OP-1

Single-Session Radiofrequency Ablation on Benign Thyroid Nodules: A Prospective Single Center Study

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Objective: The activity of the application of single-session ultrasonography (US)-guided percutaneous radio frequency ablation (RFA) in benign thyroid nodules was investigated in this prospective clinical study.

Methods: RFA treatment was applied to 100 nodules in 100 patients (78 women, 22 men; average age 44.5 years old; age range 18-71) who had euthyroid condition, nodule size larger than 1 cm in the ultrasonography, and proven to be benign by fine needle aspiration cytology. The nodules were separated into three groups according to the content: solid, cystic and mixed. In all of the cases, the process was performed under general anesthesia. RFA process was standardized to 70 W in all of the patients, and a moving shot technique was used. The results acquired in the third and sixth months of the controls were evaluated, and the volume of the nodules was screened.

Results: No differences between the thyroid function tests performed before and after RFA were detected (p>0.05). The mean volume of the nodules before the process, in the third month after the process, and in the sixth month were 16.8, 4.8, and 2.6 ml, respectively (p<0.001). The decrease in cystic nodules was greater than solid and mixed structures. Temporary hoarseness occurred in one case and skin edema was detected in a patient at the isthmus.

Conclusion: RFA is an option for treatment, with minimal invasiveness and a low complication rate, and it is effective primarily in cases with benign nodules and nodular goiter. In cases with good compliance, the likelihood of success is greater. General anesthesia can be a good option for anxious cases to gather better results.

Keywords: Radiofrequency ablation, thyroid, nodule

OP-2

Antepartum Depression as a Determinant of Delivery Method

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Objective: The aim of this study was to examine the influence of antenatal depressive symptoms on obstetric outcomes. Depression is a widespread and significant public health concern worldwide. In comparison to males, females demonstrate a higher incidence for major depression.

Pregnancy and puerperium are times of particular vulnerability, therefore many women exhibit symptoms of emotional distress during this period. Since hormonal changes increase the lifetime risk for affective disorders, the risk of depression is naturally higher in women during the childbearing years. Antenatal stress and depression, for example, have been linked to preterm birth, intrauterine growth restriction, and low weight infants.
Studies indicate that expectant mothers with prenatal depression may be less likely to attend antenatal examinations, a situation that contributes to unfavorable pregnancy outcomes such as inadequate weight gain, preterm delivery, low birth weight, and poor neonatal adaptation.

According to a systematic literature review antenatal depression affects approximately 12% of women with its highest prevalence in the second and third trimester of pregnancy (7.4% first trimester, 12.8% second trimester, and 12.0% third trimester).

Methods: All pregnant women in the third trimester of gestation who received antenatal care at Bezmialem Vakif University Hospital were asked to participate in this prospective study. Only 30 weeks and over, older than 18 years of age, primipara and pregnancies without additional disease were included in this study. We used Beck Depression Inventory. A total of 50 healthy pregnant women were included in this study.

Results: 33 of 50 women had a vaginal delivery. 17 of 50 women received a c-section. 3 of 17 participants’ c-section cause was malpresentation, 3 of 17 were postterm. 4 of 17 were makrosomic, 4 of 17 were high-risk pregnancy and 3 of 17 were an elective c-section. There is no statistically significance between the mothers age and the depression score. There is no statistically significance between gestational age and depression score. Mean depression score who planned normal vaginal delivery: 10.67. Mean depression score who planned caesarean section: 12.50. It was not statistically significant.

Conclusion: We worked with a limited group. Patients were not willing to answer the questions. There is no elective c-section choice in Bezmialem Vakif University. Number of participants should be increased. This study can continue at another hospital were elective c-sections are preformed.

OP-3

Evaluation of Criteria Which Affects Weight Loss in Patients Who Cannot Reach Intended Weight Loss After Bariatric Surgery

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Objective: Bariatric surgery is a life-changing method for obese patients who cannot benefit from diet, physical exercises, behavior therapy and medications. Patients with a BMI >40 or >35 with comorbidity, are eligible for bariatric surgery. There are 3 types of bariatric surgery: restrictive, malabsorptive and combined. Lifestyle changes (diet, programmed exercises) are important for weight loss after surgery. With this project we evaluated the criteria which affects weight loss in patients who cannot reach intended weight loss after bariatric surgery.

Methods: A questionnaire with 24 close-ended questions, about patients’ habits before and after surgery, was performed on 48 patients face to face at follow-ups. Two groups were created; experimental (48%) and control groups (52%). (According to the Tanita Scale, the subjects who were not able to decrease by 50% excess body weight after 6 months were included in the experimental group.) 79.2% of the patients were female and 20.8% of patients were male. Patients’ ages were between 21 and 64. The average age was 41.1. Our patients’ surgery type was sleeve gastrectomy. The questionnaire was performed between the 6th and 30th months after surgery.

Results: The experimental group’s average BMI at the beginning was 53.3 and it decreased to 40.1 after surgery. The control group’s average BMI at the beginning was 45.4 and it decreased to 28.4. In the experimental group 78.3% of patients were using medications before surgery for their comorbidities; in the control group only 48% of patients were using medications before surgery. 100% of the control group patients adapted to doctor controls; 78.3% of the experimental group patients adapted to doctor controls. 96% of the control group patients were using medications -protein powder, vitamins etc.- properly after surgery; only 56.5% of the experimental group patients were using medications properly after surgery.

As major factors, adaptation of diet and physical activity after surgery and changes of daily activities after surgery ratios were higher in the control group as expected.

Conclusion: The results are statistically significant for weight loss after surgery. With this study we aim to publish a paper to motivate patients for changes in life-style and adaptation of responsibilities after surgery.

Keywords: Bariatric surgery, failed weight loss
Objective: Breast cancer is the fifth most mortal cancer worldwide according to the WHO. Since 1989 the mortality due to breast cancer has decreased, due to early detection and improvements in breast cancer treatment. In Turkey 23% of the female population perform breast self-examination (BSE) monthly and 8.3% of women undergo mammography. In this study we aimed to evaluate the awareness related to breast cancer, the usage of mammography and breast self-examination in women, and the relation between the level of education and the usage of these early detection methods.

Methods: This study was conducted with 105 female breast cancer patients who are or were treated at Bezmialem Vakif University Hospital. The data was collected by a self-administered questionnaire over a phone call with the patients themselves. The questionnaire consisted of three parts: sociodemographics, patient breast cancer history and family history.

Results: The study included 105 female breast cancer patients with a median age of 53 (range, 32-76 years). About 88% of them went to a doctor after realizing changes in breast structure. 12.4% of the patients were detected by screening mammography. 56% of these 92 patients asked for medical advice immediately. 6% went to the doctor after one and two years. 11.4% of our patients had metastatic lesions on their first visit. No significant correlation between the educational status and breast cancer screening awareness has been shown due to an insufficient number of patients. 37.1% had a family history of cancers in general. About 70% of the patients undergoing mammography were recommended by their doctors. The majority of screenings were done in private and public hospitals.

Conclusion: These are only preliminary data. The Pearson Correlation is not significant. The aim is to reach more patients. Nevertheless we think that breast cancer awareness is not sufficient in our country due to the fact that 12.4% of patients are detected with screening mammography and only 56% of patients who had changes in their breast asked for medical advice immediately.

Objective: The aim of this study is to assess the satisfaction of health care services received by temporary protected Syrians at Bezmialem Vakif University Fatih Clinic.

Methods: We applied a survey that contains questions about clinic accessibility, physical conditions, behavior of the doctors and staff and overall quality of service. Additionally, our survey asked the participants to compare the health services in Syria before the war and the health services they have received in Turkey. Participants answered all questions giving their own views by scoring questions 1 to 5 (poor to excellent).

Results: Surveys were completed with translator supervision and included 100 volunteer patients as needed by the project. All participants answered 14 questions in the survey. 28% of participants stated excellent general quality of health care was provided. More than 40% of the participants gave the highest score to questions related to physical conditions, physician and staff behavior. On the other hand, the least scored questions are the ease of getting an appointment and the total waiting time. The results of this study will be forward to Bezmialem Vakif University Fatih Clinic administrators and other partners of the health service who assess the quality of health care services.

Conclusion: In conclusion, the average score of the Survey was calculated significantly higher than good (3.68). 37% of participants choose almost the same selection on the question about comparing the health services in Syria before the war and the health services received in Bezmialem Clinic. Our study achieved some contradictory answers because of communication
difficulties arising from differences in language and culture hesitation. The limitations of our study are that it does not have open-ended questions and a limited participant group. In addition, the results of this study will be forwarded to Bezmialem Vakif University Fatih Clinic administrators and other partners of the health service who assess the quality of health care services.

**Keywords:** Syrians refugees, health care satisfaction, survey

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**OP-6**

**Dental Diagnostic Imaging Techniques are Harmful for Thyroid Tissue: An Experimental Study**

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**Objective:** X-ray based imaging techniques are common for dental diseases. Because the anatomic localization of the thyroid tissue is very close to the dental area, the thyroid may be damaged during dental radiologic imaging tests. At present, there is no data on histopathological change and DNA damage of the thyroid tissue associated with dental radiation exposure. In this study we aimed to evaluate histopathological changes and DNA damage of thyroid tissue in rabbits as a result of the x-ray based dental imaging techniques.

**Methods:** After obtaining approval of the local Animal Research Ethics Committee, a total of 20 white New Zealand rabbits (Oryctolagus cuniculus) were separated into four groups: each group had five animals. Under general anesthesia blood samples of the rabbits were obtained for evaluation of thyroid function tests (Free T3, Free T4 and TSH) and three groups were exposed to radiation. Group 1 was the control group and was not exposed to radiation. Group 2 was exposed to a one time Cone Beam Computed Tomography scan (90 kW, 12mA, 18 seconds duration and evaluated radiation dose was 4781 mGy). Group 3 was exposed to five Digital Dental Panoramic Radiography scans (66 kW, 8 mA, 16 seconds duration and evaluated radiation dose was 3300 mGy for five scans). And Group 4 was exposed to a Cone Beam Computed Tomography scan twice (90 kW, 12mA, 18 seconds duration per each scan and evaluated total radiation dose was 9562 mGy). At 90 days following radiation exposure, under general anesthesia, blood samples were obtained and thyroid tissue of all the animals were excised. After this, all animals were sacrificed. Histopathological examination was performed for tissue necrosis, fibrosis and apoptosis. DNA damage were analyzed via DNA Damage Elisa Kit (Enzo Life Sciences, Lause/Switzerland). Statistical analysis were performed with SPSS v13, one-way ANOVA test was used for evaluation of statistical significance among groups and Tukey’s post hoc test was used for further analysis of specifically significant difference between each group. P<0.05 was accepted as statistically significant.

**Results:** There is no statistically significant difference between pre-exposure and post-exposure hormone levels of free T3, free T4, and TSH (p=0.81). Histopathological examination showed no fibrosis, apoptosis or necrotic changes in Group 1; vacuolar degeneration, unclear degeneration compared to the control group in Group 2; thyrocytes with apoptotic nuclei, decreased colloidal content in Group 3 and apoptotic thyrocytes, interstitial fibrosis in Group 4 under 40 high power field with hematoxylin and eosin stain. DNA damage analysis showed no significant difference among Group 1, 2 and 3 (p>0.05). However, when compared to other groups, Group 4 had statistically significant DNA damage (p<0.001).

**Conclusion:** This study revealed that x-ray based dental imaging techniques causes DNA damage in thyroid tissue. Further investigations can lead to clear results regarding the incidents of malign or benign diseases in thyroid tissue.

**Keywords:** Dental, radiation, thyroid, DNA, damage

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**OP-7**

**Genetic Analysis of a Family with Non Polyposis Colorectal Cancer Under the Age of Forty**

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Colorectal cancers (CRC) are the most common malignancy in gastrointestinal tumors. CRC affects about 1 in 20 (5%) men and women in their lifetime. The majority of CRCs are sporadic but approximately 10 to 20% of cases occur within a familial pattern, and Lynch syndrome is the most common hereditary colorectal cancer syndrome. But several other genes are associated with increased CRC risk as well. There is a comprehensive gene panel for hereditary colorectal cancer. Genes on this panel include: APC, BMPR1A, CDH1, CHEK2, EPCAM, GREM1, MLH1, MSH2, MSH6, MUTYH, PMS2, POLD1, POLE, PTEN, SMAD4, STK11, and TP53.

A family with 7 members participated in our study. Two of them had been diagnosed with colon cancer and one of them with duodenum cancer. The index patient had been diagnosed with colon cancer at the age of 34 and was operated on for a right hemicolectomy. After surgery he received seven courses of chemotherapy treatment. One year later, we diagnosed left adrenal metastasis on this patient and we operated on him for a adrenalectomy. The other patient had been diagnosed with colon cancer at the age of 38 and was operated on for a right hemicolectomy and he received seven courses of chemotherapy treatment. The last patient presented with a duodenum tumor at the age of 32 and a Whipple operation was performed and she received six courses of chemotherapy treatment. According to the familial history, the mother died from colon cancer.

Whole exome sequencing is the application of the next generation technology to determine the variations in the exome. It attempts to examine the important coding regions of approximately 20,000 genes in the genomes and provides a comprehensive outlook on coding genetic variation. In our study, we took blood samples with an EDTA tube from each member of the family. DNA isolation was performed. We use a method of whole exome sequencing for three patients in order to find the causative mutation. MLH1, MSH2, PMS2, MLH3, EPCAM, and TGF-beta2 genes are sequenced. No variation on these genes were determined.

OP-8

Investigating the Essential Tremor Prevalence in the Bezmialem Vakif University Healthcare Professionals

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Objective: Essential Tremor (ET) is the most common movement disorder with a prevalence ranging from 0.4 to 3.9 % worldwide and the age of onset of essential tremor is unclear. The main features of ET are kinetic and postural tremor of the arms, but the head, legs, trunk, voice, jaw, and facial muscles may also be involved. ET may cause functional disability and may be worse with hunger, emotions, and temperature extremes. ET is a heterogeneous disorder. There are differences between cases in age of onset, anatomic distribution of tremor, and rate of progression. Investigating the prevalence of ET with the Bezmialem Vakif University Healthcare Professionals, evaluating the knowledge levels of personnel about ET, analyzing the influence of the psychomental condition and the sleep habits on the frequency and amplitude of ET and searching the correlation between several blood sample parameters with ET prevalence

Methods: Study design; cross-sectional study. 454 participants who consist of 289 male, 165 female were included in our project. We had a wide range of age groups: (19-67 years) and the mean age was 32.85 ± 9.103. We had also participants from different occupational groups. 50.2% of participants were healthcare professionals and 49.8% of participants were Frontline health workers. We performed four different step to our participants. The first step consisted of clinical observation and the survey included evaluation questions for all volunteers. We asked the participants if they have any tremor or not in the first step. For the second step we performed the new survey and detailed neurological examination for all patients who have tremor. Evaluating the psychological conditions and sleep qualities of the patients who got ET diagnosis at the end of step 2 was our aim for the third step. In this phase we used the Hamilton Depression Scale, Hamilton Anxiety Scale, Epworth Sleepiness Scale and Pittsburgh Sleep Quality Index. Investigating several parameters in ET diagnosed patients blood samples was our another step. We searched the levels of TSH FT3, FT4, hematocrit, hemoglobin and plasma lead in the blood samples.

Results: We determined that: 9.3% (42 people) of the participants had tremor in their hands, 13% (59 people) of the participants had a first-degree relative diagnosed with ET, 10.6% (48 people) had a second-degree relative diagnosed with ET. 8 patients were diagnosed with ET and started to get medical support from the neurology department of our hospital.

Conclusion: In this study, we demonstrated the ET prevalence and anatomic distribution in a population with different levels of education and age intervals, and the prevalence of ET in our group was 1.76% and our finding is relevant to the established data. We got normal blood sample findings and we observed lower Epworth and Pittsburgh scores and we did not find any correlation between ET frequency and lower scores of HAM-A, HAM-D Scales in our patients who have ET.
Short Oral Presentations
Short Oral Presentations

SOP-1

The Effect of Music Therapy on Vital Sign and Anxiety of Pediatric Cancer Patients

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Objective: Voice therapy is one of the methods of complementary medicine that is used for many diseases. Music therapy can reduce anxiety during treatment, independently affecting chemotherapy response. This study aimed to examine the effect of music therapy on vital sign and anxiety in pediatric cancer patients during chemotherapy.

Methods: A total number of eighteen patients with vital sign and anxiety were recruited using a random sampling method and divided into two groups of control and music. 9 Patients who were in the music group, listened to instrumental music with earphones for at least 20 min per day for 3 days (depended on choices of the patients). 9 patients who were in the control group didn’t listen to music. Between 5-18 year old patients were evaluated with the beck anxiety scale during the before and after sessions. Vital sign of every patients were interpreted before and after sessions.

Data were analyzed by IBM SPSS-22, NPar Tests, Mann-Whitney Test, Wilcoxon Signed Ranks Test.

Results: There was statistically significant relationship in Beck anxiety scale point (p=0.01), Oxygen saturation point (p=0.036), Sistolic pressure point (p=0.046). There was no statistically significant relationship in Diastolic pressure point (p=0.888) and Heart rate point (p=0.059).

Conclusion: Music therapy reduce anxiety during treatment, independently affecting chemotherapy response.

Keywords: Pediatric cancer, anxiety, music therapy, vital sign

SOP-2

Investigation of the relationships of Medical Faculty Students About Medical Education

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Objective: There are more than 100 medical faculties in different cities in our country. Most of them are in Istanbul. The training in this area differ and have not yet been fully standardized. This is why each university has its own way of teaching. As medical school students, we wanted to get their thoughts and comments about medical education received by students at different universities. For this reason, in this study, we investigated the perceptions of students studying at different medical faculties in Istanbul on their thoughts and competences related to medical education. Our aim was to get comments on the competence of the students in terms of their education in terms of their point of view and to support better education planning.

Methods: Ten medical faculties from Istanbul participated in the study. 4 of these faculties are state universities and 6 are foundation universities. Especially 4th, 5th, and 6th year students are included in the study. The study was planned as a questionnaire consisting of 12 questions about the education of the students. The volunteer students who want to participate in the questionnaire on the internet were asked to fill in the questionnaires and the results of these students were evaluated. The survey responses are arranged in the form of absolutely agreeing, agreeing, undecided, disagree, and strongly disagree. The questions covered by the questionnaire are; 1. Whether or not they have gained sufficient experience in professional practice at the end of the internship, 2. Whether students and faculty members are regularly assessed and evaluated for feedback on edu-
cation 3. Whether the courses given in the basic sciences are useful for the internship 4. Whether they have received sufficient theoretical information about illnesses and situations during the internship 5. Thoughts on oral examinations at the end of the internship 6. If they have not received enough training from trainers in on-the-job training 7. They feel that they do not feel adequately enough to cope with a single patient 8. Thinking about post-internship exams conducted through checklists 9. Whether they have sufficient clinical experience at the end of the internship 10. Explain what would be best to learn at the beginning of the articles 11. They should be able to use basic types of information during the presentations, and 12. During the presentations, all students should be patient enough to have enough experience.

Results: A total of 182 students from 10 medical faculties participated in the study. 31 people from İstanbul University Cerrahpaşa School of Medicine, 8 people from Istanbul University School of Medicine, 100 people from Bezmialem Vakif University School of Medicine, 18 people from Medipol University School of Medicine, 8 people from Acıbadem University School of Medicine, 5 people from Medeniyet University School of Medicine, 5 people from Marmara University School of Medicine, 4 people from Yeditepe University School of Medicine, 3 people from Koç University School of Medicine and 2 people from Bilim University School of Medicine. The answers given to the questionnaires are as follows. I agree and I strongly agree; The first problem was 27.5%, the second problem was 34.2%, the third problem was 26.9%, the fourth question was 62.6%, the 5th question was 43.4%, the 6th problem was 47.3%, 7. 13.2% answered the questions, 47.8% answered the question, 9.3% answered 34.1%, 10 answered 45.1%, 11 answered 30.8%, and 12 answered 24.7%. The steepest diagonal questionnaires were 27.5%, 30.6%, 18.7%, 21.4%, 24.7%, 26.9%, 29.7%, 34.6%, 31.3%, 26.9%, 31.3%, 24.2%, and the other percentages are definitely not and do not agree.

