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POSTER PRESENTATIONS

PP-1

Investigation of the Effectiveness of the Emergency Department Chest Pain Assessment Score in Patients Followed with a Preliminary Diagnosis of Acute Coronary Syndrome

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Introduction: Chest pain assessment in patients admitted to the emergency department is an important clinical problem in terms of early diagnosis and safe discharge decisions. Current scoring systems may be insufficient in predicting major cardiac events. In this study, the risk assessment of patients admitted with chest pain using the emergency department chest pain score (EDACS) was performed, and the effectiveness of this scoring system was investigated.

Method: This retrospective study was conducted on patients over the age of 18 who were admitted to the emergency medicine department of our hospital between 01.06.2023 and 31.12.2023 with suspected acute coronary syndrome. The patient group determined in accordance with the Helsinki criteria was included in the study. Data were obtained from the hospital automation system, and the patients' demographic information, clinical characteristics, and EDACS scores were recorded. Patients were classified as low and high risk according to the EDACS score, and the compatibility of this classification with clinical results was analyzed.

Results: The MedCalc statistical program was used for the analyses, and frequencies and percentages were calculated for categorical variables. Interrater consistency was measured with the Kappa test, and differences between independent variables were compared with the Student's t-test and the Kruskal-Wallis test. The statistical significance level was determined as $p=0.05$.

Conclusion: The results show that the EDACS score has high sensitivity in predicting major cardiac events and ensures the safe discharge of low-risk patients. These findings support the use of the EDACS score as an effective tool in the management of chest pain in the emergency department.

Key words: Acute coronary syndrome, emergency department, chest pain, EDACS, risk stratification

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PP-2

Predictive and Prognostic Value of SOFA-C in Sepsis Patients Admitted to the Intensive Care Unit

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Introduction: Sepsis is a life-threatening organ dysfunction. Early diagnosis improves outcomes. Systemic Inflammatory Response Syndrome (SIRS), Sequential Organ Failure Assessment (SOFA), Quick Sepsis-related Organ Failure Assessment (qSOFA) and NEWSII are commonly used for sepsis evaluation. CRT is useful in guiding fluid resuscitation, and identifying patients with more severe sepsis. We propose that the SOFA-C score, which we have developed by combining the qSOFA with CRT, could be an effective method for early diagnosis.

Method: Our study will include intensive care unit (ICU) patients with sepsis. Demographics, medical history, and chronic diseases will be recorded. SIRS, qSOFA, and NEWSII scores will be assessed. Data on CRT, lactate, APACHEII, SOFA, urine output, C-reactive protein, procalcitonin, vasopressor use, renal replacement therapy, hospital/ICU stay, and 28-day mortality will be collected. After data collection, the predictive value of SOFA-C, qSOFA, and NEWS-II in diagnosing sepsis will be compared.

Results: The difference in SOFA scores between the sepsis and non-sepsis groups was found to be statistically significant (p<0.001). The median SOFA score was 2 (1-3) in the sepsis group and 1 (0-1) in the non-sepsis group. A significant difference was also observed in qSOFA scores (p<0.001), with a median of 2 (1-2) in the sepsis group and 1 (0-1) in the non-sepsis group. The difference in NEWS-II scores between the groups was found to be highly significant (p<0.001), with a median of 10 (7-11) in the sepsis group and 6 (4-8) in the non-sepsis group. Also a logistic regression analysis was conducted to evaluate the predictive value of the NEWSII, qSOFA, and SOFA-C scoring systems for the specified clinical outcome. SOFA-C emerged as the strongest predictor, with the highest odds ratio [Exp(B)=6.335] and a statistically significant contribution to the model.

Conclusion: The study results demonstrate that SOFA-C is more successful than NEWS-II and qSOFA in predicting sepsis.

Key words: qSOFA, sepsis, SOFA-C

PP-3

Comparison of Regulatory T Cell Ratios in Pre- and Post-treatment Biopsies of Patients with Crohn's Disease

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Introduction: Crohn's disease (CD) is a chronic inflammatory disorder characterized by cycles of relapse and remission due to dysregulated immune responses. Regulatory T cells (Tregs) play a crucial role in immune homeostasis, and their dysfunction contributes to chronic inflammation and tissue damage. This study investigates histopathological changes and FOXP3-positive Treg ratios in pre- and post-treatment biopsies to assess treatment effects on immune regulation.

Method: Patients diagnosed with CD between 2013 and 2024 were retrospectively analyzed. Clinical, demographic, and histopathological data were collected from hospital records. Immunohistochemical staining was performed on suitable biopsy samples using a FOXP3 antibody. Stained cells were counted in three high-density areas under high magnification ($\times400$). Pre- and post-treatment Treg ratios were compared, and statistical analysis was conducted to determine significant differences.

Results: In 29 patients, total Treg ratios significantly decreased after treatment ($p=0.009$), indicating systemic immune suppression. However, 34.5% of patients exhibited increased total Treg ratios, suggesting heterogeneity in immune responses. Intraepithelial Treg ratios showed an overall decrease, but this was not statistically significant ($p=0.909$). Nevertheless, 55.2% of patients had increased intraepithelial Treg ratios, suggesting localized immune modulation within the epithelial compartment.

Conclusion: This study found a significant reduction in total Treg ratios post-treatment ($p=0.009$), reflecting systemic immune suppression. Patients with increased total Tregs (34.5%) responded well to treatment, while those with decreased ratios showed poor response. Intraepithelial Treg ratios remained stable overall ($p=0.909$), but 55.2% exhibited increases, suggesting localized immune modulation. These findings highlight the variability of immune responses in Crohn's disease and the importance of further research to guide personalized treatments.

Key words: Regulatory T cells (Tregs), Crohn's disease (CD), FOXP3

PP-4

Comparison of Umbilical Cord Blood Gas Parameters in Newborns Born to Mothers with Early and Late-onset Preeclampsia

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Introduction: Preeclampsia (PE) is a hypertensive disorder of pregnancy that can be classified into early-onset PE (EOPE), occurring before 34 weeks, and late-onset PE (LOPE), occurring at or after 34 weeks. Generally, EOPE is associated with more severe maternal and neonatal outcomes. The effects of PE onset week on umbilical cord blood (UCB) gas parameters have not been fully studied; only UCB pH levels have been compared, with conflicting results across studies. This study aims to compare the UCB gas parameters of newborns born to mothers with EOPE and LOPE.

Method: This study included 100 women diagnosed with PE at Bezmialem Vakıf University, Faculty of Medicine Hospital between January 2013 and May 2024. Participants were categorized into EOPE (<34 weeks) and LOPE (≥34 weeks) groups based on the gestational age at diagnosis. Venous UCB gas parameters (pH, HCO_3, base excess, pCO_2, lactate), maternal demographics, delivery method, gestational age, and neonatal outcomes were recorded.

Results: No significant differences in UCB gas parameters were observed between the EOPE and LOPE groups. However, EOPE newborns had significantly lower 1- and 5-minute APGAR scores (6.84/8.54 vs. 7.61/9.14, p=0.021/p=0.005) and a higher rate of cesarean delivery (98% vs. 80%, p=0.003).

Conclusion: Although UCB gas parameters, including pH, did not significantly differ in our study, similar to a previous study on the same topic, EOPE was associated with lower APGAR scores. Larger studies are needed to further explore the effects of PE onset week on UCB parameters.

Key words: Preeclampsia, umbilical cord blood gas, early-onset preeclampsia, late-onset preeclampsia

PP-5

Evaluation of the Relationship Between Body Perception, Self-esteem and Social Media Addiction Levels of Bezmialem Vakıf University, Faculty of Medicine Students

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Introduction: This study aims to examine the relationship between body image, self-esteem and social media addiction among medical students at Bezmialem Vakıf University, Faculty of Medicine with a particular focus on gender differences.

