BEZMİÂLEM science

5th ANNUAL
MEDICAL STUDENTS'
RESEARCH DAY

04 JUNE 2021

BEZMIALEM
VAKIF UNIVERSITY

5th ANNUAL MEDICAL STUDENTS' RESEARCH DAY

04 JUNE 2021

BEZMİÂLEM science

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Guest Editor

Meliha Meriç Koç

Bezmialem Vakif University Faculty of Medicine,
Department of Infectious Diseases and Clinical Microbiology

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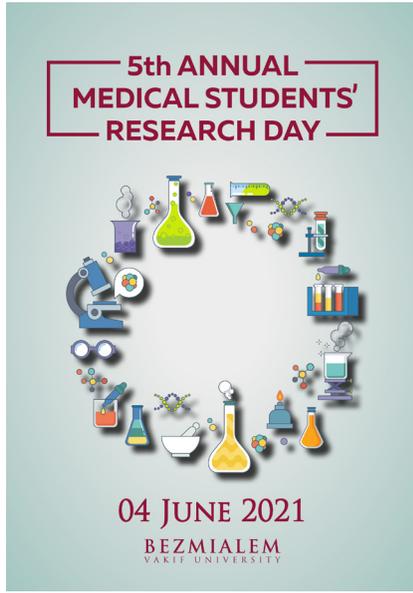
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Bezmialem Vakif University thanks everyone for their contribution and assistance in organizing this event

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PREFACE

Training as a physician requires attention not only to knowledge and patient care, but also to lifelong learning and scholarship. Scholarship is an important factor when considering the skills of a physician and the mission of Bezmialem Vakif University (BVU) is to train healthcare professionals and scientists through innovative education models by using modern science and technology in light of the values of our civilization; to conduct research that produce real results as products and services; to provide high quality and accessible healthcare services while improving the health level of our society.

Hence in 2014 Bezmialem Vakif University and Johns Hopkins University (JHU) agreed upon a curriculum development collaboration including the implementation of Scholarly Concentration Module of JHU. This serves as a potential model for translation to other medical curricula outside the United States, as well. The overall course goals and objectives are similar to the Johns Hopkins program and contains 6 modules.

Course Orientation and Module 1. In September of the first year of the program which includes actually the 4th grade of Bezmialem medical students, they have a required course orientation that provides an overview of the course objectives and process. Students are asked to begin to think about their scholarly interests. Students are also advised about early stages of research projects, including selecting a mentor, developing a question, and searching the literature.

Modules 2-4. Modules 2-4 continue in the 5th year of medical school. During this time, students are given guidance regarding their own independent project. These later modules focus on human subject protection and logistical issues related to the conduct of the project.

Modules 5-6. Modules 5-6 occur in the second year of the scholarly concentration module taking place during the 5th year of medical school, and most students have had an opportunity to conduct the bulk of the work for their project in the preceding summer. These modules are spent reviewing the progress and discussing how to present the project in an abstract, poster, or oral presentation format.

Medical Student Research Symposium. Each student presents their scholarly project at Medical Student Research Symposium (MSRS). During the day a judging process of posters, oral presentations, and podium presentations by course faculty takes place.

This Supplement of Bezmialem Science is dedicated to these presentations which were selected to be presented either orally or as posters by the faculty of the Scholarly concentration module.

Each project has been peer reviewed by faculty both from BVU and JHU and we are all proud to complete the fourth course with great success.

I would personally like to extend my sincere thanks to our collaborators in JHU and my faculty dedicated to scholarly concentration module here in BVU as well as the my students, scientists of the near future.

Rümeyza Kazancıoğlu, MD
Bezmialem Vakif University
Rector
Head of Scholarly Concentration Module

Programme

08.15-08.30: Introduction

08.30-09.15: The Importance of Impact In Research Projects

Prof. Dr. Feza KORKUSUZ, PhD

TÜBİTAK Deputy Vice President

Professor of Sports Medicine Hacettepe University

09.15-10.05: Podium Oral Presentations I

10.05-10.15: Coffee Break

10.15-11.05: Podium Oral Presentations II

11.05-11.15: Coffee Break

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13.15-14.15: Poster Presentations

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Burak Mert BEKTAŞ
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Süleyman Talha Özden
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Zuhal Uzun
Retrospective Investigation of Histological Compatibility between Colposcopically Directed Cervical Biopsy and Conization Material

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

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

Ulaş Can Arıkanoğlu
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Elif Nur Orkan
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Barış Karasu
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Evaluation of Biochemical Parameters and Imaging Methods in the Management of Patients with Renal Colic

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Poster Presentations

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Guest Editor

Meliha Meriç Koç

Bezmialem Vakif University Faculty of Medicine,
Department of Infectious Diseases and Clinical Microbiology

OP-1

Investigation of Factors Affecting Daily Life Activities in Geriatric Patients

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Introduction: The world is ageing and people are living longer with their comorbid diseases which cause a decrease in functional capacity. In this study, we aimed to find out how much the functional capacities of geriatric patients were affected by specific diseases through an age classification.

Method: Age, gender, education year, number of drugs used, comorbidities of hypertension, coronary artery disease (CAD), chronic obstructive lung disease (COPD), cerebrovascular disease, chronic heart disease, peripheric vascular disease (PVDs), dementia, Parkinson's disease and osteoarthritis (OA), and functional tests were recorded. Functional tests based on the Barthel Index for Activities of Daily Living and The Lawton Instrumental Activities of Daily Living were used. The analysis was made according to the functional dependence levels and comorbid diseases of the patients.

Results: The study included 768 outpatients who were admitted to one geriatric outpatient clinic in Turkey between January 2019 and September 2020. The mean age was 79 ± 7.61 years (13.9% 60-70, 36% 70-80, 43% 80-90, 7.1% 90 and older, female 69.30%) and the mean frequency of comorbidities was 2.09 ± 1.33. The Barthel index was evaluated through diseases, the results of CAD, COPD and PVDs ($p>0.05$) were insignificant, and the Lawton index, was evaluated by diseases, the results of CAD, COPD, PVDs and OA ($p<0.01$) were insignificant and other comorbidities were significant ($p<0.01$) for both indexes. Logistic regression was performed for diseases that caused a decrease in scores by adjusting for age, comorbidities, gender and education level. Logistic regressions of Barthel index and Lawton index found the following to be a significant risk of full dependency: dementia [odds ratio (OR): 12.9; 95% confidence interval (CI) -18.9 ± -6.9)] (OR: -5.27; 95% CI -7.08 ± -3.46) ($p<0.05$), Parkinson's disease (OR: -23.85; 95% CI -31.32 ± -16.38) (OR: -3.77; 95% CI -6.02 ± -1.52) ($p<0.05$).

Conclusion: Urinary incontinence is a problem that starts before the age of 65 years, and neurodegenerative diseases cause a diffuse decrease in daily living activities. Further investigations should be done in line with these results.

Key words: Disability, comorbidities, age classification

OP-2

The Potential Role of Alternative Transcript Isoforms in Developmental Gene Expressions in Ants

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Introduction: Alternative transcript isoforms can differ in their translated and/or untranslated regions (UTRs), which can lead to differences in proteins or their expression. Alternative UTRs can affect a gene's function through their effects on the subcellular localization and the timing of their translation. In ants, the highly conserved Homeobox containing transcription factors *Ultrabithorax* (*Ubx*) and abdominal-A (abd-A) has acquired novel spatiotemporal expression patterns and roles, in addition to their conserved expression and function. The highly specific novel subcellular localizations of *Ubx* and abdA transcripts have been shown to be involved in early embryonic patterning and the developmental integration of cellular endosymbionts into their hosts. These data suggest the possibility of structural differences in the transcripts of different developmental-stage specific expressions of these genes. This project aims to determine whether alternative transcript dependent mechanisms have played any role in the evolution of novel gene expressions and functions of *Ubx* and abdA.

Method: *Camponotus floridanus* embryos were collected and separated into two developmental stage specific groups (stage 1 and 12; n=10 per stage). Total RNA was obtained using the TRIzol method for each stage. cDNA libraries were synthesized using reverse transcriptase and Rapid Amplification of cDNA Ends was conducted to acquire Ubx and abdA transcripts. The obtained transcripts were DNA sequenced and were aligned to the annotated gene sequences using Muscle algorithm.

Results: The protein-coding sequences that we obtained from developmental stage-specific transcripts of Ubx and abd-A were discovered to be near identical. The discovered minor differences were interpreted to be due to Sanger sequencing.

Conclusion: The results suggest that the origin of the novel expression is a result of changes in either the untranslated regions or the cis-regulatory sequences of these genes. Future studies will unravel the origin of novel functional changes in these genes.

Key words: *Hox* genes, alternative transcript isoforms, embryonic development

OP-3

Investigation of Cytotoxic, Genotoxic and Apoptotic Effects of Thymoquinone-oxime on Glioma Cells

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Introduction: Glioma is one of the malignant tumors of the brain. Although many studies have been carried out so far to treat glioma and to increase the survival time, an effective method has not been found yet, and treatment is difficult. It is known that Thymoquinone (TQ), an important bioactive component of black seed (*Nigella sativa*) oil, has antioxidant, anti-inflammatory, and antineoplastic effects. The lipophilic structure and low molecular weight of TQ passes through the blood-brain barrier. Although it showed toxicity against cancer cells in *in vitro* studies, the expected effect was not seen *in vivo* models. Therefore, it is the aim of our project to examine the cytotoxic, genotoxic, and apoptotic effects of TQ-oxime (TQ-ox), which will be obtained by chemical synthesis, on gliomas in vitro.

Method: In this study, we used mouse glioma cell line: GL261. We synthesized TQ-ox from TQ. Then the structure was confirmed with nuclear magnetic resonance. After 24h incubation, we determined cytotoxicity and glutathione (GSH) by different luminometric methods, iROS, and iCa^{2+} by different fluorometric methods, mitochondrial membrane potential (MMP) by flow cytometry, DNA damage by comet assay, apoptosis by fluorescence microscopy. SPSS 25 was used for statistical analysis.

Results: When TQ and TQ-ox were evaluated together, the cytotoxic, genotoxic, and apoptotic effects of TQ-ox were found to be significantly ($p<0.001$) higher than TQ. While cytotoxicity, DNA damage, apoptosis, iCa^{2+}, and iROS levels increased significantly ($p<0.001$) in both TQ-ox and TQ, GSH and MMP levels decreased significantly ($p<0.001$) with increasing dose.

Conclusion: According to the results, we propose that TQ-ox has cytotoxic, genotoxic, and apoptotic effects on glioma in a dose-dependent manner, and therefore, TQ-ox can be one of the options that can be used for glial cancer treatment.

Key words: Glioma, thymoquinone, thymoquinone-oxime, cytotoxicity

OP-4

Investigation of *in vitro* Wound Healing Properties of Metformin and Coenzyme Q10

Ayşe Sena Altun[1], Burak Mert Bektaş[1], Ahmet Sadık Gülgeç[2], Eray Metin Güler[3,4,5]

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Introduction: Previous studies have shown that Metformin and Coenzyme Q10 (CoQ10) increase fibroblast cell proliferation, collagen synthesis, and epithelization in wound healing process. This study aimed to observe wound healing, antioxidant and anti-inflammatory activities of Metformin and CoQ10 on cultured human dermal fibroblasts and keratinocytes.