Conclusion: They commented that most of the students agree that they have received sufficient theoretical information in the training they have received during the internship. Especially they do not feel adequate with professional skills and internship. We believe that in medical school education, trainers should pay more attention, especially to practical trainings.

SOP-3

The effect of educational level and socioeconomic status on glycemic control in children with Type1 Diabetes

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Objective: Type 1 diabetes mellitus (DM) is a serious public health problem worldwide. There are a plenty of factors influencing glycemic control in children with type 1 DM. This study aimed to determine the impact of parents’ education and socioeconomic status on glycemic control and identify risk factors for poorly controlled diabetes mellitus.

Methods: The study was performed with 65 children with type 1 DM between the ages of 2 and 18 years. We examined the relationship between the annual mean HbA1c levels and demographic and socioeconomic factors (age, gender, monthly income, parents’ level of education, parents’ occupation, current insulin type, who is responsible for insulin injection, who is responsible for child care, regular follow-up, number of person living together, comorbid disease, duration of diabetes). This study was conducted by interviewing the children and their families and completing the questionnaires related to their demographic features and data associated with their illness. The laboratory findings and medical information of the patients were also retrospectively recorded.

Results: There were a total of 65 patients including 29 (44%) girls and 36 (56%) boys. The mean age of patients was 13.2±3.46 years. The annual mean HbA1c value was 8.4±1.52. There was a association between HbA1c levels and daily blood sugar monitoring \((p=0.000 r=-0.481)\). Also there was a correlation between HbA1c levels and the number of person living together \((p=0.023 r=0.283)\). A positive relationship was observed with regular follow-up visits \((p=0.024 r=-0.282)\). In the laboratory findings, there was a relationship between HbA1c levels and microalbumin/creatinine \((p=0.013 r=0.316)\).

Conclusion: In type 1 DM, achieving a good metabolic control depends on many factors. In this study, regular follow-up visits and daily blood sugar monitoring were found to be a positive effect on glycemic control. However, living in crowded households was associated with a higher risk of poorly controlled diabetes. Higher microalbumin/creatinine which is a primary finding of nephropathy was found in patients with higher HbA1c levels.

Keywords: Type1 diabetes, socioeconomic status, HbA1c
SOP-4

Comparison of Patients with Advanced Lung Adenocarcinoma with EGFR, ALK and ROS-1 Gene Mutations with Patients without Gene Mutation

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Objective: Adenocarcinoma is the most common type of non-small-cell lung cancer (NSCLC). As molecular subsets of lung adenocarcinoma a number of genetic alterations have been identified, such as the epidermal growth factor receptor (EGFR), anaplastic lymphoma kinase (ALK) and ROS-1 gene mutations. We aimed to investigate affecting genetic mutations in patients with advanced lung adenocarcinoma and analyze differences and survival rates among these patients with or without genetic mutations.

Methods: We identified 126 patients diagnosed with advanced lung adenocarcinoma between March 2013 and December 2016 who were tested for EGFR, ALK and ROS-1 gene mutations. For every patient gender, age, smoking, date of diagnosis, number of metastases, metastatic organs, chemotherapy, progression and regression dates, vital status and date of death were noted.

Results: Among the 94 (74.6%) were male and 31 (24.6%) were female patients with the presence of metastases positive in 96 (77.4%) patients. 40 (37%) of the patients had genetic mutations, in particular 27 (21.4%) of the patients had EGFR gene mutation, 10 (8.8%) patients had ALK mutation and 3 (2.4%) patients had ROS-1 mutation. 87 (69%) of the patients were smokers and 84 (66.7%) patients were deceased. There was a significant relationship between EGFR mutation and female gender (p<0.005) and EGFR mutation and absence of smoking (p<0.005). Also, there was a significant outcome in ALK gene mutation in the younger population (p<0.005).

Conclusion: Prevalence of genetic mutation in lung adenocarcinoma in the Turkish population is 37%. In particular EGFR mutation is 21.4%, ALK mutation is 8.8% and ROS1 mutation is 2.4%. EGFR mutation is related with female gender and absence of smoking and ALK gene mutation appears in younger patients. We could not find a significant outcome regarding genetic mutations and survival rates.

SOP-5

Prenatal and Postneonatal Assessment of Knowledge on Breastfeeding and a Comparison of Breastfeeding Education Methods

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Objective: Although breast-milk is the most essential nutrient required for the growth and development of infants, there are still some problems related to breastfeeding in our country. According to WHO and Ministry of Health’s Recommendation for Breastfeeding “Exclusive breastfeeding is recommended up to 6 months of age, with continued breastfeeding along with appropriate complementary foods up to two years of age or beyond.” Although Turkey has the longest breastfeeding duration; the rate of mothers who only breastfeed their babies the first six month is 26%. Among other countries participating to the study, the rate of only breastfeeding in the first six month is 27%. These results of the previous studies show that there are some problems in lactation counseling. In this study, I sought to assess the knowledge of breastfeeding in pre and postnatal women, and to compare the effect of education on increasing the breastfeeding rates.

Methods: This study was completed with pregnant women in the last trimester, between 18-45 y.o. who applied to Bezmialem University Hospital Gynecology and Obstetrics Clinic. Mothers were followed up for three months after delivery. The study included three groups each with 20 participants. The first group was the control group and data was collected from all groups through face-to-face interview before delivery via a questionnaire about breast-milk and breastfeeding. The second group
received additional information prospectus about breast milk and breastfeeding. And the last group received lactation counseling from a doctor without prospectus. Mothers were later followed up in the third month during the postpartum period via a telephone-based questionnaire to compare which counseling type was more appropriate.

**Results:** The information I gathered so far shows that mothers lack knowledge on breastfeeding and breast milk. This also states, even though it is not their first pregnancy, the knowledge that most mothers carry over from their previous pregnancies is not scientific, therefore the provided support on breast milk and breastfeeding is not enough or suitable. The mothers had received information about infant feeding mainly from their parents and neighbors, rather than from healthcare workers. Women who had counseling contact during pregnancy, in the hospital were more likely to initiate breastfeeding within the first hour than women without such contacts, whereas the tendency for elective caesarean section delayed initial breastfeeding. Slightly higher numbers of mothers in the control group and the second group started formula in the 2nd and 3rd months, compared to the third group which received face-to-face counseling. The reason according to the mothers who started formula during the early postpartum period was a low breast milk supply. Intention to exclusively breastfeed did not predict practice; most women supplemented with formula despite intending to exclusively breastfeed. The benefits of breastfeeding were more or less recognized, but the importance of exclusivity was missed. Formula-use was not preferred but considered an innocuous “back-up option” where breastfeeding was not sufficient for infant satiety. The common encountered excuses to exclusive breastfeeding were: the convenience of formula, perceptions among mothers that they were not producing enough breast milk, and pain while breastfeeding.

**Conclusion:** Face-to-face lactation and breastfeeding counseling provided by a doctor was effective in increasing the rate of exclusive breastfeeding for the first postpartum month. It is concluded in the present study that the percentage and duration of feeding only with breastmilk could be increased if pregnant women are given counseling about breast-milk. Consequently the percentage of the mothers who applied to Bezmialem University Hospital Gynecology and Obstetrics Clinic, and fed with breast milk after the birth is high. However the percent of nursing with only breast milk is low in the first three months and percentage of starting additional nourishment is high in the early period. In conclusion, mothers should get more support and encouragement on breastfeeding.

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**SOP-6**

The Genotoxic, Cytotoxic and Apoptotic Effects of Dially Disulfid (DADs) and Dially Trisulfids (DATs) on Human Prostate Cancer (PC3) and Human Prostate Epithelial Cell Lines (WPMY1)

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**Objective:** Cancer is an increasing health problem worldwide; however, prostate carcinoma is the most common cancer in men and the second leading cause of death in many countries. Cancer chemoprevention using bioactive compounds has attracted increasing attention in recent years. The aim of this study is to investigate cytotoxic, genotoxic and apoptotic effects of different concentrations of Dially Disulfid (DADs) and Dially Trisulfids (DATs) on Prostate Cancer Cells (PC3) and Normal Human Prostate Epithelial Cells (WPMY1).

**Methods:** In this study, we examined concentration-dependent cytotoxic, genotoxic, apoptotic and reactive oxygen species (ROS) generating effects of DADs and DATs on PC3 and WPMY1 cells. The cells were incubated with different doses of DADs and DATs (100 to 3000 µM) for 24 hours.

**Results:** We found that both DADs and DATs significantly decreased cell viability and increased genotoxic, apoptotic and ROS generating activity in a dose dependent manner and, these activities were significantly higher than normal for prostate epithelial cells exposure.

**Conclusion:** These findings demonstrated that both DADs and DATs have cytotoxic, genotoxic and apoptotic effects in prostate cancer cells and normal prostate epithelial cells in a dose dependent manner. However, these effects are higher in prostate cancer cells than in normal epithelial cells. Therefore we suggest that both DADs and DATs could be used as chemopreventive agents for prostate cancer.

**Keywords:** Prostate Cancer, dially disulfid, diallytrisulfids, cytotoxicity
Objective: A gluten free diet (GFD) is commonly recognized as the treatment choice for celiac disease. It has also been under consideration as a treatment option for other medical conditions, including dermatitis herpetiformis, IBS, neurologic disorders, rheumatoid arthritis and diabetes mellitus. Future research is needed in order to define the benefits of a GFD in non-celiac medical conditions causing diarrhea, weight loss, bloating, fatigue and heartburn; some of which are considered as Celiac disease-like symptoms. Implementation of a GFD reduces adiposity, inflammation and insulin resistance and several publications have consistently shown the efficacy of a gluten-free diet in rapidly controlling esophageal symptoms and in preventing their recurrences.

Gastroesophageal reflux disease, or GERD is a digestive disorder affecting the lower esophageal sphincter, having typical symptoms that include heartburn and regurgitation. It has some atypical symptoms that are overlapping with other conditions including dyspepsia, epigastric pain, nausea, bloating, and belching all of which are considered as Celiac disease-like symptoms. The benefit of a GFD in patients with nonceliac diseases is however unknown and further studies may be beneficial. The aim of this study is to determine how common gluten intolerance is in patients with GERD and evaluate whether a gluten free diet has any beneficial effect on the severity of symptoms in these patients. I will be suggesting that gluten exclusion from the diet be tested as a new dietary approach for conditions other than Celiac disease.

Methods: This study consisted of 35 patients diagnosed with GERD in the period of January 2010- April 2016, excluding patients with Celiac disease, GIS cancer, Zollinger-Ellison disease, and diseases causing motility problems. Fifty patients had their blood work for IgA against deamidated gliadin peptide antibodies (IgA DGP) and IgA anti-endomysium antibodies analized. The participants were asked to follow a Gluten free diet (GFD) for 4 weeks. To monitor the health conditions of the participants, a 20-question survey was given to assess GERD symptoms: One before the GFD and one at week 4. The results were compared and evaluated statistically.

Results: A GFD is difficult to maintain and poor adherence is by far the main cause of lack of response to treatment. Follow-up of adherence is also difficult because there are no objective measurements to assess. Thus, only 12 of the patients (f/m: 7/5, mean age 39.4, age range 18-74) could be included in the study. Gastroesophageal reflux disease-related symptoms (GERD-rs) were resolved in 10 (83.3%) of the GERD patients. Of the 35 patients, 1 (2.9%) was positive for IgA DGP. The average score for IgA was 2.00 AU and 1.86 AU for IgG (cut-off: <12). While 9 patients (75%) reported heartburn symptoms; 4 (44%) patients showed high clinical response and their symptoms were resolved. 3 patients (33%) who reported having the severity scores of ≥10, responded that their severity scores as 1-3, 1-3, 7-9 respectively. Two patients (22%) having the severity score of 4-6, reported that their symptoms decreased to 1-3.

Eight patients (66.7%) were positive for regurgitation, while the symptoms for 4 patients (50%) were totally resolved. Four patients showed significant improvement while having reported their frequencies as ‘everyday’ before the GFD, became ‘once a week’ for 3 patients and 2-3 times/week for 1 patient. The mean scores out of 7 patients (58%) who reported epigastric pain were, 5.7±0.6 vs 1.14±0.5, before and after a GFD, respectively. Of 12 patients, 12 of them (100%) were highly satisfied with the results of a GFD. 2 (16.7%) of 12 patients were not sure about being on a diet for a longer time period while the remaining 10 (83.3%) wanted to eliminate gluten lifelong.

Conclusion: Gastroesophageal reflux disease-related symptoms (GERD-rs) were rapidly relieved in 12 (100%) of the GERD patients. Thus, there was a good response to GFD with a significant improvement of their clinical condition.

Keywords: Gluten-free diet, non-celiac gluten sensitivity, gluten, gastroesophageal reflux disease, non-celiac medical conditions
**SOP-8**

**How do the Chronic Dialysis Patients Feel about Renal Transplantation?**

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**Objective:** Currently the number of end stage renal disease (ESRD) patients is on the rise in our country. Kidney transplantation offers better outcomes compared to dialysis, but requires patients access and adherence to an ongoing and complex self-management regimen. Gaining access to kidney transplantation is a complex process that involves treatment decisions made by patients and some of the patients despite significant advantages of kidney transplantation, choose to remain on dialysis for treatment. This study’s main goal was to understand ESRD patients’ attitudes and apprehensions for renal transplantation.

**Methods:** This cross sectional study included patients older than 18 years of age without a prior history of transplantation who were receiving chronic dialysis (HD/PD) for at least 3 months. A new developed questionnaire form was used to get the necessary information on the attitudes of the patients. This form consisted of fifty-nine questions about renal transplantation and was given to the patients by the same investigator during hemodialysis sessions for the HD patients and at the follow-up clinic for the PD patients. IBM SPSS Version 20.0 was used to analyse the data.

**Results:** 103 (50 female, 63 male, mean age: 57.2 years) patients, who consented were included in the study. 106 hemodialysis and 17 peritoneal dialysis patients (10 people changed the method of dialysis). 60% of them were satisfied with their dialysis treatment. 65% of the patients stated that they did not get any education/information about transplantation. 88% of the patients did not consider sex, race, belief and life style of the donor to be a barrier for their transplantation. 40% of the patients were afraid of rejection after transplantation (n=85).

**Conclusion:** In conclusion, we determined that most dialysis patients do not have sufficient information about any kind of transplantation. If the outcomes related to transplantation is explained in detail and objectivity and the patients are followed-up for continuity of their enlistment on the waiting-list by the health care givers, the chance of transplantation will increase.

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**SOP-9**

**Comparison of SpO₂ Values from Different Fingers of the Hands**

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**Objective:** The aim of this study was to provide the comparison of peripheral capillary hemoglobin oxygen saturation(SpO₂) values among every finger of the two hands.

**Methods:** Fifty-two healthy volunteers, aging between 18 and 30 years were included in this study. Volunteers, who were smokers, pregnant or menstruating, having hypotension, bradycardia, anemia or hemoglobinopathy, were excluded from the study. Volunteers with at least 8 hours of fasting period were monitored after 5 minute of resting. All SpO₂ values were recorded in the sitting position and simultaneous non invasive blood pressure and heart rate were noted.

**Results:** A total of 520 SpO₂ measurements from 52 volunteers were obtained. Comparisons were done between fingers (Repeated Anova, F: 1.199, p: 0.32) The highest average of SpO₂ value on right-handed people was measured from the right middle finger (97.8%±1.32) but it was not statistically significant when compared with all values. Besides, the highest average SpO₂ value on left-handed people was measured from the left middle finger (97.1±1.05) but it was not statistically significant when compared with all values.

**Conclusion:** Pulse oximetry is a routinely used technique in medical care that it is often regarded as a fifth vital sign. It is an objective measurement of oxygenation and is simple, reliable and accurate when used appropriately. Measurements with this
inexpensive and noninvasive method also provide heart rate and indication of tissue perfusion. The difference of SpO₂ recordings between different fingers may not be clinically important, but this knowledge may be valuable in conditions with poor peripheral perfusion. Higher perfusion in the middle finger seems reasonable to expect the highest and most accurate SpO₂ value. According to the results of this study, we believe that the middle finger of the dominant hand has the highest and possibly the most accurate SpO₂ measurements. The main limitation of this study was that, we did not have adequate left hand dominance volunteers. Further studies can be made with adequate number of left hand dominance volunteers or corroborated by arterial blood gas analyses.

**Keywords:** Pulse oximetry, fingers, peripheral capillary hemoglobin oxygen saturation

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**SOP-10**

**Evaluation of the Effects of Oenothera Biennis Oil and Hypericum Perforatum Oil on microRNA Expression in Experimental Autoimmune Encephalomyelitis**

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**Objective:** Multiple Sclerosis (MS) is an autoimmune demyelinating disease of the central nervous system. MS is a leading cause of disability in young adults and there is no curative treatment for MS. Hypericum perforatum and Oenothera biennis are widely used as an anti-inflammatory and immunomodulator in herbal medicine. MicroRNAs (miRNAs) are small non-coding RNA molecules that regulate gene expression at the post-transcriptional level. This study aimed to identify the effects of Hypericum perforatum and Oenothera biennis treatment in Experimental Autoimmune Encephalomyelitis (EAE), an animal model of MS, on microRNA expression.

**Methods:** In this study 9 week old C57BL/6 mice (n=40) were assessed and divided into 4 groups including 2 treatment groups (n=25), 1 control group (n=10) and 1 sham group (n=5). One week later MS disease was induced by using the EAE method in all mice excluding those in the control group. Two weeks later treatment groups started to receive 18-21 g/kg Hypericum perforatum oil and 18-21 g/kg Oenothera biennis oil containing food separately for 4 weeks. Each mouse was scored daily throughout the study. At the end of the study all mice were sacrificed and brain tissues were obtained. Brain tissues were homogenized, total RNA isolation and microarray data analyses were done. For the validation of microRNAs, the RT-PCR method was used.

**Results:** miR-200b is up-regulated (fold-change=42.39) in the Hypericum perforatum group compared to the sham group. miR-429 is up-regulated (fold-change=19.90) in the Oenothera biennis group compared to the sham group.

**Conclusion:** The results show that up-regulation miR-200b and miR-429 expressions may be related to alleviation of scoring and these microRNAs could be used as new therapeutic targets in the treatment of MS.

**Keywords:** Multiple sclerosis, microRNA, Hypericum perforatum, Oenothera biennis

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**SOP-11**

**The Association Between AB0 Blood Groups and Gestational Diabetes Mellitus Turkish Pregnancies**

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Objective: In this study, we examined the association between AB0 blood groups and gestational diabetes mellitus.

Methods: A retrospective case-control study was conducted using data from 300 Turkish pregnancies. Pregnant women who received a 75 g 2h oral glucose tolerance test (OGTT) at 24-28 weeks' gestation who visited the Department of Gynecology and Obstetric at Istanbul Bezmialem Vakif University faculty of Medicine Hospital between 2012-2016 were included in this study. 300 OGTT performed on this group of pregnant women were examined. Women were classified according to the results of OGTT as with GDM and nonGDM. Distribution of AB0 blood group between these 2 groups was investigated. Also, in our study we examined the association of abort and parity with GDM. The women with unknown blood groups, with known type1 or type2 diabetes mellitus before pregnancy were excluded from the study. Statistical analysis was performed with the Statistical Package for Social Sciences (SPSS) versiyon 23 (IBM Corp.; Armonk, USA) program.

Results: The percentages of women with GDM for 0, A, B, and AB blood groups were 26.8%, 32.8%, 30.8% , and 34.6% respectively and of those women with nonGDM were 73.2% , 67.2% , 69.2% , and 65.4% respectively. Statistical analysis was performed, but significant difference was not found regarding the distribution of AB0 blood group between women with GDM and nonGDM. Qualitative variables are given as a percentage for the correlation of women with GDM and nonGDM regarding AB0 blood groups. Women with AB blood group had a higher percentage of GDM compared to A, B, and 0 blood groups , while those with 0 blood group had a lower percentage of GDM compared to the others. There was not any clear difference between the women with GDM and nonGDM for the distribution of Rh factor.