Method: A cross-sectional survey was conducted with medical students from Bezmialem Vakıf University Faculty of Medicine, including students from all six academic years (1st to 6th year). The survey was administered via Google Forms between May 2024 and November 2024. Participants were assessed using the Rosenberg self-esteem scale, body image scale, and social media addiction scale. Inclusion criteria included age, gender, and absence of psychiatric disorders or substance abuse.

Results: A total of 87 students participated in the study (47 female, 40 male), with a mean age of 22.7 years. The results revealed a positive correlation between self-esteem and body image perception (r=0.028, p<0.01), indicating that as self-esteem increased, body image perception also improved. Additionally, a negative correlation was found between social media addiction and self-esteem (r=-0.048), suggesting that higher social media addiction levels were associated with lower self-esteem. Gender-based analysis showed that female students had a higher level of social media addiction than male students.

Conclusion: The findings suggest that medical students with higher self-esteem tend to have a more positive body image. Moreover, increased social media addiction is associated with lower self-esteem, particularly among female students. These results highlight the need for further research into the psychological impacts of social media use on medical students.

Key words: Body image, self-esteem, social media addiction

PP-6

Follow-up and Surgical Outcomes of Patients with Atypia (AUS)/Follicular Lesion (FLUS) (Bethesda 3) of Undetermined Significance as a Result of Thyroid Biopsy

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Introduction: Bethesda category 3 (atypia of undetermined significance/follicular lesion of undetermined significance) thyroid nodules represent a diagnostic challenge. This study evaluates the outcomes of patients categorized as Bethesda 3 at Bezmialem Vakıf University Hospital using comprehensive clinical, biochemical, and radiological criteria.

Method: A retrospective analysis was conducted on patients with Bethesda 3 thyroid nodules presenting to the general surgery clinic between October 2010 and March 2024. Inclusion criteria targeted patients with successful follow-up and those undergoing surgery due to suspected malignancy. Data collected included demographics, clinical history, laboratory tests (e.g., TSH, FT3, FT4, anti-Tg, anti-TPO), radiology reports, and pathological results. Statistical analyses were conducted to compare follow-up and surgical findings.

Results: Among 109 patients with Bethesda 3 nodules, 90 (82.6%) were female and 19 (17.4%) were male, with a mean age of 47.2 and 53.1 years, respectively. Of these, 45 underwent surgery, with malignancy confirmed in 34 (75.6%) cases. Follow-up biopsies in 64 patients followed clinically and radiologically confirmed benign outcomes. Nodule size showed a significant difference among groups (p=0.00252), while no significant association was found between age and malignancy (p=0.40009). In the patient group with malignant pathology detected after surgery, the mean nodule size was 23.53±9.94 mm, with a median of 23.50 mm. The interquartile range was 17.25-30.50 mm. This suggests that an increase in nodule size constitutes a risk factor for malignancy.

Conclusion: The study underscores the need for individualized management of Bethesda 3 nodules. While malignancy was prevalent in surgically treated cases, clinical follow-up proved effective in benign cases. Comprehensive evaluation, including repeat biopsies and detailed criteria, is vital for optimal patient care.

Key words: Bethesda category 3, thyroid nodules, malignancy, fine-needle aspiration

PP-7

Level of Knowledge and Awareness of 4th, 5th, and 6th Year Students at Bezmialem Vakıf University, Faculty of Medicine Regarding Attention Deficit Hyperactivity Disorder

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Introduction: Attention deficit hyperactivity disorder (ADHD) is a common neurodevelopmental disorder marked by persistent patterns of inattention, hyperactivity, and impulsivity. Given its significant impact on various domains of life and its frequent co-occurrence with other conditions, ADHD poses considerable challenges for individuals and their families. Consequently, early identification and intervention are essential. Therefore, early diagnosis and intervention are crucial.

Method: Level of knowledge and awareness of 4th, 5th, and 6th year students at Bezmialem Vakıf University, Faculty of Medicine regarding ADHD was evaluated through an online survey. The online survey was designed to collect sociodemographic data and assess participants' knowledge and awareness regarding ADHD. Data were subjected to descriptive and inferential statistical analyses, and results were tested at the 0.05 significance level.

Results: The study participants demonstrated a fundamental understanding of ADHD. However, no statistically significant correlations were observed between the students' sociodemographic variables (gender, age, and grade level) and their level of knowledge regarding ADHD.

Conclusion: Our study suggests that including ADHD in the medical school curriculum could significantly enhance students' awareness of the disorder. We emphasize the importance of strengthening the medical curriculum to better equip medical students with the knowledge and skills necessary to understand and manage ADHD.

Key words: Attention deficit hyperactivity disorder, awareness, medical student

PP-8

Analysis of Demographic Characteristics and Laboratory Data of Patients Diagnosed with Autoimmune Thyroiditis

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Introduction: Autoimmune thyroiditis is a common cause of thyroid diseases, including Graves-Basedow disease and Hashimoto thyroiditis. Autoimmune thyroiditis is marked by thyroid-specific autoantibodies and is linked to genetic, environmental, and epigenetic factors. In our study, individuals followed up with a diagnosis of autoimmune thyroiditis in the adult age group will be examined in terms of demographic and laboratory characteristics, and in particular, the connection between autoimmune thyroiditis and inflammatory markers will be investigated.

Method: This study included 24 patients diagnosed with autoimmune thyroiditis and a control group of 24 healthy individuals. Autoimmune thyroiditis was diagnosed based on high thyroid stimulating immunoglobulin, anti-thyroglobulin, and anti-thyroperoxidase titers and/or thyroiditis findings on thyroid ultrasonography (USG). These data were obtained retrospectively from our hospital's software system. Patients' demographic information, laboratory data, and USG images were analyzed and compared for the patient group and the control group.

Results: In the first group, there were 16 females and 8 males the average age was 40.37, and the average body mass index (BMI) was 28.43. In the control group, there were 18 females, 6 males, the average age was 45.08 and the average BMI was 29.03. No statistically significant difference was found in inflammatory markers (C-reactive protein, erythrocyte sedimentation rate, neutrophil-to-lymphocyte ratio, ferritin); however, a significant difference was found between thyroiditis findings in USG (p=0.002) between the two groups.

Conclusion: No significant difference was observed in the inflammatory markers of autoimmune thyroiditis patients compared to healthy patients. It should be kept in mind that most of these patients were under treatment, which may have affected this situation. The significant increase in findings in favor of thyroiditis on USG showed that antibody testing may be important in patients with thyroiditis detected on USG.

Key words: Hashimoto, graves, autoimmune thyroiditis, inflammatory markers, USG

PP-9

Comparison of Alexithymia and Empathy Levels Between Medical Students and Engineering Students

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Introduction: Alexithymia is characterized by difficulty recognizing and expressing emotions, while empathy is the ability to understand and share others' emotions. This study aims to compare alexithymia and empathy levels between medical and engineering students, and to examine changes throughout their education, providing insights into the impact of different academic disciplines on alexithymia and empathy.

Method: This study applied the Toronto Alexithymia Scale (TAS) and the Empathy Assessment Scale (EAS) to 395 students from Bezmialem Vakıf University, Faculty of Medicine (1st, 4th, and 6th years) and İstanbul Technical University Faculty of Engineering (1st and 4th years). TAS was analyzed through its total score and subscales: Difficulty Identifying Feelings (TAS-A), Difficulty Expressing Feelings (TAS-B), and Externally-Oriented Thinking (TAS-C). EAS was evaluated based on its total score and subscales: Social interaction, cognitive behavior (CB), and emotional identification (EI).

Results: The EI scores of 4th-year engineering students were statistically significantly higher than those of 1st-year engineering students (p=0.017). There were no statistically significant differences in alexithymia and empathy scores between 1st-year medical and engineering students. The CB and total EAS scores of 4th-year engineering students were significantly lower than those of 4th-year medical students (p=0.025 p=0.018), while their TAS-C scores were significantly higher than those of 6th-year medical students (p=0.04). TAS-A scores of 1st-year medical students were statistically significantly higher than those of 6th-year medical students (p=0.025). Medical students had significantly lower TAS-C scores than engineering students (p=0.046).

