H binding had the lowest energy with 24,852 kJ/mol. Wander will binding was shown to be higher for this molecule (23,724 kJ/mol). Following AQKQ, ARRE and THRS also displayed good binding energies (62,675 kJ/mol and 29,415 kJ/mol respectively).

Conclusion: The findings of this study point to the possibility of using three compounds as a cancer therapeutic. Although the compounds demonstrated excellent binding abilities, their effectivity on cell level is still unclear.

Key words: GBM, Factor H, drug discovery

SOP-17

Ethical Problems that CRISPR-CAS9 Biotechnology can Create Today and in the Future

Feyza KAYADUMAN[1], Nuran YILDIRIM[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Medical History and Ethics, İstanbul, Turkey

Introduction: The CRISPR-Cas9 system is an RNA and protein-based system discovered in prokaryotes. Inserting, extracting and even editing DNA sequences; it is attracting the attention of the scientific community in various variety biotechnology fields. Gene mutations that cause diseases can be repaired or defused with interventions to the genome, as well as changing any desired feature in the embryos of living organisms, including humans, and even designing babies with desired features. Our research aims to analyze the ethical problems that the promising CRISPR-Cas9 technology can bring with it. Our hypothesis is, after revealing the difference between whether this technology is for medicinal purposes or for development , try to determine by whom and by what criteria the concept of "pathological" will be determined even if it will be used for medicinal purposes. Besides, in case of the actualization of the "eugenics" and "enhancement" projects, while this genetic supremacy will continue in certain lineages, it will never be accessible for some social classes and consequently the possibility of a permanent problem of "slaves and masters" will be emphasized.

Method: While conducting this research, 6 books and articles obtained from the literature review made with the expert opinion and guidance were read and evaluated.

Results: because of the examinations and evaluations on the resources we have reached it has been understood that CRISPR-Cas9 biotechnology can be used for both treatment and development purposes. However, while treatment allows the existing pathology to disappear, development interferes with the genome, and it effects the next generations. It was concluded that the limits of use of CRISPR-Cas9, are unclear, and therefore, a superior human profile may exist in a particular group by lineage transmission.

Key words: CrisprCas9, eugenics, enhancement

SOP-18

Clinical and Electrophysiological Evaluation of Male Carpal Tunnel Syndrome Patients

Fatma Sena ÖZÇELİK[1], Özlem GELİŞİN[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Neurology, İstanbul, Turkey

Introduction: Carpal tunnel syndrome (CTS) is the most common peripheral nerve entrapment syndrome worldwide. Risk factors include obesity, female gender, genetic predisposition workplace factors and amyloidosis. Patients can experience CTS symptoms as an early manifestation of systemic amyloidosis, years before cardiac and multisystem involvement occurs. There are few researches on CTS in men in literature. Aim of this study is to conduct systematic data analysis in male CTS patients in Bezmialem Vakıf Hospital.

Method: In total, electromyography analysis was performed on 1563 patients (84% female, 16% male) for CTS between May 2017 and May 2021. 96 male patients were diagnosed with CTS, 71 of them answered our questionnaire that also includes Boston Carpal Tunnel Questionnaire. Patients were questioned about age, body mass index (BMI), job, comorbid diseases, smoking, alcohol, CTS side, duration of symptoms, functional status, symptom severity, family history of CTS and amyloidosis. Electromyography results were analyzed.

Results: Mean age was found 51, mean BMI was found 29.72. 49 patients (69%) have hand-used job. Reported comorbid diseases include diabetes (14.1%), hypertension (23.9%), heart disease (16.9%), amyloidosis (0%) and other diseases (26.8%). Twenty two patients (31%) have family history of CTS and none of them have family history of amyloidosis. Median nerve motor conduction velocity was found significantly low in older patients ($p<0.05$). Functional status was found worse in patients with longer duration of symptoms ($p=0.045$). Median nerve sensory amplitude was found significantly low in patients with high symptom severity score ($p<0.05$).

Conclusion: According to our study, symptom severity and functional status was not found related to age and BMI. There was no known personal and family history of amyloidosis in our patients. In further studies, amyloidosis mutation can be researched.