Conclusion: This study found that the patients with blood group AB have a higher percentage for GDM. This means that we have to be more careful regarding the follow-up of pregnant women with blood group AB. OGTT may be performed at earlier gestational weeks, or the patients may be invited to the hospital for glucose monitoring during the pregnancy even if OGTT is normal.

Keywords: Gestational diabetes mellitus, blood groups, AB0 blood groups

SOP-12
The Frequency of Anemia In Patients with Concomitant Rheumatoid Arthritis and Chronic Periodontitis’

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Objective: Rheumatoid arthritis (RA) is a chronic, systemic and inflammatory disease with associated chronic anemia disease frequently seen with a rate of 33%.

Chronic periodontitis (CP) is the most common type of periodontal disease. It is an inflammatory disease that prevalence of anemia is reported to be 33.8% in these patients.

Recent studies have reported that RA and CP are seen together. Chronic periodontitis was reported in 34.6% of RA patients.

Anemia of chronic disease (ACD) or inflammation may be secondary to inflammatory diseases. Treatment of ACD should be directed at the underlying disease.

In this study we aimed to find whether having RA and concomitant CP increases ACD frequency compared to periodontally healthy RA patients.

Methods: Fifty patients diagnosed with RA were enrolled in the study. Detailed physical examination, blood values assessment, patient-based evaluation questionnaire, and disease score calculation (DAS-28-ESD) were done for each RA patient. Then each patient was examined periodontally in our dentistry policlinic.

Results: Results showed 88% of RA patients were CP patients. 53% of those were mild CP, 37% were moderate CP, 32% of RA patients had ACR. No Significant difference was found between RA severity and CP severity. The frequency of ACR in RA group and RA with CP group did not show significant difference.

Conclusion: Patients with RA are more prone to CP compared with healthy population, but this has not changed the frequency or depth of ACR. All RA patients should be directed to dentistry policlinic and be closely followed by a periodontologist.
Effects of Eccentric Exercise on Strength Parameter of Knee Extensor and Flexor Muscle

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Objective: In the concentric type of exercises, muscular length is shortened and in the eccentric type exercises the muscular length is extended. Concentric muscle contractions are often used to initiate movement, and eccentric muscle contractions are used to slow movement. From the theory that exercise-induced muscle damage is mainly caused by exercise in the eccentric type, muscle strength parameters of knee extensor and flexor muscle groups after eccentric exercises were measured by isokinetic dynamometer. Changes in muscle strength parameters were evaluated in terms of injury risk and development of injury prevention strategies.

Methods: Twenty healthy male volunteers participated in this study between the ages of 20-30. Concentric and eccentric isokinetic peak torque at 30°/s, 60°/s, 120°/s and 240°/s and maximal isometric strength of knee extensor and knee flexor in both the dominant and non-dominant limb were measured using an isokinetic dynamometer. These measurements were repeated after eccentric exercise in the same way. Exercises we used were: Seated leg curl (hamstring eccentric phase), Lying hamstring and Nordic hamstring. Parameters that we examined: Peak torque, Work per repetition, Average power per repetition, Range of motion, and Time to peak torque.

Results: For results we used the Nonparametric test- Wilcoxon by using the SPSS statistics program. Because our P value was bigger than 0.05, statistically there was not a significant result.

Conclusion: As a conclusion, at the end of the study we have observed that, because escalating average strength and contraction of the time in reaching pick torque, the eccentric exercise has a positive impact on muscle strength improvement. But since the eccentric training did not have a significant effect on the muscle strength parameters when they were accompanied with a trainer, there is not a significantly increase in the risk of disability.

Comparing Capillary Refill Time from Multiple Localizations to Determine the Most Relatable to Perfusion Status in Pediatric ICU Patients

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Objective: Capillary refill time is a commonly practiced physical examination technique to evaluate tissue perfusion. Past research have shown that a prolonged CRT is a good predictor of mortality in shock patients. There is currently a surge in research questioning the usefulness of a tissue perfusion indicator and how it measures up to modern perfusion assessment techniques. Capillary Refill time is a widely used tissue perfusion assessment test that is said to have good predictive value for mortality in shock patients. The standard application method is open for debate and results are subjective and dependent on many variables. This research intends to shed light on the current usefulness of the CRT test.

Methods: Twenty patients between the ages of 0-16 were included in the research. Patients who had abnormal body temperature were excluded since that would affect the outcomes unpredictably. Room Temperature was set to a stable 24°C. Patients suffering from a variety of conditions were then asked for their parents’ consent, proper sterilization measures were taken and a pulse oxymeter was attached to a digit of the patient. Patients who were on mechanical ventilation and who were on vasopres-
sor drugs were excluded from this research. CRT was assessed from 5 major anatomical points; glabella, sternum, fingertip, heel, and tibia, by a solitary observer. Patient charts were utilized in order to obtain information regarding patient's vital signs and lactate values. Patients who had any metabolic disorders or conditions that might elevate their lactate levels other than an impaired tissue perfusion were excluded from this research. Mean O2 saturation, Lactate levels and pH values of patients were utilized to categorize patients into 2 groups: “Perfusion Impaired” and “Perfusion Intact”. As a first step, this research pondered the relationship between prolonged CRT and impaired perfusion status. As a follow up step: which localization represented this relationship best.

**Results:** According to the observer the easiest localizations to obtain CRT were: the fingertip and the heel where success rate was: 100%. Toughest localizations are: the sternum and glabella (Success rate: 65%) followed up by the tibia (SR= 70). A moderate statistically significant relation on the positive margin was found between tibial capillary refill time and mean SpO2 value variables. Other localizations did not have significant relations with tissue perfusion indicating variables. Another statistically significant relation, although weak was on the positive margin and between CRT on the finger tip and CRT values from the heel and glabella.

**Conclusion:** This study was unable to show a solid connection between the patient's perfusion status and CRT values. The connections shown are not strongly associated with the predicted results. Further study must be conducted to find standardized uses for CRT as a physical examination and to document the clinical interpretations of the results.

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**SOP-15**

**Von Willebrand’s Disease Symptoms and Menorrhagia Analysis**

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²Department of Pediatric Hematology and Oncology, Istanbul University Cerrahpaşa School of Medicine

**Objective:** Von Willebrand disease is an inherited bleeding disorder, characterized by defective platelet adhesion and aggregation. The disease is characterized mainly by mucosa associated bleeding and bleeding after surgery and trauma. The diagnosis is based on a personal or family history of bleeding and laboratory evidence of abnormalities in Von Willebrand factor, factor VIII or both. The most common symptoms are hematomas, menorrhagia and bleeding from minor wounds. The majority of women with Von Willebrand’s disease have menorrhagia, which also impairs the quality of life. Conversely Von Willebrand’s disease is diagnosed in 5 to 20% of woman who present with menorrhagia. Other frequent symptoms are epitaxis, gingivorrhagia.

Our aim was to find an answer to whether woman who have menorrhagia symptom should be suspected as a Von Willebrand patient. To find an answer to that question, additional symptoms that our patients suffer became our guide.ia, ecchymosis, longer laceration bleeding, anemia and posttraumatic bleeding.

**Methods:** In our project we have researched 30 woman patients who have Von Willebrand disease. We have especially inspected menorrhagia. In addition to that, other relative symptoms. First of all, we gathered laboratory signs and demographic information from documents of our patients'. We have inspected our patients' menorrhagia symptoms. To materialize menorrhagia we used PBAC (Pictorial Blood Assessment Chart) scoring system and our 10 question survey that we prepared.

**Results:** We found menorrhagia symptom in 24 patients out of 30 patients. The patients that have menorrhagia, the other symptoms are as following; Epitaxis: 14 (58%), Gingivorrhagia:15 (62%), Ecchymosis: 17 (70%), Longer laceration bleeding: 11 (45%), Anemia: 15 (62%). Additionally, out of 8 patients who gave birth, 4 of them had excessive bleeding during birth.

**Conclusion:** In Von Willebrand’s disease menorrhagia is a frequently seen symptom. Patients who came to the gynecology department because of menorrhagia potentially have Von Willebrand’s disease. The results from our findings show that it is meaningful to ask other Von Willebrand’s disease symptoms to patients to not miss it. Because with this disease it is hard to diagnose and its easy to overlook but with proper treatment, patients’ life quality increases dramatically.
**SOP-16**

Assessment of Reasons for Delayed Hospital Visit of Patients with ST Elevation Myocardial Infarction

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**Objective:** Ischemic heart disease is the most common cause of death. According to the Turkish Statistical Institution, 40.5% of deaths in 2015 were due to ischemic heart disease. Genetic factors, environmental factors, nutritional habits, socioeconomic level, comorbid diseases were taken into consideration. Myocardial infarction is a result of ischemic heart disease. For every minute of delay, the diagnosis of MI affects the morbidity and mortality of the patient. The critical period in the management of MI is the first 3 hours. Correct interventions during this time will save the patient from complications which are arrhythmias, cardiogenic shock, wall rupture, mural thrombus, heart failure, and pericarditis. To evaluate the causes of delay in patients with ST elevation myocardial infarction and to create awareness of MI in the society.

**Methods:** This is a survey study which includes 55 patients with ST elevation MI who received reperfusion.

**Results:** When we compared these variables with delay in time, there is no statistically significant differences.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Results</th>
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<td>Types of MI</td>
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<tr>
<td>Awareness of MI</td>
<td>vs delay time</td>
<td>&gt;0.05</td>
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<tr>
<td>Additional symptoms</td>
<td>vs delay time</td>
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<tr>
<td>Previous MI</td>
<td>vs delay time</td>
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<td>Dominant symptom</td>
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<td>DM</td>
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<td>HT</td>
<td>vs delay time</td>
<td>&gt;0.05</td>
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</tbody>
</table>

When we compared interpretation on of angina with delay time, there is statistically significant differences. (0=no comment, 1=myocardial infarction, 2=gastrointestinal disease, 3=flu)

**Interpretation of angina**

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</table>

**SOP-17**

Effect of Low Carbohydrate Diets at Different Rates on Serum Glucose, Lipid Profile, Lactate, and Some Mineral Levels in Streptozotocin-induced Experimental Diabetic Rats

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**Objective:** Type I diabetes, is a chronic condition in which the pancreas produces little or no insulin, a hormone needed to allow sugar (glucose) to enter cells to produce energy. Prevalence of diabetes increases day to day. According to WHO, in 2000 there were at least 171 million diabetics worldwide (2.8% of the total world population). Minerals are found in very low concentrations in water and also living tissues. However, changes in tissue distribution of these minerals during chronic endocrine imbalance may contribute to the occurrence of secondary complications. The factors of absorption, excretion and distribution between tissues of trace elements are not known precisely.
Although the main treatment for type I diabetes is the injection of synthetic insulin into the body and strict monitoring of blood glucose level, changes in lifestyle, such as diet and exercise, have gained considerable attention in the treatment, especially at the beginning of the disease. Food restriction has been shown to increase insulin sensitivity and decrease insulin requirement. After an excessive literature search, we have found that generally whole food restriction was studied in the experimental diabetic models but carbohydrate restriction at different ratios in the diet was not studied. Furthermore, in previous studies on food restriction, it has not been investigated whether the serum mineral (vital precursor for the function of the organism) levels might be changed. Therefore, this study was planned to investigate the effect of diets with different carbohydrate ratios on serum glucose, cholesterol, triglyceride, lactate and mineral levels in streptozotocin-induced experimental diabetic rats.

**Methods:** Experimental Design: Thirty-three male Wistar-albino rats weighing 350-450 g were used in this study. The animals were randomly divided into four groups. Animals were obtained, and housed in the Bezmialem Vakif University Experimental Animal Centre under standard laboratory conditions (12 h light/dark cycle), and a constant temperature (25±1°C) and humidity (50-60 %). They were allowed free access to food and water. All animal use procedures were approved by the Laboratory Animals Ethical Committee, Bezmialem Vakif University. The experimental groups were as follows; control group (C, n=6): At the beginning of the study, the animals were injected with saline, 0.5 ml, i.p. and then fed with standard rat diet (77.3% carbohydrate, 20% protein and 2.7% fat, Calorie 2065/ kg) for 28 days during the experimental period. Diabetic + 77% Carbohydrate (Normal) Diet Group (D+77CH, n=9): At the beginning of the study, the animals were injected with streptozotocin 50 mg/kg, i.p. and then fed with a standard rat diet (77.3% carbohydrate, 20% protein and 2.7% fat, Calorie 2065/kg) for 28 days during the experimental period. Diabetic + 50% Carbohydrate Diet Group (D+50CH, n=9): At the beginning of the study, the animals were injected with streptozotocin 50 mg/kg, i.p. and then fed with a specially prepared rat diet (50% carbohydrate, 19.8% protein and 22.2% fat, Calorie 3096/kg) for 28 days during the experimental period. Diabetic + 15% Carbohydrate Diet Group (D+15CH, n=9): At the beginning of the study, the animals were injected with streptozotocin 50 mg/kg, i.p. and then fed with a specially prepared rat diet (15% carbohydrate, 39.7% protein and 34.5% fat, Calorie 2792/kg) for 28 days during the experimental period. Two days after the administration of streptozotocin, blood samples were taken from the tail vein of all animals to measure blood glucose levels. Animals with a blood glucose level of 250 mg/dl or more were accepted as diabetic and included in the study. Blood glucose levels of animals in all groups were recorded before and 2 days after the streptozotocin injection, and also in the middle (14th day) of the study. The daily amount of feed given to the animals was adjusted so that the calorie value consumed by all groups was equal (in this case the animals in all groups were fed with the different carbohydrate value but with the same daily calorie value). A rat was considered to consume an average of 30 g of feed per day (in this case, a rat consuming a standard rat diet averaged 61.95 Calories). From the base value of 61.95 Calories, amount of other feeds with reduced carbohydrate percentage was calculated.
Biochemical Analysis: After 12 hours of fasting at the end of the experiment, blood samples were taken by cardiac puncture to measure the serum glucose, lactic acid, lipid profiles (triglycerides, total cholesterol), and serum electrolyte (Ca, Mg, Na, K, Fe, P, Cl) concentrations. Serum glucose, lactic acid and lipid (triglyceride, total cholesterol) levels were determined using the IDEXX VetTest® Chemistry autoanalyzer (Bezmialem Vakif University Research Center). Serum electrolyte values (Ca, Mg, Na, K, Fe, P, Cl) were detected in the Abbott-C16000 autoanalyser (Bezmialem Vakif University Hospital Biochemistry Laboratory).

Statistical Analysis: Statistical analysis of the data was performed in the Statistical Package for Social Sciences (SPSS) version 22 (IBM Corp.; Armonk, NY, USA) program. The Shapiro-Wilk test was used to examine whether the distribution showed normal distribution. The descriptive statistics of the data are specified as [median (minimum: maximum)] for variables that do not show normal distribution in continuous data. The Kruskal-Wallis test was used to compare two independent groups for continuous data, and Dunn’s test was used as Post-Hoc test. Significance level \( \alpha = 0.05 \) was determined.

Results: Effect of different diets on blood glucose level: After the administration of STZ, the blood glucose level significantly \( (P<0.05) \) increased in all diabetic groups compared with controls at all-time points.

Effect of different diets on lactic acid and lipid (triglyceride, total cholesterol) levels: Serum cholesterol levels of rats fed with 15 or 50% carbohydrate were higher \( (P<0.05) \) than those of controls. Although the 15% carbohydrate diet contained the highest lipid content, the highest serum cholesterol level was observed in the rats fed with 50% carbohydrate. The animals fed with 15 and 50% carbohydrate diet were found to have higher \( (P<0.05) \) serum triglyceride levels than those fed both 77% carbohydrate and control groups. Although there was no significant \( (P>0.05) \) difference in lactate levels among groups, lactate in diabetic groups was below the minimum value of the control group in some animals and well above the maximum value of the control group in some animals.

Effect of different diets on serum electrolyte concentrations (Ca, Mg, Na, K, Fe, P, Cl): The serum iron level was significantly \( (p<0.05) \) higher in diabetic animals fed with 15 and 50% carbohydrate diet than those of diabetic animals fed with 77% carbohydrate. The serum calcium level was significantly \( (p<0.05) \) higher in diabetic animals fed with 15 and 50% carbohydrate diet than those of controls. The serum chloride level was significantly \( (p<0.05) \) lower in diabetic animals fed with 15, 50 and 77% carbohydrate diet than those of controls. There was no statistical difference \( (p>0.05) \) among groups regarding the serum potassium, magnesium and phosphate levels. The serum sodium level was significantly \( (p<0.05) \) lower in diabetic animals fed with 50 carbohydrate diet than those of diabetic animals fed with 77 carbohydrate diet.

Conclusion: It was concluded that diabetes may not only affect the serum glucose and lipid levels, but also affects the serum levels of many essential minerals. Low carbohydrate diets at different rates may ameliorate the normal serum mineral levels such as iron.

Steroid Metabolism in Patients with Multiple Sclerosis

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Objective: Multiple Sclerosis (MS) is an autoimmune demyelinating disease of the central nervous system. Inflammation, axonal damage and demyelination play a part in the pathophysiology of MS. Mostly young adults are affected and the female/male ratio is 2:1. At the present time, diagnosis is made by using the McDonald criteria, MR screening and CSF analysis. There are still no reliable biomarkers for diagnosis and treatment, thus we want to search for possible biomarkers. Our aim is to see if steroid metabolism is affected in MS patients or not. In order to do this we investigated serum levels for 24S-hydroxycholesterol, vitamin D, total cholesterol, LDL and HDL.

Methods: In our study 2 groups are included. In each group there are 47 individuals. While the control group consists of healthy people, the other group consists of patients with MS. We collected the samples from both the outpatient clinics of the Neurology department of Bezmialem Vakif University Hospital and Istanbul Medical Faculty Hospital. MS patients must be newly diagnosed or have not taken any immunomodulatory treatment within 3 months. We collected the blood samples and
centrifuged them. We kept them in -80 centigrade degrees. We conducted biochemical assay. LDL, HDL, total cholesterol and 24S-hydroxycholesterol were analyzed by using an Abbott autoanalyzer. Vitamin D was studied by using a Tandem MS AB SCIEX QTRAP 4500 instrument.

**Results:** Vitamin D levels are significantly decreased (p < 0.005) in MS patients (8.64±5.62) according to the control group (14.13±7.98). However 24S-hydroxycholesterol, LDL, HDL and total cholesterol levels are not differentiated between groups.

**Conclusion:** Our results have shown that Vitamin D deficiency may play a key role in the development of MS disease. So, we think further investigations are needed to explain the role of vitamin D in patients with MS. Finally, serum vitamin D levels should be followed for those patients who have a risk for MS.

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**SOP-19**

**Neurotoxic Damage of Formaldehyde in the Hippocampus of Rats and the Protective Role of Thymoquinone on this Neurotoxicity**

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**Introduction:** This study aimed to investigate; the neurotoxic damage of formaldehyde, that is used in medicine and in other fields daily, in the hippocampus of rats and the protective role of thymoquinone on this neurotoxicity.

**Methods:** A total of 40 male rats (sprague dawley) were divided into five groups with eight rats in each group. Rats in Group I were the controls and only physiological saline solution was intraperitoneally injected. The rats in Group 2 comprised of the control group 2 and just 1 ml corn oil was injected via gavage. Formaldehyde was intraperitoneally injected into the rats in Group 3 with a dose of 10 mg/kg diluted with 10% physiological saline solution. The rats in Group 4 were injected with intraperitoneally physiological saline solution diluted with 10% 10 mg/kg formaldehyde and given 20 mg/kg thymoquinone with 1 ml corn oil via gavage. The rats in Group 5 were given 20 mg/kg thymoquinone with 1 ml corn oil via gavage. After the treatment, the animals were sacrificed and frontal cortex and hippocampal tissues were removed for biochemical and histopathological investigation.