Conclusion: Based on these results, medical education may play a role in developing empathy skills compared to engineering education, as understanding patients' emotions is essential in medicine. Additionally, medical education may have a positive impact by reducing difficulties in identifying emotions.

Key words: Alexithymia, empathy, medical students, engineering students

PP-10

Evaluation of Dyspepsia Symptoms in Smoking and Non-smoking Students at Bezmialem Vakıf University, Faculty of Medicine Students

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Introduction: Dyspepsia is a condition characterized by digestive discomfort, including symptoms such as stomach pain, bloating, gas, heartburn, and indigestion. Smoking, which is associated with many health problems, also has significant effects on dyspepsia. It has been shown that smoking reduces blood flow, affects mucosal barriers, and triggers the release of free radicals that slow down cell proliferation. These findings suggest that smoking may be linked to gastrointestinal (GI) diseases. The aim of this study is to evaluate of dyspepsia symptoms in smoking and non-smoking students using the GI Symptom Rating Scale (GSRS) scoring system.

Method: This descriptive study was conducted by applying the GSRS to 210 medical students at Bezmialem Vakıf University and categorized them into two groups: smokers and non-smokers. The survey assessed sociodemographic characteristics, smoking habits and GI symptoms. GSRS scores were calculated for each participant to evaluate the presence and severity of dyspeptic symptoms.

Results: Totally 213 medical students were included in this study, 108 smokers and 105 non-smokers. There were 105 females (49.3%) and 108 males (50.7%); the average age was 22.13. The results revealed statistically significant differences in reflux (p<0.001), diarrhea (p<0.001), and total symptom scale scores (p=0.023) between smokers and non-smokers, indicating higher levels of these symptoms among smokers. However, no statistically significant differences were observed for abdominal pain (p=0.281), indigestion (p=0.157), and constipation (p=0.582), indicating similar symptom distributions for these categories between the groups.

Conclusion: These findings suggest that smoking may contribute to the increased severity of dyspepsia symptoms, particularly reflux and diarrhea. The results highlight the potential negative impact of smoking on digestive health and underline the importance of preventive interventions to mitigate these symptoms.

Key words: Dyspepsia, smoking, gastrointestinal diseases, medical students

PP-11

Evaluation of Medical Artificial Intelligence Readiness Levels of Bezmialem Vakıf University Medical Specialization and Faculty of Medicine Students

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Introduction: Artificial intelligence is used to improve diagnostic processes in the healthcare field, playing an essential role in imaging, echocardiography, and the detection of neurological diseases. However, training in artificial intelligence remains insufficient within the curricula of medical faculties. Evaluating readiness levels will be beneficial in determining the educational curriculum for these competencies. This study aimed to assess the readiness levels for artificial intelligence among medical faculty and specialty students at Bezmialem Vakıf University.

Method: The study included medical faculty and specialty students. The "Medical Artificial Intelligence Readiness Scale" was administered online, and the scale was evaluated on a total of 110 points. A power analysis determined that the minimum sample size was 162. The data were analyzed using SPSS 21.

Results: The responses of 162 participants revealed average scores of 24.91 out of 40 for the cognitive factor, 29.64 out of 40 for the skill factor, 10.69 out of 15 for the predictive factor, and 10.92 out of 15 for the ethical factor. The overall score was 76.15 out of 110. No significant difference was observed between class levels and specialty students (p=0.569).

Conclusion: The study showed that the overall readiness levels for artificial intelligence among medical faculty and specialty students at Bezmialem Vakıf University were moderate. These findings highlight the need for incorporating comprehensive artificial intelligence training programs into medical education to ensure that future healthcare professionals are well-prepared for advancements in medical technologies.

Key words: Artificial intelligence, medical education, readiness levels

PP-12

Retrospective Evaluation of Enthesopathy, Sacroiliitis and Clinical Parameters in Ankylosing Spondylitis Patients

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Introduction: Ankylosing spondylitis (AS) is a chronic inflammatory disease affecting the spine and sacroiliac joints, leading to progressive vertebral fusion. Enthesopathy, inflammation at tendon and ligament insertion sites, is a key feature of AS. Early diagnosis and monitoring of disease activity are essential for managing AS. Magnetic resonance imaging (MRI) is effective in detecting early enthesopathic changes, while pelvic antero-posterior (AP) radiographs are used for later-stage changes. This study compares clinical parameters and imaging findings (sacroiliac MRI vs. pelvic AP) in AS patients.

Method: This retrospective study reviewed the imaging records of 2183 AS patients in the Department of Physical Therapy and Rehabilitation at Bezmialem Vakıf University (2019-2024). After excluding incomplete imaging data, 60 patients (30 males, 30 females, aged 20-50 years) were included. Imaging methods included sacroiliac MRI (group 1) and pelvic AP radiographs (group 2). Findings were compared regarding enthesopathy and sacroiliitis; clinical parameters such as age, gender, disease duration, and symptom severity were recorded.

Results: Sixty patients (30 males, 30 females) were included. In the sacroiliac MRI group, significant findings included contrast enhancement (suggesting active inflammation) and erosive changes in the sacroiliac joints ($p < 0.05$), indicating acute sacroiliitis. Joint space narrowing was also observed. Pelvic AP radiographs revealed enthesopathies of the bones, but missed soft tissue inflammations. Statistically significant differences were found in the early detection of inflammation between MRI and radiographic methods ($p < 0.01$). The severity of symptoms was more pronounced in patients with MRI evidence of active sacroiliitis.

Conclusion: This study supports Sacroiliac MRI for early detection of inflammatory changes in AS. MRI provides better assessment of active disease, while the Pelvic AP radiography remains valuable due to its accessibility and lower cost. A hybrid approach, combining both methods, is recommended for comprehensive evaluation, especially for early-stage disease detection.

Key words: Ankylosing spondylitis, sacroiliac MRI, pelvic AP, enthesopathy, sacroiliitis, radiography

PP-13

The Relationship Between Caregiver Burden for Elderly Patients and Caregiver Muscle Strength, Nutrition, and Sleep Status

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Introduction: The elderly population, defined as individuals aged 65 and over, is growing rapidly worldwide. This demographic shift is leading to an increased burden on caregivers, who are essential in assisting elderly patients. In our study, we aim to determine the burden of caregivers providing care for elderly patients.

Method: Our study was conducted from March 2023 at Bezmialem Vakıf University Faculty of Medicine Hospital, focusing on caregivers of hospitalized patients aged 65 and over. After collecting personal information, we used the caregiver burden scale (CBS) to assess caregiver burden, the Mini Nutritional Assessment Test (MNAT) and healthy eating attitude scale, to assess nutritional status, and the Epworth Sleepiness Scale (ESS) and Insomnia Severity Index (ISI) to assess sleep status. For muscle strength, a handgrip dynamometer was applied to the arm three times, and the maximum result was evaluated.

Results: To date, the study has enrolled 100 volunteer caregivers, comprising 79 females and 21 males, with a mean age of 50.5 years. According to the MNAT, the prevalence of undernutrition among participants is 48%. The ESS indicates a daytime excessive sleepiness prevalence of 12%, while the ISI reveals a moderate insomnia rate of 10%. Additionally, the handgrip test shows muscle weakness rates of 5% in females and 4% in males. After adjustment for all confounders, when comparing total scores among participants, a negative correlation was still observed between CBS and the MNAT, and a positive correlation was found between CBS and the ISI ($p<0.05$).

Conclusion: Caregiver burden is linked to poor nutrition and sleep disturbances. Therefore, the sleep and nutrition status of caregivers should be regularly monitored, and necessary measures should be taken.

Key words: Caregiver burden, elderly patients, nutrition, sleep status, muscle strength

PP-14

Evaluation of Sun Protection and Skin Cancer Awareness Among Medical Students at Bezmialem Vakıf University

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Introduction: Skin cancer arises from uncontrolled skin cell growth, often due to ultraviolet exposure or genetics. Early detection is crucial, emphasizing regular dermatologic exams and sun protection. This study evaluated skin cancer awareness and sun protection among Bezmialem Vakıf University medical students; it identified key information sources to improve knowledge.

