



# BEZMİÂLEM science

7th ANNUAL  
MEDICAL STUDENTS'  
RESEARCH DAY



14 March 2023

BEZMIALEM  
VAKIF UNIVERSITY

7th ANNUAL MEDICAL  
STUDENTS' RESEARCH DAY

14 MARCH 2023

Volume 11 • Supplement 1 • March 2023

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# BEZMÎÂLEM science

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**14 MARCH 2023**

**Guest Editor**

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Bezmialem Vakıf University thanks everyone for their contribution and assistance in organizing this event.

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## PREFACE

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Training as a physician requires attention not only to knowledge and patient care, but also to lifelong learning and scholarship, an important factor when considering the skills of a physician.

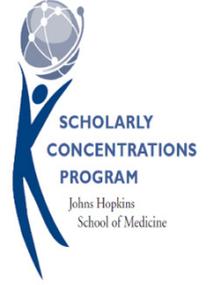
The mission of Vakif University (BVU) is to train health professionals and scientists with innovative education models, using modern science and technology, in the light of the values of our civilization; to conduct research that produces real results as products and services; to provide high quality and accessible healthcare services while improving the health level of our society. Therefore, in 2014, Bezmialem Vakif University and Johns Hopkins University (JHU) agreed on a curriculum development collaboration that includes the implementation of JHU's Scientific Concentration Module. It also serves as a potential model for translation into other medical curricula outside of the United States.

The overall course goals and objectives that include 6 modules are similar to the Johns Hopkins' program. In September of the first year of the program, which actually covers the 4th year of Bezmialem medical students, there is a compulsory course orientation that provides an overview of the course objectives and process. Students are asked to start thinking about their academic interests. From 1<sup>th</sup> to 6<sup>th</sup> module, students choose a mentor, develop a research question, review the literature, apply to the ethics committee, collect and analyse the data, write an abstract and present their projects to BVU scientific committee. Each student presents their scholarly project at the end of two years at Medical Student Research Symposium in March.

This Bezmialem Science Supplement is dedicated to these presentations selected by the faculty of the Academic concentration module for oral or poster presentation. Each abstract has been peer-reviewed by the BVU and JHU faculty, and we are all proud to have successfully completed the seventh course.

I would like to express my sincere thanks to our collaborators at JHU and my dedicated faculty here at BVU, as well as to my students, scientists of the near future.

**Rümeysa Kazancıođlu, MD**  
**Bezmialem Vakif University**  
**Rector**



## RESEARCH DAY

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### 14 March 2023

- 09.00-09.10:** Introduction  
**09.10-10.05:** Podium I (Oral Presentation)  
**10.05-10.15:** Coffee Break  
**10.15-11.10:** Podium II (Oral Presentation)  
**11.10-11.20:** Coffee Break  
**11.20-12.30:** Poster Presentation  
**12.30-13.30:** Lunch  
**13.30-14.30** Short Oral Presentation

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**ORAL PRESENTATIONS**

**Guest Editor**

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OP-1

## Nuclear Magnetic Resonance-based Metabolomics in Patients with Rheumatoid Arthritis

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**Introduction:** Rheumatoid arthritis (RA); is an inflammatory autoimmune disease that is common in the population and is characterized by painful and swollen joints that seriously affect physical function and quality of life. Patients with RA are much more prone to serious infections, respiratory distress, and cardiovascular disease than the normal population. In the diagnosis of RA, with the clinic of the patients, X-ray and ultrasound images and laboratory results of the patients help diagnosis; however, further investigations are still needed since RA is thought to be a genetically based disease. Nuclear magnetic resonance (NMR) has been used for years to diagnose different amounts of diseases, including rheumatologic diseases. NMR is the best option to image the body metabolism, which is crucial to understand better the autoimmune diseases such as RA.

**Method:** For this study, 2 different groups were determined. For the patient group, 120 urine samples were taken from patients with RA. For the control group, 120 urine samples were taken from healthy people. These samples were studied in an NMR device and the results were compared through liquid chromatography-mass spectrometer (MS)/MS device.

**Results:** After examining urine samples through an NMR device, 7 metabolites's p values were found different. P values of threonine, histidine, N-Acetylglutamine, and lactate were higher in the patient group, in contrast; p values of acetate, methylmalonate, and asparagine were lower in the patient group compared the control group. Besides p values, correlations were detected between 20 different metabolites, which were studied in urine samples of both groups

**Conclusion:** It is clear that there are some metabolic differences between the urine of an patient with RA and a healthy person. To diagnose and treat RA, these differences may be assessed.

**Key words:** Rheumatoid arthritis, autoimmunity, nuclear magnetic resonance, metabolomics

OP-2

## ***In vitro* Investigation of the Effects of *Hylotelephium* and *Typha* Plant Extracts on Anti-inflammatory and Wound Healing**

Ece GÜLER<sup>1</sup>, Fatmanur BABALI BALIBEY<sup>2</sup>, Zeynep ÖZMAN<sup>2</sup>, Mehmet Timur BAŞARICI<sup>1</sup>, Abdurrahim KOÇYİĞİT<sup>2</sup>

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**Introduction:** *Hylotelephium* and *Typha* species are known for their widespread use for treating wounds. This study investigated the total phenolic and flavonoid content, antioxidant capacities, wound healing-inducing and anti-inflammatory activity of these two species.

**Method:** After preparation of *Typha domingensis* (TDME) and *Hylotelephium spectabile* methanolic extracts (HSME), total phenol, flavonoid content and antioxidant activity were determined. Cell viability and the optimal doses for the scratch assay for HaCat and CCD-1072 cells were evaluated by MTT assay. The migration abilities of cells were evaluated using the scratch assay and analyzed by ImageJ software.

**Results:** The total phenolic content of HSME and TDME was found to be 9.8 and 36.8 mgGallicacid Eq/g, while the total flavonoid content of HSME and TDME were 6.3 and 13.8 mgQueEq/g, respectively. Also, the antioxidant capacities of HSME and TDME were found to be 312.9 and 521.4 mgascorbicacidEq/g, respectively. The maximum non-toxic dose for extracts was determined as 200 µg/mL, according to the MTT results. The maximum percentage of wound closure area with HaCaT cells after 16 h was 85.28% for 10 µg/mL TDME and 89.55% for 200 µg/mL HSME. However, after 24 h, 50 µg/mL TDME showed 91.45% area closure, while 200 µg/mL HSME showed 93.42%. Also, with the fibroblasts, it was observed that 43.27% and 61.37% of the wound area were closed after 16 and 24 h for 100 µg/mL TDME, while the control group exhibited 22.29% and 35.89% area closure, respectively.

**Conclusion:** TDME was found to have higher phenolic and flavonoid content and antioxidant capacity. In conclusion, the findings of this study provide significant evidence for the presence of wound-healing properties in both HSME and TDME.

**Key words:** *Hylotelephium*, *Typha*, wound healing, anti-inflammatory

## OP-3

## Investigation of *IFIT3* and *KCNS3* Gene Expression Patterns in the Peripheral Blood of Cryptogenic Epilepsy Patients

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**Introduction:** Epilepsy is a neurological disease, characterized by recurrent seizures. Cryptogenic epilepsies are defined as epilepsies with a lack of previous signs of brain damage and of obvious etiology. The absence of obvious causative pathology creates challenges in the clinical management of the disease. Gene expression studies aid in better clinical management, in terms of providing a better sight into etiology, or mechanisms leading to the disease. In this study, we studied the expression levels of *IFIT3* and *KCNS3* genes in blood samples to enlighten the molecular etiology of patients with cryptogenic epilepsy patients.

**Method:** Our study includes cryptogenic epilepsy patients admissioning at Bezmialem Vakıf University (n=20) and healthy controls (n=20). The participants were all over the age of 18. Females and males were equally distributed in both groups. The peripheral blood samples were collected into EDTA tubes, and total RNAs were isolated immediately. Complementary DNAs (cDNAs) were synthesized from RNA samples within the approved range of purity. *ACTB* was designated as the housekeeping gene. Primers were designed for *IFIT3*, *KCNS3*, and *ACTB*. qRT-PCR was performed on cDNA samples of both patients and healthy controls.

**Results:** Biostatistical analysis was conducted with Student t-test, using the delta delta Ct approach on Cycle of threshold (Ct) data. The expression levels of *KCNS3* were higher in the patient group ( $p<0.05$ ). *IFIT3* levels did not have a statistically significant difference between the two groups.

**Conclusion:** Patient samples showed a higher expression of *KCNS3*, a potassium channel-related gene. Non-etheless, the *IFIT3* gene, a gene functioning in immunity, didnot show any significant difference. Our findings suggest that a channelopathy is more likely to underly the disease, and that *KCNS3* might have a role in the pathogenesis.

**Key words:** Epilepsy, gene expression, RNA, peripheral blood

OP-4

## Attachment of the Oxadiazole Ring to Tetrazole-containing Proteasome Inhibitor Increases Cell Death in ER+ Breast Cancer Cells

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**Introduction:** Breast cancer is one of the most common malignancies in the world that leads to women's death. Proteasomes are large protein molecules that remove damaged or redundant proteins from the body through an enzyme called proteolysis. The 26S proteasome complex participates in the destruction of various proteins, regulates cellular mechanisms, and abnormalities in the regulation are linked to the development of cancer. Proteasome inhibitors block the activity of proteasomes, which are responsible for breaking down proteins and regulating gene expression through various signaling pathways. Many proteasome inhibitors have been developed by targeting the 26S proteasome complex for antitumor effects. These proteasome inhibitors have shown anticancer action by activating apoptosis in different tumor types. This study aimed to investigate the anticancer activity of a unique molecule with proteasome inhibitory properties that contains a tetrazole and oxadiazole ring on breast cancer cells.

**Method:** In this study, ER+ breast cancer cells (MCF-7) were used. Cell viability was analyzed by MTT assay, and the half-maximal inhibitory concentration (IC<sub>50</sub>) value with the most effective time was determined. The apoptosis was detected by flow cytometry using Annexin V/PI in addition to Acridine Orange/Ethidium Bromide (AO/EB) double staining.

**Results:** Cell viability results revealed that a new designed proteasome inhibitor induced cytotoxicity in ER+ breast cancers best at 72 hrs. However, the results showed that inhibitor containing tetrazole and oxadiazole rings has a lower IC<sub>50</sub> value (200 µM) compared to inhibitor with only tetrazole. Flow cytometry analysis and AO/EB staining results also supported the viability data.

**Conclusion:** The results of this study showed that proteasome inhibitor containing a tetrazole ring has some anti-cancer effect, but the addition of an oxadiazole ring to the molecule increases cell death caused by the inhibitor.

**Key words:** Cancer, proteasome inhibitor, apoptosis, cell death

OP-5

## Comparing the Severity of Fetomaternal Hemorrhage in Dermatoses of Pregnancy Cases with Healthy Pregnants

Merve PURDE<sup>1</sup>, Mehmet Serdar KÜTÜK<sup>2</sup>, Ümmühan Zeynep BİLGİLİ<sup>1</sup>, Ayşe Zehra GÜL<sup>1</sup>, Fatmanur KÖKTAŞOĞLU<sup>3</sup>

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**Introduction:** Fetomaternal hemorrhage (FMH) is defined as the passage of fetal blood into the maternal circulation. Fetal erythrocytes can stimulate the maternal immune system and cause an autoimmune response. Meanwhile, dermatoses of pregnancy (DP) are defined as heterogeneous groups of skin diseases that occur in pregnancy and progress with itchy skin lesions. This study aims to determine the role of autoimmunity by measuring FMH in the etiology of DP.

**Methods:** In this study the case group consisted of patients with DP and the control group consisted of healthy pregnant who applied to our clinic between November 2021-2022. FMH was determined by the Kleihauer-Betke test in the blood sample taken from the mothers. Mollison's formula was used to estimate FMH severity.

**Results:** A total of 82, 30 (36.6%) case and 52 (63.4%) control, participants were included in this study. The mean maternal age was  $31\pm 4$  in case and  $31\pm 5$  in control group; revealed no statistical difference ( $p=0.445$ ). There was no statistical difference between the two groups regarding mean gestational week ( $27\pm 10$ ,  $30\pm 7$ ,  $p=0.350$ ). The rate of multiparity was 10% in the case group and 5.8% in the control group and there was no statistical difference ( $p=0.136$ ). There was no statistical difference in the terms of gravida, parity, abortus or BMI. The mean quantity of bleeding measured significantly higher in the case group ( $7\pm 5$ ,  $3\pm 3$ ,  $p<0.001$ ). The presence of DP history were significantly higher in the case group (16.7%, 1.9%,  $p=0.023$ ).

**Conclusion:** There is a significant, positive and very strong relationship between DP and FMH which provides evidence to the relationship between FMH and autoimmunity. These results also tie well with previous studies wherein DP history is a predisposing factor for dermatoses in further pregnancies.

**Key words:** Fetomaternal hemorrhage, dermatoses of pregnancy

OP-6

## Evaluation of the Effect of Glutathione, an Antioxidant, with Hormonal, Metabolic and Inflammation Markers in DHEA-induced PCOS Rat Model

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**Introduction:** Our study aims to investigate the possible positive effect of glutathione on the treatment of polycystic ovary syndrome (PCOS) and compare with Diane-35 and metformin.

**Method:** Twenty female Wistar albino rats, were randomly divided into 4 groups after generating a PCOS model with DHEA 6 mg/100 g/day subcutaneously for 34 days. After randomization, PCOS group (n=5); 0.2 mL 1% CMC/day orally for 28 days; Diane-35 group (n=5); Diane-35 4.5 mg/kg/day orally dissolved in 1% CMC for 28 days; group 3 (metformin group, n=5); metformin 300 mg/kg/day orally dissolved in 1 mL saline for 28 days; group 4 (glutathione group, n=5); glutathione 100 mg/kg intraperitoneally on days 35, 42, 49. PCOS was also confirmed. Unilateral oophorectomy on the 35<sup>th</sup> day to evaluate the follicles in the ovaries and vaginal smear for 10 days to confirm the absence of the regular estrus cycle. On the 56<sup>th</sup> day, rats were sacrificed by taking intracardiac blood to evaluate serum inflammation markers, testosterone, and insulin levels.

**Results:** There was a significant difference between the groups in terms of serum interleukin-6, insulin, testosterone, hs-CRP, SHBG, and MDA values. There were significantly lower in the metformin and glutathione groups compared with the PCOS group while there was no significant difference between the metformin and glutathione groups for all parameters. There was no difference between Diane-35 and the PCOS groups for all parameters. The primary, secondary, atretic, and cystic follicle numbers were lower in the glutathione group compared to the PCOS group, the number of antral follicles was higher in the glutathione group compared to the PCOS group ( $p=0.003$ ). The primary follicle number in the glutathione group was lower compared with the Diane-35 group; the number of antral follicles was higher ( $p<0.01$ ,  $p=0.001$ , respectively).

**Conclusion:** The results of the study may provide evidence for the possible positive effect of glutathione on improvement of increased inflammation, hyperandrogenemia, and insulin resistance in PCOS.

**Key words:** PCOS, glutathione, Diane-35, metformin, antioxidant, rat

## The Protective Effect of Glutathione on Ovarian Function in Female Rats with Cy-Induced Ovarian Damage

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**Introduction:** Premature ovarian failure (POF) is a condition that causes significant health problems and infertility due to loss of ovarian function, which is seen in approximately 1-3% of women younger than 40 years of age. POF decreases the number of oocytes in the ovaries, especially due to accelerated atresia. This study aims to evaluate the protective effect of glutathione on ovarian function in female rats with cyclophosphamide (Cy)-induced ovarian damage.

**Method:** Forty-two adult female Sprague-Dawley rats were randomly divided into six groups. Intraperitoneal injections were made to all groups on the 0<sup>th</sup>, 7<sup>th</sup>, and 14<sup>th</sup> days. Group 1; (sodium chloride 0.9%; 1 mL/kg), group 2; (Cy 75 mg/kg), group 3; (glutathione 100 mg/kg), group 4; (glutathione 200 mg/kg), group 5; (Cy and 100 mg/kg glutathione), group 6; (75 mg/kg Cy and 200 mg/kg glutathione). On the 21<sup>st</sup> day, the rats were sacrificed and the ovarian follicle count was evaluated by histopathological examination of the ovarian tissue. Anti-mullerion hormon (AMH) AMH-positive staining intensity of the follicles, and serum AMH levels were evaluated by immunohistochemistry.

**Results:** Serum AMH levels, AMH-positive staining, primary, secondary, and antral follicle count were statistically different between the groups ( $p < 0.01$ ). Primordial, primary, secondary, and antral follicle count, AMH-positive pre-antral and antral follicle count, percentage, and staining intensity were similar in groups 1 and 2; there was a statistically significant difference between group 2 and group 6 ( $p = 0.02$ ,  $p = 0.04$ ,  $p = 0.04$ ,  $p < 0.01$ ,  $p < 0.01$ ,  $p = 0.03$ ,  $p = 0.03$ ,  $p = 0.01$ ,  $p = 0.04$ ,  $p < 0.01$ ,  $p = 0.04$ , respectively).