**Results:** Reduction in catalese, glutathione peroxidase and superoxide dismutase enzyme activities were found to be statistically significant in the formaldehyde administered rats when compared with rats in the control group. Additionally catalese, glutathione peroxidase and superoxide dismutase enzyme activities increased in rats when formaldehyde was administered formaldehyde-thymoquinone. Subarachnoid hemorrhage and vacuolization of the brain tissues in the formaldehyde group were found. It was determined that no vacuolization and less subarachnoid hemorrhage was seen in the formaldehyde+thymoquinone group compared with the formaldehyde group.

**Conclusion:** It was determined that formaldehyde-induced neurotoxic damage in the hippocampus was prevented by the administration of thymoquinone.

**Keywords:** Formaldehyde, thymoquinone, hippocampus, neurotoxic damage

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**SOP-20**

**The Impact of Early Oral Feeding on Prognosis of Acute Pancreatitis**

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**Introduction:** The impact of early oral feeding on the outcome of acute pancreatitis remains controversial. The aim of this study was to compare the prognosis of patients with acute pancreatitis who were started on either early or delayed oral feeding.

**Methods:** A total of 100 patients with acute pancreatitis were included in the study. The patients were divided into two groups: early feeding group (EF) and delayed feeding group (DF). The EF group started oral feeding 3 days after the onset of acute pancreatitis, while the DF group started oral feeding 7 days after the onset of acute pancreatitis.

**Results:** The EF group had a lower incidence of complications and a shorter hospital stay compared to the DF group. The EF group also had a lower mortality rate.

**Conclusion:** Early oral feeding appears to be associated with a better prognosis in patients with acute pancreatitis.

**Keywords:** Acute pancreatitis, early oral feeding, prognosis
Objective: Acute pancreatitis is an inflammatory disease which is characterized by abdominal pain and an increase in the amount of pancreatic enzymes. In this research the relationship between early oral feeding and prognosis of acute pancreatitis is investigated. Harmless acute pancreatitis scores (HAPS) of the patients was calculated and the relationship between HAPS and prognosis was analyzed.

Methods: Thirty patients who are hospitalized with the diagnosis of acute pancreatitis were analyzed in this research. A questionnaire was used and the patients were followed during their hospitalization period.

Results: There is a significant relationship between early oral feeding and the prognosis of acute pancreatitis at a significance level of 0.01. No significant relationship was found between HAPS and the prognosis of the disease.

Conclusion: The study indicates that there is a positive relationship between early oral feeding and prognosis of the disease. Early oral decreases the period of hospitalization. In addition, according to the findings of the study; HAPS is not an indicator of the prognosis.

### SOP-21

**Effect of Thymoquinone on C6 Glioma in vitro**

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Objective: Glioblastoma multiforme (GBM) is an invasive and the most aggressive primary tumor of the central nervous system. The standard treatment in patients with GBM is surgical resection, radiotherapy and adjuvant chemotherapy. Despite these treatments the median survival is approximately 15 months. Many researches have been made to improve survival of patients with GBM, but ideal treatment has not been found yet. Thymoquinone (TQ) is the bioactive component of black seed (Nigella sativa) oil and it has anti-inflammatory, antioxidant, anti-hypertensive, and antitumor effects. The aim of this study was to determine the effects of TQ on glioma by investigating cytotoxicity, genotoxicity, apoptosis and the amount of intracellular reactive oxygen species (ROS).

Methods: C6 glioma cells were incubated in different TQ concentrations (0 to 200 µM) for 24 hours. Cytotoxic activity with ATP cell viability assay, genotoxicity with Comey Assay, ROS levels with 2,7- dichlorofluorescein diasetat (DCFH-DA) staining and apoptotic activity were measured with acridine orange/ethidium bromide staining.

Results: Our results showed that TQ exerted dose-dependent cytotoxic effects and DNA damage in the C6 glioma cell line. Moreover TQ increased apoptosis and intracellular ROS levels in C6 glioma cells.

Discussion: Our results suggest that Thymoquinone is effective in C6 glioma cells through direct cytotoxicity, DNA damage, induction of apoptosis and increased level of intracellular ROS in vitro. Further investigation is warranted to make Thymoquinone available for treatment for patients with glioma.

Keywords: Thymoquinone, glioma, apoptosis

### SOP-22

**Effects of Non-Specific Chest Pain in Children on ECG And Pulse Oximeter**

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Objective: Our study aimed to compare children’s ECG parameters and pulse oximeter rate who received a diagnosis of non-specific chest pain in childhood in the pediatric cardiology clinic and healthy children’s ECG parameters and pulse oximeter rate who are in the same age group and the same gender.
Methods: We compared 40 pediatric patients who were diagnosed at Bezmialem Vakif University Medical Faculty Hospital Pediatric Cardiology Clinics, with childhood nonspecific chest pain according to ECG, echocardiography, laboratory and physical examination results in children aged between 5 and 17 years that presented with chest pain complaint and 40 healthy children who were referred to the pediatric cardiology clinic for the sensation of murmur and have no health problems will be considered as the control group. The patient group had the lowest age of 6, the highest age of 17 and the median age of 9. The control group had similar ages. A total of 80 subjects included in the study consisted of 40 patients (47.5% female) and 40 controls (47.5% female).

Results: There were no statistically significant differences between groups in terms of age, body sex, oxygen saturation and ECG parameters.

Conclusion: When the oxygen saturations and ECGs of patients with childhood nonspecific chest pain were compared statistically with healthy children in the same age group, significant ECG and pulse oximetry changes were not detected. It is not appropriate to use ECG parameters as a criterion for removing nonspecific chest pain from follow-up in childhood patients.

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SOP-23

The Relationship Between Affiliate Stigma, Depression and Anxiety in Families/Caregivers of People with Intellectual Disability

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Objective: Stigma can be defined as an association of disgrace or public disapproval with a condition or a minority group. Stigma has components of stereotyping, separation, status loss, and discrimination. Affiliate stigma refers to the extent of self-stigmatization among associates of targeted minorities. In our research, we aim to find out the degree of affiliate stigma in families/caregivers of people with intellectual disability and analyze its relationship with depression and anxiety in Turkey.

Methods: 47 people from Istanbul and Bursa participated in our study via rehabilitation centers. We used the Beck Depression Inventory, Beck Anxiety Inventory and Affiliate stigma scale (ASS) (Mak & Cheung 2008) which consist of affective, cognitive and behavioral components. ASS has a total of 22 scale items on a 4-point Likert scale from strongly disagree (1) to strongly agree (4).

Results:

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<th>percentage</th>
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<tr>
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<td>21.3</td>
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<table>
<thead>
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<td>Relationship</td>
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<tr>
<td>Other</td>
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<tr>
<td>Degree of disability</td>
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<tr>
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<td>48.9</td>
</tr>
<tr>
<td>severe</td>
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<tr>
<td>Age</td>
<td>Mean:42.2</td>
<td>SD:11.379</td>
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<tr>
<td>Income</td>
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<td>SD:724.386</td>
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<tr>
<td>Total caregiving time</td>
<td>Mean:13.42</td>
<td>SD:6.825</td>
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</table>
Participants’ demographic features are shown above. Affiliate stigma scale affective, cognitive and behavioral mean scores are 10.56 (±3.21), 9.73 (±3.23) and 10.88 (±3.28). One participant has very low stigma level, 37 participants have moderate stigma level, 5 participants have high stigma level. Beck Depression Inventory mean score is 10.61 (±8.35) and Beck Anxiety Inventory mean score is 12.13 (±11.01).

**Conclusion:** There was no significant relationship between ASS and BDI/BDA in our study. This may be due to the low number of participants, their similar living conditions and lower scores of ASS, BDI and BAI than other studies. Increased social acceptance and awareness, health and special education services provided for individuals with intellectual disabilities, social/financial supports given to families could be some of the reasons for the moderately low scores on the ASS in our country.

**Keywords:** Affiliate stigma, intellectual disability

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**SOP-24**

**Comparison of Postpartum Depression Rates in Mothers Who Got Breast Feeding Training with Mothers without Training**

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Postpartum depression (PPD), also called postnatal depression, is a type of clinical depression which can affect both sexes after childbirth. Symptoms may include sadness, low energy, changes in sleeping and eating patterns, reduced desire for sex, crying episodes, anxiety, and irritability. To demonstrate that breastfeeding training reduces postpartum depression. Survey study, beck depression inventory, control group: 20 patients, Mothers who got breast feeding training: 20 patients. Result: 13 out of 20 patients have depression, 11 out of 20 patients have depression.

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**SOP-25**

**The Effect of Curcumin on Bactericidal/Permeability-Increasing Protein (BPI) Expression in Neutrophils in vitro**

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**Objective:** A key cellular component of innate immune response against infection is the neutrophil, whose cytoplasmic granules contain a broad spectrum of antimicrobial proteins. Among these, bactericidal/permeability-increasing protein (BPI) stands out as a unique protein with its antimicrobial selectivity and potency toward mainly Gram-negative bacteria via cytotoxicity to bacterial inner and outer membranes, endotoxin-neutralization, opsonization of bacteria to enhance phagocytosis and selective delivery of outer membrane blebs to dendritic cells for the promotion of adaptive immunity (1, 2). Curcumin as a traditionally used chemical agent is of interest to scientists in recent years due to its anti-oxidant, anti-inflammatory, anti-angiogenic and anti-microbial properties and also its potential therapeutic activity against a variety of diseases (3). However, no previous study has focused on the relation between Curcumin and BPI expression. So, the study objective is to examine whether Curcumin acts on immune response against bacterial infection through expression of BPI and to demonstrate potential therapeutic use of Curcumin in clinical settings associated with BPI.
**Methods:** In this regard, a twenty milliliter heparinized venous blood sample was taken from a single healthy donor and polymorph nuclear leukocytes (PMNL) were separated from the blood using gradient medium. Separated PMNL cultured in DMEM equilibrated with 5% CO₂ atmosphere at 37°C. Cytotoxic activities of curcumin 1.25 to 100 µM) on PMNL cells were determined by ATP levels using a luminescence test. Control cells were treated with 1% DMSO. All the cells were incubated in a humidified 5% CO₂ and 95% O₂ at 37°C for 24 hr. Intracellular accumulation of reactive oxygen species (ROS) was determined using the fluorescent probes 2,7-dichlorodihydrofluorescein-diacetate (H₂DCF-DA). Genotoxicity was evaluated by alkaline single cell gel electrophoresis assay (Comet Assay) and, apoptosis induction was detected by Acridine Orange/Ethidium Bromide (AO/EB) double staining. BPI expression was measured by western blotting.

**Results:** Curcumin showed proliferative, anti-oxidant, anti-inflammatory, anti-cytotoxic effects on PMNL when used as 15µM concentration. BPI expression levels of neutrophils were also significantly elevated with exposure to Curcumin at similar doses. At higher doses, its effect on all of these parameters was reversed.

**Conclusion:** Pro-oxidant doses of Curcumin results in decreased BPI expression, therefore decreased resistance to microbial pathogens. So, it can be assumed that with the appropriate dosage, Curcumin may be of clinical benefit for the enhancement of the immune response through the promotion of BPI expression and its other anti-inflammatory properties.

**Keywords:** Curcumin, bactericidal/permeability-increasing protein (BPI), anti-inflammatory

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**SOP-26**

**Influence of Fatty Liver and Pancreatic Fat Volume in Severe Acute Pancreatitis in obese and non-obese patients**

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**Objective:** Acute pancreatitis is a common disease in the department of gastroenterology with variable severity, from being mild and self-limited to severe and fatal. Obesity is also a significant problem in the world. This study aimed to evaluate the relation between fatty liver and pancreatic fat and the severity of acute pancreatitis in obese and non-obese patients.

**Methods:** The medical records of 180 patients with acute pancreatitis were reviewed retrospectively, and characteristics of acute pancreatitis patients were recorded. Fatty liver was assessed by abdominal computarized tomography (CT) scan, and acute pancreatitis patients were categorized by the occurrence of hepatosteatosis for the analysis. Abdominal CT scan is a reliable noninvasive imaging method to detect hepatic steatosis, especially of moderate or greater severity. The readers were blinded to all clinical and demographic data. Pancreatic fat volume is also a similar fatty liver measurement. The severity scoring systems are Balthazar CT scoring and HAPS scoring systems (Harmless acute pancreatitis score is used for detection of disease severity (if score is <1; mild, if score is >1; severe). Clinical severity and the appearance of CT were analyzed between the non-fatty liver group and fatty liver groups.

**Results and Conclusion:** Fatty liver did not influence the severity and clinical outcome and may play a prognostic role in acute pancreatitis. But pancreatic fat could influence the results. Patients number couldn’t be same between obese and non-obese group because of acute pancreatitis had seen especially in obese group. If the non-obese group can increase prospectively, fatty liver can influence different comparison.
**SOP-27**

**Research of Cluster of Differentiation Expression in Multiple Sclerosis Patients**

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Objective: Multiple Sclerosis (MS) is an autoimmune inflammatory disease affecting 2.5 million people worldwide and characterized by acute inflammatory demyelination and loss of axons.

T lymphocytes are cells that play an important role in the immune system. Cluster of differentiation (CD) cell surface molecules are activated in many ways. CD’s have roles in cell adhesion and migration, activation of signaling pathways, immunological responses, and many other cellular events.

There are many studies showing the immunological effects of cell surface proteins on MS disease. In this study, surface proteins of CD27 is responsible for long-term defense mechanisms in T cell immunity. CD200 is a co-stimulatory in T-cell proliferation and regulatory function for myeloid cell activity. It is known that CD354 stimulates neutrophil and monocyte-mediated inflammatory response and also regulates the release of proinflammatory chemokines and cytokines.

The aim of the present study was to evaluate the expression differences between control and patient groups of CD molecules (CD27, CD147, CD200, CD354) that are estimated to be significant in MS disease.

Methods: Peripheral blood samples of 32 newly diagnosed and untreated RRMS patients and 30 healthy subjects were analyzed in the study. Flow cytometry method was used to determine the expression of cell surface markers.

Results: The CD27+ fraction of T cells and CD200+ fraction of T cells are higher in MS patients compared to control subjects (6.52±.31 vs. 6.23±.22 for CD27+ T cells, 8.76±3.21 vs. 6.36±2.97 for CD200+ T cells in a MS patient and control subjects, respectively, p<.05). However, CD354+ fraction T cells are lower in MS patients compared to control subjects (.37±0.27 vs. 0.66±.31, respectively, p<.05).

Conclusion: According to these results; CD200, CD354 and CD27 cell surface proteins may be molecules that play an important role in the pathogenesis of MS.

Keywords: Multiple sclerosis, CD27, CD354, CD200

**SOP-28**

**One-Carbon Metabolism in Multiple Sclerosis Patients**

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Objective: Multiple Sclerosis is an autoimmune demyelination disease of the central nervous system. Deficiency of Vitamin B12 causes defective formation of the myelin sheet and defective methylation of myelin basic protein, which is one of the major componets of the central nervous system. The intrathecal level of cellular actin filaments, associated with cell shape changes and movement, increases with the progression of the disease. Gelsolin and Vitamin D binding protein have an important role in the actin scavenging system.
Methods: In our study, serum samples of Multiple Sclerosis patients who were newly diagnosed or do not use immunesuppressive and immunomodulatory medicines (n=41), and the control group (n=47) were obtained. In these samples, Gelsolin, Vitamin D binding protein, methylmalonic acid, and homocysteine were measured by ELISA while Vitamin B12 and folate were measured by an Abbott arciectht autoanalyser.

Results: We found that the folate levels in the blood of the Multiple Sclerosis group (4.40±1.87) was significantly lower ($p<0.005$) compared to the control group (6.48±3.01). In contrast, there was no statistically significant difference between blood Gelsolin, Vitamin D binding protein, methylmalonic acid, homocysteine, and Vitamin B12 levels in patients with Multiple Sclerosis and the control group.

Conclusion: Folate levels may play the most important role in patients with Multiple Sclerosis. We recommend that an advanced study needs to be completed according to this relationship.

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SOP-29

Therapeutic Effect of the Oenothera Biennis and Hypericum Perforatum on EAE Model: An Investigation Through JAK-STAT Signal Pathway

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Objective: Multiple Sclerosis (MS) is an autoimmune demyelinating disease whose course is well known to advance with focal inflammatory infiltrations in the central nervous system. There are derailments of several signaling pathways with JAK-STAT the most pronounced in MS/EAE, which are in a close interrelationship with the immune system. Over secretion of cytokines induced by deregulation of the JAK-STAT signaling pathway plays a major role in pathogenesis of MS/EAE. Consequently, discovering the associations of these signaling pathways with MS will provide us with invaluable insights to develop novel therapies. Oenothera biennis and Hypericum perforatum have important immunemodulator and anti-inflammatory effects. The aim of the study was to establish the therapeutic effects of Oenothera biennis and Hypericum perforatum extracts on the EAE model by investigating the JAK-STAT signaling pathway.

Methods: Forty, nine-week C57bl/6 mice were enrolled in this study. The mice were divided into 4 groups, which included Oenothera biennis treatment group (n=12), hypericum perforatum treatment group (n=13), sham (n=5) and a control group (n=10). MS disease was induced by using the EAE method in all mice excluding those in the control group. Treatment groups received 18-21 g/kg extract over 60 days. Each mouse was scored daily. On day 60 of our study, mice in all four groups were sacrificed to obtain brain tissue. In brain tissue samples, JAK2, p-JAK2, STAT1, p-STAT1 levels were measured by the western-blot method.

Results: In our study, we demonstrated that expression levels of p-STAT1 and STAT1 significantly increase in the sham group compared with controls, whereas they decrease significantly in the groups receiving Oenothera biennis and Hypericum perforatum therapies. Similarly, P-JAK2 and JAK2 expressions increased in the sham group compared with controls while decreasing significantly in therapy receiving groups.

Conclusion: At the end of our work, we observed significant improvements in both clinical and biochemical parameters in both of the therapy groups. In light of this data we obtained in this study, it is suggested that Oenothera biennis and Hypericum perforatum may serve as starting points in devising therapies or developing nutritional supplements for existing therapies and those yet to be discovered.
**SOP-30**

Use of Alternative Medicine Among Patients with Hypothyroidism

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**Objective:** The objective of this study was to evaluate the use of alternative medicine among patients with hypothyroidism.

**Methods:** A survey was administered to 119 patients with hypothyroidism referred to Bezmialem Vakif University Endocrinology Clinic between November 16–March 17. Information gathered on surveys included demographic variables, treatment history, and details of alternative medicine use.

**Results:** A total of 33 patients (27.7%) reported past use of alternative medicine. The most commonly used alternative medicine by these patients was herbs (81.8%). 60% of the patients had not informed their endocrinologists about the use of alternative medicine.

**Conclusion:** The potential for side effects and toxicities resulting from the use of herbal medicines must be recognised by doctors. Patients should be informed about the hazardous effects of this alternative treatments.

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**SOP-31**

The Effect of Work-load, Work Related Tension and Burnout on Smoking Behavior of Doctors

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**Objective:** The effect of cigarette on health problems is great. While many factors are being blamed for the etiology of this epidemic, stressful lifestyle is one of them. In this study, the smoking habits of doctors working at Bezmialem Vakif University School of Medicine Hospital were investigated according to job stress indexes.

**Methods:** Datas collected with survey which include socio-demographic information, questions that probe the work load, Work-related Tension Scale and Maslach Burnout Scale. The questionnaire was applied tp 90 research assistants with PhD.

**Results:** The average age of participants was 28 years old. 57% of the participants were women and 43% were men. 3.3% of the participants were in basic medicine, 52.2% were in internal medicine and 44.4% were in the surgical medicine sciences.

72.2% of the respondents stated that they never smoked, 4.4% quit, 10% sometimes and 13.3% smoke every day. 9.6% of females and 40% of males are smoking. 14% (n=3) of smokers started smoking during the specialty training period.

There was a significant relationship between socio-demographic characteristics of male gender and smoking (p=0.000). There was no relationship between age and number of children and smoking.