Method: This descriptive study was conducted using a 29-item survey administered to 218 fourth-, fifth-, and sixth-year medical students. The questionnaire assessed participants' sociodemographic characteristics, sun protection behaviors, skin cancer risk factors, and knowledge levels. Of the participants, 71.1% were female, and 28.9% were male.

Results: Only half of the participants correctly identified the most common type of skin cancer. Dermatologists were the most frequently cited source of information on skin examinations (35.7%), followed by social media (31.1%). The percentage of correct answers to 10 knowledge-based questions increased with academic year; 65.6% for fourth-years, 67.1% for fifth-years, and 72.08% for sixth-years. A significant difference was observed in the awareness of the average number of nevi in individuals, between participants with a family history of skin cancer (17.6%) and those without (21.9%) (p=0.034). Students with freckles demonstrated significantly higher correct response rates to questions on melanoma characteristics, risk factors, and skin examination protocols (p<0.001, p<0.001, p=0.021, respectively). Additionally, a family history of skin cancer was associated with higher awareness of melanoma risk factors (p=0.013). However, performing self-skin examinations did not significantly impact knowledge levels (p=0.506).

Conclusion: Knowledge levels increased with academic year, highlighting the effectiveness of medical education. Students with freckles or a family history of skin cancer exhibited greater awareness of melanoma risk factors, emphasizing the need for targeted educational interventions to improve skin cancer awareness across all demographics.

Key words: Awareness, skin cancer, medical students, melanoma

PP-15

Do Childhood Traumas Increase Suicidal Thoughts Among Depressed Youth?

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Introduction: Major depressive disorder, characterized by a persistent low mood or lack of interest, is linked to increased suicidal ideation and attempts during adolescence. Although childhood trauma, such as neglect or abuse, is associated with later depression, its role in suicidal thoughts among depressed adolescents is unclear. This study seeks to explore how childhood trauma influences suicidal ideation in adolescents diagnosed with depression.

Method: Participants aged 11-18 (M=15.7, SD=1.7) completed standardized assessments, including the Childhood Trauma Questionnaire, Revised Child Anxiety and Depression Scale, Suicide Probability Scale, and Suicidal Behavior Scale. Path analysis was conducted to evaluate direct and indirect associations, controlling for sociodemographic variables.

Results: Depression status was significantly associated with higher scores on childhood trauma subdomains, including sexual abuse (p=0.045), physical abuse (p=0.035), emotional abuse (p=0.001), and emotional neglect (p=0.009), while the association with physical neglect was not significant (p=0.143). Emotional abuse (p=0.023) and emotional neglect (p=0.014) were significantly associated with suicidal probability, which strongly predicted suicidal behavior (p<001). Depression status also directly predicted suicidal probability (p<0.001) and suicidal behavior (p=0.033). Additionally, depression status was indirectly associated with suicidal behavior through the mediating effects of emotional abuse and suicidal probability, (p=0.032). The total association between depression status and suicidal behavior, combining direct and indirect effects, was significant (p<0.001).

Conclusion: This study highlights the significant role of childhood trauma, particularly emotional abuse and neglect, in predicting suicidal ideation and behavior in depressed adolescents. Analysis shows that emotional abuse and neglect contribute indirectly to suicidal behavior through suicidal probability. These findings highlight the importance of addressing trauma histories in youth with depression to mitigate suicidality risk. Future research should further explore these relationships in larger samples to develop targeted interventions.

Key words: Childhood trauma, depression, suicidality, youth

PP-16

Histopathological and Immunohistochemical Analysis of Eosinophilic Kidney Tumors

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Introduction: Eosinophilic renal tumors represent a diverse group of neoplasms that challenge differential diagnosis due to overlapping histopathological and immunohistochemical features. These tumors, which can be malignant, benign, or indeterminate in behavior, require accurate classification to guide prognosis and treatment. The recent updates in the World Health Organization (WHO) 2022 classification introduce new categories for these tumors, enhancing diagnostic precision.

Method: This retrospective study reviewed cases of eosinophilic renal tumors diagnosed between January 2013 and November 2023 at Bezmialem Vakif University Hospital. A total of 299 patients who underwent partial or radical nephrectomy were included. Pathological reports were re-evaluated according to the WHO 2022 classification, documenting histopathological and immunohistochemical features. Demographic and clinical data were also analyzed.

Results: The study identified 299 cases of eosinophilic renal tumors, including 21 angiomyolipomas, 119 clear cell renal cell carcinomas, 1 eosinophilic solid cystic renal cell carcinoma, 1 eosinophilic vacuolated tumor, 53 chromophobe renal cell carcinomas, 4 low-grade oncocytic tumors, 35 oncocytomas, 48 papillary renal cell carcinomas, 7 sarcomatoids, 1 synchronous oncocytoma and angiomyolipoma, 1 succinate dehydrogenase deficient renal cell carcinoma, 2 TFE-3 rearrangement (Xp 11 translocation) carcinomas, and 6 unclassified renal cell carcinomas. Three cases were reclassified based on the latest WHO criteria. One case, previously diagnosed as oncocytoma, was reclassified as an eosinophilic vacuolated tumor. Two cases initially diagnosed as chromophobe RCC were reclassified to low-grade oncocytic tumors.

Conclusion: This study underscores the complexity of diagnosing eosinophilic renal tumors and emphasizes the importance of using the updated WHO 2022 classification for accurate diagnosis. The findings provide valuable insights into the epidemiology, histopathological characteristics, and classification of these rare tumors, contributing to improved understanding and clinical management.

Key words: Eosinophilic renal tumors, eosinophilic vacuolated tumor, low grade oncocytoma, WHO classification

PP-17

Side Effects Due to Antituberculous Treatment in Extrapulmonary Tuberculosis Patients and Associated Risk Factors

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Introduction: Tuberculosis is an infectious disease caused by the bacterium *Mycobacterium tuberculosis.* Tuberculosis can occur in pulmonary and extrapulmonary sites. Since antituberculous treatment is a long-term treatment, drug side effects are frequently encountered. The aim of this study is to detect and classify the side effects of antituberculous treatment in patients with extrapulmonary tuberculosis and to determine the possible risk factors.

Method: Among 400 extrapulmonary tuberculosis patients treated with antituberculous treatment at Bezmialem Vakıf University Hospital, those who did not meet the inclusion criteria were excluded. The remaining 297 patients were divided into two groups: those who developed side effects (n=91) and those who did not (n=206). Side effects were classified, and the treatment day on which they occurred was recorded. Risk factors such as age, gender, diabetes, hypertension, hepatitis B infection (HBV), hepatitis C infection and malignancy were recorded and their contributions to the development of side effects were evaluated. Statistical evaluation of the data was performed using the SPSS.28.V program.

Results: Side effects were detected in 31% of the patients. Among those, 35% had hyperuricemia, 29% had allergic reactions, 23% had hepatotoxicity, 21% had gastrointestinal intolerance, 10% had neuropathy, 7% had fatigue, 7% had visual impairment, 1% had pancreatitis and 1% had ototoxicity. No significant relationship was found between "diabetes, HBV, malignancy, age" and the development of side effects. Male gender and hypertension were found to be significant risk factors for the development of side effects (male gender $p<0.001$, hypertension $p<0.05$).

Conclusion: Hypertension and male gender are significant risk factors for the development of side effects in patients with extrapulmonary tuberculosis receiving antituberculous treatment. Our results should be confirmed with further studies.

Key words: Antituberculous treatment, extrapulmonary tuberculosis, drug side effect

PP-18

Comparison of Stress Levels in Women with Spontaneous Pregnancies and Women with Pregnancies Using Assisted Reproductive Technologies

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Introduction: Assisted reproductive technologies are widely used to help infertile couples conceive, but can be very stressful which can have negative effects on both the mother and the fetus. Our goal is to understand whether there is a difference between the stress levels of spontaneous and assisted pregnancies. If there is a meaningful difference, healthcare workers can be informed and patients can be guided accordingly.