Method: Single and combined doses of Metformin and CoQ10 were examined separately in dermal fibroblasts and keratinocytes. Initially, anti-genotoxicity, anti-apoptotic effects, intracellular ROS, intracellular calcium, and glutathione levels were investigated. Afterward, the wound model was created using the CytoSelect™ 24-Well Wound Healing Assay plate and apparatus. Metformin and CoQ10 were applied to the model after 24 hours of incubation. The migration/proliferation of cells and wound closure areas were recorded at different times, and the dose/response ratio was evaluated by calculating the wound area. The supernatants of the 24-plate wound model were collected at 24 hours, and growth factors [(epidermal growth factor (EGF), vascular endothelial growth factor (VEGF)] and inflammatory [interleukin (IL)-1β, IL6, TNFα)] biomarkers were measured.

Results: After the 24-hour incubation of Metformin and Coenzyme Q10 in single and combined doses in dermal fibroblasts and keratinocytes, the maximum proliferating doses were found to be 100 µM for both substances. In all groups, the inflammatory biomarkers including IL1β, IL6, and TNFα decreased by the increasing doses of Metformin and CoQ10, while the levels of EGF and VEGF increased significantly ($p<0.001$). The wound areas were reduced considerably by the increasing doses of Metformin and CoQ10 in both single and combined cell groups of fibroblasts ($p<0.001$) and keratinocytes ($p<0.001$).

Conclusion: Increasing single and combined doses of Metformin and CoQ10 were found to be effective in reducing inflammation and increasing proliferation in *in vitro* wound model. Further formulations and animal studies should be conducted to obtain better knowledge.

Key words: Metformin, cell culture, Coenzyme Q10, wound healing

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OP-5

The Investigation of the Effectiveness of *Urtica Dioica* in the Streptozotocin-Induced Neurodegeneration Model

Ebru Çiftkaya[1], Fatemeh Bahadori[2], Şule Terzioğlu-Uşak[3], Birsen Elibol[3]

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[2]Bezmialem Vakif University Faculty of Pharmacy, Department of Pharmaceutical Pharmacology, İstanbul, Turkey
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Introduction: Nowadays, researches of phytotherapeutics for preventing the Alzheimer's disease (AD)-related neuronal damage have gained momentum. *Urtica dioica* (UD) is one of these phytotherapeutics because of its memory-improving effect. Therefore, we aimed to investigate the effects of UD on the hippocampus of streptozotocin (STZ) induced-rats.

Method: The rats were divided into the control, sham control, STZ (3 mg/kg, i.c.v) and STZ-UD [STZ injection and oral administration of UD (50 mg/kg/day)] groups. Morris Water Maze (MWM) and Passive Avoidance Task were applied for cognitive functions. After behavioral experiments, the concentrations of proteins related to AD pathology (PSEN, pTau, Amyloid beta, BACE, reelin) and the functioning of hippocampal tissue (nNOS, brevican, CAMKII, prealbumin, NMDR) were examined in hippocampus.

Results: In the MWM training, UD treatment attenuated STZ-induced learning deficiencies (p<0.05). On the MWM probe trial and the passive avoidance task which measured the memory capacity, no significant differences were observed among the groups. According to Nissl staining results, STZ injection decreased the number of neurons and UD treatment increased the viable neurons in hippocampus. At the molecular analysis, there was no change in the amount of PSEN both due to STZ injection and UD treatment. Compared to the control groups, STZ injection increased the amount of BACE and nNOS (p<0.005) which were ameliorated by the UD treatment (p<0.05). Due to STZ injection, the level of prealbumin which could "sequester" Aβ to prevent neuronal damage decreased (p=0.030). In addition, STZ injection disrupted the normal functioning of hippocampus by decreasing the level of CAMKII and NMDR which were responsible for learning and memory signaling mechanisms (p<0.001). The treatment effect of UD was especially observed in these proteins and the level of cytoskeletal protein Brevican.

Conclusion: UD has a neuroprotective role in the functioning of the hippocampal neurons to recover the neuropathology of AD by restoring neuron viability.

Key words: Alzheimer's disease, streptozotocin, urtica dioica, neuroprotective, rat

OP-6

Research of Chronotype and Sleep Quality in Infertile Population and Comparison with Non-infertile Population

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Introduction: In humans, the sleep-wake cycle, body temperature, hormone levels, affect and some cognitive functions depend on a daily rhythm called circadian rhythm. This circadian rhythm determines a person's chronotype. Chronotype refers to the period of the day when the person is physically and cognitively active and is divided into three types: morning, evening, intermediate type. There is not enough data about the effect of chronotypes in the infertile population and whether they affect the treatment.

Method: The MEQ morningness-eveningness questionnaire was used to determine chronotypes. Pittsburgh Sleep Quality Index which provides a quantitive measurement of sleep quality, was used to define good and bad sleep. One hundred three infertile and 103 fertile patients who participated in this study were divided into groups according to their MEQ and PSQI scores, and they were compared in terms of disease severity based on the clinical data we have collected.

Results: Two hundred twenty seven patients that met the inclusion criteria were enrolled for the study. The mean PSQI score of infertile women and healthy fertile women were, 5.00 ± 2.11, 4.00 ± 1.54 respectively. There are a significant differences in the mean PSQI score of women between groups ($p<0.001$). In terms of subcategories PSQI score, sleep latency, sleep duration, sleep efficiency scores were significantly different between the groups ($p<0.05$), others were insignificant. The mean MEQ score of infertile women and healthy fertile women were, 50.00 ± 9.17, 56.00 ± 6.87 respectively. There are a significant differences in the mean MEQ scores of women between groups ($p<0.001$).

Conclusion: The results showed that poor sleep quality with a high PSQI score and an evening-type with a low MEQ score are associated with a high prevalence of infertility. The results revealed that there is a potentiol connection between these two conditions and infertility. More extensive research should be done to confirm these results and to demonstrate the impact of chronotype and sleep quality on fertility success.

Key words: Infertile, chronotype, sleep quality

OP-7

The Effect of Augmented Reality Technology on Preoperative Anxiety in Children and Parents

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Introduction: The surgical operations may cause serious anxiety in children, leading to physiological and psychological problems. Some techniques are used to reduce pre-surgical anxiety. This study aims to analyze the effect of pre-surgical use of augmented reality technology in children on child and parental anxiety.

Method: Thirty-nine children between the ages of 4 and 11 years, who would undergo a surgery, and their parents were included in this study. Participants were divided into 2 groups: a study group of 18 children and the control group of 21 children. The study group did painting and saw their pictures in the form of augmented reality while the control group did nothing. Afterwards, we assessed the anxiety levels of children through Modified Yale Preoperative Anxiety Scale (mYPAS), and of parents through the State Trait Anxiety Inventory (STAI). Also, saliva samples were taken before and 20-35 minutes after the application in the study group and every 20-35 minutes in the control group.

Results: It was observed that the anxiety level (Total mYPAS score) of children in the control group was significantly higher (p=0.01). The "vocalization" and "emotional expression" categories of the mYPAS were found to be significantly higher in the control group. Although the state score indicating the level of anxiety in the STAI was lower in the study group than in the control group, no significant difference was observed (p>0.05). While there was a significant decrease between the 1st and 2nd salivary cortisol values in the study group (p=0.01), there was no significant decrease in the control group.

Conclusion: The fact that, in the study group, the stress level was found to be significantly less with the mYPAS and that the salivary cortisol level significantly decreased showed that the use of augmented reality technology could reduce children's anxiety preoperatively.

Key words: Augmented reality, anxiety, salivary cortisol, child surgery

OP-8

The Importance of Postpartum Kleihauer-Betke Test in Low Risk Rh-Incompatible Pregnant Population

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Introduction: Prevalence of Rh disease is estimated to be 276 per 100,000 live births, which is significant considering its relationship with conditions like fetal anemia, hydrops fetalis, fetal death and recurrent fetal demises in future pregnancies. In order to prevent these, anti-D immunoglobulin should be given after inciting events, in a dose sufficient. In Turkey and some other countries, anti-D dose is given on "one shot fits for all" principle. Here, we challenge the conventional wisdom and evaluate the amount of fetomaternal hemorrhage (FMH) and adjusted the dose of anti-D accordingly.

Method: In our study, Rh incompatible women who gave birth between October 2020 and March 2021 were included. FMH was determined by the Kleihauer-Betke test in the blood sample taken from the mothers after delivery. Blood smears were fixed with ethyl alcohol and incubated in citric acid buffer solution. In acid medium, HbF becomes resistant to elution, while other types are removed from erythrocytes. The smears are then taken under a microscope to examine the percentage of cells containing fetal hemoglobin. We used Oski-Naiman method to count fetal cells present, then estimated FMH using Mollison's formula. Clinical data were available at hospital's digital system.

Results: Seventy patients got tested during study period. Twenty-five (39.6%) of cases had more than 4 mL of FMH. Among them, one (1.6%) case was found to have more than 30 mL of FMH, and was given an additional dose. This case had no obstetrical risk factor such as antepartum bleeding, preeclampsia, or manual removal of placenta. The rate of smoking was significantly higher in cases with more than 4 mL of FMH (p=0.001). There were no other variables differed significantly in women having more than 4 mL of FMH.

Conclusion: FMH requiring more than 300 mcg of anti-D is significantly high in low-risk pregnant women in Turkey. Implementation of quantitative FMH testing with Kleihauer-Betke or flow cytometry test is necessary.

Key words: Fetomaternal hemorrhage, Rh incompatibility

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OP-9

Oxidative Stress and Neural Damage Parameters in Parkinson's Disease

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Introduction: Parkinson's disease (PD) is a progressive neurodegenerative disorder characterized by motor symptoms and loss of dopaminergic neurons in the substantia nigra pars compacta (SNpc) and accumulation of alpha synuclein (αSyn). There is no diagnostic test for PD, so the diagnostic criteria of PD are highly dependent on the typical motor symptoms which manifest long after the beginning of the pathology in SNpc. This research aims to study biochemical parameters such as αSyn and free radicals that might be helpful in the early diagnosis of PD and thus, to make preventive treatment possible.

Method: Sixty-two patients with PD and 62 healthy individuals with similar ages and genders were enrolled in the study. Blood samples were collected from participants and the levels of plasma αSyn were measured using ELISA. Total antioxidant status and total oxidant status were measured using TRAP assay. Iron (Fe), high density lipoprotein, low density lipoprotein, and triglyceride levels were measured with routine biochemical methods. The levels of the parameters were compared between patients and healthy individuals. The results were also compared within the experimental group in terms of the duration of the disease, treatment methods, and Hoehn-Yahr scale.

Results: The plasma levels of αSyn oligomer in patients were significantly higher than in healthy individuals ($p<0.001$). Plasma Fe levels were significantly lower in the experimental group ($p<0.05$). A positive correlation between the duration of the PD and plasma αSyn, and LDL levels was found in the experimental group ($p<0.05$).