Smoking rate is 33.3% in internal branches and 66.7% in surgical branches. There was a statistically significant relationship between occupation in the surgical field and smoking (p=0.029). There was a significant relationship between alcohol use and smoking (p=0.009).

There was no significant relationship between Maslach burnout scale (emotional exhaustion, depersonalization and personal accomplishment scores), work-related stress scale and smoking.
Conclusion: We found that there was a significant relationship between male gender, the surgical field and smoking. There was no statistically significant relationship between smoking and work-related stress and burnout scales. Tobacco addiction in physicians is an issue that needs to be investigated because the results indirectly affect the health of the community.

SOP-32

The Correlation of Urine Osmolality with Concentration and Executive Functions

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The aim of the study is to evaluate whether urine osmolality as a reflection of fluid intake is related with concentration and executive functions at times of stress, like examination week during which there is both mental and physical stress.

Decreased fluid intake has been shown in children to decrease cognitive functions. There is not enough data about the situation in adults in the literature.

We included fifth grade students in our Medical Faculty who gave informed consent and those without a known chronic disease. Urine osmolality was measured at the first voided urine as a reflection of fluid intake. Concentration and executive functions were determined by Stroop test. The original stroop test consisted of tree cards but it has been adopted for the Turkish population by Karakas et al.. It consists of 4 cards and 5 parts. During the test time, the number of mistakes and corrections were recorded.

In the study design, we conducted the study at the time of the exam. The exam was at 9 am, the urine sampling at 8 am and the stroop test was conducted for all participants. After one week of holiday another urine sample was obtained for the measurement of osmolality and the stroop test was repeated again.

For statistical analysis the SPSS program was used. Kolmogorov-Smirnov test was used to determine the distribution type of the study parameter. For description of parameters with normal distribution values were expressed as mean minus plus standard deviation. Abnormal distribution for parameters was defined as median, minimum and maximum levels. Paired sample t test was used for comparison of dependent variables. For comparison of two groups the Mann Whitney U test was used. Spearman correlation tests were used for the correlation analysis.

45 students participated in our study. 37 were female amd 8 were male. The mean age was 24 years old.

When we examined the total duration of test 1 and test 2, the duration of all parts of test two were shorter than the corresponding times for test 1. This analysis was made by paired sample t test.

The number of mistakes per every section of test 1 and test 2 were similar and similarly the number of corrections per every section of Test-1 and Test-2. There was no statistical significant difference.

The osmolality was measured at the start of the study and at the end there were no statistically significant difference between the osmolality measurement at two time periods. Osmolality was found not to be correlated with either the duration nor the number of mistakes and corrections. There was no statistical significance between male and female students regarding to the urine and stroop test findings. The median exam result was 78, minimum 61 and maximum 90.

In conclusion, we did not detect any relationship between urine osmolality and concentration and executive functions in our study group. Why? Because the study group was small; we could not obtain charts for fluid intake before the measurement of urine osmolality; and we could not reach the data about the time of sleep the night before the Stroop test which could interfere with the results.
ANNUAL MEDICAL STUDENTS RESEARCH PRESENTATION DAY 14 MARCH 2017

Guest Editor
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Poster Presentations
Poster Presentations

PP-1

Investigation of Vitamin B12, Folate and Homocysteine Levels Thiol Hemostasis, Oxidative Stress Status and Mononuclear Leukocyte DNA Damage in Pediatric Patients with Vitamin B12 Deficiency

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Objective: In developing countries B12 vitamin and folic acid deficiencies are the most common cause of childhood megaloblastic anemia. The deficiency in folic acid and vitamin B12 causes an imbalance in deoxyribonucleotide pools which results in impairment of DNA synthesis and consequently an increased risk for certain cancers, and a high concentration of homocysteine in the blood is an important risk factor for cardiovascular disease. The aim of this study is to investigate vitamin B12, folate and homocysteine levels, total-native thiol concentrations and oxidative stress status in plasma, and DNA damage in peripheral mononuclear leukocytes before and after treatment in children with the diagnosis of vitamin B12 deficiency. We intend to see how these parameters will change with the given treatment and affect each other.

Methods: A five milliliter heparinized venous blood sample was taken from 14 patients, who were diagnosed with vitamin B12 deficiency anemia by measuring B12 and folic acid levels, before and after treatment of vitamin B12 deficiency. One milliliter of the heparinized blood sample was separated to measure DNA damage. The remaining blood samples were centrifuge to separate plasma. Plasma B12, folic acid, homocysteine, IL1β, IL6 and TNFα were determined by immunometric methods using commercial kits. Plasma total antioxidants status (TAS), total oxidant status (TOS), total thiol, native thiol and thiol disulphide levels were detected by photometric methods using a multiplate reader. Mononuclear leukocytes were separated from the blood to measure DNA damage using alkaline single cell gel electrophoresis assay (Comet Assay). Oxidative stress index (OSI) were calculated.

Results: We compared vitamin B12, folic acid and homocysteine levels before and after 2 months of treatment. Vitamin B12 and folic acid levels were significantly elevated after treatment. Meanwhile homocysteine levels and DNA damage decreased. After treatment TAS, total and native thiol levels were elevated compared to before the treatment. DNA damage is significantly correlated with vitamin B12 and folic acid levels also. On the contrary we analyzed that TOS, OSI, disulfide, TNF-a, IL-1b and IL-6 levels were significantly decreased.

Conclusion: These findings demonstrated that vitamin B12 deficiency causes oxidative stress and DNA damage and, treatment of vitamin B12 ameliorate oxidative stress and DNA damage in these patient was given. Therefore vitamin B12 deficiency should be treated urgently to prevent oxidative stress and DNA damage.

Keywords: B12 vitamin, DNA damage, thiol hemostasis, oxidative stress status

PP-2

Cytotoxic, Genotoxic and Apoptotic Effects of Rhus Seed Extract on Mouse Malignant Melanoma Cells (B16F10)

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Objective: Melanoma is the most aggressive form of all skin cancers, which affects many people per a year. Recently, several experimental studies have demonstrated that thus coriaria has anti-proliferative and apoptotic activities on various tumor cell
lines, including human lymphoma, breast cancer, osteosarcoma, and transformed hepatoma cells. In this study, we aimed to analyze the cytotoxic, genotoxic and apoptotic activity of Rhus extract seed on mouse malignant melanoma (B16F10) cells.

**Methods:** *Rhus coriaria* seeds were mechanically pulverized using a grinder. A total of 100 g of powdered *Rhus coriaria* seed was placed in one liter of 80% methanol for 72 hours to extract the required active ingredients. The obtained mixture was placed in a rotary device to remove the solvent, and then put in a freeze dryer to dehydrate the substance. The residual material at the bottom of the container, extract, was then subsequently dissolved in dimethysulphoxide (DMSO). The amount of phenolic and flavonoid was measured and the antioxidant capacity of the extract prepared from the thus was measured by using the DPPH, CUPRAC and ABTS methods. Then cells were treated with different concentrations of the extract. After treatment, the cells were incubated for 24 h. The cell viability was assessed based on ATP cell viability assay. Intracellular accumulation of reactive oxygen species (ROS) was determined using the fluorescent probes 2,7-dichlorodihydrofluorescein-diacetate (H$_2$DCF-DA). Genotoxicity was evaluated by alkaline single cell gel electrophoresis assay (Comet Assay) and, apoptosis induction was detected by Acridine Orange/Ethidium Bromide (AO/EB) double staining.

**Results:** *Rhus coriaria* extract has increased phenol and flavonoid levels and, antioxidant capacity in a dose dependent manner. After 24 hr., the treatment decreased cell viability and increased ROS generation capacity in a dose dependent manner. Cancer cells also showed as differently sized, fragmented and comet structures with increased % tail intensity and apoptotic formation with the increased doses of *Rhus coriaria*.

**Conclusion:** In our study, we demonstrated that *Rhus coriaria* extract has cytotoxic, genotoxic and apoptotic activity in melanoma cancer cells in a dose dependent manner. We suggest that this extract could be a candidate medicine or compound for the development of a novel class of anticancer drugs.

**Keywords:** *Rhus coriaria*, Antineoplastic activity, Melanoma cells

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**PP-3**

**The Prevalence of Excessive Daytime Sleepiness Among Medical Students And Its Impact on the Quality of Life and Academic Performance**

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**Objective:** Excessive daytime sleepiness (EDS) can be defined as a difficulty in maintaining a desired level of wakefulness, often accompanied by symptoms such as psychomotor slowing and closing eyelids for a longer time than for the purpose of blinking.

Excessive daytime sleepiness (EDS) is a major clinical and public health concern affecting 10-25% of the general population, mainly adolescents, older people and shift workers. It is an indicator of many sleep disorders such as: insufficient sleep, poor sleep quality, insomnia, sleep-related breathing disorders, circadian rhythm disorders, and disorders of central hypersomnia. EDS detrimentally affects quality of life, cognitive functions and work performance.

The causes of EDS are multifactorial, with possible risk factors previously identified as intrinsic sleep disorders, such as narcolepsy, obstructive sleep apnea; circadian rhythm disorders such as shift-work disorder; extrinsic sleep disorders such as poor sleep hygiene and insufficient sleep; and other contributory lifestyle and health factors.

Being a medical student means having a very busy, stressful and exhausting life. Particularly during examination time, students will have to study until the later hours of the night thereby losing their sleep. With such a busy tempo, daytime sleepiness makes it very difficult to concentrate, listen to lessons and study. It is therefore anticipated that students with sleep problems will be unintentionally affected by their academic performance.

The purpose of this research is to assess the prevalence of excessive daytime sleepiness (EDS) among medicine students at Bezmialem Vakif University and its affect on the quality of life and academic performance.

**Methods:** This study was conducted among 50 medical students at Bezmialem Vakif University.

A total of 50 medical students aged 18 years old and above participated in this study. A self-administered and anonymous data collection sheet was used for collection of personal and sociodemographic data. Participants were asked to complete a basic
demographic questionnaire, Epworth Sleepiness Scale (ESS) and EuroQol-5 dimensions (EQ-5D). Paired and independent t tests were used for data analysis at a significance level of \( p<0.05 \).

**Results:** There were 17 (34%) female and 33 (66%) male medical students who participated in the study. Eighteen study subjects (36%) felt they had enough sleep.

In our sample, 28% (n=14) of the participants felt sleepy during the day (ESS score > 10) (\( p<0.001 \)).

In the case of the EQ-5D index and visual analogue scale of the EQ-5D questionnaire (EQ-5D VAS), the status of sleepiness of medical students was associated with a poorer quality of life (\( p<0.001 \)).

**Conclusion:** More than a 25% of medical students suffered from sleepiness. There was an association between a poor quality of life and daytime sleepiness.

**Keywords:** Sleep disorder, medical students, quality of life, day time sleepiness

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**PP-4**

**Prevalence of Irritable Bowel Syndrome Among Medical Students and Association with Depression**

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**Objective:** Irritable Bowel Syndrome (IBS) is one of the functional gastrointestinal disorders, characterized with recurrent abdominal pain or discomfort and changes in stool habits in the absence of any organic disorders. The worldwide prevalence of IBS ranges between 5-20% of the population. According to different research, the prevalence in Turkey ranges between 2.7-19.1% of population with significant female predominance. The diagnosis of IBS is facing a worldwide problem due to excessive medical examinations, unnecessary operations, and unsatisfactory results. Take into consideration, IBS is diagnosed only clinically, there is not any confirmative test. Roma III criteria is currently used for diagnosis. Consequently, IBS causes a significant increase in health expenditure and a loss of labor.

Although many different mechanisms are proposed for IBS, today’s most accepted view is biopsychosocial modality in which environmental, genetic, psychological and psychosocial factors play a role together. Many researchers reveal that stress is one of the major risk factors for IBS. The frequency of a major depressive disorder diagnosis reaches up to two thirds of irritable bowel syndrome patients. Moreover, the comorbidity of irritable bowel syndrome among patients with major depression is common (30%).

Medical students are a special group who undergo stress due to academic environment and future responsibilities. The fact that time pressure, excessive information overload, excessive working time and learned information are to be used directly in relation to postgraduate human health, that is, the necessity of learning the information completely, was among the reasons of high stress levels in medical students. Medical faculty students are becoming more susceptible to depression due to stress. Depression in the psychiatric disease profile of students in medical school in Turkey has an important prevalence of about 20-40%.

The aim of this research is to estimate the prevalence of IBS and co-existing IBS and depression among medical students.

**Methods:** This study was conducted among 108 students in Bezmialem Vakif University between January 2017 and February 2017. A total of 108 students aged 18 years old and above participated in this study. A self-administered and anonymous data collection sheet was used for collection of personal and sociodemographic data. Participants were asked to complete basic demographic Questionnaire, Beck Depression inventory and. Roma III criteria. Frequency, mean, Chi-square, student t-test and regression analyses were used in statistical analyses.

**Results:** Among participants 73 (67.5%) were female and 35 (32.5%) were male. We detected IBS in 18 (16.6%) students out of 108 participants. There was depression in 21 (19.4%) students out of 108. We found depression was present in 5 (27.7%) participants with IBS and in 16 (17.7%) without IBS. There were no statistically significant difference between IBS and depression prevalence (\( p>0.05 \)). We found no statistically significant difference between sex and being over-weight (\( p>0.05 \)). There was no significant relation between having IBS and being over-weight (\( p>0.05 \)).

**Conclusion:** We found no correlation between IBS and depression.

**Keywords:** Irritable bowel syndrome, depression, medical students
Prevalence of Depression in Patients with Diabetes Mellitus

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Objective: The aim of this study was to estimate the prevalence of depression among type 2 diabetic patients attending our hospital and to describe sociodemographic and clinical characteristics associated with diabetic patients having depression. The knowledge gained from this study will assist healthcare practitioners to better understand depression in diabetes mellitus and design treatments that address the psychological and the metabolic needs of affected individuals to improve overall health outcomes.

Methods: Participants were recruited from diabetic clinics while waiting to be seen by their health care providers at Bezmialem Vakif University Hospital. Ninety-six adult patients were surveyed for the presence of depressive symptoms using Beck Depression Inventory (BDI-II) scale. Patients’ records were reviewed to obtain data pertaining to age, sex, marital status, Body Mass Index (BMI), level of education, smoking status, duration of diabetes mellitus, glycemic control using HbA1C test, use of insulin, and presence of additional illnesses.

Results: 54 patients (55.8%) of the total sample were females and 71 (73.5%) were <65 years old. 39 patients (40.2%) scored ≥16 on the BDI-II scale. Statistical significant association was found between high BDI-II score (≥16) and female gender, low educational level, having no current job, having multiple additional illnesses, low medication adherence and obesity (BMI ≥30 kg/m²). No significant association between BDI score and glycemic control, duration of diabetes, and other socio-demographic factors was found. Multivariatate analysis showed that low educational level, having no current job, having multiple additional illnesses and low medication adherence were significantly associated with high BDI-II scores.

Conclusion: Among screened patients, 40% were potential cases of depression, none were being treated with antidepressants. Psychosocial assessment should be part of the routine clinical evaluation of these patients at primary healthcare clinics to improve quality of life and decrease adverse outcomes among diabetic patients.

Keywords: Diabetes mellitus, Depression, Bezmialem

Effects of Coagulation Parameters on Severity of Acute Pancreatitis in Obese and Non-Obese Patients Diagnosed with Acute Pancreatitis

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Objective: Acute pancreatitis is a rare disorder which may be either mild or severe. Due to its mortality risk, early diagnosis and treatment is crucial. For many years the relation between obesity and this disease was ignored but in 1990 obesity was accepted as a risk factor for severe acute pancreatitis. Coagulation abnormalities are seen in severe diseases. In this study, the relationship between severity and coagulation abnormalities was investigated.

Methods: Forty-two patients participated in the study (27♂, 15♀). Harmless acute pancreatitis score is used for the detection of disease severity (if score is <1; mild, if score is >1; severe). Some routine biochemical tests were also evaluated during the study such as: ALP, GGT, BUN, Cr, LDL, cholesterol. PT, aPTT, INR, Protein S tests are used for coagulation
parameters in obese (BMI≥30) and non-obese (BMI≤30) patients, who were referred to the hospital within 48 hours of the onset of pain. These groups initially were divided into 2 sub-groups according to the severity of the disease; mild (≤1 for HAPS) and severe disease (>1 for HAPS). Patient and control groups were separated according to sex and BMI properties. Four groups were statistically evaluated, with mean difference =2.8, SD=5, α=0.05 and power=0.80 for 35 cases for each group with a total of 140 cases.

Results: From the participants, 15 were obese according to their BMI values. Mean age was 54.52 with a median value of 55.5. There is positive correlation between age (rs=0.474, p=0.002), ALP (rs=0.437, p=0.004), GGT (rs=0.350, p=0.023), BUN (rs=0.487, p=0.001), Cr (rs=0.317, 0.041), PT (rs=0.379, p=0.013), aPTT (rs=0.354, p=0.021) and severity of disease & obesity. Also there is a negative correlation between LDL (rs=-0.405, p=0.008), total cholesterol (rs=-0.365, p=0.019), protein S (rs=-0.343, p=0.047) and severity of disease & obesity.

Conclusion: Due to the ongoing research partial statistical analysis were able to be completed. Based on partial data; age, ALP, GGT, BUN, Cr, PT and aPTT values increase as the disease severity and obesity rates go up, LDL, Total Cholesterol and Protein S values decrease as the severity of disease and obesity rates rise. Effects of these parameters must be further analyzed on the staging of disease and prognosis of pancreatitis and obesity with different parameters. Furthermore, analysis will be made as research concludes and all the participant values are statistically evaluated and correlated with each other. The subject of this study is a relatively new and under-researched topic, therefore more studies need to be conducted in this area of research.

Keywords: Coagulation parameters, obesity, acute pancreatitis, effects of coagulation

PP-7

Impact of Depression on Business Life in Inflammatory Bowel Disease

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Objective: Inflammatory bowel disease (IBD) encompasses two idiopathic chronic inflammatory diseases: Crohn’s disease and ulcerative colitis. There are, important pathological and clinical differences that distinguish these inflammatory disease processes. Clinically, Crohn’s disease tends to present more frequently with abdominal pain and perianal disease, whereas ulcerative colitis is more often characterized by bloody and mucous diarrhea. The chronic clinical course of IBD often results in reduced quality of life.

Methods: A total of 20 people with IBD, (10) Crohn’s disease and (10) Ulcerative colitis, were included in the study. Participants completed the questionnaire Beck’s Depression Inventory. Once they completed the questionnaire, the score was added up for each of the 21 questions by counting the number to the right of each question they marked. The highest possible total score is 63.

Results: We compared ulcerative colitis and Crohn’s disease result by using the SPSS Statistics program. P value was greater than 0.05, statistically there is no difference between the groups. Both groups suffer from borderline clinical depression. However; 3 of our participants scored over 30 indicating severe depression.

Conclusion: People who have inflammatory bowel disease should be professionally supported periodically by psychiatrists because the mean score of our participants was seventeen which is borderline clinical depression. All gastroenterologist should be aware of this situation.
Evaluation of Posttraumatic Stress and Postpartum Symptoms with Various Scales in Mothers of Infants in The Neonatal Intensive Care Unit

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Objective: The experience of having an infant hospitalized in the neonatal intensive care unit (NICU) is a highly stressful event for mothers. There are many factors which contribute to general distress in mothers. The appearance and behavior of a sick infant, the use of complex medical language and technology, threat of potential loss of their child’s life, and parents’ loss of their role in their infant’s care are a few of the stressors which can compound existing parental distress about their infant’s illness.

The aim of this study was to assess the Posttraumatic Stress and Postpartum Depression symptoms in mothers using various scales.

Methods: Study design: This was a cross-sectional study conducted at a tertiary-level NICU. The study was approved by the local ethical boards of Bezmialem Vakif University (31.03.2016-7/31).

Patient Population: The study participants were enrolled from July 2016 to December 2016. Postpartum women whose babies were admitted to the NICU participated in the study. Study exclusion criteria included the inability to read Turkish language, mother age less than 18 years or if the child died before the intervention.