**Conclusion:** The results of the study may provide evidence that glutathione at appropriate doses may have a protective effect against ovarian damage induced by the chemotherapeutic agent, Cy. It could lead to improved primordial, primary, secondary, and antral follicle numbers.

**Key words:** Glutathione, premature ovarian failure, infertility, cyclophosphamide

## Epileptic Seizure in Elderly People: Etiological Factors

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**Introduction:** The etiologies of epileptic seizures in the elderly are expected to differ from those in the young. In this study, the relationship between etiological factors with age and the presence of seizures associated with coronavirus disease-19 (COVID-19) was investigated in adult patients who presented to the emergency department with epileptic seizures.

**Method:** The study included 1,026 patients who were admitted to emergency and consulted the neurology department in Bezmialem Vakıf University Hospital between 01.01.2021-31.12.2021. According to consultation reports, 115 patients (mean age: 51.12±21.97; 52% male) were presented with epileptic seizures. Demographic data, seizure characteristics, and etiological factors of the patients were documented in detail. Patients were grouped as 18-60 years old (group <60; 75 of them) and 60 years and older (group ≥60; 40 of them).

**Results:** The number of patients without a previous diagnosis of epilepsy and without seizure history were significantly higher in group ≥60 (p values <0.001, =0.049, respectively). Seizure types observed: 22% focal and 78% generalized. Possible seizure triggering factors were examined; it was found that unknown causes (25%), infection (20%), malignancy (14%), drug disruption (11%), COVID-19 (11%), stress (7%), metabolic causes (5%), after Biotech vaccination (6%), and trauma (2%) were seen as a potential predictor. There was no significant difference between the groups in terms of seizure types and triggers. The presence of stroke, neurodegenerative disease, and diabetes, which are etiological factors, were significantly higher in group ≥60 (p values, <0.001, <0.001, and <0.001, respectively). 30% of the patients who came with the suspicion of COVID had their first seizure. There was no difference between the groups in terms of COVID-19 (p>0.05).

**Conclusion:** Elderly people presenting to the emergency department with seizures are more likely to have a first seizure and not be diagnosed with epilepsy. Therefore, etiological investigations should be done carefully.

**Key words:** Epileptic seizure, emergency, seizure types

OP-9

## Comparison of BCL2 Positivity and Ki67 Expression Rates and Clinical Prognostic Parameters in Diffuse Large B-cell Lymphoma with Germinal Center and Activated B-Cell Immunophenotype

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**Introduction:** Due to its heterogeneous characteristics in prognosis and response to treatment, there are many pathological and clinical methods to categorize diffuse large B-cell lymphoma (DLBCL). We compared the clinical prognostic parameters of these 2 groups calculated by immunohistochemical BCL2 positivity and Ki67 expression rates and NCCN-IPI (National Comprehensive Cancer Network) score.

**Method:** The study was performed with 102 patients diagnosed with DLBCL between January 2014-February 2022. Biopsy reports of the patients were reviewed, and BCL2 positivity, Ki67 expression rates, and immunophenotypes were noted. The clinical findings (age, stage, number of extranodal involvement, performance degree and LDH values) of the determined patient group were examined, and NCCN-IPI scores were calculated.

**Results:** Of the patients, 32.4% (n=33) were female, 67.6% (n=69) aging from 17 to 93. No significant difference in BCL2 or Ki67 expression, immunophenotype, or NCCN-IPI score was found between genders. It was observed that the Ki67 expression rate was higher in which the antiapoptotic protein Bcl2 was negative (p=0.001). Also, those with BCL2 negativity were more in the GCB group as an immunophenotype (p=0.009). The difference between NCCN-IPI score and Bcl2, Ki67 and phenotype was found to be statistically insignificant (p>0.05). There was no correlation with the NCCN-IPI score in those with a Ki67 expression rate above 90, but it was detected at a higher rate in the BCL2-negative group and with the GCB phenotype (p=0.001; p=0.021).

**Conclusion:** This study indicates that there is no co-relation between clinical prognostic parameters and BCL2, Ki67 and immunophenotype. In contrast pathological examination routines are statistically significant among themselves.

**Key words:** Diffuse large B-cell lymphoma, BCL2, Ki67, NCCN-IPI

OP-10

## Investigation of the Anti-cancer Effects of the Tyrosine Kinase Inhibitor-pexidartinib on the Lung Cancer Cell Line

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**Introduction:** Lung cancer is the type of cancer that causes the most deaths at all ages. Tyrosine kinase inhibitors targeting driver genes are effectively used for treating adenocarcinoma. Pexidartinib is a tyrosine kinase inhibitor approved by the Food and Drug Administration in 2019 and is the first systemic agent with proven efficacy for treating tenosynovial giant cell tumors. In this study, we investigated the anti-proliferative and anti-metastatic effects of a tyrosine kinase inhibitor pexidartinib on lung adenocarcinoma cell lines.

**Method:** In this study, BEAS-2B cell line as a healthy cell and A549 lung cancer cell line was cultured in standard conditions. The viability of cells was tested using MTT assay with pexidartinib in increasing concentrations for 24 h and 48 h. The percentages of A549 cells undergoing apoptosis were measured by AV-PI staining A-cell migration assay was performed to reveal the effect of pexidartinib on cancer cell motility. Western blotting was realized to understand the cell death mechanism with pexidartinib treatment in lung cancer cells.

**Results:** No significant effect of treatment of pexidartinib on Beas-2B cells was observed on cell viability. However, the cell viability of lung cancer cells, A549, was decreased with treatment with pexidartinib that is even 1  $\mu$ M ( $p < 0.005$ ). Necrotic cells stained with PI were increased to pexidartinib treatment on A549 cells. There was no apoptosis induced at any concentration of pexidartinib on A549 cells. On the other hand, it was shown that pexidartinib induced necroptosis with RIP1/RIP3 expression via western blot.

**Conclusion:** Our findings confirm the anti-cancer effects and safety of pexidartinib therapy on lung cells. However, it needs further studies to understand the related pathways of pexidartinib treatment in lung cancer.

**Keywords:** Lung cancer, tyrosine kinase inhibitor, pexidartinib



# BEZMÎÂLEM science

**7<sup>th</sup> ANNUAL MEDICAL STUDENTS'  
RESEARCH DAY  
14 MARCH 2023**

**SHORT ORAL PRESENTATIONS**

**Guest Editor**

Pinar Soysal

Bezmialem Vakif University, Faculty of Medicine,  
Department of Internal Medicine

## SOP-1

# Association Between Systemic Immune-Inflammation Index and Gluten-free Diet in Pediatric Celiac Patients

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**Introduction:** Celiac disease (CD) is an autoimmune condition characterized by elevated anti-tissue transglutaminase immunoglobulin A (anti-tTGA) and duodenal villous atrophy triggered by gluten ingestion. The systemic immune inflammation index (SII), is associated with various diseases such as numerous cancer and psoriatic arthritis, is calculated by the formula: platelet x neutrophil/lymphocyte. The significance of the SII in pediatric patients with CD is unclear, although there are few studies. Our study aimed to examine SII, neutrophil-to-lymphocyte ratio (NLR), platelet-to-lymphocyte ratio (PLR), and mean platelet volume-to-platelet ratio (MPR) values before diagnosis and under a gluten-free diet in children with celiac disease and to investigate the correlation between the anti-tTG and anti-endomysium antibody (EMA) and SII, NLR, PLR before and under diet.

**Method:** In this study, 68 patients who applied to the Pediatric Gastroenterology of Bezmialem Vakıf University Medical Faculty Hospital between March 2020 and February 2022 and were diagnosed with celiac disease were included in our study. The laboratory records of the patients were reviewed retrospectively. Current inflammation parameters (NLR, PLR, MPR, SII), anti-tTGA, EMA, and hemoglobin (Hb) were evaluated comparatively at initial diagnosis and after the 6 months of the gluten-free diet.

**Results:** The mean  $\pm$  standard deviation values of Hb (11.94 $\pm$ 1.33, 12.53 $\pm$ 1.3), MPR (0.02 $\pm$ 0.01, 0.16 $\pm$ 1.04), anti-tTGA (225.18 $\pm$ 95.35, 33.67 $\pm$ 68.17), EMA (3.38 $\pm$ 1.14, 0.71 $\pm$ 1.34) were significantly different between newly diagnosed CD patients and after gluten-free diet ( $p < 0.01$ ). The correlation between anti-tTGA and SII, NLR was found significant ( $p < 0.05$ ;  $p < 0.01$ ). The correlation between SII and NLR and PLR was also observed as statistically significant ( $p < 0.01$ ).

**Conclusion:** In conclusion, we confirmed that Celiac antibodies and SII have a significant correlation. Thus, SII may be a follow-up marker for pediatric CD. However, further studies are needed to elucidate SII variation.

**Key words:** Celiac disease, systemic immune-inflammation index, gluten-free diet

SOP-2

## Evaluation of Satisfaction in Career Choices of Medical Students and Occupational Satisfaction of Physicians

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**Introduction:** Occupational satisfaction is a kind of sense of satisfaction that arises because of the overlap of the expectations of the individual regarding her/his profession and what she/he has achieved while performing that profession. The aim of this study was to determine the factors that lead to the loss of occupational satisfaction in medical students and physicians.

**Method:** A two-part web-based questionnaire is applied to the participants, consisting of the Maslach Burnout Scale (MBI-HSS) and the questions obtained from the literature. The differences between burnout scores, social support, and personal coping structures between various roles were examined. The relationship between age, gender, and role of the individual and MBI-HSS, social support, and personal coping scores were analyzed by linear regression models.

**Results:** This study was performed on 126 physicians and 87 medical students of Bezmialem Vakıf University. 93.4% of the participants chose the medical faculty voluntarily, and 73.2% were emotionally satisfied with the medicine. However, 82.2% of the participants were not satisfied financially, and 40.4% stated that they would choose medical school again if they had the opportunity. 82.6% of the participants think that they cannot spare enough time for themselves or their families. The mean Personal Accomplishment, professional support, and workload of physicians were higher than medical students ( $p < 0.01$ ,  $p = 0.02$  and  $p < 0.01$ , respectively). Emotional burnout was not statistically significant between physicians and medical students ( $p = 0.051$ ).

**Conclusion:** Dissatisfaction arises in doctors and medical school students due to many factors, such as being unable to spare enough time for themselves and their families, financial inadequacy, verbal/physical violence, and abnormal working hours. Burnout caused by dissatisfaction in the longer term is more common among physicians than medical students.

**Key words:** Maslach burnout inventory, professional burnout, occupational dissatisfaction

## SOP-3

# Investigation of the Relationship Between Rosuvastatin and Atorvastatin with the NLRP3 Inflammasome Complex in LPS-induced Neuroinflammation

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**Introduction:** Statins are a class of cholesterol-lowering drugs that are very frequently used for treating dyslipidemia. Recent studies have shown that statins also have important biological effects in the brain, and they can change the synaptic transmission by modulating neurotransmitter receptors. However, although the studies conducted so far suggest that statins has important neuropharmacological effects, additional studies are important to determine its pharmacological effects on the nervous system. Our aim is to understand the effects of rosuvastatin and atorvastatin on the neuroinflammation process to explain whether this process is related to the NLRP3 inflammasome complex.

**Method:** In this study, an SHSY-5Y (human neuroblastoma) cell line was cultured in standard conditions. Cells were treated with retinoic acid and BDNF for differentiation to a neuronal phenotype for 10 days in the dark. Before the atorvastatin and rosuvastatin treatment, 20 µg/mL lipopolysaccharide (LPS) was applied to cells for 2 h. Then cells were treated with atorvastatin and rosuvastatin separately in increasing concentrations for 24 h. The viability of cells was tested using the MTT assay. NLRP3 and PYCARD levels of neuron-like cells were analyzed with the ELISA assay. The cytokine expression with atorvastatin and rosuvastatin treatment was evaluated via western blot.

**Results:** A significant recovery was observed both atorvastatin and rosuvastatin treatment separately on LPS-induced neuroinflammation. Although, this recovery of cells was observed on 50 µM with atorvastatin treatment, in the rosuvastatin treatment group, it needs a higher concentration (100 µM). Besides, it's observed that both atorvastatin and rosuvastatin treatment reduced increased expression of NLRP3 and PYCARD by LPS to control levels.

**Conclusion:** Based on these results, the molecular mechanism of atorvastatin and rosuvastatin on neuroinflammation and relation of NLRP3 inflammasome complex.

**Key words:** Atorvastatin, rosuvastatin, neuroinflammation, NLRP3 inflammasome complex

SOP-4

# The Prevalance of Hepatitis B and Hepatitis C Infection and Hepatitis B Vaccination Rate of Patients with Inflammatory Bowel Disease

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**Introduction:** Hepatitis B virus (HBV) and hepatitis C virus (HCV) infections can reactivate in cases of immunosuppression. Inflammatory bowel disease (IBD) is a chronic inflammatory bowel disease. Biological agents and immune modulators that suppress the immune system are usually used in the treatment of IBD. Therefore, IBD treatment is a risk factor for HCV and HBV reactivation. Consequently, it is vital to screen for HBV and HCV before starting treatment. In this study, we investigated the prevalence of HBV and HCV in patients with IBD, and the effectiveness of the vaccination during immune suppressive therapy.

**Method:** Two hundred fifty five patients with IBD were chosen randomly from the Bezmialem University database. Their laboratory findings HbsAg, antiHbs, anti-Hbc-igg (IgG), and anti-HCV were evaluated retrospectively. Also, patients' demographic information was considered. Patients who anti-Hbs (+) are immune to HB; if anti-HbcIgG (+), it is by past infection, otherwise by vaccine. It is considered an active infection if HbsAg (+).

**Results:** Of the 255 patients, 98.4% (251 pts) were screened for HBV and 2% (5 pts) had an active infection, while 94.9% (242 pts) were screened for HCV and none of them had HCV. 9.1% (20 pts) were immune to HBV by past infection. The HBV vaccination rate was 42.7% (109 pts) and only 29.2% (64 pts) developed immunity. 40% (54 pts) not developed immunity after the vaccine were using azathioprine 44.4% (24 pts) and biologic agent 77.8% (42 pts). patients using biological agents have not developed immunity after vaccine ( $p < 0.01$ ). No difference for developing immunity by using azathioprine ( $p = 0.292$ ).

**Conclusion:** According to these results, most of the patients with IBD have screened for HBV and HCV, but a small group was vaccinated before immunosuppressive therapy.

**Key words:** HBV, HCV, inflammatory bowel disease, vaccination

## SOP-5

## Chronic Effect of Oral Anticoagulant Therapy on Kidney Functions

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**Introduction:** We investigated whether the use of chronic oral anticoagulants has a negative long-term effect on renal function.

**Method:** The minimum duration of oral anticoagulant use as 3 months for patients was determined to be included in this study. The study was planned as a retrospective study to be conducted with patients who have been indicated for oral anticoagulant drug use. Two patient groups were generated. One that receiving anticoagulants as group 1 (n=102). Group 2 as those not receiving anticoagulants (n=53). The parameters related to these 155 patients were collected during the patients' follow-up periods.

**Results:** When the groups receiving anticoagulants (group 1) (n=102) and those not receiving (group 2) (n=53) were compared, the mean age in the group receiving the drug was  $74.23 \pm 10.24$  years, while in the group not receiving the drug was  $62.13 \pm 17.05$  years, ( $p < 0.001$ ). There was no significant difference between the two groups in terms of gender (34.3% male in group 1, 24.5% male in group 2) ( $p = 0.211$ ). There was no difference between the two groups in terms of follow-up periods ( $p = 0.843$ ), the follow-up period =  $4.3 \pm 2.4$  years in group 1 and  $4.28 \pm 2.57$  years in group 2). There was no significant difference in terms of first estimated glomerular filtration rate (eGFR) in both groups ( $p = 0.075$ ) [interquartile range for first eGFR in group 1 = 79.34 (69.70-88.17) and 89.11 (62.26-98.89) in group 2]. However, delta eGFR (first eGFR-last eGFR) was significantly higher in group 1 [delta eGFR = 16.89 (8.44-29.37) for group 1 and 3.83 (1.89-7.74) for group 2] ( $p < 0.001$ ).

**Conclusion:** According to the results and significance of delta eGFR, it can be said that chronic anticoagulant use may have a negative effect on kidney function. More detailed research with many more patients is needed to clarify this situation.