Conclusion: Plasma αSyn and Fe levels might be helpful in the early diagnosis of PD. αSyn and LDL may illustrate more severe prognosis of the disease.

Key words: Early diagnosis, Parkinson's disease, a-synuclein, oxidative stress

OP-10

Ideal Unclamping Order at Carotid Endarterectomy Procedures: *Ex Vivo* Study

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Introduction: Higher than 70% stenosis of the carotid artery poses a significant risk for stroke. Carotid endarterectomy (CEA) is a standard procedure for carotid artery stenosis. However, it carries a high risk for mortality and morbidity. The risk of perioperative embolism has been shown to be 1-3%. The unclamping procedure is one of the most critical stages. Different authorities use different sequences. After all, there is no consensus. This study aims to indicate the ideal order of unclamping the carotid arteries to prevent a cerebrovascular accident, to emphasize this matter, and to be a reference to this desideratum.

Method: In this study, 5 Bovine aortic bifurcations, which represented common carotid artery (CCA), internal carotid artery (ICA) and external carotid artery (ECA), have been prepared. Aorta and iliac artery pieces were carefully removed and prepared upon special request from animals slaughtered for consumption. Collateral branches on the arteries were ligated with surgical silk ties. CCA has been tied to the pump via a transparent medical grade PVC tube. ICA and ECA were tied to the lip of the balloons with T infusion connectors. Fifteen beads with a diameter of 2 mm representing the remnant tissue were taken into the system. All arteries were clamped with vascular clamps. Seven combinations, including one textbook combination, were used, and unclamping alternatives were examined ten times for each combination. The same beads were used throughout the entire experiment, and it was ensured that all 15 beads were present each time. 10 seconds after unclamping, the number of beads was recorded. A total of 3 vessels were used due to deformation for this procedure.

Results: The number of beads in the ICA median value was 4. The number of beads distributed in ICA had a statistically significant difference between each combination (p<0.001). The statistically significant difference occurred between 1st and 2nd combinations (p<0.001), 1st and 4th (p=0.001), 1st and 7th (p<0.001), 2nd and 3rd (p<0.001), 2nd and 5th (p=0.025), 3rd and 4th (p=0.008), 3rd and 7th (p=0.002). After getting the post hoc test results, it was found out that the best combination among the combinations formed was the 2nd combination which had the lowest median value 3.

Conclusion: Considering the statistical data obtained, a significant difference has been demonstrated among combinations. The combination with the CCA-ECA-ICA unclamping sequence has preferable results in terms of remnant tissues leading to ICA and causing a potential stroke. According to the result, the CCA-ECA-ICA unclamping sequence would be recommended during CEA procedures.

Key words: Carotid endarterectomy, embolism, stroke, clamping

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5th ANNUAL MEDICAL STUDENTS' RESEARCH DAY

04 JUNE 2021

SHORT ORAL PRESENTATIONS

SOP-1

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

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

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

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

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

Key words: HbA1c, coronary artery disease, diabetes

SOP-2

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

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

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

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

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

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

SOP-3

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

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

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

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

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

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

SOP-4

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

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

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

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

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

Key words: Colposcopy, conization, abnormal smear, compatibility

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SOP-5

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

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

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

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

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

Key words: Forensic report, emergency, responsibility

SOP-6

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

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

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

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

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

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

SOP-7

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

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

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

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

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

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

SOP-8

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

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

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

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

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

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

SOP-9

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

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

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

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

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

Key words: Oral anticoagulant therapy, bleeding, drug adherence

SOP-10

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

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

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

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

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

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

SOP-11

Increased Osteoporosis Risk and Risk Factors in Parkinson's Patients

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

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

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

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

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

SOP-12

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

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

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

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

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

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

SOP-13

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

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

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

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

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

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

SOP-14

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

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

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

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

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

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

SOP-15

What Inflammasomes Tell Us About Multiple Sclerosis

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

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

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

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

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

SOP-16

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

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

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

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

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

Key words: Renal colic, creatinine, urinary stone

SOP-17

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

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

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

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

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

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

SOP-18

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

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

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

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

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

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

SOP-19

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

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

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

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

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

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

SOP-20

Assessment of QTc Dispersion in Children with Familial Mediterranean Fever

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

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

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

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

Key words: Familial Mediterranean Fever, QTc dispersion

SOP-21

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

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

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

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

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

Key words: Vaccine opposition, education level

SOP-22

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

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

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

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

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

Key words: Zinc, copper, reference range

SOP-23

Evaluation of Hair Loss After COVID-19

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

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

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

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

Key words: COVID-19, hair loss

SOP-24

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

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

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

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

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

Key words: IBS, nutrition, defecation, fiber

5th ANNUAL MEDICAL STUDENTS' RESEARCH DAY

04 JUNE 2021

POSTER PRESENTATIONS

Guest Editor

Meliha Meriç Koç

Bezmialem Vakif University Faculty of Medicine,
Department of Infectious Diseases and Clinical Microbiology

PP-1

Age Determination by Evaluation of Costochondral Joint and Sternum on CT

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Introduction: Skeletal age can be used for diagnosis and treatment in the medicine. The most common method is wrist radiography. However, completed wrist bone ossification makes age determination difficult especially in cases over the age of 18 years. The aim of this study is to evaluate whether the fusion and calcification degrees between the sternum segments and costochondral joint calcifications have a value in the determination of age using thorax computed tomography (CT) in individuals over the age of 30 years.

Method: From January 2019 to January 2020, patients who underwent thorax CT in our center were included in this study. Age groups were determined as 30-40, 40-50, 50-60, 60-70, and 70-80 and radiological examination of 30 patients from each group was performed. The fusion degree of the manubriosternal and xifoidosternal joints were evaluated as no, partial or complete. Calcification degree of costacondral joints were numbered as 1-4. Additionally, central costochondral joint calcification was evaluated. Patients with calcium metabolism disorders, history of sternotomy and fractures were excluded from this study.

Results: The images were analyzed in the sagittal plane using Picture Archiving and Communication System. The mean age was 54.23±14.03 years. There was a statistically significant relationship between manubriosternal joint fusion and age groups (r=0.221, p=0.007) and between xifoidosternal joint fusion and age groups (r=0.427, p<0.001). There was a statistically significant relationship between age groups and costochondral joint calcification degrees (r=0.485, p<0.001). There was a statistically significant relationship between age groups and central costochondral joint calcification (p<0.001).

Conclusion: Fusion analysis of the manubriosternal and xifoidosternal joints, calcification analysis of the costochondral joint and evaluation of central costochondral calcification are inexpensive, reliable and non-invasive methods that can be used for age determination in people over the age of 30 years.

Key words: Sternum, age estimation, thorax CT, fusion, calcification

PP-2

Survey for the Determination of Types of Screen Exposure and Duration in Children Between the Ages of 0 and 3 Years

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Introduction: In recent years, the inclusion of children in the computer and internet environment has increased with the increasing variety of electronic media devices. It is important to support the development of children in the process of adapting to the virtual world Screen exposure in children can cause many developmental problems as inversely with age. 2013 guidelines of the American Academy of Pediatrics; The limitation is that children under the age of two do not spend any time in the electronic environment, and children over the age of two spend less than two hours a day. In this study, we aimed to determine the presence, duration and factors affecting screen exposure in children under 3 years of age.

Method: The working group consists of 200 parents with children of 0-3 years who do not have any health problems applied to Bezmialem Vakif University Pediatric Outpatient Clinic. Parents were applied a structured questionnaire asking epidemiological features and screen exposure of their children. Data which was obtained in this study were analyzed with SPSS 21 program.

Results: Of the parents participating in our survey study, 93% are women, 7% are men. In 72.5% of the participating families, only the father was working, 25.9% both mother and father were working, 1.6% did not work parents. 72.4% of the mothers were housewives and 27.6% were working mothers. 55.4% of children were male and 44.6% were girl. Children with no screen exposure was 8.9%, 62.8% of them were with rare of screen exposure, screen exposure frequent was 21.5%, screen exposure very frequent was 6.8%. There was no significant relationship between mother's age, child's gender, family model, mother's employment status, income level and presence of screen exposure. There was a significant relationship between the definition of the child as having a difficult temperament and the presence of screen exposure (p=0.003).

Conclusion: Most of the mothers who were exposed to the screen described their children as having a difficult temperament. This study showed us that we need to tell mothers more about the risks of screen exposure. it seems necessary to support and educate parents on parenting skills and coping skills.

Key words: Childre, exposure, screen

The Effect of Medical Developments on the Patient-Physician Relationship from past to Today

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Introduction: The duty of a physician should not be limited to provide the right treatment for the patient. The physician also has other duties such as comforting, informing and understanding the patient. Today, the importance of communication, which is one of the most important factors in the physician-patient relationship, has decreased.

Method: Patient satisfaction questionnaire was applied to a total of 173 people based on a scale developed to evaluate the non-technical side of service satisfaction in health institutions. They were scored between 0 and 4 according to the Likert scale; 0 being: I do not agree, 1: I partially agree, 2: I agree, 3: I strongly agree, 4: I completely agree.

Results: The questionnaire consisted of 43 questions about the patients' satisfaction on the outpatient clinic, hospitalization conditions, hospital staff, patients' rights, and cafeteria services. The reliability of scale was examined by Cronbach alpha, theta, and omega reliability coefficients ($\alpha=0.9682$, $\theta=0.9709$ and $\Omega=0.9841$) and the results of this scale was found to be highly significant. The validity of the scale was examined in terms of constructing validity. The scale was accepted as valid ($F=215.57$, sd1=1, sd2=9395, $p<0.0001$).
Percentages of the fully satisfied patients (completely agree, 4 points):
Polyclinic satisfaction: 78%
Hospital service satisfaction: 73%
Other bureaucratic procedures: 87%
Hospital Staff evaluation: 83%
Patient rights: 90%
Cafeteria services: 74%
Hospital physical evaluation: 82%
Overall rating: 86%

Conclusion: As a result of the research, patients stated that they were generally satisfied with the hospital services. Having a short examination period started to be regarded as normal over time. Errors in the health system have been minimized with the extraordinary efforts of doctors.

Key words: Patient-physician relationship, patient satisfaction

PP-4

Perceptions of Postmenopausal Symptoms and Treatment Options Among Middle-Aged Women

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Introduction: Menopause is the cessation of menstruation owing to the depletion of ovarian function. Vasomotor symptoms, hot flushes and some other symptoms are associated with the postmenopausal period. Hormone therapy (HT) is the most effective treatment option. After the Women's Health Initiative study, there has been some confusion about utilizing HT for alleviating menopause symptoms. Many women have opted for other non-hormonal treatments. However, the effects of these other treatments are not as promising as those of HT. The aim of this study is to investigate the perception of postmenopausal symptoms and treatment options among middle-aged Turkish women.

Method: The questionnaire was created by taking the "Perceptions of Postmenopausal Symptoms and Treatment Options among Middle-Aged Korean Women" study as an example. The study enrolled 210 Turkish women aged 45-60 years. The women were administered a structured questionnaire composing of 21 questions.