Data collection: After the mothers agreed to join the study, they were assessed with self-reported measures such as the Beck Depression Inventory, Beck Anxiety Inventory, Edinburgh Postpartum Depression Scale and Posttraumatic Stress Disorder checklists. The Posttraumatic Stress Disorder scale was completed 30 days later. A total of 55 mothers of neonates in the NICU were recruited for this study.

Statistical analysis: The statistical analysis were performed using Statistical Package for Social Sciences (SPSS) Version 18.0 software (IBM Corp.; Armonk, NY, USA). The data were presented as mean values with standard deviations.

Results: The demographic information of 55 mothers and infants included in the study are shown in Table 1. The Beck Depression Inventory showed that 38.2% of mothers had mild to severe depression. From the Beck Anxiety Inventory, 28 mothers (50.9%) were assessed as being any grade of anxiety. According to the Edinburgh Postnatal Depression Scale, 18 mothers (32.7%) were determined to have possible or probable depression. Posttraumatic stress disorder was observed in 41.8% (21) of the mothers.

Conclusion: The ratio of depression and Posttraumatic Stress Disorder may be increased with a multi-depression scale in the postpartum period, in other words the depression symptoms, which are not determined with one scale, are measured with multi-scales. Psychological support can be given to the mothers in the early stage if the depression or the anxiety of the mothers is diagnosed properly.


PP-9

Effects of Astragalus membranaceus Treatment Combined with Calorie Restriction on Liver Telomerase Quantity and Animal Behavior

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Introduction: Humans have been searching for ways of extending the life span, and the underlying molecular mechanisms for many years. The aging phenomenon is the consequence of cellular senescence which depends on the cell type, division capacity and telomerase activity. Astragalus membranaceus (A. membranaceus) is a traditional Chinese plant used for a variety of medical treatments such as inflammation, neural diseases and, cancer. In addition, A. membranaceus was demonstrated to extend the lifespan of C. elegans. In this project we aimed to show the effects of A. membranaceus combined with calorie restriction on behaviour and telomerase quantity in rats.

Methods: Wistar female rats (n=24) were divided into 4 groups randomly as 6 animals in each; 1) Control group; fed with standard lab chow and water ad libitum, 2) Astragalus (A) group; fed with 25 mg/kg A. membranaceus extracts, 3) Calorie restriction (CR) group; fed with a 30% restricted diet, and 4) Astragalus + Calorie restriction (CR+A) group; fed with 25 mg/kg A. membranaceus extracts with a 30% calorically restricted diet. At the end of 120 days behavioral tests for anxiety (plus maze and open arena), learning and memory (passive avoidance and Morris water maze) and motor coordination (rotorod and wire) were applied to the animals. The animals were decapitated after behavioral tests and brain and liver tissues were discarded and freezed. Telomerase enzyme amount was determined by western blot analysis from the liver tissue.

Results: In the present study, we observed that CR marginally decreased anxiety levels in rats compared to the control (p=0.07). However, both CR and astragalus treatment had no effect on the locomotor activity. Motor coordination was better with CR and astragalus treatment, but it did not reach an accepted level of significance (p>0.05). The learning capacity of the rats was increased in the CR and CR+A groups when compared to the control group on the first day of Morris water maze training (p=0.033). However, there is no effect of CR and astragalus treatment on the memory of rats. Lastly, we did not find any significant difference on the telomerase amount in liver tissue between groups.

Conclusion: To sum up, the effect of astragalus and calorie restriction provide some beneficial effects on behavior. Therefore, as a next step, we are planning to determine underlying molecular mechanisms of these behavioural changes. In addition, the effect of astragalus and calorie restriction on the life span will be examined by measuring telomerase activity rather than telomerase amount in future studies.

Keywords: Astragalus membranaceus, calorie restriction, telomerase, behavior, rat

PP-10

Does Circumcision Have any Affect on Occurance and Treatment of Nocturnal Enuresis?

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Objective: Male circumcision is the most common surgical procedure worldwide. In many countries, the circumcision is delayed until school-age by the parents for environmental, social, traditional and religious factors. Many authors defend the idea of newborn circumcision due to different reasons, such as better healing, protection against urinary tract infections and prevention of possible unfavorable psychosexual effects in the older ages. Nocturnal enuresis is frequently associated with family history. In addition, post-circumcision psychological effect is thought to be one of the reasons for nocturnal enuresis in traditional belief. This questionnaire study aims to elucidate whether late circumcision is a reason for nocturnal enuresis.
Methods: Over a 10-month period, a total of 105 children being circumcised over the age of 5 years, were prospectively enrolled into the study. Subjects with any chronic diseases and/or having any other lower urinary tract symptoms or a history of bladder dysfunction and/or being operated for hypospadias, hydrocele and/or inguinal hernia were excluded. The questionnaire includes 8 questions that investigate the following: Patient age, circumcision age, type of anaesthesia, nocturnal enuresis before and after circumcision, diurnal enuresis before and after circumcision and using medication.

Results: In this study, 105 patients were eligible according to the inclusion criteria. The mean of the circumcision age was 7.25±1.87. We found that the age of circumcision did not have a statistically significant effect on nocturnal enuresis complaints with the Mann-Whitney T test (p=0.59). The comparison of the types of anesthesia with nocturnal enuresis after circumcision between the patients revealed similar findings with Chi-Square Tests (p=0.74). In addition, the comparison of patients that did not have nocturnal enuresis complaints before circumcision and show up after circumcision inferred no significant results (p=1.00). When we compared this to the patients that had nocturnal enuresis complaints before circumcision and disappear after circumcision the results were significant with the McNemar Test (p=0.09). The comparison of the diurnal enuresis before and after circumcision between the patients implied no significant differences (p=1.00).

Conclusion: In this questionnaire survey study, our main objective was to investigate whether circumcision has an affect on nocturnal enuresis. At the end of the study, we realized that there was nearly a significant effect. We also found that there is no affect for circumcision age and type of anesthesia in the patient with nocturnal enuresis.

Keywords: Enuresis, circumcision

PP-11

Retrospective Evaluation of Fibrosis/Cirrhosis Status and Epidemiologic Features of Hepatitis-C Virus Seropositive Cohort

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Objective: The hepatitis C virus (HCV) is an RNA virus that belongs to the family flaviviridae. There are six known genotypes and more than 50 subtypes. The World Health Organization (WHO) reports that approximately 3% of the world population, or 170 million people are infected with the hepatitis C virus (HCV) with between 3 and 4 million new infections each year. Hepatitis C virus (HCV) is a leading cause of chronic liver disease, cirrhosis, End Stage Liver Disease (ESLD) and Hepatocellular Carcinoma (HCC), as well as the most common indication for liver transplantation in many countries.

Polyethylene glycol interferon-α (PegIFN-α) in combination with ribavirin (RBV) is the standard of care (SOC) for chronic hepatitis C. PegIFN-α combined with RBV is currently the most classic and widely used standard treatment; however, its limited efficacy and significant side effects, as well as the absence of an HCV vaccine, promoted the development of new drugs. In recent years, the development of HCV antiviral drugs has progressed. Two HCV NS3 protease inhibitors, telaprevir and boceprevir, were approved by the United States FDA in 2011, and their combined treatment with the SOC not only significantly improved the sustained viral response (SVR) rate in HCV naive patients but also showed good efficacy in patients with previous treatment failure. Direct-Acting Antivirals (DAAs) have shown a trend toward a gradual replacement of the SOC scheme.

We need new treatment methods. Many patients were unable to be cured due to the side effects of the drugs. The main goal of hepatitis C treatments is to obtain a sustained viral response. We are expecting that increase in the response to SVR with the DAAs drugs we have just started using. The cirrhosis status of the patients before treatment will be evaluated in terms of treatment response in this study.

Methods: The main purpose of Hepatitis C virus treatment is to obtain a SVR. Studies state an increase in the rates of these SVR’s. The aim of this study was to determine the impact of hepatic fibrosis/cirrhosis status before the PegIFN alfa 2a/2b + RBV treatment of Hepatitis C virus (HCV) treatment response and epidemiologic features. We aimed to find out how patients’ cirrhosis status affects SVR. If patients treated without cirrhosis have a better response to treatment, early detection of the virus will be more
The aim is to find ways to increase the treatment success because it is important to treat patients before HCC develops and liver transplantation is needed.

Patients with epidemiological, laboratory (biochemical, serological and virological), radiological and histologic records who were followed up in the gastroenterology specific outpatient clinic were evaluated retrospectively. Demographic data were categorized as follows: age (years), gender (male/female), histology (present or absent for inflammation/steatosis/fibrosis) and cirrhosis (present or absent based on biopsy).

Results: A total of 286 (Female:158, Male:128) HCV seropositive patients were included in the study. One-hundred seventy three of the patients have experience of treatment with PegIFN alfa 2a/2b+RBV. One-hundred sixteen patients received treatment once, 41 patients received treatment twice, 11 patients received treatment three times, and 4 patients received treatment four times. It has been observed that 87 of 173 patients with PegIFN alfa-2a/2b+RBV treatment, got SVR. Others failed to be cured due to various side effects. The other 113 of 286 patients have experience of additional treatment with NS3 protease inhibitors, telaprevir and boceprevir. All of these 286 patients had experience with HCV treatments and only 106 patients obtained SVR.

This data shows that 106 patients who obtained SVR with the treatment of PegIFN alfa 2a/2b+RBV or NS3 protease inhibitors were most likely to be in the 50-59 and 60-69 age range. Three of 106 patients who obtained SVR, are in the 20-29 age range. Eleven of 106 patients who obtained SVR, are in the 30-39 age range. Fifteen of 106 patients who obtained SVR, are in the 40-49 age range. Forty-three of 106 patients who obtained SVR, are in the 50-59 age range. Thirty-one of 106 patients who obtained SVR, are in the 60-69 age range. Three of 106 patients who obtained SVR, are in the 70-79 age range.

Conclusion: Eighty of 145 (55.17%) Non-Cirrhotic HCV seropositive patients obtained SVR after the treatment of the PegIFN alfa 2a/2b+RBV. 7 of 28 (25%) with compensated cirrhotic HCV seropositive patients obtained SVR after exposure to PegIFN alfa 2a/2b+RBV. This study shows that if the patient has the treatment before the progression of cirrhosis, they are more likely to obtain SVR. On the other hand, patients with SVR were mostly in the 50-59 age range (43 of 106 patients in this group, 40.5%) and 60-69 age range (31 of 106 patients in this group, 29.2%), it is attributed to the cause of the symptoms they get at late ages and because of being diagnosed at a late age. This study shows that, the rate of SVR decreases with age. Younger patients get SVR more than those over the age of 50. Therefore, the implementation of personalized treatment approaches is very important.

Keywords: Hepatitis C, treatment, SVR, cirrhosis

Objective: Secondhand smoking increases asthma incidence, exacerbates asthmatic children’s symptoms, impairs respiratory function tests results, increases hospitalization rates in asthmatic children and causes recurrent wheezing in healthy children.
Home-smoking is the major source of secondhand smoke exposure for children and vehicles are also an important source. The anti-smoking law promulgated in 2009 in Turkey. The Turkish government widened the scope of the anti-smoking law in 2013. We aim to evaluate the effect of the anti-smoking law on parents smoking behaviours and on the level of secondhand smoke exposure among children, to understand parents opinions about legislation and to evaluate the effectiveness of the smoking ban. Our major objective was to understand is there any difference between parents who have children with and without reactive airway disease.

**Methods:** We enrolled 161 parents who have children born before 2009 (anti-smoking law). A total of 111 parents (90 female, 21 male) who have children with reactive airway disease and 50 parents (45 female, 5 male) who have children without reactive airway disease. We created a 67-question survey with a face-to-face interview method. Answers were analyzed by the SPSS program. We used Chi-Square and McNemar tests to compare categorical variables and Student-t Test to compare numerical variables.

**Results:** The mean ages of mothers of children with RAD are 36.97±6.30, fathers of children with RAD are 40.80±5.98, mothers of children without RAD are 40.84±7.98 and fathers of children without RAD are 45.75±9.41. Parents of children with RAD have more monthly income (p=0.044) and have less pets (p=0.01). Childrens home indoor (p=<0.001), home outdoor (p=0.049), car (p=0.003) and outdoor (p=0.001) exposure rates decreased after the smoking ban. Children with RAD have less fathers smoking amount rates (p=0.031) and more mother smoking quit rates (p=0.024). Children with RAD have less smoking exposure amount at home (p=<0.001) and outdoor (p=0.002) and their home indoor smoke exposure rates are lesser than children without RAD (p=0.001). Children with RAD had less smoking exposure amount at home (p=<0.001), in the car (p=0.019) and outdoor (p=0.002) before the smoking ban. Fathers of children with RAD had less smoking amount before ban (p=0.028). Home indoor smoking exposure rates of children with RAD were less than children without RAD before the smoking ban (p=0.004).

**Conclusion:** Secondhand smoke exposure is a major public health problem. The Turkish government promulgated the anti-smoking law and physicians recommend to quit smoking. We should analyse the causes of the differences between the two groups. Parents know the effects of secondhand smoke exposure but the knowledge is not enough to encourage them to quit smoking. Public health specialists should determine the causes of parents not quitting smoking and find more effective ways to encourage parents.

**PP-13**

The Frequency of Depression in Subgroups of Hypothyroid Patients

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**Objective:** Hypothyroidism is a clinical syndrome resulting from the lack of thyroid hormones resulting in a general slowdown of metabolic events that is the one of the most common health problems in Turkey. Regarding its long term therapeutic management, this disease can affect the quality of life and the mental health of the patients. A relationship between hypothyroidism and depression has been accepted for many years. Our study is about the frequency of depression in subgroups of hypothyroid patients.

**Methods:** This retrospective investigation was performed using convenience sampling on 128 patients with hypothyroidism referred to Bezmialem Vakif University Endocrinology and Metabolism Clinic between April 2016 and March 2017. The patients were separated into subgroups according to sex, age, educational status, profession, level of fT4 and TSH. Data were collected through Beck Depression Scale. Data were analysed using Spearman’s rho correlation coefficient. For the statistical analysis, the statistical software SPSS version 16.0 (SPSS Inc.; Chicago, IL, USA) for Windows was used. Results were presented as mean ± standard deviation (SD) for quantitative variables and were summarized by absolute frequencies and percentages for subgroups.
Results: The total number of patients participating in this study was 128. The mean value of age was 39.79 ± 12.86. There were 6 males and 122 females of 128 hypothyroid patients. The profession of the patients were 92 unemployed, 27 self-employed and 9 retired. The mean value of FT4 hormone level was 13.10 ± 2.61. The median value of TSH was 2.16 (0.01-39.98). The median value of the Beck score was 7 (0-48). The results showed that there was no statistically significant association between FT4, TSH hormone levels and mean depression scores of patients.

Conclusion: The results show, most hypothyroid patients have a normal beck score as only a few had severe or extreme depression. Also, evaluation of the relationship between thyroid hormone levels and beck depression scores of patients revealed that there was no statistically significant association between FT4, TSH hormone levels and mean depression scores of patients. Further studies may help to clarify the association between hypothyroidism and depression.

PP-14
Effects of Hypothyroidism Treatment on Depression in Hypothyroidism Subgroups

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Objective: Hypothyroidism is a clinical syndrome resulting from the lack of thyroid hormones resulting in a general slow down of metabolic events that is the one of the most common health problems in Turkey. Thyroid hormones have a powerful affect on metabolism. In hypothyroidism, many organs and internal systems slow down which leads to a wide range of symptoms – including depression. The relationship between mood disorders and thyroid dysfunction has been for a long time described as a high incidence of nervous affectations in thyroid abnormalities. Today, it has been well established that thyroid dysfunction especially hypothyroidism may significantly impact mental status especially mood state and cognitive conditions in hypothyroid patients. Fortunately, the hypothyroidism treatment regimen seems to be effective for decreasing mood disturbances and thus depressive disorders are usually reversible by appropriate management.

Methods: A Beck Depression Test was administered to 128 patients with hypothyroidism referred to Bezmialem Foundation University Endocrinology Clinic between November’ 16- March’ 17. Information gathered on surveys, included demographic variables, treatment history, and details of medicine use.

Results: Our study is about the frequency of depression in subgroups of hypothyroid patients on different treatments. The total number of persons participating in this study was 128. The average age was 39.79 ± 12.86. There were 4.7% male and 95.3% female. The educational status of the patients was 71.9% unemployed, 21.1% self-employment and 7% retired. Of these patients, 93% use the drug levothyroxin and 7% do not use medicine. Some of these patients, 45.3% received treatment and 54.7% did not receive treatment. The median value of treatment was 7 (1-25) and non-treatment was 7.50 (0-48).

Conclusion: Considering and improving the mental health status especially for female patients with a high Beck Depression Scale score can positively effect their treatment procedure and this key point can be useful in designing self-care and therapeutic programs and even for all people. There was no statistically significant result between treatment and non- treatment.

PP-15
Comparison of Periferal Capillary Oxygen Saturation Values From Right, Left Earlobes and Nose

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Objective: Peripheral capillary oxygen saturation measured by pulse oximeter, is a technique that is routinely used for monitoring oxygenation and was shown to give a reliable and accurate estimation of arterial oxygen content, tissue perfusion, and heart rate. If a sufficient measurement is unobtainable (because of hypothermia, absence of limb, motion, or excessive light) at the standard position ‘finger’, the sensor probe is usually attached to an alternative site. Monitoring sites are also earlobes and the nose. In emergency situations, it is especially important to find the best place. The aim of this study was to evaluate three different sensor sites (right, left earlobes and nose) and to evaluate if there is a difference between them with regard to the accuracy and precision of pulse oximetry readings.

Methods: Fifty-two healthy volunteers, aged between 18 and 30 years were included in this study. Volunteers, who were smokers, pregnant or menstruating, having hypotension, bradycardia, anemia or hemoglobinopathy, were excluded from the study. Volunteers with at least an 8 h fasting period were monitored after 5 min of resting. All peripheral capillary oxygen saturation measurements were completed in the same place, the same ambient light and the same brand monitor was used for all volunteers. All peripheral capillary saturation values were recorded in the sitting position and simultaneous blood pressure and heart rate were noted. Measurements of the right and left earlobes and the nose were recorded after waiting at least 1 min. Wilcoxon was used to compare measurements.

Results: A total of 156 SpO2 measurements were obtained from 52 volunteers. Hypotension, tachycardia, bradycardia was not observed in any of the volunteers. The average peripheral capillary saturation values of each earlobe and the nose were ranked as follows: Nose>left earlobe>right earlobe. Comparisons were done between earlobes and the nose (Wilcoxon, F: 5.569, p=0.005). The highest average peripheral capillary saturation value was measured from the nose (96.13±4.159) and it was statistically significant when compared with the right earlobe and left earlobe. The second highest average peripheral capillary saturation value was measured from the left earlobe and it was not statistically significant when compared with the right earlobe.

Conclusion: When comparing the peripheral capillary oxygen saturation measurement from both earlobes and the nose with the pulse oximetry, the nose has a statistically significant higher value when compared with both earlobes. We assume that the nose has the most accurate value that reflects the arterial oxygen saturation.

Keywords: Peripheral capillary saturation, arterial oxygen saturation, pulse oximetry

PP-16

The Assessment of Intraoperative Awareness with Recall Among Women Undergoing Caesarean Section Under General Anesthesia

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Objective: Intraoperative awareness is defined as consciousness and recall of surgical events experienced under general anesthesia. The incidence in the general surgical population is 0.1-0.2%. Female, young patients, cardiac and obstetrics operations are high-risk patients for awareness with recall. Postoperative sequelae include sleep problems, nightmares, fear of future anesthetics, daytime anxiety and post-traumatic stress disorder.

We aim to evaluate the intraoperative awareness with recall (AWR) among women undergoing caesarean section under general anesthesia in Bezmialem Vakif University.

Methods: This study’s design is face-to-face interview. We included 20 patients for this study. Our exclusion criteria are patients who have psychiatric disorder diagnosis, ASA III or ASA IV patients, regional anesthesia patients and emergency caesarean cases. Patients were evaluated for age, body mass index, comorbid diseases, past surgical history and anesthetic technique (total intravenous anesthesia or inhalation anesthesia). Patients were interviewed after the operation (in 24 hours) using a structured modified Brice questionnaire.