Key words: Carpal tunnel syndrome, amyloidosis, body mass index, workplace factors

SOP-19

The Effect of Respiratory Diseases in Preterm Infants on Sleep Problems, Habits and Characteristics

Lâl OKAY[1], Erkan ÇAKIR[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul ,Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Pediatrics, İstanbul, Turkey

Introduction: Respiratory diseases are common in preterm infants, especially those born under 32 week gestation because of inadequate surfactant production that keeps the alveoli in the lungs expanded. Although any specific study cannot be reached in the literature, many indirect studies report that young adults born with very low birth weight were more prone to sleep disordered breathing and several studies report sleep disturbances being common in ARDS survivors after discharge. Thus our objective was to compare sleep quality of discharged preterm babies and see if there was a correlation with respiratory causes faced in NICU along with the severity of their problems.

Method: The study included 128 preterm babies between 6 and 24 months who had respiratory diseases during their stay in the NICU, 167 preterm babies without any major diseases and 215 full-term babies. Data were collected online using Survey Monkey forms on the basis of voluntary response sampling. To assess sleep-related difficulties and habits guardians of the babies completed SDSC, BISQ-R and Researcher's Questionnaire. For multiple-group comparisons, the Kruskal-Wallis test was used. After that, Mann-Whitney U test was used for two group comparisons. The chi-square test was applied for categorical variables. $P<0.05$ was considered statistically significant.

Results: Length of stay in the NICU and lower gestational week were not found to have a statistically significant correlation with sleep disturbances ($p=0.13$) in healthy preterm. However, among infants who was affected by respiratory diseases it was observed that lower gestational week was correlated with higher rates of sleep disturbances ($p=0.029$). Infants who suffered from pleural effusion were more likely to have disturbed sleep ($p=0.028$). Sleep scores of all 3 groups were similar, but caregivers of preterm infants perceived sleep to be less of a problem compared to healthy term babies.

Conclusion: Results of our study shows that there is no significant correlation between sleep problems and respiratory diseases suffered in the NICU. There is a negative correlation between gestational week and sleep disturbances in preterm infants who had respiratory diseases.

Key words: Premature, sleep, respiratory disease, BISQ-R

SOP-20

Investigation of Neutrophile-to-Lymphocyte Ratio in Patients with Type 2 Diabetes Mellitus and in Subjects with Impaired Fasting Glucose

Münire Zeliha ÖZDER[1], Aclan ÖZDER[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Family Medicine, İstanbul, Turkey

Introduction: Diabetes is a group of metabolic diseases characterized by hyperglycemia resulting from defects in insulin secretion, insulin action, or both. The current study investigates the neutrophil to lymphocyte ratio (NLR) among diabetics and pre-diabetics.

Method: This cross-sectional study was conducted at the Bezmialem Vakıf University Hospital between March 2020 and March 2021. Our population is represented by 51 patients with (Type 2 Diabetes Mellitus) and age- and sex-matched 51 non-diabetic and 51 subjects with impaired fasting glycemia (IFG).

Results: The mean fasting blood glucose level in the population with diabetes was 202.68±63.06 mg/dL while that of the IFG group was 111.07±9.85 mg/dL and it was found as 90.07±6.30 mg/gL in the non-diabetic group (p=0.000). The mean hemoglobin A1c (HbA1c) level in the group with diabetes was 8.80±1.62% compared to 5.97±0.34% of the IFG group and as well as 5.39±0.44% in the non-diabetic group (p=0.000). In the patients with diabetes and subjects with IFG, NLR was significantly higher (1.97±0.56 and 1.33±0.56), respectively compared to the non-diabetic group (1.06±0.76) (p=0.000). Among the subjects with diabetes, a positive statistical Pearson correlation was seen between NLR and HbA1c levels (r=0.357; p=0.000) and FBG levels (r=0.306; p=0.000). We also divided the group with diabetes based on the HbA1c levels into group A (HbA1c<7.5%) and group B (HbA1c ≥7.5%). Out of 51 patients with DM, there were 12 (23.5%) patients in group A (mean HbA1c =6.97±0.34%) and 39 (76.5%) patients in group B (mean HbA1c =9.33±1.45%). The mean FBG level in group A was 146.53±16.69 mg/dL while that of group B was 218.88±62.23 mg/dL (p=0.000). The NLR in group A was 1.47±0.83 and significantly lower than that of group B (1.80±0.92) (p=0.001).

Conclusion: NLR is increased in patients with type 2 diabetes mellitus and impaired fasting glucose. NLR could be used as a simple and cost-effective tool to monitor the progression and control of T2DM and thereby in preventing vascular events.