Method: Three inventories will be used on patients who visit Obstetrics and Gynecology Department of Bezmialem Vakıf University. A demographic survey, Perceived Stess Scale and State-Trait Anxiety Inventory. The demographic survey has 9 questions. The Perceived Stress Scale is scored out of 40 points. Higher scores mean higher levels of stress. State-Trait Anxiety Inventory consists of two parts of 20 questions each. State Anxiety Inventory focuses on the anxiety levels in a particular environment, while Trait Anxiety Inventory focuses on anxiety irrespective of the environment. It is scored between 20 and 80. Higher scores mean higher levels of stress. The minimum sample size is 19. T-tests and SPSS 28V will be used.

Results: There is not a significant difference between the scores of spontaneous and assisted pregnancies in any of the inventories ($p>0.05$). Women who are younger than 30 scored significantly higher in State Anxiety Inventory ($p<0.05$), meaning they experience more stress. Women who have never been pregnant before scored higher in the Trait Anxiety Inventory ($p<0.05$).

Conclusion: Although there isn't a significant correlation between stress levels and assisted pregnancies, young and first time mothers, experience more stress. They should be guided by healthcare workers to have a smoother pregnancy.

Key words: Assisted reproductive technologies, stress, pregnancy

PP-19

Endometriosis Awareness of Doctors and Medicine Students in Bezmialem Vakıf University

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Introduction: Endometriosis is a gynecological condition in which glands and tissue of the endometrium migrate outside the uterus. It is a chronic and painful disease that has an effect on the quality of daily life and sexual experiences of people. It causes symptoms like dysmenorrhea, dyspareunia, infertility, dischezia, and dysuria affects 1.5-15% of the population. Endometriosis holds substantial clinical significance because of its effect on the reproductive phase of people's lives. We designed our own questionnaire that has answers or true or false about endometriosis. We processed the data from the answers of medical school students and doctors. Additionally, we aim to assess the level of knowledge in our university and generate awareness about endometriosis.

Method: The questionnaire was filled by 80 people and categorised into 6 groups: 2 genders (male and female), 2 jobs (student and doctor), and those having the disease. SPSS version 28 was used for statistical analysis. Pearson chi-square, Fisher-Freeman-Halton, and Fischer's exact tests were used for evaluation. People who had at least a 70% success rate counted as successful.

Results: The results of 80 attendees have been analyzed, and 12 (15%) of attendees and/or someone in their family had been diagnosed with endometriosis. Fifty-one (63.7%) of the attendees were female, and 29 (36.3%) of the attendees were male. Forty (50%), of the attendees were doctors. Women (36.5%) and men (35.7%) are equally successful (p=0.942). Doctors (95%) are more successful than students (35%) (p<0.001). People who have endometriosis (75%) are more successful than others (63.23%) (p=0.546).

Conclusion: Students are significantly less successful than doctors (p<0.001). We shared the true answers after the study, to evaluate the success rates.

Key words: Endometriosis awareness, university students, doctors

PP-20

The Success Rates of Target HbA1C Levels in Type 2 Diabetic Patients

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Introduction: Type 2 diabetes mellitus is a prevalent chronic condition that can lead to severe microvascular and macrovascular complications. This study evaluates the success rates of achieving target HbA1C levels (<7.5%) in patients with type 2 diabetes and explores factors influencing glycemic control, aiming to raise awareness about diabetes management.

Method: A retrospective analysis was conducted on 100 type 2 diabetic patients treated at the diabetes clinic of Bezmialem Vakıf University Hospital between 2023 and 2024. Data included demographic details, HbA1C values, treatment modalities, adherence to diet and medication, and presence of diabetes complications. Descriptive and inferential statistical analyses were performed with significance set at $p < 0.05$.

Results: Among the 100 patients (36 males, 64 females), 61 achieved target HbA1C levels (male: 69.4%; female: 56.3%). Success rates were uncorrelated with age ($p=0.993$). Patients using oral antidiabetics had higher success rates compared to those on insulin injections ($p=0.009$). Attention to diet and treatment adherence are shown to be correlated with success rates with $p=0.001$ and $p=0.017$ respectively. Complications were more common in patients failing to achieve glycemic control ($p=0.011$).

Conclusion: The success rates of achieving target HbA1C levels were found to be relatively high (61%) compared to past studies. No correlation was found between reaching the target values and age and gender factors. There was a strong association between glycemic control and diet, and treatment adherence. Patients on oral antidiabetics showed better outcomes than those on insulin injections. Diabetes complications were more prevalent in patients with failed glycemic control, underlining the importance and severity of achieving target levels.

Key words: Type 2 diabetes mellitus, HbA1C, glycemic control

PP-21

The Effects of Blood Sugar Regulation on Cognitive Function in Patients with Mild Cognitive Impairment

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Introduction: Mild Cognitive Impairment (MCI) represents a clinical condition between normal aging and dementia, characterized by measurable cognitive impairment in the absence of dementia. This study aims to investigate the relationship between glycemic regulation parameters, including fasting blood glucose (FBG) and hemoglobin A1c (HbA1c), and cognitive functions assessed by the Mini-Mental State Examination (MMSE) in MCI patients.

Method: This cross-sectional study included 124 patients initially evaluated for MCI, of whom 79 were excluded for not meeting the inclusion criteria. Cognitive functions were assessed using the MMSE. Glycemic regulation parameters (FBG and HbA1c) were analyzed, and the neutrophil-to-lymphocyte ratio (NLR) was calculated as an inflammatory marker. Pearson's correlation coefficient was used to examine relationships between glycemic control parameters and MMSE scores. Continuous variables were compared between genders using independent sample t-tests, while categorical variables were analyzed using the chi-square test.

Results: There was no significant difference in MMSE scores between male and female patients. Additionally, no significant differences were found between genders in terms of age at diagnosis, current age, HbA1c levels, fasting glucose levels, and NLR ($p > 0.05$ for all). No significant correlation was found between MMSE scores and HbA1c levels ($r = 0.036$, $p > 0.05$). However, a weak negative correlation was observed between FBG levels and MMSE scores ($r = -0.281$), suggesting a possible inverse relationship.

Conclusion: Although a negative correlation was observed between glycemic regulation parameters and cognitive performance, the relationship was not statistically significant. Larger sample sizes are needed to better evaluate these findings. Considering the potential importance of glycemic regulation in cognitive health, especially in diabetic populations, further studies are needed to explore its clinical implications.

Key words: Mild cognitive impairment, mini mental state examination, HbA1C

PP-22

Assesment of Liver Functions in Women with Polycystic Ovary Syndrome Using Fibroscan

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Introduction: This study evaluates liver function in women diagnosed with polycystic ovary syndrome (PCOS) using FibroScan, a non-invasive imaging technique. PCOS, a common endocrine disorder in women of reproductive age, is linked to metabolic disturbances that may affect liver health. By comparing PCOS patients with healthy controls, this research aims to explore the association between PCOS and hepatic steatosis.

Method: A total of 36 participants, including 18 women diagnosed with PCOS based on the Rotterdam criteria (2003) and 18 age-matched healthy controls, were recruited from Bezmialem Vakıf University Hospital. Anthropometric data, such as waist-to-hip ratio and body mass index (BMI), were recorded. Liver steatosis and stiffness were assessed using FibroScan, focusing on controlled attenuation parameter (CAP) and elasticity. Additional serum analyses included lipid profiles, fasting insulin, and hormonal markers (follicle-stimulating hormone, luteinizing hormone, thyroid-stimulating hormone). Statistical analyses were conducted using SPSS version 28, with significance set at $p < 0.05$.

Results: PCOS participants exhibited significantly higher BMI compared to controls ($p < 0.01$). Elevated CAP scores in the PCOS group indicated greater hepatic steatosis ($p = 0.03$). Liver stiffness values were higher in PCOS patients but were not statistically significant ($p = 0.07$). CAP scores showed positive correlations with insulin levels and lipid profiles in the PCOS group. Hormonal marker differences were not statistically significant.