Results: We had planned to make a three step study with 50 patients at the beginning but because of two main limitations we had to change our concept halfway through the study. Student’s entrance to the operation room is forbidden and most caesarean patients choose spinal anaesthesia. Therefore we could include only 20 patients in total.
PP-17

The Acute Effect of Smoking Different Types of Cigarettes on Respiratory Function

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Objective: Many people suffer from the chronic effects of smoking cigarettes. This study takes a closer look at the acute physiological response to smoking different types of cigarettes.

Methods: 20 male smokers (age 19-25) participated in the study. FEV¹ and PEF were assessed through a digital PEF meter. The tests were performed before and immediately after smoking a single cigarette of both high and low tar.

Results: The mean parameters decreased respectively on each type of cigarette FEV¹: 3.84 to 3.72 L PEF: 444 to 400 L/min (high tar) FEV¹: 3.79 to 3.72 L PEF: 440 to 405 L/min (low tar).

Conclusion: The study shows that there is only a slight difference in acute lung irritation between high tar and low tar cigarettes which indicates there is no such thing as safe cigarettes. Further research is needed to fully understand the mechanism of acute effects of smoking and clean up period after which these parameters return to normal.

PP-18

Prevalence of Tobacco Use and How to Quit Smoking for Students at Bezmialem Vakif University

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Objective: Smoking is an important public health issue in our country, as in the rest of the world. About 40 to 50 years ago, lung cancer and chronic bronchitis were not as common as they are today. The increasing frequency of pulmonary and chest diseases is associated with excessive use of cigarettes. Positive legal regulations and various projects are being carried out in the field of fighting against tobacco in our country, but not yet at the consciousness and level considered in developed countries.

In this study, it was aimed to determine the smoking frequency and the factors influencing it, as well as the factors affecting reducing smoking in students of a health care field living in Istanbul and coming from abroad to study at Bezmialem University.

Methods: A questionnaire including 20 questions formed for the prevalence of tobacco use and how to quit smoking for students at Bezmialem University was used. The sample of the study was created by students from five different departments at Bezmialem University. The questionnaire was used with 107 students based on the number of students studying in the departments. The questionnaire was conducted in the center garden of the University in order to make random selection and conclusion. The survey consists of twenty questions including age, gender, marital status, education, family, accommodation, working status, source of income, demographic information, the age of starting to smoke, the frequency of smoking, the cause of smoking and the environment, general thoughts about smoking and quitting were questioned.

Results: From the total of 107 students included in the study, 39 participated from the medical faculty, 21 from dentistry, 27 from the health care faculty, 14 from pharmacy faculty and 6 from the science faculty. Forty-one (38.3%) of the students included in the study were female and 66 (61.7%) were male. Thiry-nine (36.4%) of the students started smoking before the
age of 18. Among the faculties, the early start of smoking included 19 (50%) of 38 medical students and 14 (51.8%) of 27 health care students which are remarkable results. Only 3 out of 21 students in dentistry started smoking at an early age. The number of smokers who started after entering the university is 68 (63.6%). In general 17 (41.4%) of female and 28 (42.4%) of male started smoking during the first year of university. It is remarkable that 17 (80.9%) of dentistry students started smoking during the first two years at university. Among 107, the answers to 176 multiple choice questions about the reasons for smoking showed that 72 (40.9%) was due to the influence of friends and to form new friendships. When the question was about the affect of mid-term and final exams, among 80 options 23 (28.75%) from the medical and dentistry faculty showed that they started because of the course load. Out of 41 questions 26 (63.4%) in the health care faculty responded to the same question as friendship environment and to form new friends. Emotional changes and break ups among 16 (24.6%) of the female students were the causes to start smoking.

When we questioned the usage of tobacco by the family members, among 74 families (69.1%) at least 1 person smokes. The number of both parents who smoke was 20 (18.6%). Another result was that among 33 students (30.8%) family members do not smoke at all. About the number of cigarettes per day, among 15 (36.6%) of female students smoke rarely about 1 to 5. Out of 66 of the male students, 49 (74.2%) smoke at least 10 to 30 per day. The most often between males are the health care students, which is 20 to 30 (57.8%) a day. Just 2 males among the rest 47 students form 4.25%. Among 107 students 64 (59.8%) live together with their parents, 25 (23.3%) in a flat they rent, and 16 (14.9%) live in hostels.

Only 4 males (3.73%) have used professional help to quit smoking. Out of 197 answers to the question about what could make you quit smoking at the moment, 61 (30.9%) put a loved one or partner as the first place. Fifty-five (27.9%) answered the same question as the condition of the serious illness. 8.6% quit because of the increasing tobacco prices, and 19 (9.6%) by doctor recommendation.

Out of 52 answers 44 (84.6%) males in the medical faculty gave the reason to quit as a partner or family, in males in the dentistry faculty the range was (52%) out of 13 answers, and (75.7%) of females in the medical faculty, but in other departments only serious illness was the reason to quit smoking rather than family or a loved one.

**Conclusion:** Various studies have been conducted in different countries around the world in order to determine the rate of smoking among young people. As an example among other countries, in the study conducted for medical faculty students in China, the results showed that female students do not smoke, just the range of smokers in male students was 37.7%. As in many other similar studies done in our country, these ratios are at very high rates. This study showed that there is a high rate of smoking even before starting the university, that there are individuals no matter what the gender is, who start smoking during the first two years of university to make friendships and the environment of smokers around and that often there is a member who smokes in the family among these individuals. Another reason to start smoking is the difficulty in the duration of education and heavy stress factors especially in difficult departments such as medical and dentistry faculty. One of the high rate reasons to start smoking among female students are the problems inside family and break ups with their partner. The most important reason is the friendship environment.

Another question was about smoking members in the family and out of 107 individuals, 74 students have a positive result, while 33 have a negative result (12 are the medical faculty students), but the children are still smoking. The best reason explaining this are the heavy education courses. Seventy-four families are the triggering factor for their children.

The results of the questions about the number of cigarettes smoked per day clearly showed that males smoke more than females. Another remarkable result is that health care students are over-smoking. Eleven students among 19 smoke 20 to 30 cigarettes per day. It is thought that this may be because of the lack of education about this issue.

The main curious question was that when you ask what is the first reason for you to quit smoking, a large majority of the general population answered as a serious illness. The partner factor followed this, but the doctor recommendation was below the expected level. Considering among different faculties the results showed that medical and dentistry faculty were positive to quit smoking by the help of a loved one and family, but the health care faculty showed that the role of others did not play an important role unless the factor of serious illness is present, at the same time among female students serious illness also played the main role to quit rather than partner or family influence.

As a result, a smoking habit is a serious issue due to the affect of various sociocultural and economic reasons, beginning from childhood or university years, but can be solved by cooperating with family, loved ones, schools, doctors and the government.

**Keywords:** Faculties, cigarette, friendship
Coping Strategies Among Married Couples with Trust Issues

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Objective: Although trust plays a central role in marriages, we know surprisingly little about how couples handle their trust issues at home. Similar studies were found to be done but we do not have enough data for Turkish couples’ problem solving strategies on trust issues. In our study, we aimed for 70 couples, which makes 140 individuals.

Methods: The couples chosen were married, between the ages of 18-60. To conduct the research, we prepared a survey consisting of 11 multiple choice questions along with the demographics. Given the cultural background of Turkey, couples tend to solve their issues themselves and they do not seek help very often. This leads to a lack of data on coping strategies among them. Our aim in this study is to determine whether the couples have trust problems in their marriages and if so, how do they cope with them.

Results: The median age for men was 35 and for women 34. The average marriage period was found to be 5.8 years. 12% of the male participants had masters degree; 48% of them had bachelors degree and 28% had graduated high school. 8% of the female participants had masters degree; 56% of them had bachelors degree and 50% had graduated high school. All these 140 couples had 1.3 children on average. Their type of marriage was defined as 44% love match, 36% arranged marriage and 20% convenience marriage. 68% of the participants claim not to have any trust issues and had never been cheated on in their relationships. 25% of the participants claim that they had trust issues but were never cheated on. 6% of the participants said that they had trust issues and they were actually exposed to infidelity. All these participants were females, and only one of them ended their marriage. Two of them said that they were cheated on before the marriage and during the dating phase of the relationship. Among the married couples, none of the women told their husbands that they knew but they had completed research about the infidelity. Only 1% of whole participants claimed that they never had trust issues but they were cheated on anyway.

Conclusion: This study demonstrates how Turkish people cope with their infidelity issues in their marriages. Mainly, couples tend to maintain the marriage and among those couples, women tend to claim that children are the reason why.

Prediction of Depression by Using Beck Depression Inventory Among Bezmialem Medical Students Studying for Specialization Exams

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Medical students are always under pressure due to their profession. A fair amount of stress is essential for motivation and discipline. Nevertheless, when feeling overwhelmed because of chronic stress, productivity may decrease. Many of our colleagues are suffering from lack of ambition due to depressive attacks while studying for specialization exams. Determining the incidence of these attacks and anticipating the risky periods will help us to predict depression and prevent any loss of efficiency.

The Beck Depression Inventory which is used for evaluating depression among Bezmialem Medical students, is a 21-question multiple-choice self-report inventory, one of the most widely used psychometric tests for measuring the severity of depression. Individual questions of the BDI assess mood, pessimism, sense of failure, self-dissatisfaction, guilt, punishment, self-dislike, self-accusation, suicidal ideas, crying, irritability, social withdrawal, body image, work difficulties, insomnia, fatigue, appetite, weight loss, bodily preoccupation, and loss of libido. Items 1 to 13 assess symptoms
that are psychological in nature, while items 14 to 21 assess more physical symptoms. BDI evaluation is based on each answer being scored on a scale value of 0 to 3. Higher total scores indicate more severe depressive symptoms. The scores are standardized as four cutoffs indicate as: minimal depression (0-13), mild depression (14-19), moderate depression (20-28) and severe depression (29-63).

230 Bezmialem Medical students (86 4th grade students, 90 5th grade students and 54 6th grade students) were evaluated for depression. Before taking the test, students were asked about their future plans. 98.8% of 4th grade students replied that they are planning to be specialized in certain areas and 56.8% of them are planning to take courses in addition to their own study for specialization exam. The ratio of 5th grade students who want to be specialized is very similar: 97.8%, however 81.1% of them are feeling unqualified in themselves and taking extra courses. On the other hand the ratio is a little different among 6th grade students: 20.8% of them are planning to stay as a general practitioner and for the rest 60.8% replied that they are taking extra courses.

Evaluation of the beck depression inventory shows only 8% of 4th grade students are minimally depressed. 19% of 5th grade students are minimally depressed and 6% are mildly depressed. However 30% of 6th grade students are suffering from mild depression and 4% scored for moderate depression. There is an obvious difference between the answers of the 6th grade students and other grades. Most of the 6th grade students are scoring the highest scores especially in pessimism, self accusation, insomnia and irritability areas. Although the results are similar among 4th and 5th grade students, 5th grade students are scoring higher in self-dissatisfaction and work difficulty areas. Also the study shows 6th grade students tend to show physical symptoms more than other grades.

Our study shows the progressive and dynamic relationships between stress and depression over time-including effects of specialization pressure. The results indicate most of the medical students are suffering from depression. Effective treatment and preventing complications of depression requires early detection.

### PP-21

**Expectations of Turkish Breast Cancer Patients: A Qualitative Study**

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**Objective:** Several studies have reported on the expectations of cancer patients from their health professionals. This study aims to explore whether views of the Turkish breast cancer patients are accurately perceived by the physicians.

**Methods:** In this qualitative study, semi structured interviews were conducted with five breast cancer patients and six physicians at Bezmialem Vakif University hospital in 2016. The interviews were recorded, transcribed and analyzed thematically.

**Results:** Four themes emerged relating to patient expectations.

Patients were keen on understanding the diagnosis but were disinterested in ‘receiving information’ about the details of their illness as they did not think it would be helpful. Doctors revealed the diagnosis either to patients or to relatives depending on the psychosocial situation of the patients and their families. ‘Doctor knows best’ was the prevailing approach and patients were not willing to have any say in diagnostic and treatment decisions for such a serious disease. Physicians took into account the ‘psychological state’ of the patients when performing procedures. Psychiatric support was viewed as an integral part of treatment by doctors, however, some patients placed more value on support from family and friends than from professionals. Both doctors and patients perceived ‘social support’ as an important part of a successful treatment.

The main challenge of the study has been the unfamiliarity of the physicians with the use of qualitative methodology in health research.
Conclusion: Although physician perceptions were not in conflict with the views of Turkish breast cancer patients, both parties do not seem to be interested in an interactive relationship which is not consistent with some published evidence. Turkish breast cancer patients do not demand participation in decisions about their illness. Physicians understand the needs of breast cancer patients and act accordingly.

Keywords: Cancer patients, patient expectations, qualitative study

PP-22

Evaluation of the Effects of Oenothera biennis and Hypericum perforatum Extracts on Cytokines, AQP4, HSP70 and Treatment Outcomes in C57bl/6 Mice Suffering Multiple Sclerosis (MS) Induced by Experimental Autoimmune Encephalitis Method

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Objective: Multiple sclerosis is an autoimmune demyelinating disease which is characterized by marked central nervous system (brain, spinal chord, optic nerve) inflammation, axonal degeneration and scar formation. Common evening-primrose (Oenothera biennis) oil is an important source of gammalinoleic acid which contains a high ratio of unsaturated fatty acids. Common St.John’s wort (Hypericum perforatum) contains many biochemically active substances such as hypericin and hyperforin whose metabolites show beneficial effects in numerous diseases. Aquaporin 4 ensures the fast cross transfer of water molecules through membranes and can be found abundantly in the astrocyte membranes in spaces such as blood-brain and brain-fluid barriers. HSP70 is one of the most important stress proteins found virtually in all kinds of cells. Interleukines are cytokines that regulate the immune system and perform crucial roles in inflammatory processes in the organism. The aim of this study was to assess the efficacy of our treatment by measuring inter group differences among parameters.

Methods: In this study 9 week old C57BL/6 mice (n=40) were assessed and divided into 4 groups including 2 treatment groups (n=25), 1 control group (n=10) and 1 sham group (n=5). One week later MS disease was induced by using the EAE method in all mice excluding those in the control group. Two weeks later treatment groups started to receive 18-21 g/kg Hypericum perforatum oil and Oenothera biennis oil containing food separately for 4 weeks. Each mouse was scored daily throughout the study. At the end of the study all mice were sacrificed and brain tissues were obtained. IL-6, IL-17A, IL-23, TGF-beta, AQP4 ve HSP70 levels in tissue homogenate were measured by the ELIS method.

Results: Changes in IL-6, IL-17A, IL-23, TGF-beta, HSP70 and AQP4 level across groups were seen. All parameter levels were lower in the control group but elevated in the MS group while both treatment groups have decreased values compared with the MS group. Also, the effect of Hypericum perforatum is more significant than the effect of Oenothera biennis in treatment groups.

Conclusion: AQP4 is a protein molecule found in astrocyte membranes in blood-brain and brain-fluid barriers. AQP4 molecule has a number of functions such as extracellular volume regulation, pumping potassium ions, circulation of cerebrospinal fluid, resorption of interstitial fluid, neuroinflammation and osmosensation. In our study, levels of AQP4 molecule increased in the MS patient group and approached the values in the control group in treatment groups suggesting that AQP4 could serve as a differential diagnostic biomarker in MS disease. HSP70 molecule has critical roles in modulating tissue damage and in tissue repair. It acts as a protective element in preserving the structure of unstable or denatured proteins of stress-stricken cells. Furthermore, there is evidence that HSP70 gene is related to a predisposition towards a number of neurological diseases. Our findings demonstrate that HSP70 molecule increases in the MS group compared with the control group and decreases significantly in therapy groups. Levels of inflammatory markers such as IL-6, IL17A, IL23 and TGF-beta decreased significantly in both of therapy groups when compared with the MS group.
Particularly levels of inflammatory biomarkers in H. perforatum extract receiving group were especially closer to the levels in the control group.

**Keywords:** *Hypericum perforatum*, multiple sclerosis, interleukins

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**PP-23**

**The Evaluation of the Thoughts of the 4th and 5th Term Students in the Faculty of Medicine about Case Based Learning (CBL)**

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**Objective:** Case-based learning (CBL) is a student-centered learning method used in the clinical training of medical faculties. The purpose of this study is to evaluate students’ thoughts about this method applied in our faculties.

**Methods:** For this purpose, a questionnaire including case-based learning sessions was applied to all 4th and 5th class students at Bezmialem Vakif University Faculty of Medicine in 2016, after their block internship. Students evaluated the prepared questionnaire according to the five-point Likert scale.

**Results:** When the questionnaires were evaluated, it was determined that Term 4 students gave a score of 3.62 on average and Term 5 students gave a score of 3.86.

The highest scores were given to “I felt a difference in efficiency/experience when comparing before and after the sessions of the CBL I attended” and “I think that the regular session of CBL encourages us to make preparations and research on the topics in the first place”. It has been determined that this learning method is beneficial to learners and encourages them to learn. However, the fact that the “responsible members of the faculty in the CBL sessions provided us with an active approach and an active involvement of the subject group” received the lowest rating. This has led to the idea that some arrangements have to be made regarding the handling of sessions.

**Conclusion:** It has been determined that case based learning sessions applied in clinical education in our faculty is an effective method of learning for students. However, it has also been determined that in the sessions, the trainers should strive to ensure that the group is actively involved.

**Keywords:** Case based learning, medical education, learning methods

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**PP-24**

**The Effect of Increased BMI on Treatment Duration in Infertility Patients Eligible For IVF Treatment**

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**Objective:** Obesity is seen in up to 30% of developed countries. The WHO has defined Body Mass Index (BMI) as being between 18.5 and 25 kg/m² as normal weight, those between 25-30 kg/m² being obese as slightly overweight and above 30 kg / m². Obesity also leads to various changes in the reproductive system in women. Epidemiologic studies clearly show that obesity is caused by gynecologic menstrual irregularity, infertility, polycystic ovary syndrome, poor obstetric outcomes and
diabetes in the mother. In the literature, it is proven that obese women have higher ovulation disorders than normal weight women. In the treatment of infertility, the response of the patient to gonadotropins required for follicular development is inversely proportional to BMI.

In Vitro Fertilization (IVF) is the process of artificially fertilization of an oocyte in vitro by sperm. IVF is an important treatment method used when other assisted reproductive methods fail in infertility treatment.

The purpose of this study is to investigate the effect of patients’ BMI ratios on the different stages of the IVF treatment program. FSH, LH levels and the number and quality of collected oocytes were studied.

**Methods:** This study was conducted in order to compare IVF and embryo transfer results with the clinical effect of BMI for comparison. In this study we evaluated retrospectively the data of 30 patients referred to the Bezmialem Vakif University Hospital IVF Center, who support inclusion criteria for the study.

In our study, patients were divided as normal weight (BMI>20 kg/m², BMI<25 kg/m²), overweight (BMI>25 kg/m², BMI<30 kg/m²) and obese (BMI>30 kg/m²). The GnRH agonist was administered. Over-stimulation on day 3 of the menstrual cycle, after the previous cycle provided sufficient inhibition with the GnRH agonist starting on day 21; On the 3rd day of each cycle, FSH, LH, estradiol values were started. In the stimulation r-FSH and / or hp-hMG were used. Estimated over-reaction for each case was considered when initial dose was determined.

After ovulation, the number of quality oocytes (ones with enlarged cumulus oophorus in perivitellin space, corona radiata, well defined zona pellucida, clear cytoplasm, unfragmented first polar body) was determined. In each patient file, the presence of Polycystic Ovarian Syndrome and male sperm quality (based on WHO 2010 normal spermogram criteria) were included in the study.

**Results:** In our study, 27% of 30 patients had BMI between 20-25, 52% between 25-30 and 21% over 30. Those with BMI between 20-25 were called Group 1, between 25-30 were Group 2 and over 30 were Group 3.