Key words: Diabetes mellitus, HbA1c, impaired fasting glucose, neutrophile-to-lymphocyte ratio

SOP-21

Usage Rates of Vitamin and Mineral Supplements Among Patients That Visit Bezmialem Primary Health Care and Effect of COVID-19 Pandemic on Starting to Use this Supplements

Eren DAVUT[1], Aclan ÖZDER[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Family Medicine, İstanbul, Turkey

Introduction: Lack of vitamins and minerals can cause serious health issues and decrease immune-system effectiveness. Additionally, such supplements thought to be useful in the administration of coronavirus disease-2019 (COVID-19) infection. Our research assesss the supplement usage rates in patients with different age, gender, income, intellectual level. Also, we want to study the effect of doctor consultation and COVID-19 pandemic on starting using supplements.

Method: Surveys were given to 158 patients that visit Bezmialem Primary Health Care. In this survey; gender, age, income, education of patients, usage, frequency and types of supplements being used were analyzed. Also, questions about doctor supervision and effect of COVID-19 were asked.

Results: Seventy-six of 158 patients were using any kind of supplement; 65% of these started using by advice of a doctor while 21.1% began to use by researching. The prevalence of supplement usage among ages 19–70 years was 40.1% in Canada but in our research 47.3% of patients were using supplements. Most frequently used supplements were vitamin-D (61.8%), vitamin-C (38.2%), vitamin-B12 (61.8%) and iron (40.8%). Vitamin and mineral supplement usage rates did not show any significant difference among any group (p>0.05). COVID-19 pandemic was not a significant determining factor on starting to use supplements (p>0.05). However, there was significant evidence that women started using supplements by advice of a doctor (p=0.034). Also, rate of starting using supplements because of COVID-19 pandemic was significantly higher among women (p=0.004).

Conclusion: It has been determined that women tend to use supplements by advice of a doctor more and COVID-19 pandemic has an increased effect on women to start using supplements. Increasing the awareness of patients about essential supplement usage would have a positive effect on public health.

Key words: Supplement, COVID-19, vitamin, mineral

SOP-22

Comparison and Correlation of Current Radiological Measurement Methods in Clinical Practice: Reverse Shoulder Arthroplasty Angle versus Lateralization and Distalization Shoulder Angle

İpek ÖZTÜRKMEN[1], İsmail Kerem BİLSEL[2]

[1]*Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey*
[2]*Bezmialem Vakıf University Faculty of Medicine, Department of Orthopedics and Traumatology, İstanbul, Turkey*

Introduction: The reverse shoulder arthroplasty (RSA) angle is a new measurement method for use in plain radiography. There are other measurement methods defined as lateralization shoulder angle (LSA) and distalization shoulder angle (DSA). LSA and DSA are associated with the postoperative functional outcomes. There are few studies to present the assessment of these measurement methods in the current literature. The current study demonstrates the most reliable measurement method in RSA.

Method: Fifty-one patients who had RSA were retrospectively evaluated. RSAs performed between April 2014 and February 2020 were reviewed. Inclusion criteria were a primary RSA for rotator cuff tear arthropathy and minimum follow-up 1 year. Exclusion criteria were revision RSA, RSA for proximal humeral fracture, preoperative teres minor fatty infiltration with latissimus dorsi transfer, postinfection RSA, primary glenohumeral arthritis and preoperative deltoid impairment that was proven clinically. The mean age was 70.74 years (range, 57-92 years), with 40 female and 11 male patients. The study included 37 right and 14 left shoulders. RSA angle was compared with the LSA and DSA using plain radiographs by 3 independent observers. Functional outcomes of these radiological measurement methods were investigated.

Results: The interobserver and intraobserver agreement were substantial to almost perfect. There was no significant difference in interobserver or intraobserver reliability. RSA angle correlated positively with the DSA (p=0.000). RSA angle correlated positively with the internal rotation (p=0.038). Forward elevation correlated negative with the LSA (p=0.034).

Conclusion: RSA angle, DSA and LSA are effective measurements to use in clinical practice. These radiological measurement methods are correlated with the postoperative clinical outcomes.