Results: With regard to the first questionnaire category, only 5.7% of the participants recognized menopause as a disease. For obtaining information about menopause, a majority of participants (57.14%) depended on mass media. Only 10.5% of the participants wanted to be administered HT for menopausal symptom treatment. A very low proportion of participants had positive views about HT (12.4%). The most common reasons for having negative views about HT were its adverse reactions (51.4%) and concerns about developing cancer (26.7%).

Conclusion: A very low proportion of participants recognized menopause as a disease and had positive views about HT, possibly because of incorrect information obtained from the mass media. Many women are not aware that there are definite contraindications and indications for appropriate HT usage. There is a need to improve public awareness about the benefits of HT and measures should be taken to remove incorrect information from the mass media.

Key words: Hormone therapy, menopause, postmenopausal symptoms

PP-5

Analyzing the Relationship Between Brain Magnetic Resonance Imaging Findings and Clinical Findings in Children with Cerebral Palsy

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Introduction: Cerebral palsy (CP) is a non-progressive neurodevelopmental disorder that occurs in the fetal brain, causing loss of motor function, movement and posture. The definitive biological markers may not be identified in the diagnosis of CP. Magnetic resonance imaging (MRI) may relatively provide information about the nature and timing of brain lesions. The aim of this study was to evaluate the association between cranial MRI findings and clinical comorbidities of CP.

Method: This study was carried out retrospectively in Bezmialem Vakif University Medical Faculty Hospital Pediatric Neurology Outpatient Clinic. Two hundred-two patients who were newly diagnosed or followed up between January 2017 and August 2020 were included. The demographic information and MRI results of the patients were recorded in detail.

Results: Cranial MRI abnormalities were detected in 91.5% of the patients. According to the data obtained, the most common clinical finding was determined as epilepsy (77.2%) and it was observed that epilepsy frequently accompanied corpus callosum atrophy (p=0.036). We found that mental retardation, speech disorders and gait disorders were associated with focal infarction and a significant correlation was found between them (p=0.041, p=0.008, p=0.014). It was learned that clinical findings such as behavioral disorders, learning difficulties and attention deficit were associated with white matter damage (p=0.005). We found a significant correlation between nutritional disorders and cortical atrophy (p=0.006). Except for nutritional disorders, the association of stereotypic movements with cortical atrophy was remarkable (p=0.034).

Conclusion: It has been found that many of the clinical findings seen in CP are significantly related to the damaged area of the brain. The development of the associated symptoms may be stopped or prevented by early intervention.

Key words: Cerebral palsy, magnetic resonance imaging, clinical findings

PP-6

Self-efficacy Perceptions of Professional Competencies of 5th and 6th Grade Students in Bezmialem Vakif University Faculty of Medicine During the COVID-19 Outbreak Process

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Introduction: In clinics, the perception of self-efficacy is emphasized as an important indicator of students' academic success and career planning. In the 2020-2021 academic period, internship practices were suspended for a while because of the Coronavirus disease-19 pandemic. For this reason, it was considered worth investigating, especially the measurement of self-efficacy perceptions related to the professional competence of fifth and sixth grade students.

Method: "The Importance and Self-efficacy Perceptions of Physician Candidates regarding Occupational General Competencies Scale" was developed and used by Başusta and Elçin in 2014. In this study, it was prepared and applied through Google Forms. The information required to communicate with students was provided by the permission of the dean's office. Descriptive statistics of the data were indicated as average n and %. All statistical analyses were analyzed and reported at 95% confidence level at alpha =0.05 significance level in SPSS 21.0 program.

Results: Seventy-six fifth-graders and 92 sixth-graders completed the study, with a participation rate of 84%. When scale results were evaluated on a class basis, there was no statistically significant difference in professional importance and self-efficacy sub-scores ($p>0.05$). Compared to the maximum scores, the self-efficacy level was both intermediate in the fifth and sixth grades. On the basis of gender, there was a statistically significant difference in importance ($p<0.05$). Women gave more importance points than men. The self-efficacy scores given by women and men were close with no significant difference ($p>0.05$). The lowest means of importance (3.75) and self-efficacy (3.0) were in the practice of interventional applications.

Conclusion: This study demonstrated that, for 5th and 6th graders, the importance and self-efficacy levels were lowest in making interventional applications. There was no significant difference found among students in the name of self-efficacy. It was shown that women gave more importance to clinical practices than men.

Key words: Online education, medical students, COVID-19, self-efficacy

PP-7

Evaluation of the Relationship Between Diabetic Peripheral Neuropathy and Vitamin B12 Level in Diabetic Patients

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Introduction: Diabetic peripheral neuropathy is the most common cause of adult polyneuropathy. The most common type is distal symmetrical polyneuropathy (DSPN). Paresthesia, numbness and neuropathic pain are presentation symptoms of DSPN, whereas motor weakness is a symptom in later stages. Vitamin B12 deficiency has been reported in some patients with DSPN, and there are conflicting results regarding the results of B12 replacement therapy. It is suggested in the literature that Metformin, a biguanide derivative used in the first-line treatment of type 2 diabetes mellitus, causes vitamin B12 deficiency in various studies, and therefore, it has an effect on the clinical picture.

Method: We included 62 diabetic patients, who were admitted to Bezmialem Vakif University Endocrinology Clinic, in this study. All patients were assessed with the Michigan Neuropathy Screening Instrument (MNSI), that consists of a questionnaire and a physical examination part. The correlations between fasting blood glucose (FBG), HbA1c, Vitamin B12 levels and MNSI scores were evaluated.

Results: A significant negative correlation was found between FBG and serum B12. We found a significant negative relationship between HbA1c and serum B12. There was a positive significant relationship between HbA1c and the MNSI scores.

Conclusion: It can be concluded that the level of Vitamin B12 in patients using Metformin was low especially with high FBG and HbA1c levels. However, Vitamin B12 was not correlated with MNSI scores. Vitamin B12 screening should maintain its place in patients who come with high HbA1c and FBG with or without neuropathy symptoms. Because of the relationship between HbA1c and MNSI scores, we suggest that it is necessary to check the vitamin B12 level in patients presenting with neuropathic symptoms and with high HbA1c values.

Key words: Diabetic peripheral neuropathy, diabetes mellitus type 2, vitamin B12, metformin, HbA1c, fasting blood glucose, Michigan Neuropathy Screening Instrument

PP-8

The Impact of Peer Victimization and Psychological Symptoms on Quality of Life in Children and Adolescents with Familial Mediterranean Fever

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Introduction: Familial Mediterranean Fever (FMF) is a chronic disease, which is the most common monogenic autoinflammatory periodic fever syndrome. Poor quality of life and accompanying psychological symptoms are characteristics of chronic illnesses. Another problem faced by individuals with chronic diseases is peer bullying. The aim of our study is to investigate the effects of peer victimization and psychological symptoms on quality of life in children and adolescents with FMF.

Method: Children and adolescents between the ages of 8 and 18 years, who were followed up with a diagnosis of FMF in Bezmialem Vakif University Hospital Pediatric Outpatient Clinic, and healthy control group who applied to the Pediatric Outpatient Clinic were included in this study. These individuals were asked to complete a data collection form including sociodemographic characteristics. In addition, in both groups, depression, anxiety, quality of life and peer bullying were questioned according to determined scales.

Results: Results were calculated for 19 children and adolescents with FMF disease and 20 healthy controls. Quality of life was found to be significantly lower in children and adolescents with FMF disease compared to controls (p=0.035). Depression (p=0.04), anxiety (p=0.211) and peer bullying (p=0.396) scores were not found to be significant in children and adolescents with FMF disease compared to healthy controls.

Conclusion: Our results showed that children and adolescents with FMF may need follow-up and support from a psychiatric perspective. Their quality of life decreased and the frequency of depression increased compared to children and adolescents without FMF. Future studies with larger cohorts are needed to evaluate the psychological symptoms and peer bullying in children and adolescents with FMF.

Key words: Familial Mediterranean Fever, psychology, anxiety, depression, quality of life, peer victimization

PP-9

Investigation of Clinical and Epidemiological Characteristics of Kawasaki Patients

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Introduction: Kawasaki disease (KD) is a systemic vasculitis of unknown etiology. The absence of a specific laboratory test or clinical findings for KD causes difficulties in diagnosis. We retrospectively investigated the demographic characteristics, clinical and laboratory findings, treatment and follow-up results of patients who were followed up and treated with Kawasaki in Bezmialem Vakif Hospital.

Method: We took 36 patients who were diagnosed with KD between February 2009 and February 2020. We studied the patients in two groups as KD and incomplete KD. We checked whether there was a connection among the data by statistical analysis.

Results: Thirty-six patients were included in the study, 19 (58.8%) were male, 17 (47.2%) were female, 27.8% of the patients were above five years old, 25% were between the ages of five and two years, 47.2% were under the age of two years. The average age of the patients at the time of diagnosis was 38.64 months (1.5-131 months). The mean period from the beginning of the complaint to the diagnosis was 7.6 ± 3.4 (3-14 days) days. The most common findings were skin rashes (80.6%), non-purulent conjunctivitis (77.8%), and oral mucosa and lip changes (75%). Fifteen (41.7%) patients were diagnosed as complete KD. Twenty-one (58.3%) patients were evaluated as incomplete KD. A second dose of intravenous immunoglobulin (IVIG) was administered to 10 (27.1%) patients who were unresponsive to the first dose of IVIG.

Conclusion: In our study, male to female ratio was 1.12. Incomplete Kawasaki's frequency was increased compared to the reference studies in Turkey (in Turkey, it was between 13.6% and 42%, in our study it was 58.3%). The most common findings in the patients were skin rashes, non-purulent conjunctivitis, and changes in the oral mucosa and lips. LAP findings awere especially common in children over 5 years old. In our study, C-reactive protein, sedimentation and thrombocyte levels were usually high, and albumin and sodium levels were commonly low. Patients unresponsive to first dose IVIG treatment were higher than reference studies (10-15% in reference studies, 27.1% in our study).

Key words: Kawasaki disease, vasculitis, coronary artery, fever

PP-10

Knowledge and Confidence Level of the Mothers of Children Between the Ages of 0 and 36 Months Who Came to Bezmialem Vakif University Faculty of Medicine Hospital Child Health and Diseases Polyclinic: A Questionnaire Study

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Introduction: Vaccines are the most important and effective elements of preventive medicine and public health practices in improving public health. Although they are reliable products, their safety and necessity can be questioned by the society for various reasons. For many years, some circles have been skeptical of the vaccine concept. In addition to discussing its efficacy, they held vaccines responsible for some diseases of unknown etiology, arguing that they could cause serious disadvantages and as a result, they continued to systematically oppose the concept of vaccination and in time the concepts of "vaccine hesitancy-vaccine rejection" were introduced in the world.