Conclusion: The findings suggest that FibroScan is a valuable non-invasive tool for evaluating liver health in PCOS patients. The observed prevalence of hepatic steatosis highlights the importance of regular liver monitoring in this population. Further research is warranted to examine causal mechanisms and effective interventions for managing hepatic complications in PCOS.

Key words: PCOS, FibroScan, hepatic steatosis, liver stiffness, non-invasive assessment, metabolic health

PP-23

Evaluation of Thyroid Fine Needle Aspiration Biopsy Results Performed at Bezmialem University Hospital and Comparison with the Literature

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Introduction: The thyroid gland is the largest endocrine gland in the body, and thyroid-related diseases are among the most common endocrine disorders. However, most are benign, with a low risk of malignancy. Since thyroid nodules are typically asymptomatic, they are often detected incidentally. Fine needle aspiration (FNA) biopsy is the standard method for evaluating thyroid nodules, with results classified using the Bethesda System for Reporting Thyroid Cytopathology. This system categorizes the cytological results into six diagnostic criteria: inadequate, benign, atypia of undetermined significance/follicular lesion of undetermined significance, suspicious for follicular neoplasia, suspicious for malignancy, and malignant. The aim of this study is to evaluate the cytological outcomes of FNA biopsies performed at Bezmialem University Hospital, using the Bethesda system, and to compare these results with those reported in the literature.

Method: This retrospective study included patients who underwent thyroid FNA biopsy at Bezmialem University Hospital from 2018 to 2023. Demographic data (age, gender), nodule characteristics (size, location), and Bethesda classification were collected from clinical records and postoperative histopathology reports.

Results: A total of 200 cases were included, with 85% of patients being female. Most thyroid nodules were classified as benign (80.5%), consistent with findings in similar studies. Only 3 cases (1.5%) were found to be malignant. No significant association was found between nodule size, location, or age and Bethesda category.

Conclusion: The results of this study indicated that thyroid FNA biopsy results at Bezmialem University Hospital were predominantly benign, with malignancy rates consistent with literature. No significant association was observed between nodule characteristics and Bethesda classification, supporting the reliability of FNA in thyroid diagnostics.

Key words: Thyroid nodule, fine needle aspiration biopsy, Bethesda system for reporting thyroid cytopathology

PP-24

Food Literacy Abilities of Bezmialem Vakıf University Faculty of Medicine Students

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Introduction: Food literacy involves the knowledge, skills, and behaviors necessary to access, analyze, and use nutrition-related information to make healthy choices. It also includes understanding the impact of nutrition on health. Factors such as education, traditions, income, and nutritional knowledge influence eating habits and awareness. This study aims to evaluate the food literacy levels of medical students at Bezmialem Vakıf University, focusing on their awareness of the foods they consume and the resources they use for healthy eating research.

Method: The Food Literacy Scale-TR, consisting of 12 questions, was used to assess the food literacy of medical students in the 2024-2025 academic year. The survey was conducted online via Google Forms and included students from the 1st to the 6th year of study. To achieve 80% power at a 95% confidence level, with a standard deviation of 9, a minimum sample size of 70 participants was calculated.

Results: A total of 71 students completed the survey. Scores ranged from 1 to 5 points per item, with a maximum possible score of 80. Higher scores indicated greater food literacy. The average score for male students was 54.95±9.82 (n=21), while female students scored 56.78±8.83 (n=50). No significant relationship was found between gender and food literacy scores (p=0.427). When comparing grades, 6th-year students had the highest average score (63.4), and 5th-year students, the lowest (53.07). However, no significant differences were observed across grade levels (p=0.759).

Conclusion: The results showed that students were, on average, 75.9% conscious about food literacy. There was no significant relationship between food literacy skills and gender or grade level.

Key words: Food literacy, medicine students, education

PP-25

Determination of Orthorexia Nevroza Tendencies in Bezmialem Vakif University Faculty of Medicine Students

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Intoduction: Orthorexia nervosa (ON) is an eating disorder that begins with seemingly healthy eating habits but can become harmful. Individuals with ON exhibit an obsessive focus on food purity, preferring organic, low-calorie products, avoiding fast food, and meticulously reading food labels. This excessive concern can disrupt daily life and result in nutritional imbalances. ON prevalence varies with age, gender, and socioeconomic status, with young women being particularly vulnerable due to societal pressures and body image concerns. This study aimed to assess ON tendencies among medical students at Bezmialem Vakıf University.

Method: The ORTO-11 scale was used to assess ON tendencies among Bezmialem University undergraduate medical students in the 2024-2025 academic year. The 15-question online survey that focused on eating attitudes was administered to the study group. Participants were evaluated based on gender, smoking status, and body mass index (BMI).

Results: A total of 184 participants (125 females, 59 males) were included. The mean ORTO-11 score for female participants was 29.27 ± 5.6, while the mean score for males was 31.98 ± 7.1. A statistically significant difference was found between the ORTO-11 score and gender ($p=0.025$). The average ORTO-11 score for non-smokers ($n=145$) was 29.64 ± 6.1, and for smokers ($n=39$), it was 32 ± 6.4. No significant difference was found between the ORTO-11 score and BMI, smoking status, or academic year.

Conclusion: ON appears to be influenced by gender among medical students; females have a higher tendency towards orthorexic behavior, which calls for more awareness, and the creation of targeted interventions in the context of health-focused educational settings.

Key words: Ortorexia nervoza, eating disorders, healthy diet

PP-26

Retrospective Evaluation of the Diagnosis, Treatment, and Follow-up Processes of Children Diagnosed with Developmental Dysplasia of the Hip at the Orthopedics and Traumatology Outpatient Clinic of Bezmialem Vakıf University Hospital

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Introduction: Developmental dysplasia of the hip (DDH) is a congenital orthopedic disorder affecting 1-5 per 1,000 live births. It can lead to pain, limited mobility, and osteoarthritis. Early diagnosis and treatment are crucial to prevent complications.

Method: This retrospective study included 50 patients diagnosed with isolated DDH at Bezmialem Vakıf University Hospital between 2012-2024. Patients with syndromic or teratogenic DDH were excluded. Statistical analyses were performed using SPSS 2.0 with t-tests and chi-square tests, considering $p < 0.05$ as significant.

Results: Among the 50 patients, 88% were female, and 30% had a positive family history. Oligohydramnios (8%) and breech presentation (10%) were observed as perinatal risk factors. Swaddling was associated with restricted external rotation ($p = 0.027$). The most common clinical findings were hip abduction asymmetry (70.8%) and leg length discrepancy (63.8%). Graf ultrasound classifications revealed Type 2c (35.5%) and Type 3 (32.3%) as the most frequent. Pavlik harness was applied to 91.4% of patients, with an 80.6% success rate. Surgery was required in 18.8% of cases under six months, increasing to 61.5% between six and twelve months. The overall complication rate was 14.6%.

Conclusion: Early diagnosis and intervention improve DDH outcomes, reducing complications. Surgical treatment is necessary for delayed cases, but a multidisciplinary approach is vital. Further studies with larger cohorts are needed for more definitive conclusions.

Key words: Developmental dysplasia of the hip, Pavlik harness, orthopedic surgery, early diagnosis, pediatric orthopedics

PP-27

Evaluation of the Risk Factors for Anterior Femoral Notching in Total Knee Arthroplasty and Its Effects on Clinical Outcomes

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Introduction: Notching of the femur during total knee arthroplasty (TKA) has been associated with supracondylar fractures. Due to anatomical differences among patients, avoiding femoral notching can be challenging when using standardized implant designs. This study aimed to evaluate whether femoral notching leads to fractures and to analyze its frequency and contributing factors.