Key words: Reverse shoulder arthroplasty, RSA angle, LSA, DSA, functional outcomes

SOP-23

Persistence of Symptoms in Subjects Who Recovered from COVID-19

Rabia BALTA[1], Sedat MEYDAN[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Anatomy, İstanbul, Turkey

Introduction: Coronavirus disease 2019 (COVID-19) is a contagious disease caused by severe acute respiratory syndrome coronavirus 2. This disease presents with a wide variety of symptoms: ranging from fever, cough, sore throat to anosmia, ageusia, and shortness of breath. As COVID-19 keeps spreading throughout the world, the long-lasting effects of COVID-19 have become a relevant topic. The term "Post-COVID Syndrome" is used to describe ongoing symptoms seen after recovery from COVID-19. Currently, there aren't many studies in the literature evaluating the Post-COVID Syndrome. With this research, we investigate the persistent symptoms seen among individuals who recovered from COVID-19.

Method: We obtained the data from the participants through an online questionnaire distributed on social platforms. We assessed the participants for demographics, chronic illnesses, health status, date of symptoms onset, healthcare usage, previous symptoms, and current symptoms.

Results: We included 334 people (71.9% women, median age:35) in the study. Days from symptom onset was between 86 and 500 (median: 180). After a minimum of 3 months from an acute infection, some of the most commonly reported symptoms were loss/change of smell (9.3%), back pain (7.5%), loss/change of taste (6.6%), myalgia (6.3%) and shortness of breath (4.2%). 64.8% of the participants felt these symptoms decreased their quality of life.

Conclusion: Ongoing symptoms are common in individuals who recovered from COVID-19. It is crucial to recognize this condition and continue monitoring COVID-19 patients for the persisting symptoms if necessary.

Key words: Post-COVID, symptoms, persistence, post-covid

SOP-24

The Relationship Between Metabolic Syndrome and Coronary Artery Disease in Patients with Elective Coronary Angiography

Gevher Begüm AHMETOĞLU[1], Mahmut ULUGANYAN[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Cardiology, İstanbul, Turkey

Introduction: Metabolic syndrome (MetS) is a collection of atherogenic metabolic disorders that constitute risk factors for cardiovascular diseases of unknown etiopathogenesis. The presence of MetS components in a large part of the adult population worldwide, increasing morbidity and mortality, has made MetS a growing public health problem. In this study, we evaluated which components of the MetS are more effective in the formation of coronary artery disease, on patients who underwent coronary angiography (CA).

Method: This prospective study was conducted at the Cardiology Clinic of Bezmialem Vakıf University in Istanbul. The study population included all patients who were administered a CA procedure with the complainant of chest pain. The Turkish MetS Guidelines were used as diagnostic criteria for MetS. A total of 221 people were included, 129 with MetS and 92 without MetS.

Results: Most patients were male (71.9%), the mean age was 62, 30.4% of them smoked, 68% were diagnosed with Diabetes Mellitus, 59.4% with hypertension, 58.3% of the patients met the MetS diagnosis criteria. Stent was administered to 40.8% of the patients who underwent CA. The mean Body Mass Index was found to be 29.3, glucose 135.37, total cholesterol 188.7, high-density lipoprotein 43.6, low-density lipoprotein 128.3, trigliserid 172.3 and HgA1c 6.36. The number of involved arteries were increased in patients with the MetS (p=0.31). As BMI increased, the rate of MetS also increased. Although male gender came first among the patients who underwent CA, the prevalence of MetS did not show a statistically significant correlation with gender, mean age or smoking.

Conclusion: Recent data indicate that the dyslipidemia, hyperglycemia and abdominal obesity are crucial predictors of MetS in patients with CAD.

Key words: Coronary artery disease, metabolic syndrome, coronary angiography

SOP-25

Incidence and Progression of Myopia in Medical Students During COVID-19 Pandemic

Melih Furkan UYAR[1], Jülide Canan Umurhan AKKAN[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Ophthalmology, İstanbul, Turkey

Introduction: Refractive error is a common disorder. It can develop in every phase of life and occurs if the eye cannot focus light properly on the retina. Many studies have figured a solid connection between the level of intelligence with years of school participation and the seriousness of myopia. During near work eyeball is in accommodation. Accommodation raises intraocular pressure causing elongation of eyeball that leads to myopia. In this study, we examined how myopia progressed in medical students during the pandemic process.

Method: In this study, Bezmialem Vakıf University medical students (n=101) selected regardless of whether they used glasses and classified according to the myopia status in their families. Each participant's refraction status with auto refractometer, and visual acuity with Snellen chart were evaluated. Biomicroscopic anterior segment and fundus were examined. The same methods were repeated after 6 months and compared with the previous data.