**Key words:** Oral anticoagulant, kidney, eGFR, INR, creatinine

## SOP-6

# Investigation of the Immunomodulatory Effect of Pistachio Green Hull Extract

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**Introduction:** Antioxidant, anti-microbial, anti-mutagenic, and anti-inflammatory effects of pistachio green hull demonstrated by studies. However, there are not enough studies on the immunomodulatory effect. In our study, the immunomodulatory effect of the pistachio green hull will be investigated.

**Method:** A lymphocyte pool was created from waste whole blood of healthy individuals, and lymphocytes were cultured. The total phenolic content of pistachio extract obtained by appropriate methods were determined spectrophotometrically using Folin-Ciocalteu reagent. The erel method was used for total antioxidant capacity measurement. The appropriate extract dose range was determined using the wedge-splitting test method for viability analysis. After the cell suspensions were seeded in a 6-well culture plate with  $2 \times 10^5$  cells in each well, two different non-cytotoxic doses of extracts were added to the wells in five replicates and incubated for 24 h in an incubator at 37 °C, 5% CO<sub>2</sub>. After incubation, the supernatant and cell parts were separated and flow cytometric analysis (CD3+CD16/56+ NK, CD3+CD8+ T-lymphocyte) and cytokine measurement [interleukin (IL)-10, interferon- $\gamma$ , tumor necrosis factor- $\alpha$ , IL-2 and IL-12] were performed. SPSS 28 (Statistical Package for the Social Science) package program was used in the calculations.

**Results:** We observed that the phenol and flavonoid content increased in correlation with the increase in concentration. Because of the appropriate methods, we found 0.49 mg Que Eq/mL flavonoid and 0.60 mg GAE/mL phenol compound in 1 mg/mL extract concentration. When we observed the effects of extracts at appropriate doses on lymphocyte cells in flow cytometry, a decrease in CD16/56 lymphocytes with an increase in dose ( $p < 0.05$ ), an increase in CD3 lymphocytes ( $p < 0.05$ ), and no significant difference in CD3/8 lymphocyte results were observed.

**Conclusion:** Immunity-related diseases will continue as long as humanity exist. As scientists, our main goal should be to keep the immune system in balance rather than to strengthen or weaken the immune system.

**Key words:** Pistachio green hull, phenolic content, immunomodulation

## SOP-7

## Measuring Anxiety Levels of Girls with Precocious Puberty and Their Parents

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**Introduction:** Central precocious puberty (CPP) raises concerns that affected girls can not reach their adult height potential and it might cause psychiatric disorders. The use of gonadotropin-releasing hormone agonist (GnRHa) in children with CPP is highly effective in maintaining adult height potential, but its effects on resolving psychological distress havenot been discovered. The aim of this study was to measure the anxiety levels of girls and their families to examine the psychosocial necessity of treatment.

**Method:** Female patients who applied to the pediatric endocrinology outpatient clinic with a complaint of breast development before the age of 8 or menstruation before the age of 10 were included in the study. The control group consisted of those in the same age group who didnot have any chronic diseases. Parents filled the Revised Child Anxiety and Depression Scale-Parent Version for their children and the state-trait anxiety inventory scale for themselves.

**Results:** This study included 36 patients and 36 controls. The mean age of the patient group was 8.06 ( $\pm 1.5$ ). The patient's mean body mass index z-score was 0.84 and the range was (-1.80) - (+2.45). Fourteen of thirty-six patients diagnosed with CPP were true CPP. The mean age of the control group was 7.83 ( $\pm 1.10$ ). The parenteral state anxiety and Trait anxiety between the patients and the control group were statistically insignificant. Social phobia, panic disorder, separation anxiety, generalized anxiety, obsessive compulsive disorder, and major depression levels were statistically insignificant among children. There was no significant difference between the total anxiety scores.

**Conclusion:** It's known that after the age of 8 GnRha has minimal effect on the final height. This study showed that psychological distress levels are also similar to that of the control group. Children may not need to start on medication for psychological reasons.

**Key words:** Precocious puberty, anxiety, depression

SOP-8

# Investigation of Possible Cross Neutralization Between Hazara Virus and Crimean-Congo Hemorrhagic Fever Virus

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**Introduction:** Crimean-Congo hemorrhagic fever virus (CCHFV) is an *Orthonairovirus* causing lethal infection in humans. The studies of CCHFV should be performed in BSL-4 conditions, which makes it unfeasible, and a model organism is needed. Hazara virus (HAZV) is a candidate for this, given the phylogenetical similarities between HAZV and CCHFV. Our aim is to investigate whether a cross-neutralization occurs, which indicates the structural similarity between the two viruses.

**Methods:** Titers of HAZV stocks were measured by performing TCID<sub>50</sub> assays. Five Balb/c mice were immunized against purified HAZV. To confirm the immunization of mice against HAZV, ELISA tests were performed. Microvirus neutralization tests (mVNT) were performed in duplications and the highest serum titer was 1/8. The SW13 cell line was used in TCID<sub>50</sub> and mVNT. HAZV stocks were produced using the BHK-21 cell line.

**Results:** ELISA using anti-HAZV mouse sera and purified HAZV as a coating agent, yielded positive results indicating successful immunization of the mice. Afterwards, mVNT studies using HAZV and anti-HAZV mouse sera were conducted. However, immune mouse serum was not able to neutralize HAZV infection in the infected cell culture studies.

**Conclusion:** Results of our studies demonstrate that HAZV could be propagated in vitro cell culture settings, purified as antigen, and used as an immunogen in experimental animals. Viral neutralization studies demonstrated that HAZV infection in cultures werenot neutralized by the serum samples obtained from immune mice. Our results indicate the challenging nature of HAZV while trying to produce neutralizing antiserum against itself. This would be a limitation for the studies investigating HAZV as a surrogate model for CCHFV. Thus, we conclude that more sensitive methods such as qPCR should be used in such experiments and then the hypothesis readdressed.

**Key words:** Crimean-Congo hemorrhagic fever, Hazara virus, neutralization

## SOP-9

# Investigation of the Anti-Inflammatory and Immunomodulatory Effects of Mullein Species Extracts on Rheumatoid Arthritis

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**Introduction:** Rheumatoid arthritis (RA) is a chronic autoimmune disease characterized by erosion of joints. With an estimated prevalence of 0 and 46%, it is widely seen in developed countries. A strong correlation between defective immune response and RA has been proven and tumor necrosis factor- $\alpha$ , interleukin (IL)-1, and IL-6 are dominant cytokines in RA pathology. In this study, we find anti-inflammatory and anti-rheumatoid effects of *Verbascum* spp.

**Method:** Two types of *Verbascum* spp. were collected and dried in the sun for 10 days. Plants were extracted using the Slatnars method. *Verbascum* spp. were further analyzed for its total phenolic, flavonoid content and antioxidant capacity. To used as a RA *in vitro* model, fibroblast-like synovocytes are targeted, as this specific cell line has a significant role in the pathogenesis of RA. Two synovium samples were collected from patients diagnosed with RA. Primer cells were cultured in high-glucose Dulbecco's Modified Eagle Medium, and MTT analyze was used to determine the therapeutic range of verbascum extracts. To assess the anti-inflammatory effect of *Verbascum* extracts, NF- $\kappa$ B protein levels were analyzed via western blotting. Cells were incubated with LPS to induce inflammation for 4 h then incubated with 50 and 100  $\mu$ g/mL concentrations of *Verbascum* extracts.

**Results:** It has been determined that *V. siniatum* and *Verbascum* st. extract yield 74.14 and 59.77 mg GallicAcidEq/g phenoli, 34.96 and 25.26 mgQueEq/g flavonoid content and have 822.23 and 403.33  $\mu$ M ascorbic acid Eq/g antioxidant capacity, respectively. By MTT essay, it has been determined that concentrations below 125  $\mu$ g/mL are safe to use and NF- $\kappa$ B was reduced at 100  $\mu$ g/mL in both species.

**Conclusion:** These findings suggest that verbascum spp. may provide a new alternative treatment option for developing RA therapies in the future, as *V. Siniatum* has more potential than *Verbascum* st.

**Key words:** Anti-inflammatory, rheumatoid arthritis, *Verbascum*

SOP-10

## Long-term Effects of Aspartame on Global DNA Methylation in Various Tissues

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**Introduction:** We investigated the possible effects of widely used sweetener aspartame on global DNA methylation in various tissues.

**Method:** The study was performed on 15 Sprague-Dawley<sup>®</sup> rats. The rats were divided into 3 groups: the low-dose group was given 50-mg aspartame daily, the high-dose group was given 250-mg aspartame daily, and the third group was control. After being on this diet for 10 weeks, the rats were euthanized and their cerebral cortices, livers, kidneys, testicles, and pancreas were harvested. DNA from all the tissues were isolated using a Zymo Research Quick-DNA<sup>™</sup> Microprep Plus Kit and was kept in -20 °C until all of the DNA samples were ready. Global DNA methylation levels were determined with a Zymo Research 5-mC DNA ELISA Kit. The distribution of methylation values were assessed with Shapiro-Wilk test and comparisons were performed with Tukey's multiple comparison test.

**Results:** Compared with the control, it was observed that global DNA methylation was significantly increased in the pancreas ( $p=0.0057$ ) and liver ( $p=0.0005$ ) of the high-dose group and in the cerebral cortex ( $p=0.022$ ) of the low-dose group. When the low-dose group was compared with the high-dose group, a significant increase in the kidney ( $p=0.0178$ ) and liver ( $p=0.0001$ ) and a significant decrease in the cerebral cortex ( $p=0.0241$ ) were observed.

**Conclusion:** The results of the study show that dietary consumption of aspartame causes global DNA hypermethylation in the pancreas and liver. Since both global hypermethylation and hypomethylation have been recognized as a cause of oncogenesis, further research is needed on the possible risks of aspartame consumption.

**Key words:** Aspartame, global DNA methylation, environmental epigenetics

## SOP-11

## Lifestyle and Dietary Habits in Urolithiasis Patients

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**Introduction:** Urolithiasis is a disease that is common among the human population. It is known that metabolic disorders play a role in the development of urolithiasis, and risk factors such as diet and lifestyle should not be ignored. Our aim in this study is to question the patients under the headings of lifestyle and dietary habits to better recognize these patients with the data obtained and to compare the data with the control group.

**Method:** In our study, 25 patients with urolithiasis and 25 healthy controls were examined from various aspects under the headings of lifestyle and dietary habits using a self-administered questionnaire. Demographic and clinical data were compared between the groups.

**Results:** The mean age of the patient was 46.1 ( $\pm 11.6$ ), and the mean body mass index (BMI) of the patients was 26.6 ( $\pm 4.3$ ). 72% of patients had relatives diagnosed with kidney stones. Comparing the groups, the rate of having a positive family history of urolithiasis in the patient group was significantly higher than that in the control group ( $p < 0.001$ ). Daily water consumption was below 1.5 L for 36% of the patients, and 72% of the patients were not using extra salt in their meals. There were no significant differences between the groups comparing daily water intake and additional salt usage ( $p = 0.799$ ,  $p = 0.758$ , respectively). While 40% of the patients were overweight and 20% of the patient were obese, there were no significant differences comparing BMIs between the groups ( $p = 0.808$ ).

**Conclusion:** This study could not find a significant difference between the patient and control groups in terms of eating habits and lifestyle. However, a positive family history was a significant risk factor.

**Key words:** Urinary stones, lifestyle, diet

SOP-12

## The Relation of Polypharmacy and Loss of Appetite in Geriatric Patients

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**Introduction:** The aim of our study was to examine the effects of polypharmacy (>5 or more drugs) and inappropriate drug use on appetite.

**Method:** Demographic information, medications, chronic diseases, and appetite test results were scanned. While the use of 5 or more drugs was accepted as polypharmacy, the drug burden index was used to calculate the anticholinergic load. Loss of appetite was assessed with the CNAQ test. Twenty-eight or less out of 40 points on the CNAQ test was defined as loss of appetite.

**Results:** Individuals with dementia and a mini mental test score <23 were excluded from the study. Seven hundred thirty eight outpatients admitted to the geriatrics outpatient clinic were included in the study. The mean age of the participants was 77.7. 71.3% of the participants were women. 18.2% of the patients had hyperpolypharmacy (10 or more drugs), and 66.2% had polypharmacy. While 48.9% had a loss of appetite, 51.1% had normal appetite. Polypharmacy was associated with loss of appetite ( $p<0.05$ ). In our study, the risk of loss of appetite in individuals with polypharmacy was 1.6 times higher than those without polypharmacy. This rate was 1.9 for hyperpolypharmacy. Significance remained even after age, gender, and educational status were eliminated and remained when the loss of appetite was assessed independently of malnutrition.

**Conclusion:** Loss of appetite is more common in elderly patients with polypharmacy. Therefore, to eliminate the loss of appetite, the drug treatments of the patients should be reviewed regularly and the number of drugs should be attempted to be reduced.

**Key words:** Polypharmacy, loss of appetite, geriatric assessment

## SOP-13

# Comparison of Hydrochlorothiazide and Indapamide Use in Patients with Chronic Kidney Injury in Terms of Treatment Efficacy and Adverse Effects

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**Introduction:** The aim of our study aimed to retrospectively compare indapamide and thiazide diuretics in terms of treatment efficacy and adverse effects in patients with chronic kidney injury.

**Method:** Patients with chronic kidney damage using one of the thiazide or indapamide diuretics will be included in the study. The sample size was  $n_1=n_2=60$ , and a total of 120 patients were found. Group 1 was recruited as patients using thiazide diuretics and group 2 were recruited as patients using indapamid. Patients were evaluated according to treatment efficacy and adverse effects.

**Results:** The last creatinine mean of drug group 1 was found to be significantly lower than the group 2 ( $p<0.001$ ). The final mean glomerular filtration rate (EGFR) of the group 2 was significantly lower than the group 1 ( $p<0.001$ ). The mean urea of group 1 was found to be significantly lower than the group 2 ( $p=0.02$ ). The mean creatinine of group 1 was found to be significantly lower than that of the group 2 ( $p<0.001$ ). The mean EGFR of the group 2 was found to be significantly lower than the group 1 ( $p<0.001$ ). The mean uric acid level of the group 1 was found to be significantly lower than the group 2 ( $p=0.027$ ).

**Conclusion:** It has been observed that the use of hydrochlorothiazide or indapamide causes different metabolic side effects in patients with chronic kidney injury. Considering these metabolic side effects, patients should be offered the most appropriate treatment.

**Key words:** Hydrochlorothiazide, indapamide, chronic kidney injury

SOP-14

# Evaluation of Prenatal Diagnosis Methods, Indications, and Results of Rare Diseases: Bezmialem Vakıf University Experience

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**Introduction:** Rare diseases (RD) are mostly progressive and chronic diseases with serious morbidity and mortality, seen in 1 in 2,000 people or less. Today, a great majority of RD can be detected prenatally with next-generation sequencing techniques. The main purpose of this study was to determine the frequency, distribution, and population profile of prenatal invasive diagnostic tests (PIDT) for RD.

**Method:** In this study, a retrospective analysis of PIDT performed at Bezmialem Vakıf University, Faculty of Medicine, Department of Obstetrics and Gynecology between the years of 2017-2022 was evaluated.

**Results:** In our clinic, 198 PIDTs were performed. While 15.7% of the procedures were performed for investigating RD, 84.3% were for other indications. There was no significant difference in age, gestational age, or type of pregnancy between the groups. The rate of consanguineous marriage among the groups was statistically significant (32.3%, 4.1%,  $p < 0.01$ ). In the group who underwent PIDT for RD, the results were positive in 11 (39.3%) cases and other chromosomal anomalies were seen in 5 (17.9%); while 31 patients (19.3%) were diagnosed with chromosomal/other diseases, and 4 (2.4%) with RD in the other group. The probability of a positive result in the RD group is significantly higher (57.1%, 21.7%,  $p < 0.001$ ). The line plot depicting the temporal change of indication for prenatal test shows a steep increase in the rate of RD-related invasive tests.

**Conclusion:** Our data indicate that PIDT with the indication of RD is gradually increasing. This information leads us to believe that soon invasive tests might be primarily used for RD and/or single-gene mutations. More effective screening programs should be implemented by health authorities to ensure these improvements in rare diseases.

**Key words:** Rare diseases, prenatal invasive diagnostic tests, amniocentesis

## SOP-15

# Relationship Between Stroke Risk Factors Knowledge and Lifestyle Behavior Compatibility in Medical School Students

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**Introduction:** It was aimed to examine the relationship between stroke knowledge of Bezmialem Vakıf University Medical Faculty students and their lifestyle behaviors toward stroke risk factors.