Method: After obtaining informed consent from the mothers, a questionnaire was applied. For the confidence level against vaccines, the "Vaccine Reliability Scale", whose reliability and validity was confirmed for the Turkish form containing questions about the vaccine reliability, was used. When previous studies were taken as reference, using the NCSS PASS 2007 program, the sample size was determined to be at least 194 for the $\alpha=0.05$ significance level and 80% power and 70% knowledge level.

Results: Results were analyzed and there were statistically significant relationships detected. Level of vaccine hesitancy decreased significantly as the adequacy of communication with doctors increased (p=0.001) and mothers 'confidence in doctors' knowledge and competence in vaccines increased (p=0.001). And mothers who think that they were adequately informed had less vaccine hesitancy than mothers who did not think that they were informed enough (p=0.005).

Conclusion: The results of the questionnaire study show that mothers' quality of communication with doctors, confidence in doctors' knowledge and competence, and lastly being informed by the government are important factors that directly affect the level of vaccine hesitancy of mothers.

Key words: Vaccine hesitancy, questionnaire, confidence, communication

PP-11

Placenta Previa Risk Factors and The Relevance Between Ultrasound Findings and Hysterectomy Incidence

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Introduction: Placenta previa is a condition in which the placenta is attached to the lower uterine segment and completely or partially covers the internal cervix. In this study, we attempted to see the relationship between antenatal ultrasound and hysterectomy.

Method: At least 80 cases of placenta previa, who applied Bezmialem Vakif University Hospital polyclinic between 2010 and 2020, were studied. The risk factors that were studied were as follows: Maternal age, parity, gravity, miscarriage, abortion, birth weight, the week of birth, apgar score, sex of the fetus. We estimated the effects of these risk factors by calculating mean numbers. As a result of hysterectomies, placentas were classified by invasion degree of the placenta layers as placenta percreata, increata, and accreata. Use of bleeding protective methods during surgery, antepartum bleeding, bladder invasion of the placenta and the sex of fetus were also studied.

Results: Ninety-two placenta previa patients were studied. 30% of the patients had antepartum bleeding. One of three patient was over the age of 35 years. Only in 8 patients, uterine invasion was detected by antenatal ultrasound examinations and 4 of them underwent hysterectomy. In 26 patients, uterine invasion was seen during surgery and 18 of them underwent hysterectomy, rest of them had bleeding preventer methods such as uterine and hypogastric artery ligation. Pathological classification showed that out of 18 patients who went under hysterectomy, 5 had acreata, 4 had percreata and 9 had increate, which constituted 50% of them. 80% patients with placenta percreata and bleeder invasion had gone into more than three cesarean sections, which strengthened the relationship between uterine wall damage and abnormal placental invasion. 62% of the patients had male fetus.

Conclusion: In our study, 8 out of 92 placenta previa cases were detected with antenatal ultrasound invasion findings, 4 of them underwent hysterectomy. The correlation between antenatal ultrasound invasion findings and hysterectomy incidence was about %50. Also, the rate of invasion detection during operation was found to be more frequent than antenatal ultrasound.

Key words: Placenta previa, ultrasound, hysterectomy

PP-12

Seasonal Prevalence of Influenza A (H1N1) and B Viruses Between 2016 and 2019

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Introduction: Influenza A and B viruses can lead to different degrees of clinical course, from mild to severe, and may be fatal. Especially pregnant women, children under 5 years old, elderly over 65 years old and patients with chronic diseases are at risk for H1N1 virus complications. In this study, it was aimed to show the prevalence of influenza A (H1N1) and B viruses by years and months using nasopharyngeal swab samples that we had in between 2016 and 2019.

Method: The data were obtained from nasopharyngeal swabs from all polyclinics between 2016 and 2019. Sofia Analyzer and a Sofia Influenza A + B FIA kit were used for differentiation. Descriptive statistics for months based on frequency (percent) was given in this study.

Results: 11,034 nasopharyngeal samples were sent to our laboratory in the period of 2016-2019. 2,393 (21.6%) of them were positive for influenza A virus and 662 (5.9%) of them were positive for influenza B. Thirty-eight (0.3%) of the samples were positive for Influenza A and B at the same time. Prevalence of influenza A virus: January 712 (29.7%), February 178 (7.4%), March 13 (0.5%), April 9 (0.3%), May 1 (0.04%), June 2 (0,08%), July 2 (0.08%), August 0, September 0, October 18 (0.7%), November 111 (4.6%), December 1,364 (56.9%). Prevalence of influenza B virus: January 157 (23.7%), February 236 (35.6%), March 46 (6.9%), April 37 (5.5%), May 89 (13.4%), June 3 (0,4%), July 0, August 0, September 0, October 2 (0.3%), November 9 (1.3%), December 94 (14.1%).

Conclusion: It was found that influenza A virus was seen much more in the winter season (December, January and February) and influenza B virus was more common in the early spring period, including January, February and March. Knowing the seasons in which the disease is seen more will be important for vaccination.

Key words: Influenza viruses, pandemic

PP-13

The Retrospective Analysis of Patients Diagnosed with T-Cell Lymphoma at BezmialemVakif University's School of Medicine Hospital

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Introduction: Lymphoma is an interesting disease in many ways. Lymphomas are tumoral formations that originate from lymphocytes. T-cell lymphomas are uncommon and aggressive malignancies associated with poor outcome. We aimed to identify patients diagnosed with T-cell lymphoma, to classify them according to their stages and response to treatment, and to obtain a retrospective study.

Method: Patients who presented to the Hematology Clinic between 2011 and July 2020 were included in the study. It was planned to reevaluate the patients in a retrospective study. Excel was used in the analysis of data. Patients diagnosed with Mycosis Fungoides, an indolent type of T-cell Lymphoma, and followed only by the hematology clinic were included in the study.

Results: A total of 40 patients, 16 women and 24 men, were included in the study. The average age was 52,225 years. Of these patients, 15 (5 women and 10 men) had MF, 3 (1 female and 2 male) had Anaplastic T-cell lymphoma and 22 (10 female and 12 male) had uncategorized T-cell lymphomas. Of the patients, 1 was diagnosed as Stage 1A, 6 as 2A, 4 as 2B, 10 as 3A, 5 as 3B, 7 as 4A, and 7 as 4B. During the study, 2 patients left the clinic, 17 patients died. The average age of patients that died was 59,529 years. Of the patients, 11 were observed in remission, 2 of them went into remission on brentuximab. Bone marrow biopsy was performed in 32 patients and 10 patients were referred to an external center. While 7 of the 40 patients continue their treatment in our clinic, 2 patients still continue at the external center.

Conclusion: T-cell lymphoma is a rare disease that is still unknown. Even if the patients respond to the treatment, the response is poor with relapses. By expanding this study, it can be used as a basis for future research which can potentially be helpful for developing new approaches to this disease.

Key words: T-cell lymphoma, retrospective study, socio-demographic characteristics

PP-14

Evaluation of Knowledge, Approaches and Behaviors on HPV Vaccination in Bezmialem Vakif University Students

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Introduction: Doctors' and healthcare providers' accurate knowledge and attitudes towards HPV vaccinations affect public in a positive way. Our aim in this study was to evaluate knowledge, approaches, and behaviors of grade four medical and dental students on HPV vaccination to enlighten the path for better outcomes.

Method: In our cross-sectional study, 4th grade students of the Faculties of Dentistry and Medicine in Bezmialem Vakif University who had just begun their clinical internship in 2019-2020 academic year were asked to participate in an online survey via Google Forms.

Results: A total of 75 people, including 59 (78.7%) from the Faculty of Medicine and 16 (21.3%) from the Faculty of Dentistry, participated in our study. Thirty-six participants (48.0%) smoked cigarettes at least once in their lives. Four people (5.3%) had a relative diagnosed with HPV and one person (1.3%) had a relative diagnosed with cervical cancer. Nineteen participants (25.3%) stated that they were sexually active. Seventy (94.6%) out of 74 noted that they learnt HPV infection in the university. Medical students agreed more on the following statements compared to dental students: "The family doctor has informed me on HPV vaccination", "The family doctor has informed me on HPV scan", "I believe HPV vaccination is safe", "I approve vaccination of children for HPV" and "I would have my children vaccinated for HPV" (respectively p=0.031, 0.015, <0.001, 0.013 and 0.009).

Conclusion: Compared to dental students, medical students correctly answered more questions which were in line with their attitudes. The findings are expected to enlighten further steps for a higher level of knowledge, more positive approaches, and attitudes towards HPV vaccination.

Key words: HPV, HPV vaccination, cervical cancer, public health

PP-15

Investigation of Sample Rejection Reasons from Clinical Biochemistry Laboratory

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Introduction: Clinical laboratories have a very important role in terms of patient safety due to their effects on the diagnosis and treatment of patients. The majority of laboratory errors, which are largely preventable, originate from the pre-analytical phase. It is important that each laboratory conducts studies on its own sample rejection rates and reasons for rejection and attempts to reduce these rates as much as possible. With this study, our aim is to investigate sample rejection rates and its causes and to determine the preventable causes in Bezmialem Vakif University Hospital Medical Biochemistry Laboratory.

Method: Rejected samples were divided into groups considering the requested test, the priority of the test, the department where the patient was located, the characteristics of the tube, the time the sample was taken, the time the sample was accepted, the time between the time the sample was taken and the admission to the laboratory, the personnel who took the sample, and the reason for the sample rejection. Data on rejected samples were expressed as rejection rate and percentage within groups.

Results: 61,033 of the samples that were accepted to the Bezmialem Vakif University central laboratory between 01/08/2019 and 01/08/2020 were rejected. Among the rejected examples, the most demanding department was Emergency Medicine (25.6%), the most wanted unit was Emergency Polyclinic (28.8%), the most wanted service was Internal Medicine Service (15.7%). With 57.2%, a higher rejection rate was found in the samples from inpatients than in those from outpatients. Hemolysis was the most common reason for rejection in 30 of 36 episodes with 100%.

Conclusion: In conclusion, most sample rejection samples are preventable. It is recommended that each laboratory investigates its own reasons for rejection, the personnel comply with the ideal blood collection conditions, and the staff gets training on the key principles to reduce rejection rates.

Key words: Rejection, sample, clinical laboratory

PP-16

Investigation of Attention Deficit and Hyperactivity Disorder in Patients Applied to Hospital with Any Accident, Injury or Trauma

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Introduction: Attention and Hyperactivity Disorder (ADHD) is a neuropsychiatric disorder and characterized by increased activity and less self-control about attention, concentration and impulses. For these reasons, people who have ADHD do not think before action so they make their move immediately and impulsively. Owing to that behavior, there are some outcomes like accident, injury, and trauma. In this research, our purpose was to investigate ADHD and routine anxiety-depression state in patients who applied to hospital with any accident, injury or trauma.

Method: We attempted to reach the patients with accident, injury or trauma who were admitted to Bezmialem Vakif Univercity. After the treatment, we applied two scales to these patients, which were Prof. Dr. Atilla Turgay's ADHD Scale and Hospital Anxiety Depression Scale. This group was our study's case group. Our control group was formed with healthy volunteers with similar sociodemographic features. We compared the results of these two groups.