Results: Because of the first and second measurements, the right eye myopia average was 1.75 and 1.78 (p>0.05), the left eye myopia average was 1.69 and 1.71 (p>0.05), the right eye astigmatism average was 0.50 and 0.53 (p>0.05), and the left was 0.57 and 0.60 (p>0.05). Of the participants, 71.3% were myopic, 40.6% were astigmatic, and 20.8% were healthy in both measurements. 26.7% of the participants have had eye disorders since high school, 22.8% since secondary school, 16.8% since primary school, and 12.9% since the university. Myopia average increased from 2.1 to 2.4 in those with a family history (p>0.05).

Conclusion: No new myopia cases were observed. Genetic factors play an important role in the development of myopia, but there was no significant difference in this 6-month period.

Key words: Incidence, myopia, medical students, COVID-19, pandemia

SOP-26

The Role of Serum Bile Acid Profile in the Pathogenesis of Lean Non-Alcoholic Fatty Liver Disease and Identification of Potential Biomarkers

Esin ÖZKAN[1], Metin BAŞARANOĞLU[2], Şahabettin SELEK[3], Metin DEMİREL[3], Rasul SHARIFOV[4], Fatmanur KÖKTAŞOĞLU[3], Merve GÜNEY COŞKUN[5]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Gastroenterology and Hepatology, İstanbul, Turkey
[3]Bezmialem Vakıf University Faculty of Medicine, Department of Biochemistry, İstanbul, Turkey
[4]Bezmialem Vakıf University Faculty of Medicine, Department of Radiology, İstanbul, Turkey
[5]İstanbul Medipol University Faculty of Health Sciences Turkey, Department of Nutrition and Dietetics, İstanbul, Turkey

Introduction: Non-alcoholic fatty liver (NAFL) has become one of the leading causes of chronic liver disease worldwide without any approved treatment. Although obesity plays an important role in NAFL pathophysiology, lean patients can also develop fatty liver. Disrupted bile acid metabolism, alterations in tricarboxylic acid cycle and oxidative stress can contribute to the disease. In this research effort to understand the mechanism underlying lean NAFL, body composition measurements and several blood serum biomarkers were studied.

Method: Thirty-nine healthy asymptomatic subjects and 27 asymptomatic subjects with ultrasound confirmed NAFL without any other liver diseases who had a body mass index (BMI) of 25 and reported drinking <20 g/week of alcohol were enrolled in the study. Body weight composition and blood serum biomarkers were analysed.

Results: Patients with NAFL had significantly higher BMI and abdominal fat mass (p=0.002 and 0.022, respectively). There was no significant difference in serum total bile acid levels and oxidative stress markers between two groups. In NAFL group alanine transferase, gamma-glutamyl transferase, fasting serum glucose, total serum bilirubin, isocitrate dehydrogenase (IDH) and zinc levels were significantly higher (p=0.029, 0.010, 0.010, 0.020, 0.022, and 0.007, respectively). Among serum lipid profile, high-density lipoprotein was substantially lower in the NAFL group (p=0.013).

Conclusion: In this study it was found that abdominal obesity is strongly linked with lean NAFL similar to obesity-associated fatty liver. The current study showed that bile acids did not differ between groups. Higher IDH and zinc levels can be associated with lean NAFL and can be used for treatment follow-up. Nevertheless, further research is needed for understanding the relationship between lean NAFL and new potential biomarkers.

Key words: Non-alcoholic fatty liver disease, biomarkers, bile acids

SOP-27

The Association Between Attention Deficit Hyperactivity Disorder and Pathological Internet Use Among Adolescents

Özge ÜNAL[1], Songül DERİN[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Child and Adolescent Psychiatry, İstanbul, Turkey

Objective: Internet usage among adolescents has increased considerably over the last two decades. The unpredictable diffusion of the Internet has led to pathological internet use (or termed as internet addiction). Internet addiction is characterized by impulsive behaviors without establishing a cause-effect relationship. Additionally, attention deficit hyperactivity disorder (ADHD) is one of the most common childhood neurodevelopment diseases with increasing prevalence rates. The principal characteristics of ADHD are inattention, hyperactivity and impulsivity. Starting from the fact that both disorders characterize by impulsivity, we investigated the relationship between Internet addiction and ADHD symptoms.