**Method:** We conducted two online questionnaires that prepared by us, the researchers, in accordance with the references. In the “Stroke General Knowledge Questionnaire, there are 16 closed-ended questions, each worth 1 point, about stroke term, general information, warning signs and symptoms, risk factors, and treatment. In the “Lifestyle Behavior Compatibility by Stroke Risk Factors Questionnaire”, the relationship between the participants’ behaviors and risk factors will be determined by physical activity, diet, smoking status, salt consumption and sugar consumption with a total of 12 points. A total of 274 students participated in this study voluntarily.

**Results:** The study participated by 174 female (63.5%) and 100 male (36.5%). One hundred fifty six students (56.9%) had previously received information about stroke. The median general knowledge score of those who received information [14.0 (6.0-16.0)] was significantly higher than those who did not receive information [12 (0.0-16.0)] ( $p < 0.001$ ). When the median score of general knowledge level (GKL) was compared between grades: the GKL of fourth [14.0 (7.0-15.0)], fifth [14.0 (7.0-16.0)], and sixth [15.0 (13.0-16.0)] grades was found to be superior to the first [11.0 (0.0-15.0)] and second [12.0 (0.0-14.0)] grades. The GKL of 5<sup>th</sup> and 6<sup>th</sup> grades was higher than the third [12.0 (2.0-16.0)] graders. The GKL of 6<sup>th</sup> graders was higher than 4<sup>th</sup> graders ( $p \leq 0.001$ ). No significant difference was observed when lifestyle behavior compliance was compared between grades.

**Conclusion:** According to the results of the study, no positive correlation was observed between high levels of stroke knowledge and lifestyle behavior compliance according to risk factors.

**Key words:** Stroke, knowledge, lifestyle, survey, medical students

SOP-16

## Determination of the Relationship between Thyroid Hormones, Anti-TPO and Anti-Tg and Depression, Anxiety and Quality of Life in Patients with Hashimoto's Thyroiditis

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**Introduction:** Hashimoto's thyroiditis, also known as autoimmune thyroiditis, is the most common endocrine disease-causing hypothyroidism, and is characterized by high anti-thyroid peroxidase (anti-TPO) and anti-thyroglobulin (anti-Tg) levels. In our study, we determined the relationship between antibodies and hormones with depression, anxiety, and quality of life. Unlike other studies, we also investigated the effects of antibody levels on the severity of depression and anxiety.

**Method:** Forty-seven patients who were diagnosed with Hashimoto's thyroiditis according to anti-TPO, anti-Tg, thyroid stimulating hormone (TSH), and T4 were included. We examined anti-TPO levels in 3 groups as normal (0-60 U/mL), high (60-2,000 U/mL), and very high (greater than 2,000 U/mL). To collect data systematically we used Beck Depression Inventory, Beck Anxiety Rating Scale and World Health Organization Quality of Life Scale.

**Results:** We found a statistically significant positive high correlation between depression and anti-TPO, moderate correlation with anti-Tg, and no correlation with TSH and T4. Also, we found a statistically significant positive moderate correlation between anxiety and anti-TPO and anti-Tg, no correlation with TSH and T4. There was a statistically significant positive low correlation between quality of life and anti-TPO; however, no correlation with anti-Tg, TSH, and T4.

**Conclusion:** This study has been shown that anti-TPO and anti-Tg levels are associated with depression, anxiety, and quality of life. Contrary to other studies, we found more severe depression and anxiety in the very high group, but lower quality of life. Thus, a significant increase in the quality of life of the patients can be achieved, and the worsening depression and anxiety can be prevented.

**Key words:** Hashimoto's thyroiditis, anti-TPO, anti-Tg, TSH, T4, depression, anxiety, quality of life

## SOP-17

## Investigation of Indications for Requesting the Serum Immunofixation Electrophoresis (IFE) Test

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**Introduction:** The investigation of monoclonal gammopathies in the investigation of the cause of chronic kidney damage of unknown etiology in the practice of nephrology has almost entered into routine practice. The aim of this study was to determine the optimum immunofixation electrophoresis (IFE) indications by comparing the laboratory findings of those who gave a positive result with those who gave a negative result in patients who were requested for an IFE test.

**Method:** This study was a retrospective study. Patients who applied to Bezmialem Vakıf University Medical Faculty Hospital between January and May 2022, and who were requested IFE test will be included.

**Results:** Out of 51 patients, 64.7% was IFE testes negative and 35.3% was tested positive. Of those who had a negative IFE test, 48.5% were female, 51.5% were male, 60.6% had diabetes, 51.5% had anemia, 3% had congestive heart failure. Of those with a positive IFE test, 44.4% were female, 55.6% were male, 38.9% had diabetes, 77.8% had anemia, 16.7% had congestive heart failure. There were no statistically significant differences between IFE -positive and IFE -negative test results in terms of age, albumin, alkaline phosphatase, cancer antigen, Cl, C-reactive protein, glomerular filtration test, Fe, and glucose averages. Mean hemoglobin, total iron binding capacity, protein in spot urine, and immunoglobulin (Ig)G, and IgA values of those with negative IFE test were significantly higher than those with the positive IFE test.

**Conclusion:** Mean hemoglobin and total iron binding were lower in patients with monoclonal gammopathy, as expected. IgG and protein in spot urine were higher compared with the patients whose IFE test was found to be negative. Based on these results, it may be useful for clinical practice to order an IFE test from kidney patients with iron deficiency anemia and proteinuria.

**Key words:** Serum immunofixation electrophoresis, monoclonal gammopathy, chronic kidney disease

SOP-18

# Relationship Between the CHA2DS2-VASc Score Calculated in Patients who Underwent Elective Electrical Cardioversion and the Preservation of Sinus Rhythm in the Months After the Procedure

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**Introduction:** Atrial fibrillation (AF) is the most common rhythm disorder. Electrical cardioversion (CV) is a common treatment used to convert AF to sinus rhythm; however, recurrence of AF may occur after CV. The CHA2DS2-VASc score has high consistency in quantifying the thromboembolic risk. The aim of our study was to calculate the relationship between the CHA2DS2-VASc score and the preservation of the sinus rhythm after electrical CV in patients with AF.

**Method:** One hundred fifteen patients with AF who underwent elective electrical CV at a tertiary cardiology center were included in this study. Baseline CHA2DS2-VASc scores, and the sinus rhythm preservation rates at the 1<sup>st</sup> and 3<sup>rd</sup> months of the patients were evaluated.

**Results:** The mean age was 66.6±10 years, and 61.7% were females. The mean CHA2DS2-VASc score was 3.7 (range: 0-7). Hypertension was present in 97.4% (n=112), diabetes in 58.3% (n=67), vascular disease in 11.3% (n=13), congestive heart failure, and stroke in 15.7% (n=18). At the end of the procedure, CV was successful in 90.4% (n=104). Significant results were obtained between the CHA2DS2-VASc score and conversion to sinus rhythm at the end of the CV procedure (p=0.011), staying in the sinus rhythm at the 1<sup>st</sup>-month follow-up (p=0.023), and staying in the sinus rhythm at the 3<sup>rd</sup>-month follow-up (p=0.011). According to the logistic regression analysis model, the variables that significantly affect the end-of-procedure result are age and history of stroke (p=0.042; p=0.011)

**Conclusion:** The CHA2DS2-VASc score is a simple, easy, and reliable scoring system that has a relatively high performance for predicting unsuccessful electrical CV and recurrence of AF at follow-ups.

**Key words:** CHA2DS2-VASc, atrial fibrillation, electrical cardioversion

## SOP-19

## Investigation of Inflammatory Serum Parameters in Long-Covid Patients with Neurological Complaints

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**Introduction:** During the acute coronavirus disease (Covid) infection, inflammatory serum parameters are frequently examined. Our aim is to analyze the changes in these parameters in long-Covid patients.

**Method:** The inflammatory parameters of 92 patients who met the appropriate criteria with neurological complaints such as headache, myalgia, post-exertional fatigue, anosmia-ageusia, dizziness, insomnia, and forgetfulness were compared with their first and 3 to 6 months of control admissions.

**Results:** The blood results were compared with first and follow-up admissions of 46 women and 45 men; aged from 21 to 77 (median =43) who were admitted to the hospital with headache (21.53%), myalgia (20%), dizziness (6.15%), post-exertional fatigue (36.91%), anosmia- ageusia (6.15%), insomnia (6.92%), and other symptoms (2.34%) with the diagnosis of long-Covid. After the analysis compared with the first application, a significant decrease and approach to normal values were observed during the follow-up in C-reactive protein (CRP), D-dimer, ferritin, creatinine, lactate dehydrogenase (LDH), neutrophile/lymphocyte ratio, leukocyte count, and erythrocyte sedimentation rate (ESR) ( $p<0.001$ ;  $p<0.001$ ;  $p=0.001$ ;  $p=0.017$ ;  $p<0.001$ ;  $p=0.004$ ;  $p<0.001$ ;  $p<0.001$ ). There was no statistically significant decrease in ACE and procalcitonin ( $p=0.113$ ;  $p=0.381$ ).

**Conclusion:** A decrease and normalization to the baseline were found in CRP, D-dimer, ferritin, creatinine, LDH, NEU/LYM ratio, leukocyte count, and ESR compared with the values during the first and follow-up admissions. The absence of a significant decrease in ACE wasnot significant due to the possible flaws in the laboratory analysis. Procalcitonin results were found to be insignificant because the elevation was observed in different patients during the acute and long-Covid periods. In this respect, multicentric studies with larger sample groups are needed to determine the persistently elevated markers in long-Covid patients.

**Key words:** Long-Covid, inflammatory serum parameters, COVID-19

SOP-20

# Knowledge Levels and Community Guidance of Doctors Working in Family Health Centers on HPV Screening and HPV Vaccination

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**Introduction:** Human papillomavirus (HPV) is a sexually transmitted DNA virus that causes genital condyloma and cervix, vulva, vagina, penis, oropharynx, anal canal cancers. HPV vaccines have a protective effect against cancers that may arise from HPV infection. This study aims evaluating the knowledge levels and tendency to inform the target population of family physicians working in Family Health Centers, where the HPV PCR test is performed according to cervical cancer screening program in Turkey.

**Method:** Study questionnaires were filled in between June and September 2022 via online platforms. One hundred thirteen family physicians working in different FHCs in Turkey filled out the study questionnaire. Thirty eight questions that include information about HPV infection, screening and vaccination, and whether they recommend the vaccine to their patients were asked. Participants categorized as female/male, age (<35,35-50,>50), duration of experience (<10,10-20,>20) and the answers were evaluated.

**Results:** When the answers evaluated by the categorized age groups according to knowledge level questions: participants under the age of 35 knows the number of HPV types and HPV infection in men statistically significant ( $p=0.007$ ,  $p=0.032$ ). It was also seen that the group with less than 10 years of experience gave a correct answer to the 2 questions mentioned statistically significant ( $p=0.008$ ,  $p=0.037$ ). In other questions, when age and experience groups were evaluated, no statistically significant difference was found.

**Conclusion:** Our study is the first survey to evaluate the awareness and knowledge levels of family physicians working in FHCs in Turkey about HPV screening and HPV vaccine. We observed that family physicians had similar knowledge levels on the subject in terms of gender, age and experience. However, we think that family physicians should have more information about HPV screening and HPV vaccine and that their tendency to guide the society can be improved.

**Key words:** HPV, HPV vaccine, HPV screening

## SOP-21

## Examination of Loss of Work Force in Patients Suffered from Hand Injuries

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**Introduction:** Hands are a organ we use most in our daily and business life. The most frequent use causes the most frequent injury and these hand injuries cause loss of the workforce.

**Method:** This retrospective and non-invasive study was conducted a telephone questionnaire to the patient who applied to our hospital with the complaint of hand injury.

**Results:** One hundred thirty patients participated in our study. 74.6% of our patients were male patients and the duration of return to work of male patients was significantly longer than female patients. When we look at the education levels, 84.6 of our patients did not have a university education and each decrease in education levels was found to be statistically significant in prolonging the duration at return to work. Thirty one of our patients were admitted to our hospital due to work accident and the duration of being away from work was 77.5% longer than those normal injuries, and loss of productivity when they returned to work was found to be significantly higher than in normal patients. Significant early return to work and higher productivity was found in our patients who received physical therapy (PT) compared to patients who didnot received PT. There was no significant result in terms of return to work and productivity between patients who do sport and those who do not. According to the statements of our patients, there was no significant relationship between smoking and return to work and loss of productivity.

**Conclusion:** Occupational accidents, lack of PT, and low education had a negative impact on return-to-work durations and productivity. There were no significant results on the negative effects of smoking and non-sports life.

**Key words:** Hand injuries, occupational accidents, loss of workforce

# The Relationship Between c-Troponin-I and CK-MB Values Measured After the Procedure and Cardiovascular Events in the Medium and Long-Term in Patients Who Underwent Elective Angiography and Percutaneous Coronary Intervention

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**Introduction:** We questioned the relationship between the incidence, prognosis, and clinical manifestations of periprocedural myocardial injury in patients with stable coronary artery diseases.

**Method:** Two-hundred six patients who underwent percutaneous coronary intervention (PCI) and January 2021-January 2022 were included. The relationship between post-PCI process and cardiovascular events was evaluated by measuring blood c-Troponin-I and creatine kinase-myocardial isoenzyme (CK-MB) obtained after the PCI.

**Results:** This single-center study recruited 206 patients with a mean age of  $66.26 \pm 10.42$  (male/female =154/52). Significant, positive, and low-grade correlations were present between age and c-Troponin-I and CK-MB (respectively,  $r=0.210$ ,  $p=0.004$ ;  $r=0.185$ ,  $p=0.011$ ) We observed higher c-Troponin-I and CK-MB values as patients' recorded age increase. The number of occluded vessels and c-Troponin-I and CK-MB values show a statistically significant, positive, and low-level correlation, respectively, ( $r=0.222$ ,  $p=0.002$ ;  $r=0.197$ ,  $p=0.007$ ). Independent risk factors for c-Troponin-I and CK-MB were diabetes, hypertension, hyperlipidemia, used artery in which attempted (femoral or radial), smoking, events during the follow-up period (exitus, stroke, re-PCI), and cerebrovascular events ( $p>0.05$ ). We found no significant correlation between c-Troponin-I and CK-MB values and pre-procedural laboratory parameters (white blood cell, hemoglobin, platelet, total cholesterol, high-density lipoprotein, low density lipoprotein, HbA1c and body mass index.

**Conclusion:** As the patient age and number of occluded vessels increase, c-Troponin-I and CK-MB values increase as well. Similar to the previous studies, we found no correlation between c-Troponin-I and CK-MB values and exitus, stroke, re-PCI, and cerebrovascular events. More large-scale prospective studies are necessary to confirm the prognostic roles c-Troponin-I and CK-MB blood levels.

**Key words:** Coronary artery disease, percutaneous coronary intervention, myocardial infarction, c-Troponin-I, CK-MB

## SOP-23

## Evaluation of Women's Awareness and Knowledge of Planned Oocyte Cryopreservation at Different Sociocultural Levels

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**Introduction:** Our study aimed to compare the level of knowledge regarding childbearing, female fertility, and oocyte freezing between participants who consider planned oocyte cryopreservation and those who do not among.

**Method:** We conducted a cross-sectional survey from June 2022 to September 2022 in women of reproductive age and diverse sociocultural backgrounds. Fifty-six-item survey collected responses online. The study comprised 915 participants through social media (age range=21-45) and the survey items correspond to their perspective and degree of knowledge on family planning, future fertility expectations/plans, and oocyte freezing, as well as.

**Results:** Out of 915 women, 595 (65%) were in the 21-26, 193 (21.1%) were in the 27-32, 67 (7.3%) were in the 33-38, and 60 (6.6%) were in the 39-45 age ranges. Half of the women (n=464, 50.7%) reported that they intend to undergo oocyte freezing in the future. When women who considered oocyte freezing were compared with women who did not, it was found that the rate of positive attitude toward oocyte freezing in unmarried women (p=0.021) with a high education level (p=0.044) was higher. Age and income level did not affect the intentions for oocyte freezing. The group that is considering oocyte freezing provided significantly more accurate responses to the seven items about the level of knowledge about family planning/postponing fertility and oocyte cryopreservation compared to the group that is not planning oocyte freezing.

**Conclusion:** Our study supports the findings in previous studies conducted in other countries, that single women higher education levels were found to have a higher level of knowledge about oocyte freezing and they were in favor of using this method. We suggest further studies look into effective ways to inform society about oocyte freezing.

**Key words:** Infertility, social oocyte freezing, oocyte cryopreservation

## SOP-24

# The Effects of the Unilateral Uterine Artery Notch Detected at 24<sup>th</sup> Gestational Weeks on Perinatal Outcomes in Low-Risk Pregnancies

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**Introduction:** The persistence of a diastolic notch after 24 weeks of gestation is associated with insufficient trophoblast invasion of the spiral arteries. Previous studies have confirmed the association between increased blood flow resistance in both uterine arteries (UA) (bilateral UA notch) and a higher risk of the consequent development of pre-eclampsia, intrauterine growth restriction, or SGA. However, there is a paucity of data regarding the prognostic value of the unilateral UA notch. In this study, we assessed the effects of unilateral UA notch detected at 24 gestational weeks on perinatal outcomes in low-risk pregnancies.