Method: This single-center, retrospective study analyzed patients who experienced femoral notching after TKA. Data collected included notching depth, notching grade (classified using the Tayside classification), pre- and postoperative lower extremity deformity analysis, presence of postoperative fractures, and implant brand and size.

Results: Between June 2019 and December 2023, 75 patients underwent TKA and experienced femoral notching; however, there were no reported postoperative fractures. Among these, 9 patients had bilateral femoral notching, resulting in 84 analyzed knees. Notching grades were distributed as follows:

- Grade I: 24 knees
- Grade II: 24 knees
- Grade III: 20 knees
- Grade IV: 16 knees

Seventy percent of patients used Stryker-branded implants, while 29.3% used Zimmer & Biomet implants. No significant difference in notching grade was observed between implant brands (p=0.888). Additionally, no correlation was found between notching grade and implant size (p=0.355 for left knees, p=0.871 for right knees).

Lower extremity deformity analysis indicated postoperative alignment improvements:

- aPDFA (pre-op mean: 87.58; post-op mean: 84.18; normal range: 79-87)

- aPPTA (pre-op mean: 84.18; post-op mean: 82.35; normal range: 78-84)

Conclusion: Although femoral notching is generally avoided during TKA as a precaution, this study found no correlation between femoral notching and the occurrence of fractures. Furthermore, notching severity was not associated with implant brand or size.

Key words: Anterior femoral notching, total knee arthroplasty, supracondylar periprosthetic fracture

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PP-28

Are We Treating PCOS the Right Way? Comparison of the Effectiveness of Combined Oral Contraceptive Methods Based on Estrogen Dose in the Management of Polycystic Ovary Syndrome

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Introduction: Polycystic ovary syndrome (PCOS) is a common and significant condition that affects 8-13% of women. The Rotterdam consensus defines PCOS by the presence of at least two of the following three criteria: oligo-anovulation, hyperandrogenism, and polycystic ovaries. In the treatment of PCOS, combined oral contraceptives are commonly preferred as the first-line treatment option. This study aims to assess the impact of combined oral contraceptives with varying estrogen doses on the quality of life and symptoms in PCOS patients and identify the most effective doses for each symptom. Additionally, based on these findings, the goal is to create a guideline that will support individualized treatment approaches.

Method: A total of 33 female patients, aged 18-45, diagnosed with PCOS and referred to the Obstetrics and Gynecology Clinic of Bezmialem Vakıf University, were included in the study. The patients used three combined oral contraceptive groups differentiated by estrogen dose (low, medium, and high). The quality of life was assessed after treatment using the PCOSQ-50 and Ferriman-Gallwey scoring system. Surveys were collected via Google Forms, and descriptive statistics, chi-square, and t-tests were analyzed using SPSS 28V.

Results: The high-dose group demonstrated significant improvements in quality of life (QoL) scores (p=0.015), whereas no significant differences were found between the low- and medium-dose groups (p=0.054). Hyperandrogenism-related symptoms, such as excessive hair growth, were significantly reduced in the high-dose group (p=0.023). High estrogen doses strongly correlated with improved physical and psychological symptoms (p<0.001).

Conclusion: High-dose estrogen effectively improves QoL, particularly for hyperandrogenism symptoms in women with PCOS. These findings highlight the importance of personalized treatments and encourage further research to confirm these results.

Key words: Polycystic ovary syndrome, combined oral contraceptive, quality of life, estrogen, treatment strategies

PP-29

Development of Glutathione Peroxidase Enzyme Activity Measurement Kit Control Material

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Introduction: This study aims to investigate the preservability and activity of the enzyme glutathione peroxidase using the lyophilization technique.

Method: Samples from 5 EDTA tubes and 5 serum separator tubes, classified as medical waste after hematological and biochemical analyses, and commercially purchased bovine blood, were included in this study. Whole blood samples were analyzed for enzyme activity and subsequently centrifuged to separate the plasma. The separated samples were then washed three times with 0.9% saline solution through centrifugation. Prepared samples including whole blood, plasma, and serum were mixed with CPDA, sucrose, and distilled water at 1:2 and 1:10 dilutions. Enzyme activities were assessed using assays. Following lyophilization, the samples were reconstituted with the same materials, and enzyme activities were re-evaluated daily.

Results: In studies conducted on human whole blood, enzyme activity exhibited stability for 3 to 4 days in all samples, depending on concentration and the solvent used. However, serum and plasma samples were not stable. In studies on animal whole blood, CPDA and sucrose samples at a 1/2 dilution, as well as sucrose samples at a 1/10 dilution, demonstrated stability for one month. In animal serum samples, the 1/1 dilution samples, along with the sucrose and CPDA samples at a 1/2 dilution, exhibited stability for 11 days. Stability was maintained for a shorter duration in the remaining samples.

Conclusion: Products derived from human whole blood exhibited a shorter stability duration compared to those from animal whole blood. Given that prolonged stability is more advantageous for control materials, whole blood and serum samples obtained from animals would be more suitable for the preparation of control kits.

Key words: Glutathione peroxidase enzyme activity, lyophilization, control material

PP-30

Evaluation of Electrocardiography in Patients Admitted to Emergency Service with Drug Intoxication

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Introduction: Intoxications, caused by toxic substance intake, represent 0.8-5% of emergency admissions and significantly contribute to mortality and morbidity. Continuous monitoring and electrocardiography (ECG) assessments are crucial as toxic agents can impact cardiovascular function. ECG evaluation aids in the detection of electrolyte disturbances and involves analyzing heart rate, QRS duration, sodium channel block, QT duration, and the presence of ischemia. This study aims to enhance the follow-up and treatment of intoxicated patients in emergency services through ECG evaluations, shedding light on their importance and documenting previously unrecorded ECG similarities in such cases.

Method: The study examined patients aged 18 and older admitted to emergency services from 01.01.2020 to 31.12.2023, following ethical committee approval and adherence to the Declaration of Helsinki. Intoxicated patients were identified using ICD codes and hospital database reviews. Exclusions included patients under 18, those without poisoning, those lacking ECGs, incomplete data, and referrals from other hospitals. Data on demographics, admission details, interventions, poisoning routes, chronic illnesses, medication history, substance use, ECG interpretation, lab results, consultations, and outcomes were systematically recorded for evaluation.

Results: Among 72 patients, 38 were female and 34 male, (average age 56.6±9.8). While the QRS duration was normal, a significant gender difference was noted (p=0.001). QT durations differed based on whether medications were taken knowingly or accidentally (p=0.045). There was a significant relationship between certain medications and QT duration (p<0.05 for antidepressants and p=0.007 for paracetamol).

Conclusion: Evaluation of our research results found that although intoxication with antidepressants created a difference in QT duration, knowingly taking the medication also caused a significant difference. In cases of patients admitted for intoxication to the emergency service, it should be considered whether the patient knowingly used the medication when assessing QT duration. Our results need to be validated through further experimental and clinical studies.

Key words: Electrocardiography, intoxication, emergency, QT, QRS

PP-31

The Impact of the COVID-19 Pandemic on Bezmialem Vakıf University Medicine Students' Attitudes Towards Influenza Vaccination

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Introduction: Vaccines are crucial in the fight against infectious diseases, and the influenza vaccine is recognized as an important preventive measure, especially for individuals in high-risk groups. However, challenges such as vaccine hesitancy make this fight more difficult. The coronavirus disease-2019 (COVID-19) pandemic has influenced individuals' perceptions of health and vaccines. This study aims to evaluate medical students' attitudes toward the influenza vaccine and the impact of the pandemic on these attitudes.

Method: This study was conducted among medical students enrolled at Bezmialem Vakıf University through a web-based survey. The survey included questions about demographic information and attitudes, knowledge, and behaviors related to influenza and COVID-19 vaccines. Data were analyzed using descriptive statistics, chi-square tests, and independent t-tests (p=0.05).