Method: The study was conducted with adolescents between the ages of 11-18; the patient group consisted of 40 adolescents first-time diagnosed with ADHD and the control group consisted of 40 adolescents without a psychiatric diagnosis. A total of 80 adolescents completed the Young Internet Addiction Scale (YIAS) for assessing the presence or severity of Internet addiction and their parents completed the Conners' Parents Rating Scale-Short Form (Conners3-P[S]) for assessing ADHD symptoms of the children. A sociodemographic form was used to obtain personal information.

Results: There was no statistically significant difference between the groups in terms of YIAS scores (p=0.279). However, Conners3-P(S) scores of the patient group was significantly higher than the control group (p<0.001) and significant associations have been found between the level of ADHD symptoms and the severity of pathological Internet use in adolescents (p=0.002).

Conclusion: There is a positive correlation between the severity of ADHD symptoms and predisposition to Internet overuse, however there is no significant change between the patient group and the control group in terms of internet usage despite the remarkable differences in ADHD levels of the groups.

Key words: Attention deficit hyperactivity disorder, pathological internet use, internet addiction, adolescents

SOP-28

Retrospective Analysis of Vitamin D Status in Pediatric Patients with Celiac Disease

Ceren ÇAKICI[1], Güzide DOĞAN[2], Ali TOPRAK[3]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey

[2]Bezmialem Vakıf University Faculty of Medicine, Department of Pediatric Gastroenterology, Hepatology and Nutrition, İstanbul, Turkey

[3]Bezmialem Vakıf University Faculty of Medicine, Department of Statistics, İstanbul, Turkey

Introduction: Celiac disease is associated with fat-soluble vitamins (A, D, E, and K) and micronutrient deficiency. Vitamin D levels can be significantly affected by enteropathies such as celiac disease. This study compares the vitamin D levels of children with a new diagnosis of celiac disease with the control group.

Method: This retrospective study had newly diagnosed children with celiac disease as the study group and children without celiac disease as the control group. Age, gender, season of birth and the diagnosis date of celiac disease, weight-height measurements, clinical symptoms and 25-OHD values were recorded. 25-OHD levels were classified as severely deficiency <10 ng/mL, deficiency <20 ng/mL, insufficiency 20 to <30 ng/mL and sufficiency ≥30 ng/mL.

Results: Ninety-three newly diagnosed celiac disease patients (58% females; mean age of 9.54±4.50) and 93 controls (58% females; mean age of 9.54±4.50) were included. 36 patients (44% females) had typical clinic presentation and 57 patients (65% females) had an atypical clinical presentation in patients with celiac disease. Study group had 59 (63%) children with vitamin D deficiency, 27 (29%) children with vitamin D insufficiency. The control group had 9 (9%) children with vitamin D deficiency and 51 (54%) children with vitamin D insufficiency. The percentage of children with vitamin D deficiency was significantly higher in the celiac disease group compared with controls (86.8% vs 13.2%, p<0.001), but the percentage of children with vitamin D insufficiency was significantly higher in the control group (65.4% vs 34.6%, p<0.001).

Conclusion: According to this study celiac disease can be assessed as a risk factor for vitamin D deficiency in children. Vitamin D levels should be checked at the diagnosis of celiac disease and nutritional support should be given in appropriate patients.

Key words: Celiac disease, vitamin D, children

SOP-29

Investigation of Cytotoxic, Genotoxic, Apoptotic and Reactive Oxygen Species Generating Effects of Plantago Anatolica Extract on Colon Cancer Cells (HT-29)

Rukiyenur ABLAK[1], Abdurrahim KOÇYİĞİT[2], Ebru KANIMDAN[3]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Medical Biochemistry, İstanbul, Turkey
[3]Bezmialem Vakıf University Faculty of Medicine, Department of Medical Biochemistry, İstanbul, Turkey

Introduction: The aim of the study the is to investigate cytotoxic, genotoxic, apoptotic and reactive oxygen species (ROS) generating effect of Plantago anatolica extract in colon cancer cells (HT-29) and normal cell lines (CCD18Co)

Method: HT-29 and CCD-18Co were cultured in suitable mediums. The leaves of Plantago were extracted. Then, the total antioxidant capacity (TAC), phenolic content and flavonoid values were determined. The cytotoxic effect of Plantago was determined by MTT assay. Also, H2DCFDA was used as an indicator of ROS in cells. Additionally, apoptosis were determined by comet assay.