**Method:** This is a retrospective analysis of the data obtained from singleton low-risk pregnancies with a unilateral UA notch detected at 24 weeks of gestation and pregnancies without a UA notch of the same gestational age. The main outcome measure was adverse pregnancy outcomes, defined as any case of preeclampsia, small for gestational age, stillbirth, or early neonatal death. Our gathered data included demographic data for each group, perinatal data such as birth weight, birth week, preeclampsia, preterm birth and the mode of delivery, Ph, base deficit, APGAR scores, and NICU admission rate. The independent effect of the unilateral UA notch was evaluated with logistic regression analysis. All statistical analyses were analyzed at the 0.05 significance level in the IBM SPSS Statistics 26.0 program.

**Results:** A total of 162 patients enrolled in the study, (n=35) of which were detected with a unilateral UA notch (study) and (n=127) patients with normal UA (control). The mean ages of the study and control groups were 26 (19-34) vs 29 (19-44), respectively (p=0.001). The study and control group's mean BMIs were (25.7±4.15 vs 26.05±3.88, respectively, p=0.646). Patients with unilateral UA notch showed a low prevalence of intrauterine growth restriction (IUGR). The mean z score for birth weight was (0.31±0.85 vs 0.10±0.96, respectively p=0.259), the prevalence of preterm birth was (35.7% vs 1.6% respectively p=0.185) and preeclampsia (2.9% vs 1.6% respectively p=0.259) that was not significant. There were no adverse results regarding neonatal outcomes. In the logistic regression analysis, the unilateral UA notch was not found to be an independent risk factor for any observed postnatal outcome measure.

**Conclusion:** The unilateral uterine notch at 24 weeks in low-risk pregnancies is not associated with abnormal perinatal outcomes.

**Key words:** Uterine artery, notch, preeclampsia



# BEZMÎÂLEM science

**7<sup>th</sup> ANNUAL MEDICAL STUDENTS'  
RESEARCH DAY  
14 MARCH 2023**

**POSTER PRESENTATIONS**

**Guest Editor**

Pinar Soysal

Bezmialem Vakif University, Faculty of Medicine,  
Department of Internal Medicine

PP-1

# Evaluating the Communication Skills of Medical Students in Bezmialem Vakıf University

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**Introduction:** Effective communication is the key for diagnosis and treatment in health care. Clear communication between patient and provider paves the way for accurate diagnoses and treatment decisions.

**Method:** In the research, a study group will be determined with the voluntary participation of Bezmialem Vakıf University Faculty of Medical students. The “Communication Skills Inventory” (IBE) developed by Ersanlı and Balcı will be used in the evaluation of the survey data to be made online via Google forms. Communication Skills Inventory (IBE); it is a 5-point Likert type scale developed by Ersanlı and Balcı (1998) to evaluate the communication skill levels of university students. The scale consists of three sub-dimensions: cognitive, affective, and behavioral. There are 15 questions measuring each dimension. Each subscale will be evaluated separately, and the general communication skill level of the individual can be determined by looking at the total of the scale. The highest score that can be obtained from each subscale is 75, and the lowest score is 15.

**Results:** Two hundred and thirty -five students responded to the survey (29.19%). First -grade students were the most participant (53.8%), and sixth -grade students were the minimum (12.14). More women (60.9%) responded than men. Cognitive communication skills of the survey generally had higher rates (45 to 75) than the other two sub-dimensions (20 to 75). Affective and behavioral questions had lower rates and were close to each other.

**Conclusion:** Bezmialem Vakıf University medical students have higher scores in cognitive skills. Clinical education can be formed around receiving due to the lack of affective and behavioral communication skills.

**Key words:** Medical students, communication skills, medical faculties

PP-2

## Retrospective Comparison of Vitamin D Levels Between Patients with Migraine and Healthy Control Group

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**Introduction:** It is thought that neurogenic inflammation and vasodilation play an important role in migraine pain. The thought that vitamin d concentration is inversely proportional to inflammation supports its relationship with migraine. The role of calcium in the contraction process of the smooth muscles of the vascular walls may also provide a rational link. The vitamin D receptor in the brain, is involved in many physiological brain processes. The aim of this study was to contribute to the literature by comparing vitamin D levels between migraine patients and the healthy control group.

**Method:** Fifty five patients older than 18 years old diagnosed with migraine according to ICHD-II diagnostic criteria applied to the Neurology Outpatient Clinic of Bezmialem Vakıf University Hospital between July 2020 and July 2022, and 55 healthy controls over the age of 18 applied to the Family Medicine Polyclinic of the Bezmialem Vakıf University Hospital in the same date range were included in the study. Vitamin D levels of the groups were obtained retrospectively from the hospital information system and compared.

**Results:** 69.1% of migraine group and 54.5% of the control group's vitamin D levels were found lower than in the normal range. 30.9% of migrane group and 45.5% of the control group's vitamin D levels were found within the normal range. No statistically difference was found between the migraine and healthy control groups in comparison to vitamin D levels ( $p=0.136$ )

**Conclusion:** There are studies support a significant relationship between vitamin D deficiency and migraine, also there are studies with no significant results in the literature. In our study, we did not find a statistically significant relationship between migraine and vitamin D deficiency. To make a conclusion, a larger series should be investigated.

**Key words:** Vitamin D, migraine, healthy control

PP-3

## Health Attitudes and Affecting Factors of Medical Faculty Class 1 and 4 Students

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**Introduction:** A healthy lifestyle is to control all behaviors that may impact one's health. By maintaining healthy lifestyle attitudes, mortality and morbidity rates in chronic diseases can be significantly reduced. It will be more motivating for physicians who have practiced healthy lifestyle behaviors in their own lives to guide them on the population they serve. This study investigates the health attitudes of the 1<sup>st</sup> and 4<sup>th</sup> class medicine students and the factors that may affect them.

**Method:** Data were collected online with a questionnaire prepared using the literature. Socio-demographic information and healthy lifestyle behaviors such as nutrition, physical activity, and hygiene behaviors were questioned. Bezmialem Vakıf University Faculty of Medicine 2021-2022 academic year classes 1 and 4, 52 students constituted the universe of the research.

**Results:** The health responsibility score of the class 1 students was higher than the class 4 students ( $p=0.022$ ). Nutrition and coping with stress scores of the students who stayed with their family were higher than the students who stayed at students house or alone ( $p<0.05$ ). When the students were asked about their reasons for choosing medicine, the total scores of those who chose it at the request of their families and those who chose to guarantee their job was found to be significantly lower and student who chose it for having interest in medicine took a higher total score ( $p=0.000$ ).

**Conclusion:** Healthy life behaviors scores of the students who progressed in medical education did not increase. 55% of the students stated that healthy life behaviors were not sufficiently included in the education programs, and it was thought that there was a need for improvements in this subject in the medical education curriculum.

**Key words:** Medical students, healthy lifestyle behaviors, medical education

PP-4

## Clinical and Pathological Correlation and Concomitant Upper Gastrointestinal System Pathologies in Children Diagnosed with Celiac

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**Introduction:** Celiac disease is a gluten-induced enteropathy. Tissue transglutaminase and endomysium antibodies, which are serological markers associated with celiac, increase in titer and histopathological changes often seen in the duodenum, are helpful in the diagnosis. The aim of this study was to determine the gastric and esophageal pathologies accompanying the duodenal lesion in celiac biopsy specimens. It will be attempted to reveal whether these changes are related to the severity of the duodenal lesion. Additionally, it will be attempted to determine whether there is a relationship between the measured antibody titers and the severity of histopathological changes.

**Method:** The study included, 53 pediatric patients diagnosed with celiac. The esophagus, stomach and duodenum biopsy results and antibody levels of the patients were examined.

**Results:** All duodal biopsies were consistent with celiac pathology. The gastric pathologies were found to be normal in 32.1%, active gastritis in 7.5%, and chronic gastritis in 60.4%. The esophageal pathologies were found to be normal 54.7% and mild esophagitis 45.3%.

**Conclusion:** Active gastritis, chronic gastritis, and mild esophagitis may accompany duodenal lesions. Gastric and esophageal biopsies from patients who have duodenal biopsy for celiac disease will be more beneficial for the clinical evaluation of the patient. The limitation of this study was the inability to compare the relationship between antibody titers, gastric and esophageal pathologies, and the severity of duodenal lesion, as the number of similar patients with different marsh grades could not be found.

**Key words:** Celiac disease, tissue transglutaminase, endomysium antibodies, gastritis, esophagitis

## Frequency of Epilepsy in Different Types of Dementia

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**Introduction:** Dementia is a clinical syndrome characterized by progressive cognitive decline. Alzheimer's Disease, Vasculer Dementia, Dementia with Lewy Bodies and Frontotemporal Dementia are types of dementia. Epilepsy, is a chronic disease caused by the sudden discharge of neurons. Epilepsy can affect the prognosis of dementia. Therefore, it is important to investigate how much the frequency of epilepsy increases in different types of dementia.

**Method:** At least 138 dementia patients need to be included in the study. Seizure frequency has been investigated by asking questions to patients who applied to the hospital after June 1, 2022. Also data of those who applied to the hospital before June has been looked at the Nucleus system. The data has been analyzed using the IBM SPSS Statistics 22.0 package program. The distribution of the data was been checked with the chi-square test.

**Results:** Totally, 159 dementia patients were included in this study. There were 92 females (57.9%), 67 males (42.1%), and the average age was 74.11. One hundred thirty seven patients have Alzheimer's disease (86.2%) and 22 patients have non-Alzheimer disease (13.8%). Twelve of whom have frontotemporal dementia (7.5%), 4 of whom have Dementia with Lewy Body (2.5%), 5 of whom have vasculer dementia (3.1%), 1 of whom has Parkinson dementia (0.6%). Only 3 of the dementia patients had epileptic seizures (1.9%) and all of them have Alzheimer's disease. The frequency of epileptic seizures among Alzheimer disease patients is 2.2%, and 0% in non-Alzheimer's patients. Not a significant relationship was found between epilepsy and types of dementia ( $p=0.638$ ).

**Conclusion:** In our study, no significant relationship was found between the types of dementia and epilepsy. If the study is performed with more participants, different results can be obtained.

**Key words:** Dementia, Alzheimer's disease, epilepsy

PP-6

## Evaluation of Blood Gas Results of Patients Presenting to the Emergency Department with Diabetic Ketoacidosis

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**Introduction:** Diabetic ketoacidosis (DK) is an acute, life-threatening complication of Diabetes Mellitus. Increased ketone levels in serum causes increased anion gap metabolic acidosis and ketonuria. Studies have reported that blood gas is 97.8% sensitive and 100% specific for the diagnosis of diabetic ketoacidosis. The aim of this study is to evaluate blood gas analysis in patients presenting to the emergency department with diabetic ketoacidosis.

**Method:** This study was planned retrospectively on 62 patients over the age of 18 who were diagnosed with DK by applied to the emergency department. According to the criteria of the American Diabetes Association, DK is defined as serum glucose  $\geq 250$  mg/dL, serum anion gap  $>10$  mEq/L, bicarbonate  $\leq 18$  mEq/L, pH  $\leq 7.30$ , and ketones in urinalysis. The blood gas results of the patients were compared with the clinical severity of the patients (mild, moderate, severe) based on these criteria.

**Results:** The mean age of the patients was 34.9. Of these patients, 40.32% were female and 59.68% were male. Of the patients, 45.2% mild, 38.7% moderate, 16.1% severe DK patients. There were differences in pH and bicarbonate values among all clinical severity groups ( $p=0.000$ ). Although there were differences in the adjusted significance levels, significant differences were revealed between our clinical severity groups in values such as  $pCO_2$ , anion, chlorine, creatinine, leukocytes, and urine ketone ( $p<0.001$ ).

**Conclusion:** In our study, when we compared the clinical severity groups of DK with the comorbidity, age, and some blood gas results such as glucose, lactate, base excess, C-reactive protein, sodium, potassium, and urea, we could not find a statistically significant difference between the clinical severity groups.

**Key words:** Diabetic ketoacidosis, blood gas, anion gap, serum

PP-7

## Chronic Obstructive Pulmonary Disease and Life Quality

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**Introduction:** Chronic obstructive pulmonary disease (COPD) is a preventable and treatable lung disease. Patients with COPD need to exert more effort to breathe, therefore become more fatigued. COPD will be the third most common cause of death in the world in 2030. COPD puts a great burden on both the person himself and the people around him and it is a disease that lowers their quality of life (QoL). QoL can be divided into non-health-related and health-related. Health-related QoL means a state of complete physical, mental, and social well-being. The so-called Short Form 36 questionnaire is a very popular test for questioning health-related quality of life.

**Method:** Functional measures such as progressive loss of FEV1 cannot determine the quality of life. Measuring QoL in COPD is important; therefore, both general and disease-specific QoL questionnaires are used in patients with COPD. The Short Form 36 questionnaire was administered simultaneously to patients with COPD and healthy volunteers, and their results were compared. The minimum number of samples was calculated as  $n_1=n_2=83$  total/66. Patients with an irreversible FEV1/FVC value below 70 in the pulmonary function test for COPD were included in accordance with the GOLD2022 guideline. The volunteer group will be determined by a pulmonary function test without COPD.

**Results:** Eighty three patients with COPD and 102 control groups participated in our survey. We examined the standard of living of patients compared with healthy people. We observed that the patients were in a worse condition than healthy people in terms of physical functions, physical role difficulties, mental health, social functioning and general health perception ( $p<0.001$ ). On the other hand, no significant difference was found between healthy people in terms of emotional role difficulty ( $p=0.181$ ), pain perception ( $p=0.988$ ) and energy ( $p=0.769$ ).

**Conclusion:** COPD also affects the patient life quality. The relationship between COPD and life quality is quietly high.

**Key words:** COPD, pulmonary function, health quality

# The Relationship Between Sleep Quality and Academic Achievement Score in Bezmialem Vakıf University Medical Faculty Students

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**Introduction:** Sleep is a state of unconsciousness that can be reversed by sensory or other stimuli. It is a state of inactivity that allows the organism to rest and a regeneration period that prepares the whole body for life. Sleeping disorders can cause many negativities such as difficulty in concentrating, excessive activity, excessive daytime sleepiness, impulsivity, moodiness, irritability, poor school performance, learning disorders, and problems in social relations. The aim of this study supports the literature by investigating whether there is a relationship between sleep quality and exam success in medical school students.

**Method:** In the study, the Pittsburg Sleep Quality Index and Academic Self-Efficacy Scale will be applied to 120 students of the Bezmialem Vakıf University Faculty of Medicine. The data will be analyzed using the IBM SPSS Statistics 22.0 package program. The mean differences between the groups will be examined with the t-test, and the relationship between the continuous variables will be checked with the Pearson correlation coefficient.

**Results:** Forty-three male and 77 female students participated in our study. The average Pittsburgh Sleep Quality Index score of the students participating in the study is  $6.19 \pm 2.27$ . The mean score of the students on the Academic Self-Efficacy Scale is  $106.16 \pm 21.04$ . The PUKI value was compared according to the classes and a significant difference was found between the 3<sup>rd</sup> and 5<sup>th</sup>, 3<sup>rd</sup> and 4<sup>th</sup>, 3<sup>rd</sup> and 1<sup>st</sup> grades, and between the 2<sup>nd</sup> and 1<sup>st</sup> grades. A statistically significant ( $p=0.004$ ) negative (inverse relationship) low-level correlation was found between PUKI and Academic Self-Efficacy Scale scores in all the students participating in the study ( $r=-0.263$ )

**Conclusion:** Sleep quality also affects our academic success. A relationship, albeit low, was found between sleep quality and academic achievement.

**Key words:** Sleep quality, academic self-efficiency, medicine students

## PP-9

## Awareness of Healthcare Professionals on Patient Rights

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**Introduction:** Patient right, it forms a sub-title of human rights and is among the basic rights that human beings have gained from birth. We evaluate how much basic patient rights such as the right to request information, the right to refuse, the right to stop, the right to be respected and respected, and in particular to privacy, are known by our healthcare professionals, and how much they are implemented and their attitudes.

**Method:** In our study, cross-sectional research will be carried out in the field of health. The health workers working in Bezmialem Vakıf University Hospital will be selected and a study group will be formed. In the data collection process, a 25-question questionnaire with "yes" "no" answers will be used, which was created by the researchers by scanning the literature. The knowledge score will be calculated from 25 questions prepared to measure the knowledge level of healthcare professionals about patient rights. The highest and lowest scores will be determined. A high score will indicate a high level of knowledge.