Results: Our case group consisted of 71 people. Ten of them were found to have anxiety (14.1%) and 30 of them were detected to have depression (42.2%). Our control group consisted of 72 people. Sixteen of them were found to have anxiety (22.22%) and 40 of them were detected to have depression (55.55%). With regards to ADHD, 8 out of 71 patients (11.2%) in the case group and 4 out of 72 (5.5%) patients in the control group were proved to have ADHD (p=0.21).

Conclusion: According to these results, ADHD was found more frequently in the patients that applied to hospital with any accident, injury and trauma, although it was not statistically significant. Our results should be confirmed with further clinical studies and larger population.

Key words: Attention deficit hyperactivity disorder, accident, injury

PP-17

Investigation of Panic Attack Patients Who Applied with Chest Pain to Bezmialem Vakif University Emergency Department

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Introduction: Panic attacks are severe attacks of fear and anxiety that occur at certain times. Chest pain is a common symptom of panic attacks. Especially the presence of chest pain causes repetitive emergency department admissions. We aimed to prevent the inappropriate treatment given to these patients by investigating the panic attack patients for whom the diagnosis of Acute Coronary Syndrome was ruled out.

Method: This study was carried out retrospectively. We evaluated the patients who presented to the emergency department of Bezmialem Vakif University with chest pain and panic attack symptoms. Patients diagnosed with Panic Attack in the Emergency Service between May 1, 2020 and October 31, 2020 were included in the study.

Results: In this study, 32 patients with chest pain among 136 patients diagnosed with panic attack were included. According to our hospital's database, it was seen that the average number of attacks experienced by patients in a week was 1.25. Therefore, 37.5% of the patients applied more than once. Echocardiography or ultrasonography was requested for a total of 17 people (53.1%). In addition, tomography or magnetic resonance imaging was performed in 14 patients (43.8%). The analysis and imaging results requested from the patients were normal. Most of the patients who presented to the emergency department with chest pain complaints were discharged after excluding life-threatening conditions. In addition, they were referred to the psychiatry service.

Conclusion: A panic attack should be considered after it is confirmed by physical examination and various tests that the pain is not caused by cardiac reasons. The problem should be explained to the patient who has applied with chest pain to the emergency department and diagnosed with a panic attack. Then, the patient should be referred to the psychiatry department. In case of repeated admissions to the emergency department with atypical chest pain, we should definitely consider panic attacks. Thus, unnecessary medical analysis, polypharmacy and use of unnecessary drugs by patients are avoided.

Key words: Panic attack, chest pain, emergency service

PP-18

Investigation of Risk Factors Affecting the Development of Nephrotoxicity in Patients Receiving Colistin Therapy: A Retrospective Study

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Introduction: Colistin (COL) has become the backbone of the treatment of infections due to extensively drug-resistant Gram-negative bacteria. The most common restriction to its use is acute kidney injury (AKI). Studies have reported that approximately one third of patients using COL have developed nephrotoxicity. In this study, we aimed to detect which patient group developed nephrotoxicity while receiving COL regimes.

Method: We reached data by using our Bezmialem Vakif University' patients data system called 'Bizmed' retrospectively (July 2020 - June 2021).When we were arranging our patient groups, we took exclusion and inclusion criteria into consideration. We did not include patients that had chronic renal disease. In addition to above-mentioned exclusion criteria, we also determined inclusion criteria as follows: Patients should be over 18 years old and admitted to anesthesia and reanimation ICU. Also, they should take IV COL for at least 48 hours. Patients with no pre-existing kidney dysfunction were compared in terms of risk factors (age, hypertension, use of contrast media, and the use of other nephrotoxic drugs) and outcomes of AKI were graded according to the KDIGO criteria.

Results: Six out of 14 patients developed COL nephrotoxicity. The average age of the patient group was 56.5%. New onset of AKI was observed in 42.8% of the patients. In patients who developed nephrotoxicity, the rate of sepsis was 33.3%, while in those who did not develop it, it was 25%. We did not reach the targeted patient number on the ethical form. Statistical analysis could not be performed.

Conclusion: COL-induced nephrotoxicity occurred significantly more often in patients older than 60 years of age and it was related to low initial glomerular filtration rate estimations and high Charlson Comorbidity Index scores, which were basically determined by age.

Key words: Nephrotoxicity, intensive care unit, colistin

PP-19

Examination of Platelet Count and Mean Platelet Volume (MPV) Values in Children Diagnosed with Rheumatic Heart Disease

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Introduction: Acute rheumatic fever (ARF) is a non-suppurative inflammatory connective tissue disease seen after group A beta hemolytic streptococcal (GAS) infections of the upper respiratory tract. Long term cardiac damage that can occur as a result of a single severe attack or multiple recurrent ARF attacks is called rheumatic heart disease (RHD). In the evaluation of the mean platelet volume (MPV) together with the platelet count (PLT), we can obtain significant results in terms of showing the severity of inflammation in blood. The aim of our study is to obtain information about the inflammatory process by examining the platelet counts and MPV in children with rheumatic heart disease.

Method: In this prospective study, 132 children aged 5-18 years, who applied to the pediatric cardiology department of Bezmialem Vakif University between June 2020 and March 2021, were included. Echocardiography was performed on all participants by a pediatric cardiologist. In both groups, the complete blood sample was taken and we examined inflammatory markers (MPV and PLT) in the blood. We obtained all data from our hospital's patient data system.

Results: A total of 65 patients (39 female and 26 male) diagnosed with RHD and 67 healthy children (39 female and 28 male) participated in our study. We compared the patient group and control group in terms of age, gender, MPV, and PLT. The groups were similar in age and gender (p>0.05). MPV and PLT values of the patient group were lower than those of the control group but there was no significant difference between the two groups (p>0.05).

Conclusion: According to the results of our study, MPV and PLT values are not good parameters to show inflammation in children diagnosed with rheumatic heart disease.

Key words: Mean platelet volume, platelet count, rheumatic heart disease

PP-20

Self-Confidence in Clinical Breast Examination (CBE) Among Students of Bezmialem Vakif University Medical Faculty

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Introduction: Breast cancer remains a worldwide public health dilemma and is currently the most common tumor in the globe. It is a global issue now, but still it is diagnosed in the advanced stages due to the negligence of women regarding the self-inspection and clinical examination of the breast. Early diagnosis of breast cancer is one of the best approaches to prevent the devastating consequences of this disease. In some developed countries, the 5-year relative survival rate of breast cancer patients is above 80% due to early prevention. Clinical breast examination (CBE) is a key step in the diagnosis and surveillance of a number of benign and malignant breast diseases. When used as a part of a multimodal evaluation, the breast exam provides important information used in both the workup and management of many diseases of the breast. The aim of this study is to demonstrate the number of CBEs for improving students' confidence in their CBE skills.

Method: An online survey was conducted to Bezmialem Vakif University Faculty of Medicine 4th, 5th and 6th grade students. 68 female and 33 male students between the ages of 20 and 25 years were included in the study.

Results: Twenty-two, 68 and 11 medical faculty students from 4th, 5th and 6th grades, respectively, participated in the study. The number of CBEs performed by the students so far was divided into 8 groups as 1-2, 3-4, 5-6, 7-8, 9-10,11-15,16-20 and 20+, performed by the number of students as 5,13,23,14,4,6,17, respectively. Among the students participating in the study, 45.6% (46/101) felt competent, but 38.6% (39/101) felt indecisive in CBE. 60.4% (60/101) thought they could distinguish abnormalities, but 26.7% (27/101) felt indecisive. 55.4% (56/101) of them thought that more than 20 clinical breast examinations should be performed.

Conclusion: This study shows that the more the students perform CBEs, the more they gain confidence in distinguishing lesions, especially after 20 times of thorough examination.

Key words: Clinical breast examination, medical students, self-confidence

PP-21

Evaluation of Diastolic Parameters of The Heart in Cerebrovascular Diseases

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Introduction: Cerebrovascular diseases (CVD) are a leading cause of morbidity and mortality. There are various risk factors including hypertension, diabetes mellitus, smoking, dyslipidemia, atrial fibrillation, carotid artery stenosis, and obesity. CVD have an important place in CVD. The term diastolic dysfunction is used for conditions in which diastolic relaxation, diastolic tension and left ventricular filling are impaired. In this study, we evaluate the diastolic parameters of the heart in patients with cerebrovascular disease.

Method: This study was performed retrospectively. It was planned to enroll 150 patients who were diagnosed with acute CVD and underwent echocardiographic examination. The study was conducted in patients diagnosed with CVD at Bezmialem Vakif University Hospital between November 2019 and December 2020. Patients who were diagnosed with cerebrovascular disease and had an echocardiographic examination at bedtime were included in the study from hospital records. The diastolic function evaluations of the patients were performed by measuring the tissue velocities (e'/a') and E/e' rates with transmitral filling (E/A) and tissue Doppler. In addition to the diastolic parameters of the patients, left ventricular ejection fractions were also evaluated.

Results: In this study, diastolic functions of 92 patients with CVD [59 men (64.1%), 33 women (35.9%)] were evaluated. Eighty patients (87%) were stage 1, 8 patients were stage 2 (8.7%), and 4 patients were evaluated as normal (4.3%). It was observed that diastolic parameters were more deteriorated compared to the normal population.

Conclusion: The analysis of the enrolled patients showed that the diastolic parameters of the patients with cerebrovascular disease were more deteriorated than normal population.

Key words: Cerebrovascular disease, cardiovascular disease, diastolic disfunction

PP-22

The Reasons for the Refusal of the Vaccines Nowadays

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Introduction: Immunization is an important healthcare service that helps the prevention of babies, children or adults from getting infected by several diseases. Despite the evidence supporting the safety, benefits and success of vaccines, concerns about vaccination practices and their effects have been raised in families these days. Therefore, there emerged a need to re-evaluate the factors affecting vaccination practices. The factors that influence parents are various reasons such as active ingredients in vaccines, lack of information, side effects and social media. Another reason is the lack of information revealed as a result of research on vaccination. This lack of information appears to be the most important reason for vaccination refusals.

Method: Participants of the study were 214 parents of children aged 0-10 years. The survey was spread to parents living in Istanbul and lasted between 23.11.2020 and 01.04.2021. In this study, parents of vaccinated and non-vaccinated children were divided in two groups. In this grouping, the gender of the children (female 57%) (male 43.4%), sibling status (65.2% yes) (34.8% no) and the economical situations were figured out.

Results: The rate of parents who considered appropriate to have their children vaccinated was 70.4% and the rate of those who did not find it appropriate to vaccinate their children was 29.6%. We determined the reasons of individuals who refused to have the vaccine. We listed the people who affected the mothers in making this decision; themselves (90%), spouses (32.5%), friends (10%), family elders (2.5%), and clergymen (2.5%). Among the reasons of the mothers who refused vaccination, the highest percentage was the side effects and harm of vaccination (92.5%).

Conclusion: In this study, the majority of parents accepted the vaccination and the improper information about immunization was the main reason for refusing vaccination.