Results: To determine the TAC, flavonoid and enol concentration increased in Plantago anatolica. According to the cytotoxicity assay the IC50 value of the extract is approximately 1.89 mg/mL for cancer cells, while it is approximately 2.8 mg/mL for normal cells. Because of comet assay, it was determined that apoptosis increased as the concentration increased at two different doses and the augmentation was higher in cancer than normal cells. Lastly, the qRT-PCR analysis, showed that the expression of the *Bcl-2* gene decreased while the expression of the *Cas-3* gene increased in the cells which received the extract.

Conclusion: According to our research results Plantago anatolica extract dose-dependently showed significant cytotoxic, genotoxic, apoptotic effect. The study's results suggest that Plantago anatolica extract has therapeutic power when developed from natural components of the diet for the treatment of colon cancer.

Key words: Plantago anatolica, ROS, colon cancer

SOP-30

Effect of the Most and the Least Favorite Music Genre of Youngs on Their ECGs

Nihade Nur PAMUK[1], İsmail MERAL[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Physiology, İstanbul, Turkey

Introduction: Nowadays, music plays a significant role in our lives. Does music really touch our heart? To answer this question, this study was designed to investigate the effect of the most and least favorite music genre of youngs on their electrocardiograms (ECG).

Method: A total of 54 participants (33 men and 21 women) were asked to listen to their favorite and least favorite music while we recorded an ECG -lead II-. Firstly, the subjects had to lay down for 4 min (Resting 1 period, R1) to slow down their heart rate. Afterwards, they got to listen to their favorite song for 4 min (Favorite song period, FavS), before resting for another 4 min (Resting 2 period, R2). Lastly, their least favorite song was played (Least favorite song period, LFavS). The heart rate (HR), amplitudes and durations of the waves P, QRS, and T in the ECG, and the durations of the intervals [P-R (s) and Q-T (s)] were calculated.

Results: Women's HRs decreased ($p < 0.05$) during the R1 period. Although listening to their favorite song increased ($p < 0.05$) their HRs, listening to their least favorite song did not change ($p > 0.05$) their HRs. The study periods in men showed no significant difference ($p > 0.05$) regarding HR. Additionally, the amplitudes and durations of the waves in the ECG, and the durations of the intervals did not change ($p > 0.05$) by listening of either music genre in women or men.

Conclusion: Women react more to their favorite genre than men, and thus, although men's HRs did not change, their HRs increase. This may be because women have a more emotional nature.

Key words: Music, ECG, most and the least favorite music, heart rate

SOP-31

Cognitive and Behavioral Changes in Patients with Cervical Dystonia

Elif TURAN[1], Özlem GELİŞİN[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Neurology, İstanbul, Turkey

Introduction: Dystonia is a movement disorder caused by muscle contractions that cause abnormal postures and repetitive involuntary movements. Cervical dystonia gives clinical findings most commonly in the form of torticollis and dystonic tremor. It is characterized by an abnormal involuntary head posture. The etiology and pathophysiology of primary dystonia is still not fully elucidated. It is thought to occur because of basal ganglia dysfunction, which is associated with the control of motor and cognitive functions. In this study, it is evaluated patients with cervical dystonia in detail in terms of cognitive, mood, behavioral and social aspects.

Method: Fifteen cervical dystonia patients and 15 healthy individuals aged 18–60 years were included in our study. Our exclusion criteria have not a diagnosed cognitive disorder and not having a diagnosis of secondary dystonia. We used Montreal Cognitive Assessment (MoCA), Standardized Mini-Mental Examination (SMME), Verbal Fluency Test, Frontal Assessment Battery (FAB), Beck Anxiety Inventory (BAI), and Beck Depression Inventory (BDI) in our study.

Results: A significant difference was found between the two groups in the MoCA, SMME, Verbal Fluency Test, FAB ($p<0.001$), BAI ($p=0.007$) and BDI ($p=0.001$). We analyzed the Verbal Fluency test in two different ways: animal and KAS. While in the animal test the mean value of the healthy group was 25.13 ± 3.02, it was 17.66 ± 6.89 in the patients ($p=0.001$). In the KAS test, the mean value of the healthy group was 51.40 ± 13.51, while it was 27.53 ± 12.51 in the patients ($p<0.001$).

Conclusion: In cervical dystonia patients, when compared to healthy individuals; there is regression in attention, concentration, memory and abstract thinking abilities. Also, depression and anxiety rates are extremely high.