**Results:** Of the 50 participants participating in the study, 25 were men, 25 were women, and the mean score of patients' rights was  $86.88 \pm 9.697$  for men and  $81.76 \pm 8,253$  for women. According to gender, it was determined that the knowledge level of men was higher than women ( $p=0.021$ ). No significant results were found by occupation.

**Conclusion:** Although the level of knowledge is better for men than for women, it would be good for both genders to continue their education.

**Key words:** Healthcare workers, patients' rights, awareness

PP-10

## Is Cesarean Delivery a Risk Factor for Atopic Allergic Disease in Children

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**Introduction:** The rate of both childhood allergic diseases and delivered by cesarean section has been increasing worldwide for the last 30-40 years. Our objective was to investigate the relationship between delivered by cesarean section and atopic-allergic disease in prepubertal children, and to compare children with atopic-allergic diseases with non atopic healthy children.

**Method:** A prospective cross-sectional study of 216 prepubertal children aged 2-10 years was performed; the participants were 112 atopic children with physician-diagnosed-allergic disease (allergic rhinitis and asthma) (serum total immunoglobulinE level >100 kU/L and eosinophilia >4%, or positivity to at least one allergen in skin test) and 104 non-atopic healthy age- and sex-matched controls. Data were collected between October 2022 and November 2022 at the Pediatric General and Pediatric Allergy Outpatient Clinics of Bezmialem Vakıf University Hospital.

**Results:** Demonstrated that 85 (39.5%) children were delivered by cesarean section and 131 (60.5%) were delivered by normal vaginal delivery. In all age groups, 38.4% of the children in the atopic allergic disease group and 40.4% of the healthy group were born by cesarean section ( $p=0.442$ ). No significant association between cesarean section delivery and atopic-allergic disease in childhood was found in our study (odds ratio =0.98, 95% confidence interval =0.64-2.87,  $p=0.454$ ).

**Conclusion:** This study demonstrated that no relationship between cesarean section delivery and childhood atopic-allergic disease was found in this study.

**Key words:** Allergic diseases, prepubertal children, cesarean section

PP-11

## The Knowledge, Attitude and Awareness of Society Toward Psychology, Psychiatry and Mental Disorders

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**Introduction:** Most people in Turkey refrain from getting help their mental disorders because of stigmatization. This study investigates society's information and attitudes toward psychiatry.

**Method:** This study was conducted on individuals who live in İstanbul. A questionnaire prepared by a specialist on the basis of previous studies and containing 20 questions was applied using the "non-probability sampling" method over 335 individuals.

**Results:** 99.4% of the participants defined a psychiatrist and 76.4% defined a psychologist correctly, whereas only 66.4% distinguished the difference between them. Healthcare workers ( $p=0.000$ ) and younger subjects (between the ages of 18-35) ( $p=0.013$ ) answered this question more correctly in comparison with the others. 85.6% of the participants stated that they would use psychiatric medications if necessary, but 68.3% of them mentioned that they would prefer to be treated by verbal psychotherapeutic techniques. The respondents gave the highest marks (98.5%) to the statement "I would take her/him to a psychiatrist/psychologist" to a question where Schizophrenia defined, It is followed by major depression (97.6%) and panic attack (88.9%). Participants with a bachelor's/master's degree ( $p=0.025$ ), young age ( $p=0.028$ ), and a healthcare job ( $p<0.001$ ) got higher marks than the other participants.

**Conclusion:** People know that psychiatrists are doctors with a medical degree, but they do not account for them as psychotherapists. They regard psychologists as treating by talking and psychiatrists as treating with drugs. According to the answers of the questions telling the symptoms of these disorders, people consider schizophrenia and depression as more associated with psychiatry than panic attack. All participants answered more than 50% of the questions correctly, and most of them mentioned that people with psychiatric disorders should not be stigmatized.

**Key words:** Psychiatry, psychology, mental disorders

## Effectiveness of Heart Score in Obstructive and Non-Obstructive Myocardial Infarction

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**Introduction:** Myocardial infarction (MI) is the ischemia of the heart muscles. Non-obstructive MI is characterized by less than 50% stenosis on angiography. Its prevalence is 5-25%. It is essential to identify high-risk patients in emergency departments. In our study, we compared the HEART score of patients with and without obstruction of more than 50% in cardiac angiography (CAG).

**Method:** Our study included patients diagnosed with acute coronary syndrome and underwent CAG in the emergency department between 01/01/2018-31/12/2019. As it is a retrospective study, the requirement for informed consent was waived. All patients with obstructive and non-obstructive MI and over 18 were included in the study. Trauma diseases, those with missing data, whose scores were not calculated, or who were referred from another hospital were excluded from the study. Patients were divided into two groups: obstructive and non-obstructive MI. Collected data were compared between the groups.

**Results:** Of these patients, 129 (39.5%) had obstructive MI, and 197 (60.4%) had non-obstructive MI. There was no statistically significant difference between the groups regarding median HEART scores (6, 6,  $p=0.254$ ). While HEART score showed 1 (0.77%) patient as low risk, 80 (62%) as medium risk, and 48 (37.2%) as high risk in the obstructive group; 3 (1.52%) patients were classified as low risk, 119 (60.40%) as medium risk, and 75 (38.07%) as high-risk in the non-obstructive group. The difference between the groups was not statistically significant.

**Conclusion:** In our study, no statistically significant difference in the HEART score comparison of the patients in the obstructive and non-obstructive groups were established. Thus, the HEART score can be used safely in patients admitted to the emergency department with chest pain and evaluated as obstructive and non-obstructive MI.

**Key words:** HEART score, obstructive myocardial infarction, non-obstructive myocardial infarction

PP-13

## Diagnostic Importance of HDL, LDL, Gamma Glutamyl Transpeptidase to Platelet Ratio, Gamma Glutamyl Transpeptidase to Albumin Ratio in Hepatocellular Carcinoma, Hepatocellular Adenoma and Liver Metastasis

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**Introduction:** Alpha fetoprotein (AFP) is the most important tumor marker in the diagnosis of hepatocellular carcinoma (HCC). However, a significant proportion of patients with HCC patients were AFP negative (AFP <20 ng/mL). This study aimed to evaluate the diagnostic value of low density lipoprotein (LDL), high density lipoprotein (HDL), gamma glutamyl transpeptidase (GGT) albumin ratio and GGT platelet ratio in HCC, liver metastases and hepatocellular adenoma.

**Method:** We retrospectively analyzed 201 patients Among these patients, 6 patients had hepatocellular adenoma, 56 patients had AFP (+) HCC, 26 patients had AFP (-) HCC and 63 patients had liver metastases. 50 patients were selected as the control group. Kruskal-Wallis test was used to analyze the changes in HDL, LDL, GGT to albumin ratio and GGT to platelet ratio between these groups.

**Results:** When AFP -positive and AFP -negative HCC patients were compared, there was no significant difference in HDL ( $p=0.168$ ) and LDL ( $p=0.656$ ) values, but there was a significant difference in the GGT to platelet ratio ( $p=0.024$ ). When we compared the control group with metastasis patients and AFP -positive and AFP -negative groups, there were significant differences in HDL values, GGT to albumin ratio and GGT to platelet ratio ( $p<0.05$ ). When these values were compared between metastasis patients and AFP -positive patients, The differences were found (HDL  $p=0.039$ , GGT/albumin  $p=0.018$ , GGT/platelet  $p<0.05$ ). Significant differences were observed between hepatocellular adenoma and AFP (+) HCC in these values. No difference was found between the groups in the LDL value ( $p=0.428$ ).

**Conclusion:** HDL, GGT to platelet ratio, and GGT to albumin ratio have an important role in the diagnosis of liver neoplasms and in the differential diagnosis of primary liver cancer and liver metastases. These values are significant for hepatocellular adenoma, but the number of patients is not sufficient.

**Key words:** Gamma-glutamyl transpeptidase to platelet ratio, HCC, liver metastases, gamma-glutamyl transpeptidase to albumin ratio

PP-14

## Perianal Fistula Frequency, Characteristics, and Response to Treatment in Patients with Crohn's Disease

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**Introduction:** Crohn's disease (CD) is a chronic inflammatory bowel disease with a progressive and destructive course. The development of a perianal fistula  $\pm$  abscess is one of the main complications that requires a multidisciplinary approach. The aim of this study was to examine the frequency, characteristics, and treatments of perianal fistula  $\pm$  abscess in patients with CD.

**Method:** Patients aged 18-65 years who referred between June 2019 and June 2022 to the Gastroenterology and General Surgery Outpatient Clinic of Bezmi Alem Vakıf University Hospital for perianal fistula and perianal CD (perianal fistula  $\pm$  abscess) will be included in this study. All information regarding the presence of perianal fistula  $\pm$  abscess, symptoms and treatments that are seen and applied to these patients will be analyzed retrospectively.

**Results:** Among 218 patients with CD, (51.8%) were females with a mean age of 44 years, and (48.2%) were males with mean age of 40 years ( $p=0.011$ ), and the average age for two genders was 42.53 ( $p<0.001$ ). Among CD patients, 58 perianal fistulas were detected ( $p<0.001$ ) with 31 males and 27 females. In 30 patients, perianal fistula was accompanied by a perianal abscess (51.7%). The difference between isolated perianal fistula  $\pm$  abscess and perianal fistula  $\pm$  abscess due to CD is also significant ( $p<0.001$ ). Based on the AGA classification, 34 patients have a simple fistula (58.6%), whereas 24 patients have complex fistula (41.4%). Finally, 11 patients have high fistula (18.9%) and 47 patients have low fistula (81%). Only 28 patients had seton surgery (48.3%).

**Conclusion:** CD itself is more frequent in females, and fistulizing CD is more frequent in males. In some patients, perianal fistula  $\pm$  abscess may be the initial presentation of CD. The difference between isolated perianal fistula and perianal CD is also representative. Simple, low, and inter-sphincter fistulas are the most frequent type of perianal fistula.

**Key words:** Crohn's disease, Perianal fistula  $\pm$  abscess, AGA classification, Park's classification

PP-15

## The Prevalence of COVID-19 Infection and Vaccination Rate of Patients with Inflammatory Bowel Disease

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**Introduction:** Coronavirus disease-19 (COVID-19) virus may cause gastrointestinal system symptoms similar to inflammatory bowel disease (IBD), which is a chronic, immune system-related disease. The usage of immunosuppressive medication may reduce the risk of mortality by preventing the cytokine storm. On the other hand, they increase the number of Angiotensin converting enzyme-2 Receptor and simplify the replication of the severe acute respiratory syndrome-coronavirus-2 in the body. Therefore, the overall impact of IBD in COVID-19 infection is unclear.

**Method:** In this study, 255 patients with IBD were chosen randomly from the Bezmiâlem University' database. The pcr results, their IBD medications, and COVID vaccination doses and types were evaluated retrospectively.

**Results:** Our data showed that of the 255 patient, 53.7% (137 pts) have never been infected with coronavirus. 94.1% (111 pts) who had COVID-19 infection, experienced mild symptoms. Only 1 (0.8%) patient had been admitted to the intensive care unit who had been treated with mesalazine, azathioprine and biologic agent. Of the 255 patients 76.9% (196 pts) were vaccinated with Biotech; 45.9% (90 pts) had an infection at least one time, and 95.6% (86 pts) experienced mild symptoms. Of the 255 patients, 46.8% (80 pts) were vaccinated with Sinovac; 31.6% (37 pts) had been diagnosed with an infection, and 95.0% (35) described mild symptoms. Nobody with a vaccine has been admitted to the intensive care unit. The patients with mild symptoms were using the following medications in different percentages: 58.6% (65 pts) biologic agents, 44.1% (49 pts) azathioprine and 74.8% (83 pts) mesalazine.

**Conclusion:** According to these results, the majority of patients with IBD overcame the COVID infection with mild symptoms. Neither the type of vaccine nor the different IBD medications have a significant role during infection.

**Key words:** Inflammatory bowel disease, COVID-19, biologic agent, vaccine

PP-16

## The Effect of Social Media on the Rhinoplasty Process

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**Introduction:** Rhinoplasty is one of the most popular and complex surgeries in the fields of ENT and plastic surgery. Rhinoplasty surgery can be performed for correcting nasal functional problems-narrowing of the airway due to the obstructive structure-for aesthetic purposes only or for both purposes. The proportions and symmetry of the nose are directly related to the beauty of the face. At this time, social media has a great role in changing the perceptions of beauty, as it affects our lives in every aspect. We thought that there might be a relationship between the increase in aesthetic rhinoplasty and the increase in the use of social media. The aim of this study was to examine the effect of social media on the rhinoplasty process.

**Method:** In this proposed study, our questionnaire was applied to patients who had rhinoplasty surgery in the last 1 year at Bezmialem Vakıf University, Faculty of Medicine, Department of Otorhinolaryngology. The survey was administered face-to-face and online. Obtained data were evaluated with Student-T data analysis method and values below  $p < 0.05$  were considered significant.

**Results:** The effect of social media was not found to be significant in patients' decision to have surgery and choosing their doctor ( $p=0.68$ ). The rate of self-liking in selfies and photographs was significant in the post-operative satisfaction rate ( $p=0.02$ ). The mean of the scores given to the increase in photo sharing on social media after the surgery was 3.73 out of 10.

**Conclusion:** Patients who are affected by social media during the surgery process and patients who are not affected by social media can be divided into two groups, and the satisfaction rates of these patients after the surgery can be evaluated and compared with the Sam Most Criteria.

**Key words:** Rhinoplasty, social media, beauty standards

PP-17

## The Effects of Hours of Antihypertensive Drugs on Ambulatory Blood Pressure

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**Introduction:** Hypertension is a serious disease that needed to be treated properly. There are modifiable and non-modifiable factors that can affect the blood pressure. It is known that factors such as excessive salt consumption, obesity, endocrine diseases and genetics plays role, in the development of hypertension. In the literature, there are studies on the time-dependent effects of antihypertensive drugs. *Non-dipper* is the failure of blood pressure drop 10% which is considered normal at night, and higher pressure than normal in the morning is called *morning surge*. The presence of *non-dipper* and *morning surge* has been associated with poor prognosis in studies. The purpose of our study was to reveal the relationship between the intake time of drugs and blood pressure values.

**Method:** In this retrospective study, we used blood pressure values of the patients that were recorded in the system with a Holter monitor. We used the patients' blood pressure values who used ARBs and ACEIs and noted the time they took the drug. We compared that time and the presence of the *non-dipper* and *morning surge*.

**Results:** There were 95 patients who took drugs in the morning and 31 patients who took it in the evening. While the morning group had 71.3% *non-dipper*, the evening group had 80.6% of it (p=0.305). The morning group had 60.6% *morning surge*, whilst the evening group had 67.7% of it (p=0.479).

**Conclusion:** Considering the inequality number of patients in the groups, no significant differences were found.

**Key words:** Anti-hypertensive drugs, ambulatory blood pressure, hypertension, holter monitor

## Examination of the Relationship Between Exam Anxiety and Perceived Stress Level and Cognitive Flexibility in Bezmialem Vakıf University Medical Faculty Students

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**Introduction:** The current study measures exam anxiety, perceived stress, and cognitive flexibility levels in Bezmialem Vakıf University, Faculty of Medicine students; to examine and evaluate the relationships between these parameters. Because of this study, it is aimed to have an idea about exam anxiety and its possible causes, the factors it is related to, and to suggest solutions depending on the results if necessary. It is thought that this study will contribute to the literature.

**Method:** This research was carried out as a survey-based study on Bezmialem Vakıf University, Faculty of Medicine students. The questions were sent to all participants online via social media. In the study, exam anxiety levels, perceived stress levels, and cognitive flexibility levels of the participants were measured. We asked participants about their age, gender, class and applied the AYDA Exam Anxiety Scale, Perceived Stress Scale, and Cognitive Flexibility Inventory.

**Results:** According to the data obtained, 72 women and 54 men participated in our study. A significant relationship was found between the exam anxiety of the participants and their perceived stress ( $r=0.379$ ,  $p<0.0001$ ) and cognitive flexibility ( $r=-0.187$ ,  $p=0.036$ ) levels. Simultaneously, a significant relationship was found between perceived stress and cognitive flexibility levels ( $r=-0.199$ ,  $p=0.025$ ).

**Conclusion:** It can be concluded that perceived stress and cognitive flexibility levels are effective in students' experiencing exam anxiety. Therefore, solution suggestions can be considered to reduce the perceived stress levels of students and increase their cognitive flexibility.

**Key words:** Exam anxiety, perceived stress, cognitive flexibility

PP-19

## Comparison of Pre- and Post-shift Anxiety States of Resident Doctors at Bezmialem Vakıf University

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**Introduction:** The aim of this study was to compare the anxiety and depression levels of resident doctors working at the Bezmialem Vakıf University Hospital before and after the shift with the help of STAI I-II and Beck Depression Inventory.