Key words: Vaccination, immunization, parents

PP-23

Relationship of Sports Habit with Depression Levels in Medical Students

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Introduction: It has been suggested that sports improve mood with various physiological and biological mechanisms. Psychological effects of sports such as increasing self-confidence, getting away from negative thoughts, improvement in sleep and adaptation to stress are also mentioned. Our aim was to reduce the prevalence of depressive symptoms in students by instilling them in regular sports. We aimed to investigate the difference in the symptoms of depression between medical school students who exercised regularly and those who did not.

Method: The socio-demographic scale and Beck Depression Scale were applied to 110 medical students who did not do sports and 110 medical students who did regular sports 3 days in a week or at least 5 hours in a week.

Results: The mean of the depression score of those who exercised regularly 3 days in a week or at least 5 hours in a week was 9, and the mean depression score of medical students who did not exercise regularly was 17.

Conclusion: The mean depression score of medical students who did sports regularly was found to be 9. The average depression score of medical students who did not exercise regularly was found to be 17. A significant difference was found between depression scores. It was observed that students who did regular sports had minimal depression. It was observed that students who did not exercise regularly were on the medium depression scale. According to our findings, it has been found that regular exercise is effective in reducing depression.

Key words: Sport, depression, medical students

PP-24

Evaluation of the Relationship Between Fear of Childbirth and Socio-demographic Characteristics in Pregnant Women

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Introduction: Fear of childbirth is a common feeling among pregnant women. Due to excessive fear, delivery may be prolonged and fetal distress may occur. This study aims to evaluate the relationship between fear of childbirth (tocophobia) and socio-demographic characteristics in pregnant women.

Method: This study was planned prospectively. The sample of the study consisted of 112 pregnant women at 28-40 gestational weeks. A participant information form (22 questions) and Wijma Delivery Expectancy/ Experience Questionnaire (W-DEQ) A version were completed by the subjects. According to the scale, a higher score represents a higher degree of tocophobia. The minimum score that can be obtained from the scale is 0, the maximum score is 165. The data were evaluated using the IBM SPSS statistics 22.0 package program and the Mann-Whitney U test.

Results: One hundred twelve women at 33.27 ± 3.7 gestation weeks were included in the study. The mean maternal age was 29.19 ± 5.239 years. The mean W-DEQ A score of women was 57.9643 ± 27.17840. No statistically significant difference was found in W-DEQ A scores in relation to age (p=0.536), gestation week (p=0.27), pandemic distress (p=0.139), delivery method preference (p=0.321), distressing experiences before pregnancy (p=0.507), educational level (p=0.291), chronic disease (p=0.632), having a problem in a previous pregnancy (p=0.543), having a problem in current pregnancy (p=0.325), spontaneous or assisted fertilization (p=0.215) or being in financial difficulty (p=0.091). A statistically significant difference was found in women with pregnancy experience (p=0.011), pre-pregnancy care (p=0.026) and planned pregnancy (p=0.022).

Conclusion: According to the results of our research, fear of childbirth was found at a high rate regardless of most of the investigated sociodemographic factors including age, educational level, and economic status. However, in primiparous expectant mothers, rates were significantly higher than in multiparous women. It is thought that pregnancy education and counseling will be beneficial for this group of women.

Key words: Fear of childbirth, pregnancy, tocophobia

PP-25

Evaluation of Radiation Awareness in Medical Faculty Students before and after Education

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Introduction: After being discovered by W. Conrad Roentgen in 1895, X-rays and electromagnetic radiation have become more a part of our lives every year. Today, imaging methods used in the medical diagnosis and treatment contain ionizing radiation which causes adverse biological effects on living organisms. In radiology practice, it is essential to take the least dose in accordance with the ALARA (As low as reasonably achievable) principle. In this study, we aimed to measure the level of knowledge of Bezmialem Vakif University Faculty of Medicine students about radiation dose and safety in radiological imaging methods and then to provide training.

Method: Our study was conducted with the form of a questionnaire and covered the academic year of 2020-2021 Bezmialem Vakif University Faculty of Medicine students (n=300). The questionnaire contained 15 questions which aimed to measure the knowledge level of the students. According to the sample size and power analysis, it was decided to apply the same questionnaire 15 days later after the training. The data distribution was examined by the Shapiro-Wilk test. The scores before and after the training were evaluated with the Wilcoxon or Paired t-test. Descriptive statistics were explained as mean $\pm$ standard deviation or median (minimum-maximum). All statistical analyses were performed and reported in IBM SPSS Statistics 20.0 program at α=0.05 significance level.

Results: Of the 300 students who participated in the pre-education survey, 28% were 1st grade, 25% were 2nd grade, 12% were 3rd grade, and 35% were 4th grade students, and the same rates were preserved in the post-training survey. The 13 questions were answered correctly with an average rate of 33% in the pre-training questionnaire, while 74% were answered correctly after the training (p=0.043).

Conclusion: In conclusion, correct answers significantly increased after the training compared to the pre-training.

Key words: Radiation, questionnaire, awareness

PP-26

Awareness of Breast Milk and Breastfeeding Practices Among Female Healthcare Workers in Bezmialem Vakif University

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Introduction: Although breast milk is really important for the health of babies and mothers, there are still problems in starting and continuing breastfeeding. It is known that there are lots of factors effecting breastfeeding practices but there is no doubt that knowledge and attitude of healthcare professionals have a major role in this. For healthy generations, all healthcare professionals -especially female ones- should convey their knowledge and experience to mothers about this issue.

Method: In this study, we aim to evaluate the awareness about the importance of breast milk among female healthcare workers and learn about their own breastfeeding practices with a 40-question survey. One-hundred-seventeen female healthcare workers with or without children, who worked currently in Bezmialem Vakif University Hospital, participated in our study. The data obtained were evaluated with the SPSS analysis software.

Results: Sixty-eight (59%) physicians, 29 (25%) nurses and 19 (16%) healthcare workers from other professions participated in our study. The average age was 30 years and 34% of them stated that they had children. Those who gave only breast milk to their first born baby for the first 6 months constituted 50% of those who had children. And those who continued breastfeeding for at least 2 years were only 24% of the mothers. 10% of them stated that their babies did not receive breast milk at all. The average knowledge level rate was 65%. We found out that knowledge levels were correlated with age (p=0.015) and profession (p=0.007). Also, those who educated mothers in their professional life (p=0.0001) and who attended an education programme (p=0.0001) had a higher level of knowledge.

Conclusion: As a "baby friendly" foundation and a faculty university, we must handle this issue more carefully in the faculty education for students and in-service trainings for professionals.

Key words: Breastfeeding, healthcare workers, breast milk, knowledge level

PP-27

Evaluation of Anxiety and Fear Levels of Bezmialem Vakif University Students During COVID-19 Pandemic

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Introduction: After the Coronavirus disease-19 (COVID-19) was declared as a pandemic by the World Health Organization, many countries had to make radical decisions. Some of these are quarantine, isolation and social distance practices. Freedom is restricted, and families are separated. However, the pandemic process still remains uncertain. Healthcare workers are more affected than the rest of the society, as they work in dangerous conditions with heavy workload. This study aims to indicate the prone to anxiety and the fear of catching the disease among medical and dental students.

Method: A total of 140 students from the 4th and 5th grades of faculties of medicine and dentistry were included. Socio-demographic data, fear, and anxiety levels of the individuals were recorded using an online questionnaire. COVID-19 Fear Scale was used to measure fear levels, and Coronavirus Anxiety Scale (CAS) was used to determine anxiety levels.

Results: According to CAS, the mean anxiety total score of female students was significantly higher than that of male students (p=0.001). According to COVID-19 Fear Scale, the mean anxiety total score of female students was significantly higher than that of male students (p=0.001) and the mean anxiety total score of those who intended to use vitamins and supplements in case of COVID-19 disease had borderline statistical significance compared to students who did not use vitamins and supplements (p=0.051).

Conclusion: It was found that female students had higher anxiety and fear levels than male students. Those who intended to use vitamins and supplements in case of COVID-19 disease were found to be more prone to anxiety according to COVID-19 Fear Scale. There was no significant difference between the remaining propositions in terms of faculty, class or gender.

Key words: COVID 19, anxiety, fear, medical student, dental student, survey

PP-28

Can CXCL13 be a Prognostic Marker in Clear Cell Renal Cell Carcinoma?

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Introduction: CXCL13, B-cell chemoattractant, has been associated with many diseases and cancers. One of the malignancies that CXCL13 has been investigated is clear cell renal cell carcinomas which are the most common subtype of renal cancers. The aim of this study is to evaluate the immunohistochemical staining patterns of CXCL13 in clear cell renal cell carcinomas and to determine its relationship with pathological tumor stage, risk factors and prognostic parameters.

Method: In this study, 99 patients who underwent partial/ radical nephrectomy and were diagnosed with clear cell renal cell carcinoma were included. Four micron sections were taken from paraffin embedded blocks containing sufficient tumor and kidney tissue. Samples were immunohistochemically stained with CXCL13 antibody. During microscopic examination, CXCL13 positive stained cells in 10 high magnification fields were counted and evaluated using a semi-quantitative H score: 3x strongly stained +2x moderately stained + weakly stained. The cut-off value was set as 40 for values between 0 and 300. The low and high stained groups were compared in terms of prognostic parameters and risk factors.

Results: In T3 stage tumors, 54.8% of intratumoral lymphocytes were highly stained with CXCL13, while the proportion of low stained was 29.8%. The amount of intratumoral lymphocytes stained with CXCL13 increased in advanced pathological stages (p=0.05). Non-smoking cases were mostly in the low staining group (p=0.06). Low stained lymphocytes in the kidney with CXCL13 were higher in all T-stages. T3 stage tumors were less than T1 stage tumors with low staining (p=0.04).

Conclusion: Although there is no statistically significant difference between staining and other prognostic parameters, the relationship we found between advanced pathological stage and intratumoral CXCL13 staining suggests that CXCL13 has a prognostic value in this cancer.

Key words: CXCL13, immunohistochemistry, clear cell renal cell carcinoma

PP-29

Knowledge, Attitudes and Behaviors of 4th Year Students of Faculty of Medicine and Faculty of Pharmacy in Bezmialem Vakif University about Rational Medicine and Its Use

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Introduction: The use of wrong, unnecessary, ineffective and costly drugs all over the world causes problems of various dimensions. These effects include increased morbidity and mortality rates. For these reasons, various solutions have been tried to be produced and developed in the world. In this context, "Rational Drug Use" studies have been initiated in the world. Physicians, pharmacists, other groups can be considered as responsible parties in raising awareness on rational drug use and raising public awareness. In this study, it was aimed to evaluate the knowledge, attitudes and behaviors of the students of the Faculties of Medicine and Pharmacy about rational drug use in order to raise the awareness about rational drug use in future physicians and pharmacists.

Method: In the evaluation of knowledge, attitudes and behaviors regarding rational drug use, Bezmialem Vakif University 4th year Medicine and 4th year Pharmacy students in the 2019/2020 academic year were selected as the study universe. In the population of the study, Bezmialem Vakif University Faculties of Medicine (88) and Pharmacy (39) students were included, and there was no exclusion criterion in the selection of the universe. A 15-question questionnaire was applied to evaluate knowledge, attitudes and behaviors regarding rational drug use. The questionnaire to be applied was prepared on the internet using google forms.