Key words: Cervical dystonia, neuropyshciatric, social cognition

SOP-32

Investigation of the Correlation Between Preoperative Diffusion Tensor Imaging Parameters and Histopathological Findings in Patients with Meningioma

<u>Enes Oğuzhan ALKAN</u>[1], Lütfullah SARI[2], Alpay ALKAN[2]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Radiology, İstanbul, Turkey

Introduction: our study aimed to investigate whether the tumor differs in terms of apparent diffusion coefficient (ADC) and fractional anisotropy (FA) values, mitotic index and Ki-67 proliferation index in cases with transitional and atypical meningioma.

Method: This study was approved by the Institutional Ethics Committee. Patients diagnosed with meningiomas were retrospectively reviewed. Forty-five patients (14 male and 31 female; 57 ± 13.98 years old) were assessed using magnetic resonance imaging (MRI) and diffusion tensor imaging (DTI) before surgery. ADC and FA values of tumour were determined. The presence of brain invasion with four or more mitoses was accepted to be sufficient for the diagnosis of atypical meningioma. Patients with atypical meningioma were classified as group 1 and those with transitional meningioma were considered group 2. The relationship between FA, ADC and Ki-67 proliferation index, mitotic index was evaluated. FA and ADC values of atypical and transitional meningiomas were compared. Mann–Whitney U test was used to compare the groups. The relationship between ADC and FA values, mitotic index and Ki-67 was investigated by Pearson correlation test.

Results: Significant differences were found between group 1 and group 2 in terms of mitotic index and Ki-67 proliferation index (respectively, $p=0.001$ and $p=0.000$). There was no statistically significant difference between group 1 and group 2 in terms of FA and ADC values. In Group 1, there was a positive correlation between FA values and mitotic index ($p=0.02$, $r=0.421$). Also, a negative correlation was found between ADC values and mitotic index ($p=0.04$, $r=-0.374$). A negative correlation was found between ADC values and Ki-67 proliferation index in group 2 ($p=0.009$, $r=-0.614$).

Conclusion: This study shows that DTI parameters cannot differentiate transitional and atypical meningioma despite significant differences in terms of mitotic index and Ki-67 proliferation index.

Key words: Meningioma, MRI, DTI

SOP-33

Attention Deficit and Sleep Disturbances in Pediatric Patients after Diagnosing with Herpes Simplex Virus Encephalitis

Derya AKBABA[1], Özden TÜREL[2], Ali Güven KILIÇOĞLU[3]

[1]Bezmialem Vakıf University Faculty of Medicine, İstanbul, Turkey
[2]Bezmialem Vakıf University Faculty of Medicine, Department of Pediatric Infection, İstanbul, Turkey
[3]Bezmialem Vakıf University Faculty of Medicine, Department of Child and Adolescent Mental Health and Diseases, İstanbul, Turkey

Introduction: Encephalitis is a condition in which the brain parenchyma becomes inflamed due to an infection or an autoimmune response and causes neurological dysfunction. There are many causative agents leading to encephalitis, and the most common one is herpes simplex encephalitis (HSE). Survivors of encephalitis may be left with emotional, behavioral, and cognitive consequences such as inappropriate behavior, and difficulty learning and sleep disturbances.

Method: In this study, parents of children patients aged between 6 and 17 were questioned about their quality of sleep and attention deficit through 33-question Children's Sleep Habits Questionnaire (CSHQ) and 48-question Conners' Parent Rating Scale (CPRS). This study is conducted in one group only. This group included 23 children who were previously diagnosed with Herpes Simplex Virus Encephalitis between years 2012–2021. Our only exclusion criteria have not any other known disease before the diagnosis of HSE .

Results: Total of 23 pediatric patients diagnosed with HSE were included in this study. The mean CPRS score was 55.9 ± 25. The mean CSHQ score was 69.13 ± 12. The higher the scores get the possibility of having attention deficit and sleep problems increases. Our data strongly suggest that children previously diagnosed with HSE would later develop either attention deficit or sleep disturbances or both. There is no correlation found between CSHQ and CPRS whatsoever.

Conclusion: For both CPRS and CSHQ, the higher the scores get the possibility of having attention deficit and sleep problems increases. Therefore, our study proves that there is a connection between HSE and attention and sleep.

Key words: Encephalitis, sleep, attention, CPRS, CSHQ