**Method:** A total of 31 residents working in 9 different departments at Bezmialem Vakıf University Hospital were included in this study. Beck Depression Inventory and STAI I-II scales were used in this study to evaluate the anxiety and depression levels of the participants. Residents filled out the questionnaire via Google forms just before and right after their shift.

**Results:** The mean age of the 31 residents included in the study was  $28.54 \pm 1.87$  years. When the gender distribution was analyzed, 16 (51.6%) were female and 15 (48.4%) were male. A statistically significant difference was observed when the mean scores of STAI I ( $p=0.006$ ) and STAI II ( $p=0.018$ ) were compared according to the data obtained before and 24 h after the shift. Accordingly, it was observed that the anxiety levels of resident physicians decreased significantly after the shift compared with the anxiety levels before. On the other hand, no significant difference was observed when the mean Beck depression scores obtained before and after the shift were compared ( $p=0.071$ ).

**Conclusion:** According to the results, anxiety levels of residents dropped significantly after the shift, which can be interpreted as anticipatory anxiety. However, it is shown that there was not a significant difference in depression levels before and after the shift, which was expected.

**Key words:** Shift, anxiety, residents, STAI

# The Effect of COVID-19 on Diet, Exercise Habits, and Metabolic Control in Obese Children

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**Introduction:** Childhood obesity has become a public health problem all around the world. Childhood obesity has serious comorbidities, which can affect almost every system in the body and can also persist into adulthood. There are multiple factors affective in etiology, but lifestyle habits (eating behaviors and physical activity) are especially more important. During the coronavirus disease-19 (COVID-19) pandemic, the lifestyle of obese children has changed by necessity. The aim of this study was to investigate the effects of the COVID-19 pandemic on diet, exercise habits, and metabolic control in obese children.

**Method:** Forty-nine obese children between the ages of 6 and 18 years, who applied to the pediatric endocrinology department between November 2020 and April 2021, were included in this study. Metabolic parameters (glucose, lipid, insulin, thyroid hormones, body mass index and cortisol level) were analyzed retrospectively and children's nutritional habits and physical activity durations during the pandemic period were evaluated.

**Results:** Our data showed that body mass index was increased during pandemic ( $p < 0.01$ ). A statistically significant increase was found in glucose, insulin, low density lipoprotein, and triglyceride levels ( $p < 0.05$ ). High density lipoprotein and T4 levels were decreased ( $p < 0.01$ ). No statistically significant increase was found in the levels of thyroid stimulating hormone ( $p = 0.13$ ) and cortisol ( $p = 0.16$ ). This study has been shown that the time spent on physical activity decreased in 40 children (83.6%), while the time spent in front of the screen (computer, telephone etc.) increased in 39 children (79.5%). When we examined the eating habits, it was shown that 36 patients (73.5%) have poor diet (feeding score  $< 0$ ).

**Conclusion:** According to these results, body mass index of obese children were increased and metabolic parameters were changed during the COVID-19 pandemic. Children have become more sedentary, and their eating habits have changed dramatically in this process.

**Key words:** Childhood obesity, COVID-19, eating habits

PP-21

## COVID-19 Vaccine Attitude and Vaccine Awareness of Patients Applying to Family Medicine at Bezmialem Vakıf University Hospital

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**Introduction:** This study is a survey study on the evaluation of the positive or negative effects of some factors we have determined on the vaccination attitude about coronavirus disease-19 (COVID-19) of the patients. The expectation is to obtain data on how the factors we have determined about the patients are effective in the vaccination attitudes of the patients in our patient group.

**Method:** The factors of positive and negative perceptions toward the vaccine and the differences in the attitudes of the patients according to the characteristics we determined were examined. In our study, with 260 patients were included.

**Results:** When compared according to gender, no difference was found ( $p>0.05$ ). No difference was found between educational status  $p<0.01$ . As the education level increased, the positive attitude toward the vaccine increased more. Compared to cigarette use, non-smokers ( $14\pm4$ ), 17 (11-19), smokers ( $10\pm1$ ), 10 (9-11) had more positive attitudes toward the vaccine compared to  $p<0.01$ . When compared according to the presence of chronic diseases, the attitudes of those with chronic disease ( $16\pm3$ ), 18 (19-14), those without chronic disease ( $10\pm2$ ), 10 (11-9) were more positive toward vaccination  $p<0.01$ . When compared according to the severity of Covid, the attitudes of patients with severe disease ( $17\pm2$ ), 17 (19-18) towards vaccination were more positive than those with mild disease ( $10\pm1$ ), 10 (11-9)  $p<0.01$ .

**Conclusion:** Gender did not make a significant difference in positive or negative attitudes toward the vaccine among the patients, but education status, smoking, presence of chronic diseases, and the severity of COVID affected the attitudes toward the vaccine.

**Key words:** Coronavirus disease, vaccine attitude, pandemia

## Clinicopathological Features in Patients with Solid Pseudopapillary Tumors

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**Introduction:** Solid pseudopapillary neoplasia (SPN) is a rare tumor with low malignant potential, and it is mostly located in the tail of the pancreas. It usually affects young women. Although most of the cases are asymptomatic, they mostly apply to the clinic with non-specific symptoms such as abdominal pain. The gold standard in diagnosis is a histopathological examination. Surgical resection is usually performed, and the survival rate after resection is high. Our aim in this study was to examine the postoperative conditions in patients diagnosed with SPN.

**Method:** In this study, patients who had a pathologically confirmed diagnosis of SPN between September 2011 and September 2022 were retrospectively analyzed. Demographic data of the patients, reasons for admission to the hospital, imaging methods used in the diagnosis, surgical procedures performed on the patient, long-term survival after treatment, complications, local recurrence, and metastases were investigated.

**Results:** In this study, seven patients diagnosed with SPN were identified. The mean age of the patients was 32.86 years, and 6 of them were female. Five cases presented with abdominal pain, and 2 cases were diagnosed incidentally. Computed tomography was performed on 5 patients, and magnetic resonance imaging was performed on 3 patients. Distal pancreatectomy was performed in all patients, and splenectomy was performed in 6 patients. The mean follow-up time was 45.6 months. Postoperative complications, recurrences, and metastases were not observed in any patient; one patient could not be reached.

**Conclusion:** SPN is a rare tumor seen mostly in young women, and the main clinical presentation is abdominal pain. All SPNs were located in the tail of the pancreas, and the prognosis after resection was successful.

**Key words:** Solid pseudopapillary neoplasm, distal pancreatectomy, pancreas, pancreatic tumor

PP-23

## Evaluation of the Relationship Between Postpartum Cardiac Output of Smoking Women and Birth Weight

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**Introduction:** The risk of morbidity and mortality among low birth weight (LBW) newborns is significantly higher. Maternal cigarette consumption is involved in the etiology of LBW. Smoking increases cardiac output (CO) in humans to compensate for decreased oxygen transport to tissues. However, it is unclear whether this compensation mechanism is at a level to prevent complications such as LBW during pregnancy. The study aimed to determine the relationship between the postpartum CO of women who smoked during pregnancy and the weight of newborns in their last pregnancy.

**Method:** Twenty-five women who had smoked during pregnancy and whose smoking was proven by a breath carbon monoxide test were included in the study. Participants were divided into two groups: Group A consisted of women that gave birth to appropriate for gestational age newborns (n=17) and group B consisted of women that gave birth to LBW newborns (n=8). In the evaluation of the echocardiograms, the recommendations of the American Echocardiography Guidelines were taken into consideration, and cardiac outputs of the cases were determined by the formula “stroke volume (SV) x heart rate”.

**Results:** Echocardiography was performed in twenty-five female cases. The mean birth weights of group A and group B were 3,285 grams vs. 2,300 grams (p<0.001), respectively. No statistically significant relationship was found between the birth weight of the newborns and the postpartum CO, CO index, SV, and SV index of the cases (p>0.05).

**Conclusion:** This study indicates that postpartum CO measurements are not related to the birth weights of newborns. The harmful effects of smoking on fetal growth seem to occur by using the fetal-placental mechanism rather than maternal cardiac function.

**Key words:** Smoking, cardiac output, low birth weight

## Determination of the Amount of Bone to be Resected in the Arthroscopic Surgery of Femoroacetabular Impingement Syndrome and the Effect of This Amount on the Postoperative Clinical Results

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**Introduction:** Femoroacetabular impingement syndrome is a common condition. It occurs with a decrease in the ratio of the head-neck junction of the femur. The problem that we will examine is a CAM lesion. Sphericity loss and globalization deterioration in the femur and a decrease in the head-neck junction. Clinical symptoms are primarily hip and/or groin pain, limping, stiffness; especially during the examination. Decreased range of motion is an indicator of this. Conservative treatment and surgical treatment are possible. With the resection, complaints decrease.

**Method:** Patients who underwent resection for at least 2 years of follow-up will be retrospectively scanned. There will be 2 groups of 20 people according to the amount of resection over and under 100%. The resection amount/percentage will be calculated from the pre- and postoperative tomography, and the relationship between this amount and clinical results will be examined by iHot score.

**Results:** The mean iHot score change in patients was 52.3 ( $p < 0.01$ ). There was not correlation between the resection amount performed in patients with the preoperative ( $p = 0.169$ ) and the postoperative ( $p = 0.365$ ) iHot score. First group's preoperative iHot score was  $97.35 \pm 12.26$  standard deviation (SD), after  $41.9 \pm 25.62$  SD; the mean score of 2<sup>nd</sup> group preoperatively was  $93.3 \pm 14.51$  SD, and  $44.15 \pm 26.53$  SD after surgery. While the change in the iHot of the 1<sup>st</sup> group was  $55.45 \pm 29.52$  average, it was  $49.15 \pm 32.82$  in the 2<sup>nd</sup> group and wasn't found significant ( $p = 0.715$ ).

**Conclusion:** There is a clear clinical improvement in both groups. The amount resected during the surgery did not have a significant relationship with the not's pre - postoperative iHot score, and the effect of the removed lesion rate on the iHot score was not found significant.

**Key words:** Femoroacetabular impingement, CAM, resection, CT, iHot-12

PP-25

# Measuring the Level of Knowledge About the Herbal Supplements Used for Losing Weight Among the Patients with Metabolic Syndrome

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**Introduction:** This study aims to measure the prevalence of using herbal supplements for weight loss in patients with metabolic syndrome and their level of knowledge about the supplements according to education, gender, and age.

**Method:** The study was conducted with patients who agreeing to participate. Patients were diagnosed with metabolic syndrome according to the Diabetes Foundation-2005 Metabolic Syndrome Diagnostic Criterium; they were 18-65 year old males (n=50) and females (n=50). Their level of knowledge about the supplements were measured according to their gender, age, educational status, and income level. A face-to-face questionnaire with 15 questions was applied.

**Results:** The majority of the patients were between the ages of 30-49 with 54 people. When the educational status of the patients was questioned, 77% were primary and secondary school graduates. The income level of the patients was mainly at the level of 6,000 ₺/month (64%). There was no significant difference between men and women in the definition of herbal supplements. Seventeen of male patients (34%) and 33 in females (66%) (p=0.001) were using herbal supplements. Seventeen of male patients (34%) knew that herbal supplements could have side effects and 32 in females (64%) (p=0.01). When the level of knowledge about side effects was compared between the age groups, there was no significant difference (p=0.45). The level of knowledge about the herbal supplements increases with education level (p=0.002).

**Conclusion:** In conclusion, the number of women using herbal supplements for losing weight and the knowledge level of women about these supplements are higher than men. The level of knowledge about the herbal supplements also increases with education level.

**Key words:** Metabolic syndrome, herbal supplements, losing weight

## Women's Preference of Contraceptive Methods According to Their Socio-demographic Characteristics

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**Introduction:** The aim of this study was to evaluate the affecting factors for contraceptive method usage among reproductive -aged women.

**Method:** This study consisted of 103 women who are aged between 18-48 years old. In a standardized questionnaire, their socio-demographic characteristics, obstetric characteristics and their currently used contraceptive method and experiences with it as well as their experiences with other contraceptive methods that were preferred previously in their life were recorded. The questionnaire was completed by a face-to-face interview.

**Results:** The participants had a mean age of 34.85 [standard deviation (SD)  $\pm 7.24$ ], 8.09 years of marriage duration (SD  $\pm 10.31$ ) and 1.7 children (SD  $\pm 1.2$ ). Of the respondents, 51.5% were housewives, 22.8% had a college-level jobs. Of the participants, 76.5% were using a contraception method. The most common method across all age groups was condom (n=34) followed by coitus interruptus (n=20). Age, education level, income, children, and occupation had no effect on the preferred method of contraception. The most common reason for choosing a contraceptive was comfortability by 29.4% while 18.8% of the participants were using their contraceptive method of choice because their husband wanted so. 9.8% of the respondents had an unwanted pregnancy under contraception (condom n=3, coitus interruptus n=2, intrauterine device n=3, oral contraceptives n=1, injections n=1). 23.9% of the women thought condom was the safest contraceptive method against pregnancy, the second most common answer was tubal ligation (22.5%).

**Conclusion:** The rate of using a contraceptive method was high among participants. Participants' demographic characteristics had no direct effect on the method of choice. Women had different opinions about the safest method of contraception against pregnancy. Having an unwanted pregnancy while under contraception was rather high. Patients should be educated on regarding different options for contraception.

**Key words:** Contraception, women, socio-demographic features

PP-27

## Investigating the Effectiveness of Kampala Trauma Score (KTS) in Comparison to Trauma and Injury Severity Score (TRISS) in Fall from Height Patients

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**Introduction:** Fall from a height (FFH) is one of the most common reasons for admission to the emergency department and an important public health problem for Turkey. The aims of this study are; to investigate the characteristics of fatalities and predictors of mortality in FFH patients and to test the effectiveness and applicability of 2 trauma scores for specifically FFH patients.

**Method:** This research was carried out retrospectively from the data of 81 patients. Demographic characteristics, comorbidities, laboratory test data, vital parameters, and physical examination data were recorded in the prepared forms. Kampala trauma score (KTS) and Trauma and Injury Severity Score (TRISS) were calculated for each patient. A Spearman's correlation was run to determine the relationship between KTS and TRISS of the patients.

**Results:** Twenty-six (32.1%) females and 55 (67.9%) males with a mean age of 28 (range, 1 to 88) were included in this study. Thirty eight (46.9%) patients fell from 1 meter (m) and less, 40 (49.4%) patients fell from 1.1 m-4 m, 2 (2.5%) patients fell from 4.1 m-9 m, and 1 (1.25%) patient fell a from height greater than 9 m. Almost 75% of falls occurred in the afternoon hours. 91.4% of the falls were accidental, 7.4% of the falls were work-related, and 1.2% of the falls were related to suicide. Seventy three (90.4%) patients sustained only one system injury, and 8 (9.6%) patients had multisystem injury. There was a strong positive correlation between KTS and TRISS ( $r=0.795$ ,  $p<0.001$ ).

**Conclusion:** KTS was found as effective as TRISS in predicting the mortality of FFH patients. FFH patients are in critical condition therefore a practical score such as KTS can be used instead of TRISS in the emergency departments.

**Key words:** Fall from height, KTS, TRISS

## Effect of Renal Damage on Prognosis in Patient with Acute Pancreatitis

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**Introduction:** Acute pancreatitis (AP) is an inflammatory process associated with a high complication rate and an increased risk of death. In this study, we compare the relationship between the severity of the disease and kidney damage to predict the prognosis in patients with AP.

**Method:** Patients over 18 who applied to the emergency department between 01.01.2019-31.12 2019 and were diagnosed with AP were included in the study. In our retrospective study, patients with chronic renal failure, pregnant women, those missing data, and cancer patients were excluded. The diagnosis of AP severity was classified according to the BISAP score. Acute kidney injury (AKI) was defined according to the AKIN criteria. The relationship between AP and kidney failure was investigated by comparing the BISAP and AKIN scores with the data we obtained.

**Results:** In our study, 127 patients were included, and the mean age was  $51.28 \pm 14.84$  years. 45.7% of the patients were male and 54.3% were female. Even Although there was no statistical difference when the AKIN score was compared with the hospitalization status in the intensive care unit, compared with the BISAP scoring was meaningful between the two groups. ( $p=0.138$ ,  $p<0.001$ ) AKI was present in 15.2% of the patients with high-risk BISAP scores. BISAP was found to be a high risk in 19.2% of patients with AKI ( $p=0.379$ ).

**Conclusion:** AKI is a frequent complication of severe acute pancreatitis and develops late during the disease, usually after the failure of other organs. AKI was present in 15.2% of the patients with high-risk BISAP scores. The development of AKI should not be ignored in patients with severe acute pancreatitis.