Results: In the 15-question survey study, a significant difference was found between the 11th (p=0.023) and 15th (<0.001) questions. While pharmacy students used the medication until their complaints were over, medical students preferred to use the medication until the end of the medication. While pharmacy students learned about drug side effects from the pharmacist, medical students preferred to learn from the physician. There was not a meaningful result in other questions.

Conclusion: Students trust people in the field in which they are studying.

Key words: Rational drug use

PP-30

Comparison of Drug Efficiency and Safety in Childhood Febrile Convulsions Depending on the Rate of Seizure Recurrency

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Introduction: Sodium valproate (VPA), phenobarbitone and levetiracetam are the most common drugs prescribed for febrile seizures. This study aims to analyze the drug efficacy and seizure recurrence rate of phenobarbitone, VPA and levetiracetam.

Method: This was a retrospective study on preselected patients with febrile seizures aged 6 months to 5 years from the Bezmialem Vakif University Faculty of Medicine Hospital and diagnosed by the Department of Pediatric Neurology between the years of 2018 and 2019. The children had no other neurologic, psychiatric or somatic disorders. The participants were divided into three groups based on the treatment and the number of subjects was determined as 30 patients for each group based on 95% of QN level and 80% of power concedingly with double times more recurrence rate for one group to another. Associations and differences between the groups were evaluated using the $\chi 2$ test or Fisher test. The study data were evaluated using SPSS 20.0, IBM software. A value of p=0.05 was accepted as statistically significant.

Results: This research was experimented on 93 patients who were concedingly suited on the exclusion and inclusion criteria. There were 31 patients who exposed to VPA with 36.07% of seizure recurrence, 30 patients who exposed to levetiracetam with 33.5% of seizure recurrence, 32 patients who exposed to phenobarbitone with 34% of seizure recurrence.

Conclusion: Statistically, no significant relationship was observed between the groups since the p-value was more than 0.05 with respect to the statistic analysis which was performed accordingly to SPSS 20.0. No supremacy nor inferiority was observed between VPA, levetiracetam and phenobarbitone by the means of efficacy and seizure recurrence.

Key words: Febrile seizure, VPA, levetiracetam, phenobarbitone

PP-31

Evaluation of Allergy in Ankylosing Spondylitis

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Introduction: While atopic disorders are associated with a predominant Th2 cytokine pattern, the cytokine pattern of ankylosing spondylitis (AS) can be described as an "impaired Th1 cytokine pattern". It is known that the generation of a Th2 immune response is inhibited in the presence of Th1 cytokines. However, previous researches have showed that patients with AS are more inclined to developing atopy. This study aims to find if there is an association between allergy and disease activity in patients with AS.

Method: Patients with ankylosing spondylitis, who were (HLAB27 positive) admitted to Bezmialem Vakif University Medical Faculty Physical Therapy and Rehabilitation Polyclinic, were included in our study. Patients were divided into two groups, based on their disease activity score which was determined by Bath AS Disease Activity Index (BASDAI). Serum immunoglobulin E (IgE) values and eosinophil count of these two groups were compared.

Results: A total of 25 patients, including 11 male (44%) and 14 female (56%), were included in this study, and the average age was 42 years. 10 patients (40%) were scored as BASDAI ≥4 (Group 1) and 15 (60%) as BASDAI <4 (Group 2). The mean value of serum Ig level was 25.8 (IU/ML) in Group 1 and 22.6 (IU/ML) in Group 2 (p=0.138). The mean value of eosinophil count was 0.175 (10*3/UL) in Group 1 and 0.115 (10*3/UL) in Group 2 (p=0.127). There was no significant difference between these two groups in terms of IgE and eosinophil count.

Conclusion: Eosinophil count and serum immunoglobulin E values of AS patients with high disease activity were not significantly different from those of AS patients with low disease activity. This result suggests that allergy is not a risk factor for disease activity of ankylosing spondylitis.

Key words: Ankylosing spondylitis, allergy, eosinophil, immunoglobuline

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Research of Prevalence of Iron Deficiency and Anemia in Children Under 2 Years of Age

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Introduction: Iron is an essential element of vital functions such as erythrocyte production and protein synthesis. Iron deficiency causes systemic symptoms as well as anemia. From the 6th month of life, iron deficiency develops due to rapid growth and insufficient intake. Before anemia develops in the early period, there may be symptoms such as anorexia, weakness, growth retardation, restlessness and sleep disturbance. Iron deficiency anemia (IDA) is a decrease in hemoglobin concentration as a result of iron deficiency. Iron deficiency is the most common cause of anemia in all age groups. The aim of this study is to investigate the prevalence of iron deficiency observed in infancy under 2 years of age in healthy children based on retrospective records.

Method: In our retrospective study, children between the ages of 6 months and 2 years, who were admitted to the Bezmialem Vakif University Medical Faculty Hospital Pediatric Outpatient Clinic between January 2018 and January 2019 and who did not have any chronic diseases, were included.

Results: In our study, the records of 3,438 patients were examined. Anemia was detected in 719 of 3,438 patients. One hundred ninety four of these patients were diagnosed with IDA. One hundred and three of them were male and 91 of them were female. Eighty-eight of the patients diagnosed with IDA were children under 1 year old; 106 patients were children between the ages of 1 and 2 years. The incidence of IDA was measured as 5.5%.

Conclusion: Most of the iron deficiency seen in children is due to malnutrition, and it is of great importance for babies to start supplementary food intake with breast milk after the 6th month and to make iron supplements from outside if necessary. In our study, IDA was found in 5.5% of the children. Families of patients should be informed about this issue and awareness should be created. If there is no other disease, children should continue the treatment of IDA by getting adequate nutrition and iron supplements.

Key words: Iron deficiency, anemia, children

PP-33

Investigation of Thiol Disulfide Balance in People with Polycystic Kidney and Chronic Kidney Disease

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Introduction: Autosomal dominant polycystic kidney disease is an inherited multisystem disease characterized by progressive cystic enlargement of the kidneys. Proteinuria is the most sensitive marker of chronic kidney disease progression in clinical practice, especially when combined with eglomerular filtration, but they have limitations. Therefore, early and more sensitive biomarkers are required. Oxidative stress refers to the in vivo oxidation of lipids, proteins, carbohydrates and DNA and involves many biochemical pathways. Thiol/disulfide homeostasis is a marker of oxidative stress. We think that total and native thiol, which will be examined in the serum of patients with polycystic kidney disease and chronic kidney disease, will be an important marker in elucidating the pathogenesis and determining the prognosis, and the results obtained by comparing it with routinely used parameters will make a great contribution to the clinicians.

Method: With the power analysis performed, it was calculated that 3 groups (50 patients with the diagnosis of Polycystic Kidney Disease, 50 patients with Chronic Kidney Disease and 50 healthy volunteers) were included in the study. Total and native thiol levels in the serum samples taken were measured in the Bezmialem Vakif University Faculty of Medicine Medical Biochemistry Routine Laboratory with the new method developed by Erel et al. in the autoanalyzer device.

Results: As a result, the levels of thiol and native thiol, known as antioxidants, differed significantly between the patients with chronic kidney disease and polycystic kidney and the healthy control group ($p < 0.05$). With this study, we showed that chronic kidney disease is associated with thiol levels ($p < 0.0045$). GFR rate was found to be lower in patients with chronic kidney disease than in healthy volunteers ($p < 0.05$).

Conclusion: In this study, the results were found to be significant by comparing thiol levels in patients diagnosed with chronic kidney disease and polycystic kidney disease and healthy volunteers.

Key words: Kidney disease, total thiol, native thiol

PP-34

Sleep Quality: Role in the Risk and Severity of Coronary Artery Obstruction Due to Atherosclerosis

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Introduction: Sleep is an important modulator of **cardiovascular function**, both in physiological conditions and in disease states. In individuals without a primary sleep disorder, sleep may exert significant effects on the autonomic nervous system, systemic hemodynamics, cardiac function, **endothelial function**, and coagulation. Insomnia is the most prevalent sleep disorder in the United States and has high comorbidity with a number of cardiovascular diseases (CVDs). In this research we aimed to investigate the association of combined sleep behaviour with the incidence and severity of cardiovascular disease particularly coronary artery syndrome prospectively. In this study we consider patients with symptoms of coronary artery disease who go through a diagnostic angiography in Bezmialem Vakif University Hospital.

Method: A total of 70 male and female patients with stable angina pectoris free of severe comorbid conditions (diabetes mellitus, pulmonary arterial hypertension, CVD) aged between 40 to 70 were included in this study. To evaluate the sleep quality of patients who undergo angiography imaging for diagnosis and/or treatment of coronary artery disease we used sleep quality survey which is consist of 5 questions that evaluates duration of sleep, chronotype of sleep, insomnia, snoring and excessive daytime sleepiness and had 70 patients fill out the questionnaire survey. The angiography reports of these patients were evaluated using Gensini score and according to the results, patients were grouped as mild, moderate and severe. The Gensini score of each group patients have been compared to the score of their sleep quality survey.

Results: Four out of 16 patients with sever coronary artery stenosis had very poor sleep quality. 6 out of 9 patients with mild coronary artery disease had poor sleep quality. This is while no patients with normal coronary artery had a low score of sleep (lowest:3).

Conclusion: In this prospective study, a healthy sleep pattern was associated with reduced risks of CAD.

Key words: Coronary artery disease, sleep quality, insomnia, gensini score

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Determining the Relationship of Elbow and Wrist Muscle Strengths with Disease Activity and Functionality in Patients with Spondyloarthropathy

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Introduction: Ankylosing spondylitis (AS) is an inflammatory disease that, over time, can cause some of the small bones in your spine (vertebrae) to fuse. Given the risk of chronic inflammation and reduced physical activity, patients are also at risk of accelerated muscle wasting. We aim to compare the muscle strength of muscle groups in AS patients with the muscle powers of healthy volunteers and to examine the relationship of muscle strengths with disease activity and functionality.

Method: Forty males (20 AS, 20 healthy) were included in the study. Bath Disease Activity Index (BASDAI), Functional Index (BASFI), and AS quality of life (ASQoL) scores were recorded. The maximum (max) and mean elbow flexion, extension, (EF, EE), wrist flexion, extension (WF, WE), radial deviation, ulnar deviation muscle strengths of the patients in both groups were measured by a handheld dynamometer.

Results: There was no significant difference between AS patients and healthy volunteers in terms of muscle strength. The symptom duration was found to have a moderate negative correlation with all the muscle strengths (EF, EE, WF, WE, radial deviation, ulnar deviation). In the patient group, a significant negative correlation was found between the BASDAI and BASFI and all muscle groups.

Conclusion: There was no significant difference between AS patients and healthy volunteers in terms of muscle strength but the higher the disease activity and functionality, the lower the muscle strength in the AS group. Strengthening specific muscle groups for the desired goal can be a reasonable strategy.

Key words: Ankylosing spondylitis, muscle strength, disease activity, functionality, quality of life