Results: A total of 105 students participated in the study; 65.71% were female, and 34.29% were male. Among the participants, 45.71% had received at least one influenza vaccine in their lifetime. While 66.67% of females believe in the necessity of the influenza vaccine, only 47.22% of males share this belief (p=0.054). Reasons for not believing that the influenza vaccine protects against the flu include "lack of sufficient knowledge", (51.85%). A statistically significant relationship was found between students who received the influenza vaccine during the COVID-19 pandemic and those who reported that the pandemic influenced their influenza vaccination decisions (p<0.0001).

Conclusion: The COVID-19 pandemic positively impacted individuals' attitudes toward influenza vaccination. However, doubts about the necessity of the vaccine and insufficient knowledge indicate that vaccine hesitancy persists. These findings emphasize the importance of future educational programs to raise awareness and reduce vaccine hesitancy.

Key words: COVID-19, influenza vaccine, vaccine hesitancy, medical students, pandemic impact

PP-32

Relationship Between Vitamin D Level and Graves' Disease

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Introduction: It is suggested that vitamin D deficiency is a contributing factor in the pathogenesis of many autoimmune diseases. There are only a few studies investigating the relationship between vitamin D deficiency and Graves' disease (GD), which is an autoimmune thyroid disease. Therefore, in this study, we compared the vitamin D levels in patients with GD and healthy controls and examined whether there were correlations between vitamin D levels and laboratory and clinical parameters.

Method: The medical records of 92 patients with GD aged between 18-75 and 223 healthy controls, matched according to age and gender from Cerrahpaşa Adult Endocrinology Clinic, were examined retrospectively, and the laboratory and clinical data for the study were obtained.

Results: Patients with GD had significantly lower vitamin D levels compared to controls (19.08 ± 7.53 vs. 21.98 ± 10.02 ng/mL, $p=0.02$). The prevalence of vitamin D deficiency (<20 ng/mL) and insufficiency (20-30 ng/mL) was higher in GD (57.6% vs. 48.4%, $p<0.001$, and 38% vs. 30.5%, $p<0.001$, respectively) compared to that in controls. In patients with GD, there were no correlations between the levels of vitamin D and thyrotropin receptor antibodies (TRab), free triiodothyronine (FT3), and free thyroxine (FT4). There was no difference in the vitamin D levels between the Graves ophthalmopathy-positive and-negative patient groups (18.39 ± 6.8 vs. 18.58 ± 6.8 ng/mL, $p=0.79$).

Conclusions: Patients with GD had lower vitamin D levels compared to healthy controls; but, there was not any effect of the vitamin D levels on the laboratory or clinical parameters of GD.

Key words: Vitamin D, Graves disease, Graves ophthalmopathy

PP-33

The Positivity of The Direct Antiglobulin Test and CD38 Expression in Patients with Chronic Lymphocytic Leukemia and Their Relationship Between The Rate of Developing Autoimmune Hemolytic Anemia

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Introduction: During the course of CLL, approximately 35% of cases are observed with a positive direct antiglobulin test (DAT), and 7-10% of patients with a positive DAT develop autoimmune hemolytic anemia (AIHA9. Studies have shown that DAT and CD38 positivity cause a negative outcome in patients with CLL. This study aims to examine the relationship between CD38 expression and DAT positivity and their association with the development of AIHA.

Method: This study was designed retroprospectively and included 74 patients. Patients' clinical findings (age, gender, lymphadenomegaly, hepatomegaly, splenomegaly), hematological profiles, CD38, DAT, and AIHA positivity and negativity during the diagnosis and treatment process were examined. Diseases that patients had in the previous period and during treatment were included. Statistical analysis was calculated.

Results: The number of patients who met inclusion and exclusion criteria was 74. CD38 levels were positive in 23 (31.1%) patients. DAT levels were positive in 22 (29.7%) patients. 6 patients developed AIHA. The number of cases showing both DAT and CD38 positivity, was 3 (4%, p=0.035). There were no patients who were either CD38 or DAT positive and developed AIHA. The frequency of developing AIHA was significantly higher in male patients (6/6, 100%) compared to female patients (0/6, 0%) (p=0.03). Nine patients developed secondary cancer. Hypothyroidism was detected in 5 patients.

Conclusion: We could not find a significant relationship between positive DAT and CD38 expression in relation to AIHA development. This result could be related to the number of the studied cases. In order to make a conclusion about their value as prognostic parameters, a larger series should be investigated.

Key words: Chronic lymphocytic leukemia, direct antiglobulin test, CD38, autoimmune hemolytic anemia

PP-34

Association Between Serum Uric Acid and Lipid Profile in Type 2 Diabetic Patients

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Introduction: Diabetes mellitus (DM) is a systemic disease primarily characterized by imbalances in substances affecting multiple systems. The most common cause of death is cardiovascular disease, with dyslipidemia being the greatest risk factor for cardiovascular disease. Also, hyperuricemia shows a correlation with dyslipidemia. In our country, there are insufficient data about this association. Our goal is to epidemiologically investigate this relationship and thereby minimize potential complications that may arise due to diabetes.

Method: Patients diagnosed with type 2 DM who visited the Family Medicine outpatient clinics at Bezmialem Vakıf University Faculty of Medicine Hospital between January 2014 and January 2024 were included in this study. The patients' demographic data (age, gender, comorbidities, medications used) and fasting blood glucose, HbA1c, triglycerides, HDL, LDL, and uric acid levels were retrospectively collected from the hospital database. $P<0.05$ was considered statistically significant.

Results: We evaluated clinical and laboratory findings in 234 patients with type 2 DM. In this study, 50% (117) were females and 50% (117) were males. Two hundred nine patients (89.3%) had high HbA1c values and 90 patients (38.5%) had hyperuricemia. Sixty of the hypertriglyceridemic patients (43.1%) also had hyperuricemia.

Conclusion: Results of this study showed that there was a significant weak positive correlation between uric acid levels and triglyceride levels in type 2 diabetic patients, indicating that high uric acid may contribute to elevated triglycerides. There was no significant correlation between serum uric acid and other lipids. These results suggest that monitoring uric acid levels in diabetic patients, especially with hypertriglyceridemia, may help identify individuals at higher cardiovascular risk. Further research is needed to explore this connection.

Key words: Type 2 diabetes mellitus, uric acid, lipid profile

PP-35

Determination of Blood Culture Positivity Times for the Purpose of Reducing the Standard Incubation Period in Blood Cultures

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Introduction: Blood culture remains the gold standard for diagnosing bloodstream infections, yet prolonged incubation times delay clinical decision-making. Automated blood culture systems have reduced time-to-positivity (TTP), raising the question of whether the standard 120-hour incubation period can be shortened. This study aimed to analyze positivity distributions across different pathogens and evaluate the feasibility of reducing the standard incubation time.

Method: This retrospective study analyzed 5,156 positive blood cultures collected at Bezmialem Vakıf University Hospital between April 2022 and April 2024. Pathogens were categorized, and cumulative positivity distributions were calculated. Kaplan-Meier survival analysis, log-rank testing, and Cox proportional-hazards modeling were used to determine the positivity trends. Sensitivity and specificity analyses were conducted to assess the impact of TTP reduction.

Results: The cumulative positivity analysis showed that 99.1% of cultures turned positive within the first 48 hours, suggesting a strong early detection capability. Kaplan-Meier analysis revealed that most bacterial infections reached positivity by 85 hours, with *Escherichia coli*, *Klebsiella pneumoniae*, and *Staphylococcus aureus* exhibiting rapid detection. However, a significant proportion of clinically critical pathogens, including fungi (*Candida* spp.), fastidious bacteria (*Brucella* spp.), and certain anaerobes, required extended incubation of 105-120 hours. Reducing the TTP below 120 hours would risk missing these pathogens, compromising patient safety.

Conclusion: Although most bacterial pathogens are detected within 85-90 hours, the presence of highly clinically relevant pathogens requiring 105-120 hours necessitates maintaining the standard 120-hour incubation period. Reducing TTP is not feasible without risking false negatives in slow-growing pathogens, which are critical for patient management.

Key words: Blood cultures, incubation time, time-to-positivity, bloodstream infections, clinical microbiology