**Key words:** Acute pancreatitis, BISAP, AKIN, renal damage

PP-29

## Examining the Relationship Between Smoking and the Course of COVID-19

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**Introduction:** Our study aims to examine the course of the disease from the perspective of smokers/non-smokers and volunteers who have had coronavirus disease-19 (COVID-19) with our survey questions, to reveal data and to contribute to the literature.

**Method:** This study included 100 volunteers who had COVID-19. The volunteers included the 1, 2, 3, 4, 5, and 6<sup>th</sup> grades of the Bezmialem Vakıf University, Faculty of Medicine and the staff of Bezmialem Hospital. There are 19 questions in our survey conducted on the online platform. Our questionnaire included questions such as the symptoms of passing COVID-19, severity, and hospitalization history of smokers and non-smokers.

**Results:** Volunteers from different age groups over the age of 18 participated in this study. 66% women, 34% men participated. While 73% did not smoke, 27% did. Based on the data obtained from the questionnaire, there was no significant difference between smokers and non-smokers in terms of hospitalization, duration of COVID-19 symptoms, use of cortisone, oxygen blood thinners during treatment, and intensive care admission ( $p>0.05$ ). It was observed that people who smoked during COVID-19 had a milder experience of COVID-19 compared with the scores ( $p=0.007$ ).

**Conclusion:** More studies are needed to preserve the association between smoking and COVID-19. Parameters such as vaccination, age, and year of passing the disease also change the course of the disease. The link with this institution to smoking cannot be determined directly. According to this study, there was no relationship between smoking and the course of COVID-19. Volunteers who smoked during their illness reported that they had mild COVID-19 according to their own scores.

**Key words:** Smoking, COVID-19, symptom

PP-30

## Evaluation of the Effect of Breastfeeding on Sleep in 6-12-Month-old Infants

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**Introduction:** Infant sleep is affected by many variables. Breastfeeding could also be one of these and the lack of consensus about this relationship motivated us to investigate the association between infant sleep and breastfeeding.

**Method:** Data collecting questionnaire and Brief Infant Sleep Questionnaire were filled by the parents of infants between 6 to 12 months of age in the outpatient clinics of Bezmialem Vakıf University Hospital Pediatrics Department.

**Results:** Ninety two patients participated and were divided into 3 groups. Group 1 represented the infants, who were breastfed only until six months of age and fed with the combination of mother milk and complementary food after that (n=59); group 2 consisted of infants, who always took the combination (n=26). Infants, who took the combination in the first six months and then only complementary food (n=7) made group 3. The total duration of sleep at night didnot differ between the groups significantly ( $p=0.614$ ), median values being 570, 540, 540 minutes respectively. What the parents made, when their kids awoke at night, was significantly different between group 1 and 3 ( $p<0.001$ ). 81.4% of the parents in group 1 breastfed their babies and 71.4% of the parents in group 3 fed their babies with feeder. The start of bedtime routines in groups 1 and 2 also differed significantly ( $p=0.041$ ); 55.9% of infants in group 1 before 10 p.m., and 73.% of infants in group 2 after 10 p.m.

**Conclusion:** Taking only mother milk without complementary food or formula until six months of age is associated with an earlier start to bedtime routine. Also, the parents, who exclusively breastfed in the first six months tended to breastfeed their babies at night-awakenings more than the parents, who always fed their babies with combination.

**Key words:** Infant sleep, breastfeeding, formula, complementary food

PP-31

## Does Having a Sibling with a Cow's Milk Allergy Decrease the Consumption of Milk and Dairy Products?

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**Introduction:** The prevalence of cow's milk allergy (CMA) has been increasing in children. The current study evaluates if having a sibling with CMA affects milk and dairy product consumption and eating habits for the children who do not have CMA and if having a child with milk allergy causes anxiety in the family for their healthy kids.

**Method:** A telephone survey was conducted on the parents of the children who had been diagnosed with CMA were still on an elimination diet. Those whose diet has terminated, or those without a sibling or with a sibling that also had CMA were eliminated. The questionnaire was prepared for the healthy siblings.

**Results:** A totally 108 children were included. Fifty four of them were female (50%). The mean age was  $8\pm 5$  years. After the diagnosis of their siblings, 104 of the healthy kids (96.3%) continued to consume milk and dairy products, although their weekly consumption had significantly decreased ( $p=0.008$ ); and 4 (3.7%) were completely deprived. Ninety-three of the healthy siblings (86%) continued to consume milk-containing junk food. Furthermore, 38 of the families (35.2%) stated their concern about their healthy kids' transition period to supplementary food.

**Conclusion:** Although the siblings without CMA continued to consume milk and dairy products, they had a statistically significant decrease in the frequency of consumption. The high consumption of milk-containing junk food reduces the quality of their nutrition. Therefore, when a child is diagnosed with CM, monitorization of his healthy siblings for their nutrition, regular growth and development may be advised to prevent potential complications.

**Key words:** Cow's milk allergy, elimination diet, healthy siblings

PP-32

## The Effect of COVID-19 Pandemic on Glycemic Control and Follow-up Visits in Children with Diabetes Mellitus

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**Introduction:** Diabetes mellitus is a disease characterized by the deterioration of carbohydrate and lipid metabolism, which develops because of the absence or reduction of insulin's effect. The restrictions in the coronavirus disease-19 (COVID-19) pandemic are at a level to affect glycemic control in individuals with type 1 diabetes. In our study, it we contributed to the literature by analyzing the different characteristics of the patient population who applied to our center by detailed inquiry on the features we have compiled considering the literature.

**Method:** In this study, the files of children with type 1 diabetes who visited pediatric endocrinology outpatient clinics between March 2018 and March 2022 were reviewed retrospectively. Hospital visits, age, body mass index (BMI) standard deviations, and HbA1c levels of the children were recorded. Ketoacidosis and hypoglycemia attacks, the number of daily blood glucose measurements, and physical activity changes were investigated.

**Results:** When the data were analyzed, it was determined that 55 patients, 58.2% of whom were women, had a 34.5% COVID-19 transmission rate and a 61.8% COVID vaccination rate. HbA1c levels increased during the pandemic. The insulin dose per kilogram increased. It was determined that physical activity decreased in 63.6% of the patients and increased in 9.1%. There was a decrease in admissions to the endocrinology outpatient clinic. A slight decrease was observed in the BMI. It was observed that the number of hypoglycemic and the ketoacidosis attacks increased in the pandemic, but these changes were not statistically significant.

**Conclusion:** Although the eating habits of children showed minimal changes with the pandemic, their metabolic control went worse throughout the pandemic. This disturbance may be due to decreased physical activity and the lack of regular endocrinology and dietitian visits.

**Key words:** Type 1 diabetes, COVID-19, endocrinology visits, metabolic control

PP-33

## The Effect of Sleep Positions and Occupation on Shoulder Diseases

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**Introduction:** The shoulder joint causes a very critical action in people's lives, such as positioning the hand in spatial planes and is functionally at an extremely vital point. Humans spend one-third of their daily time sleeping and the other third doing their job. During sleep, the human body tends to rest and repair damage. Unlike other systems, the shoulder joint is the most exposed joint to pressure during sleeping and in daily life. Apart from trauma, occupational-related shoulder pain is a common reason people seek medical attention.

**Method:** Twenty four questions in the questionnaire we prepared were asked to 47 patients who applied to the hospital with the complaint of shoulder pain. After our survey, we conducted data analysis methods to investigate whether there was a link between sleeping positions, occupations, and shoulder pain.

**Results:** There is a significant relationship between the painful shoulders and dominant hands of the patients ( $p=0.018$ ). There was no relationship between the shoulders they lie on and the painful shoulder ( $p=0.251$ ) but in patients with impingement syndrome described pain on their shoulders on which they lie. In patients who shared a bed with a partner, there was no relationship between the side of the bed they slept on and the side on which they described pain ( $p=0.725$ ). A relationship was observed between patients who woke up at night due to their pain and those with morning stiffness ( $p=0.035$ ). There was no relationship between the working hours and the hours they described pain ( $p=0.067$ ), but the majority of our patients stated that they felt constant pain during the day.

**Conclusion:** Both sleep and occupational activities trigger shoulder pain, but larger studies should be done to understand the relationship in more detail.

**Key words:** Shoulder, pain, sleep, position, occupation

## Investigation of Gail and Tyrer-Cuzick Risk Models in Our Society in Determining Breast Cancer 5-Year Risk Levels in Women

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**Introduction:** Until date, many experimental and statistical models have been developed to calculate the lifetime risk of developing breast cancer. The most commonly used risk models are Gail and Tyrer-Cuzick. There is no correlation study in our society regarding these models and their effectiveness in cancer screening. This study aims to analyze the correlation between the Gail and Tyrer-Cuzick models and to identify the best model for screening in our society.

**Methods:** A total of 38 breast cancer patients who were diagnosed with breast cancer at our hospital were recruited, along with 38 healthy women as the control group. To systematically collect historical data, a detailed form containing all the information of the patients questioned in the Gail and Tyrer-Cuzick models was prepared. A retrospective study was performed to collect information. The 5-year and lifetime risk of breast cancer was evaluated using the Gail and Tyrer-Cuzick models.

**Results:** A diagnostic test were plotted for the Gail and Tyrer-Cuzick model to evaluate their predicted risk values for breast cancer diagnosis. The results of our study show that the Gail model had 68.4% sensitivity and 78.9% specificity with 76.47% positive prediction value, 71.43% negative prediction value and 73.6% accuracy. Tyrer-Cuzick model had 100% sensitivity, 57.8% specificity, 70.3% positive prediction value, 100% negative prediction value, and 86.8% accuracy.

**Conclusion:** Breast cancer risk calculators can provide valuable information that can be used to guide prevention, screening, and chemoprophylaxis strategies in women. Both the Gail model and Tyrer-Cuzick models can be used to evaluate breast cancer risk. The Gail model has relatively lower accuracy in evaluating breast cancer risk, and the Tyrer-Cuzick model has higher accuracy in evaluating breast cancer risk among Turkish women.

**Key words:** Breast cancer, Gail model, Tyrer-Cuzick model

PP-35

## Correlation of Biochemical Variables with Adenoma Size in Patients with Primary Hyperparathyroidism

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**Introduction:** Primary hyperparathyroidism is an endocrine disease characterized by inappropriate excess secretion of parathyroid hormone. In 80% of patients with primary hyperparathyroidism, the cause is solitary parathyroid adenoma. Primary hyperparathyroidism biochemically; characterized by high parathyroid hormone, high calcium levels, and is the most common cause of hypercalcemia in outpatient clinics. Surgery is the only definitive treatment method. Preoperative estimation of parathyroid adenoma size may facilitate decision-making on the extent of surgical exploration and may help minimize postoperative complications by allowing minimal exploration. The aim of our study was to reveal the relationship between the perioperative biochemical profile and adenoma size in patients operated for primary hyperparathyroidism.

**Method:** In the study, the medical records of 100 patients who underwent surgery for primary hyperparathyroidism due to parathyroid adenoma in the Bezmiâlem Vakıf University Hospital Clinic of General Surgery were reviewed retrospectively. The following variables were analyzed: preoperative serum calcium, parathormone and alkaline phosphatase, intraoperative parathormone, postoperative serum calcium and parathormone, calcium and parathormone decrease and maximum adenoma diameter. Bivariate correlations were calculated by the Spearman's correlation test at the 95% significance level.

**Results:** One hundred patients were included in the study. The median age of the patients was 55 years (range 14-82) and 81% were females. 34% of patients had musculoskeletal pain and 21% of patients had suffered from nephrolithiasis. The maximum adenoma diameter correlated moderate with preoperative parathormone ( $r=0.37$ ), preoperative calcium ( $r=0.3$ ), and preoperative alkaline phosphatase levels ( $r=0.31$ ). There was also a moderate correlation with pre-and postoperative calcium levels ( $r=0.41$ ) and with preoperative parathormone levels and preoperative alkaline phosphatase levels ( $r=0.35$ ).

**Conclusion:** We concluded that preoperative estimation of adenoma size according to biochemical variables is difficult as the maximum adenoma diameter is moderately correlated with calcium, alkaline phosphatase, and parathormone values.

**Key words:** Primary hyperparathyroidism, adenoma, parathormone, calcium, alkaline phosphatase

PP-36

## Investigation of the Effects of Nutritional Habits at Bezmialem Vakıf University Faculty of Medicine Students on Academic Achievement

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**Introduction:** The World Health Organization formulated its definition of health as: “Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.” One of the important factors to achieve this state of well-being is healthy nutrition. Therefore, in this study, we investigate the effect of nutritional habits on academic achievement in students at Bezmialem Vakıf University Faculty of Medicine.

**Method:** The survey will be performed online via the Google Forms platform. To determine the relationship between the variables in the statistical analysis based on previous studies, a sample size of  $n=70$  was determined. The questionnaire consists of questions prepared by us and questions derived from existing surveys. (Project EAT-II Survey for Young Adults, Health and Behaviour Survey). Percentage calculations and Fish-Freeman Halton t-tests and chi-square tests will be used in data analysis, and all statistical analyzes will be performed using IBM SPSS statistics.

**Results:** Seventy nine people participated in the study. It was found statistically significant that most of the students with a GPA of 3-4 (91.7%) and 4 (8.3%) focused on better when they went to the university by having breakfast ( $p<0.01$ ). The GPA of the students who consume high-calorie food or snacks at lunch (33.3%) shows a lower distribution than the GPA of the students who consume low-calorie and healthy food (60.2%) ( $p<0.01$ ). The GPA of the students who had a balanced and healthy diet during the exam period (91.7%) was found to be higher than those who had an unbalanced diet (8.3%) ( $p=0.033$ ).

**Conclusion:** Because of our study, showed that students' nutritional habits have a significant effect on their academic achievement, and it has been determined that the students who have balanced and healthy nutritional habits are more successful than those who do not. Studies with larger populations are needed to better elucidate the study.

**Key words:** Nutritional habitsand, academic achievement, grade point

PP-37

## Comparison of the B12 Levels of Breast Milk and Formula-based Infants Until the Period of Milk Childhood

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**Introduction:** Vitamin B12 deficiency often occurs in the diet of low animal food consumption, especially in the vegetarian diet that has become popular recently. The period of pregnancy and lactation have been explained, and with some mechanisms still being investigated, B12 vitamins are missing in babies. Vitamin B12 plays a critical role in underage milk children whose brain development has not yet been completed and myelination continues, leaving permanent neurodevelopmental damage to their deficiency. Therefore, it is essential to investigate and work on this issue.

**Method:** In our study, blood samples taken between these years will be used from patients between the ages of 0-2 (during the period of milk childhood) who applied to the General Pediatric Policies at Bezmiâlem Vakıf University Faculty of Medicine between 2019-2021. The blood samples were checked at B12 levels.

**Results:** Those who received breast milk for less than 6 months also called group 1 have a total of 82 babies. Those who have received breast milk for more than 6 months are also composed of 82 people. Both the groups had 41 girls and 41 boys. Statistical results show that group 2 B12 values are significantly higher than the group 1 B12 values ( $p < 0.001$ ). There was no statistically significant relationship between the B12 values in relation to gender ( $p = 0.52$ ).

**Conclusion:** The results of this study show that the B12 levels of babies who have taken breast milk longer, regardless of male or female babies, have recorded higher. Our results should be confirmed with further experimental and clinical studies.

**Key words:** Milk childhood, formula, vitamin of B12

# The Effect of Social Media on the Desire to Have Aesthetic Surgery

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**Introduction:** Aesthetic surgery takes an important place in the field of plastic and reconstructive surgery. Aesthetic surgery procedures are performed to make the body image look more desired. Social media is the platform used by more than half of the world's population, and the appearance of people on social media is important. This study evaluates whether there is a significant relationship between patients' social media usage and their desire to have plastic surgery and which gender and age range is affected more by social media.

**Method:** In this study, a survey consisting of 10 multiple-choice questions was administered to patients between the ages of 18 and 50 who applied to the Bezmi Alem Vakıf Hospital, a plastic surgery clinic. The questionnaire consisted of questions about demographics, preferred social media platforms, average daily screen time, do they think that people use Photoshop on social media, whether are they using Photoshop on their photos, and whether it is possible that social media impacted their decision to think about doing plastic surgery.

**Results:** A total of 59 patients participated and the most used social media platforms were Instagram and WhatsApp (91.5%). There was no significant relationship found between the use of social media and the desire to have aesthetic surgery ( $p>0.05$ ). There was a statistically significant relationship between the people who answered that social media impacted their decision to have aesthetic surgery and the people who Photoshop their photos on social media ( $p=0.005$ ).

**Conclusion:** According to this study, there is no significant relationship between the usage of social media and the desire to have aesthetic surgery.

**Key words:** Social media, plastic surgery, reconstructive surgery