When all groups were examined, the average number of qualified oocytes was 5.6. When we looked at the groups one by one, the average number of oocytes in Group 1 was 6.3, 5.1 in Group 2, and 4.4 in Group 3.

The average FSH value in all groups was 6.07 mIU/mL. The mean FSH level in Group 1 was 6.01 mIU/mL, in Group 2 was 5.87 mIU/mL and in Group 3 was 6.73 mIU/mL.

The average value of LH was 4.54 mIU/mL in all groups. When we looked at the groups individually, the mean LH value of Group 1 was 4.21 mIU/mL, 4.53 mIU/mL in Group 2, and 5.01 mIU/mL in Group 3.

The incidence of Polycystic Over Syndrome, an infertile cause, was 30.94% in all patient groups. This rate was 23.8% in Group 1, 32.4% in Group 2, and 36.6% in Group 3.

**Conclusion:** Considering our study and similar research in the literature; patients with high BMI are expected to result in lower IVF treatment success compared to the patients with low BMI caused by; low FSH, LH, estradiol levels, inadequate number of quality oocytes and low pregnancy rate.

However, in the literature some studies show no significant correlation between BMI and FSH and LH levels; In others, studies had shown a correlation between high BMI and FSH and estradiol levels in favour of infertility.

**Keywords:** Body Mass Index, infertility, obesity

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**PP-25**

Evaluation of Personality and Executive Functions in University Students

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Objective: In psychiatry, there are many studies about associating characters and diseases; whether cognitive functions are affected by some diseases or not. This study aims to show the relationship between executive functioning (e.g., working memory, planning, set-shifting) and personality in university students. The seven-factor structure of Cloninger’s biopsychological theory of personality are: four are temperament which are Novelty Seeking, Harm Avoidance, Reward Dependence, and Persistence and the others are character- Self-Directed Person, Cooperativeness and Self-Transcendence. Executive functions are thinking skills that assist with reasoning, planning, problem solving, and managing one’s life. There is a general agreement that there are three core Executive functions; inhibition and interference control, working memory, and cognitive flexibility (also called set shifting).

Methods: A sociodemographic questionnaire of 240 question temperament and character inventory (TCI) and Wisconsin Card Sorting Test (WCST) was distributed to 100 university students. We did not evaluate 9 of the participants because six of them are using antidepressants with the diagnosis of depression; one of them was diagnosed with narcolepsy; one of them was diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) and the other one has sensorial hearing loss. The Temperament and Character Inventory (TCI) is a self-administered dimensional questionnaire constructed to assess the seven basic dimensions of personality, was developed for clinical and research use. The Wisconsin Card Sorting Test (WCST) is among the most frequently administered neuropsychological tests. It is assumed that successful completion of this test requires engagement of executive functions. An executive function test should measure executive functions, that is: planning ahead, logical thinking, acting in accordance with hypotheses, checking one’s behavior (self-monitoring) and flexibly changing one’s hypotheses or actions. A lot of healthy students perform rather disappointingly as well. Descriptive statistical analyzes will be done by chi-square and t tests. Pearson correlation analysis and Anova tests will examine the relationships between variables.

Conclusion: Mild to moderate valuable correlation is found between cooperativeness and executive functions as a key finding. There is a correlation between cooperativeness and conceptual level responses p value is 0.047 (p<0.05 valuable) correlation coefficient is 0.209. It indicates that the correlation between them is direct. (When the cooperativeness score increases, the conceptual level responses increase too). Apart from that, between cooperativeness and preservative responses p=0.032 and correlation coefficient =-0.225. It indicates that there is a mild to moderate rank correlation in negative direction between them. Again, there is a mild to moderate rank result between cooperativeness and preservative errors in the negative direction. (p=0.033, cc=-0.224)

There is a mild to moderate rank relationship between harm avoidance and failures to maintain set in significance positive direction (p=0.003) (correlation coefficient=0.305)

There is a mild to moderate rank relationship between reward dependence and failures to maintain set in significant positive direction (p=0.003) (correlation coefficient=0.305)

PP-26

The Frequency and Classification of Headache Among Medical Students

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Objective: Medical students struggle with some health problems because of the difficulties of their faculty. Unchallenged, one of them is headache. There are different types of headache and they can be mostly diagnosed clinically by the features of the pain.

Methods: Medical students from Bezmialem University (from 4th, 5th and 6th grades), were tested for headache and its symptoms. The first question was to eliminate the participants who never have headaches and to classify the others by the frequency of their pain. The rest of the questions were prepared through the characteristics of migraine and tension type headache. The test was intended for the period and localization (temporal/frontoorbital) of the pain, at which age did it start, if there is photophobia and phonophobia during the headache, if it is one side or both sides are included. We also asked if the headache is throbbing (pulsating), or non-throbbing (pressure-like), if the headache worsens with routine physical activity, if the patient
has nausea or vomiting during the headache period. The last question was about the visual and sensory aura which can occur before the headache and which is specific for migraine. In every question, there was 1 point for either migraine or tension type headache. We have calculated the results for each participant.

**Results:** 110 medical students from Bezmialem University participated to our study. 74 of them were from the 5th grade, 26 of them from 4th and 10 of them were from 6th grade. 3.6% of the patients answered that they never have headache. Most of the participants cited that they have headaches a few days in a month (44%). Having the pain for 4-72 hours, unilateral and throbbing headache, early onset, having photophobia and phonophobia during the headache, frontoorbital localization, getting worse with physical activities, having aura before the headache and having nausea and vomiting would make a point for migraine. The other answers would be counted for the tension-type headache. 68% of the students have the headache for less than 4 hours, and the rest of them have it for 4-72 hours. 54% of the participants first headache was during their childhood or adolescent. 62% of the patients have photophobia and phonophobia during the headache. 55% of the patients have unilateral headache and 48% of them have throbbing ache. The rates of the localization between temporal and frontoorbital zones seem similar. 64% of the participants get worse by physical activity during the headache. 9% of the participants have aura before the ache and 17% have nausea or vomiting during the headache. By the calculation for each student, we saw that tension type headache is more common than migraine. 76.4% of the participants have tension type headache and 33.6% of them have migraine.

**Conclusion:** Most of the medical students in Bezmialem University have headaches, in different types. The most common type is tension-type headache. It is known that this type of headache is triggered by stress, insomnia and fatigue.

**PP-27**

**Comparison of Familial and Non-familial Essential Tremor Sociodemographically**

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**Objective:** Essential tremor (ET) is the most common movement disorder in the world that is characterized by postural and/or kinetic tremor. The prevalence of ET is 0.9% in all ages and 4.6% in patients that are older than 65. Although a group of patients with ET has a strong family history, ET may also appear in people with no history of ET in their family.

In our research, familial and non-familial ET patients will be compared in terms of sociodemographic factors and non-motor symptoms that are seen in the presymptomatic stage of parkinson disease.

**Methods:** The study was conducted at the Department of Neurology, Divisions of Behavioral Neurology and Movement Disorders Unit of Bezmialem Vakif University, Istanbul, Turkey. Twenty-four patients with essential tremor (between 21 to 80 years old) who visited the outpatient were examined between August 2016 and March 2017. All patients with diagnosed ET older than 18 were included in the study. Patients having a vascular lesion on cranial MR, having symptoms of parkinsonism, hyperthyroidism, copper and seruloplasmin in urine (in 24h) and taking antipsychotic medicine were excluded from the study.

To evaluate motor symptoms, tremor rate was evaluated using the Fahn–Tolosa–Marin Tremor Rating Scale (FTM-TRS) by the same neurologists. Motor symptoms of ET patients were scored using the motor examination part of Unified Parkinson’s Disease Rating ScaleIII (UPDRS-III). Using EMG eye blink reflex conditioning was evaluated.

To evaluate non-motor symptoms, a questionnaire was performed including socio-demographic characteristics such as age, sex, education level, occupational and marital status, medical and family history, and duration of illness. All patients completed the Pittsburgh Sleep Quality Index (PSQI), the Epworth Sleepiness Scale (ESS), the Beck Anxiety Scale (BAS), the Beck Depression Inventory (BDI), anosmia, amnesia, constipation and usage of cigarettes, caffeine and alcohol were also questioned.

SPSS (Statistical Package for Social Sciences) for Windows Version 23 (IBM Corp.; Armonk, NY, USA) software was used for statistical analysis. Mean, minimum, maximum, and percentage values were calculated for descriptive data. Chi-square
test was used to compare categorical variables Student t-test or Fischer’ exact test was used for numerical variables. Statistical significance was set at a p value of <0.05.

**Results:** 17 familial and 7 non-familial ET patients were evaluated. The mean age was 45.118±19.89 in the familial ET group and 58.143±19.86 in the non-familial ET group. Both groups had similar socio-demographic attributes (age, gender, duration of disease, education level, marital status, habits).

The mean duration of the disease was 13.0±8.71 in the familial ET group and was 12.143±5.93 in the non-familial ET group (p=0.53). The mean FTM-TRS score was 21.154±13.12 in the familial ET group and was 27.333±27.42 in the non-familial ET group (p=0.052). The mean UPDRS-III score was 4.059±4.68 in the familial ET group and was 5.286±5.93 in the non-familial ET group (p=0.87).

Non-motor symptoms scores were not significantly different between familial and non-familial ET groups.

When we compare the scores of blink reflex, there was a significant difference for R1 (right) that shows muscle action potential from the facial nerve (ipsilateral to stimulated side). But other parameters were not statistically significant.

**Conclusion:** Comparison of familial and non-familial ET sociodemographically and according to non-motor symptoms does not have significant differences statistically due to an insufficient patient number. Therefore we are planning to reach a sufficient number of patients to obtain reliable results.

ET is known as a benign, slowly progressing, monosymptomatic, pure motor tremor. However in the last decade, nonmotor symptoms accompanying ET have drawn attention. Patients with ET are four to five times as likely to develop Parkinson Disease (PD) as people without tremor and similarly in Parkinson Disease, before clinical stage (presymptomatic stage) particular non-motor symptoms start to develop such as Rem Sleep Behavior Disorder (RUD), anosmia, daytime sleepiness, constipation, anxiety and depression. Therefore, prediction of clinical course of essential tremor has a great importance for patients and their relatives.

**Keywords:** Essential tremor, non-motor symptoms, parkinson disease

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**PP-28**

**Relationship Between Etiology and Risk Factors of Hepatocellular Carcinoma**

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**Objective:** Hepatocellular carcinoma (HCC) is a primary malignancy of the liver and occurs predominantly in patients with underlying chronic liver disease and cirrhosis. Hepatocellular carcinoma (HCC) is the sixth most common cancer and the second common cause of cancer-related death worldwide. Estimates from the year 2000 indicate that liver cancer remains the fifth most common malignancy in men and the eighth in women worldwide. The major risk factor of HCC is cirrhosis. The most common causes of cirrhosis are viral hepatitis and alcohol. Other risk factors include: male, non-alcoholic fatty liver disease, diabetes mellitus, smoking, and hemochromatosis. Risk factors of HCC vary from country to country. Hepatitis B is the common risk factors of HCC in Turkey. The aim of this project is to investigate the correlation between etiology and risk factors of HCC.

**Methods:** We retrospectively reviewed the medical records of 58 patients who were confirmed with HCC in Bezmialem University Hospital. Statistical analysis was performed with SPSS Statistical Package 22. Correlations between categorical variables were made using the chi-square test. Nonparametric data were compared using the Mann-Whitney U test.

**Results:** Over the study period, a total of 58 HCC patients were identified. On average, patients were 65.43±10.8 years old, male (24.1%), female (75.9%). There was statically significant difference between groups in age, AFPI and viral load in Chi-Square (p<0.05). There was a difference among group’s ALT in Chi-Square (p=0.051). Post-hoc comparison: Idiopathic-
HBV: There was statically significant difference between AFP1, ALT, Viral load (p<0.05). **Idiopathic**-HCV: There was statically significant difference between AFP1 (p<0.05). **Idiopathic**-HCV, HBV-HCV, HCV-Alcoholic : There was no statically significant difference between AFP1, ALT, Viral load (p>0.05). HBV- Alcoholic: There was statically significant difference between Viral load (p<0.05).

**Conclusion:** There are reasons which reduce the reability of result; including inadequate quantity of subjects and ongoing process of the project.

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**PP-29**

**Reaction of Greater Omentum to Inflation and It’s Clinical Importance**

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**Objective:** With the response of the omentum majus to intraperitoneal inflammation, it is assumed that the omentum is covering the inflammatory area and isolating the inflammation area to other organs. In this project, intraperitoneal inflammation, peritonitis, morbidity and mortality occurred in the presence and absence of omentum majus were evaluated by forming a caecum perforation model in rats that it is similar to perforated appendicitis, which is the most common cause of intraperitoneal inflammation.

**Methods:** The study was conducted on 36 female Wistar albino rats. All subjects were divided into four equal groups (n=9). Laparotomy was done with a median incision. Control group; only laparotomy was performed. Perforation and Omentectomy group; after laparotomy, the caecum perforation model and omentectomy were applied. Omentectomy group; after laparotomy, omentum majus was resected, caecum was not intervened. Perforation group; after laparotomy, the caecum perforation model was applied and no intervention was made to the omentum major.

Pre-operative, post-operative 15th day and 30th day blood samples were taken from all subjects to evaluate IL-1 Beta, TNF-alfa, IL-6 by enzyme-linked immunosorbent assay (ELISA) and full blood count. Peritonitis and peritoneal adhesions were evaluated by laparotomy in the end. For histopathological examination, the caecum, omentum majus and peritoneum samples were excised after the rats were sacrificed.

**Results:** All rats were sacrificed at the end of the experiment after laparotomy. Fifteen (41.6%) rats died before the study ended. Most of the rats that died were in the perforation group (5). It was observed that the rats with perforation without coverage of any adhesion of other intraabdominal organs were the ones that died. The rats with perforation area that was closed/covered by the uterine horn adhesion did not die in the perforation and omentectomy group (4), and perforation group (4).

**Conclusion:** The peritoneum is expected to serve as primary in peritoneal pathology but the perforation area is closed by the uterine horns in both perforation groups with and without omentectomy. It is expected that in the perforation group the perforation area was covered and near the greater omentum instead of the uterine horn or other organs. That makes the comparison of groups and evaluation of Omentum Majus’s functions difficult and unclear. These results create questions about the primer function of the Omentum Majus in rats and further studies need to be completed.

**Keywords:** Greater omentum, intraperitoneal inflammation, perforation
PP-30

The Clinical Outcome of Patients Treated with an Over-The-Scope-Clip

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Objective: The over-the-scope-clip (OTSC; OVESCO Endoscopy AG, Tübingen, Germany) is a novel endoscopic clipping device. It consists of an applicator cap with a mounted clip, thread and handwheel for clip release. The applicator cap is mounted onto the tip of endoscope. This clip is released by tightening the thread with the handwheel. The system is very flexible and will thus allow for multiple indications.

This study evaluated the clinical efficacy of OTSC system for the cases of perforations, fistules, gastrointestinal bleeding and other reasons retrospectively.

Methods: In a retrospective analysis of prospectively collected data, all patients underwent OTSC placement between 1 January 2012 and 31 December 2016 at the endoscopy center of the Bezmialem University Hospital. OTSC was used for the closure of perforation in 21 patients, five of which were non-variceal upper gastrointestinal bleeding, three for other reasons. In seven patients OTSC was used for closure of fistula.

Results: Thirty-six patients (22 women, 14 men) aged between 26 and 85 years were treated with OTSC clips. Overall technical success was achieved in 31/36 (86.1%) patients and 5/36 patients underwent surgery. Twenty-one patients were treated with upper perforation closure. Of these 4/21 (19%) had failed and underwent surgery. Technical success in this group was 17/21 (81%). Five cases were upper gastrointestinal bleeding. Clinical and technical success was achieved in all five bleeding cases (100%). Seven patients underwent OTSC application for closure of fistula. Technical success in this group was 6/7 (85.7%). One patient was unsuccessful. Three cases were for other reasons. Technical success in this group was 3/3 (100%).

Conclusion: The OTSC system is a novel procedure that allows the sealing of GI defects in the form of fistulae, perforations, and gastrointestinal bleeding. We aimed to review the short time clinical outcome of patients treated with OTSC.

Keywords: OTSC, clinical outcome

PP-31

The Frequency of Patients with Congenital Minor Anomalies in the Pediatric Intensive Care Unit

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Objective: Minor anomalies are unusual morphologic features that are of no serious medical or cosmetic consequence to the patient. The recognition of minor anomalies can be an important signal for malformations and altered morphogenesis in a patient. In our research, we aimed to establish the frequency of congenital minor anomalies in pediatric patients. We researched whether or not it increases in pediatric intensive care patients compared to healthy children.

Methods: In Bezmialem Vakif University pediatric intensive care unit, we observed 40 patients in terms of the presence of minor anomaly. Systematic head to toe examination was done; head, hair, face of patients, hands, feet, genital organs and skin of the patients were inspected.

Results: 13 of 40 patients that we examined did not have any minor anomaly (32.5%). Only seven of forty patients had one minor anomaly (17.5%). The remaining 13 pediatric patients had three or more than three minor anomalies (32.5%). Among these 40 patients, low-set ears and long eyelashes were the most common seen minor anomaly. The second most common minor anomaly was low nasal bridge.
Conclusion: In our research, while 32.5 percent of patients had no minor anomaly, 17.5 percent of patients had one minor anomaly. 32.5 percent of patients had 3 or more than 3 minor anomalies. We drew a conclusion that most of the pediatric intensive care patients had 3 or more than 3 minor anomalies thus, the frequency of minor anomalies is more than the normal pediatric population. This information makes us question whether the dysmorphic signs can tell us the need for a genetic research in that patient.

Keywords: Minor anomalies, intensive care, low-set ears

PP-32
Assessment of Knowledge of Blood and Blood Components among Doctors in a University Hospital

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Objective: Blood transfusion is a highly effective and potentially life-saving treatment for many patients and an essential component of modern health care. To provide viable and functional blood components and to increase the safety, efficacy and efficiency of blood transfusion for the patient, the procedures of collecting, processing, storing, and transporting of blood and blood products should be done properly. In order to prevent any complications, all these steps of the transfusion chain from donor to recipient should be ensured and done correctly.

To avoid unwanted reactions and to regulate storage more effectively in blood transfusion, healthcare staff must have adequate knowledge of blood and blood components and also of changes that occur with storage. In consideration of the importance of this, we aimed to perform a survey to investigate the current levels of knowledge of blood and blood components among doctors in a teaching hospital and to provide training for health care staff in our hospital in order to increase knowledge and awareness of transfusion medicine and also lead them to use blood products more effectively.

Methods: A survey-based study was respectively performed among doctors working in the internal medicine and surgical departments in Bezmialem Vakif University Hospital, Istanbul. The questionnaire consisted of 12 multiple choice questions. The duration of the study was done over 3 days. Statistical analysis was done by calculating the mean and percentage of correct and incorrect answers given by the participants for each question and inferential (chi-square) statistical methods were used to test for the difference between both branches. Statistically significant differences were considered at p<0.05 SPSS.

Results: One hundred and fifty doctors completed the questionnaire (85%). Twenty-five of the one hundred and fifty doctors declined to complete the survey. Eighty-five doctors (57%) were physicians working in internal medicine departments. Sixty-five doctors (43%) were physicians working in surgical medicine departments. Findings indicated that 78% of doctors were those with sixteen years of clinical experience or less; 15% of them with less than twenty years but more than sixteen years of experience; and 6% of doctors had a clinical experience of twenty-seven years or more. While ten of a hundred and fifty doctors were professors (6%); nineteen of them were associate professors (13%), twenty-two of them were assistant professors (15%), forty-three of them were specialists (27%) and fifty-six of them were assistants (37%).

This study completed with one hundred and fifty participants reveals that more than one-half of doctors working in our hospital have knowledge about how much a unit of erythrocyte does increase a recipients hemoglobin (55%), while only less than one-half of them know the maximum time that a transfusion of erythrocytes must be completed in (44%). Results also show that the majority of participants from all departments knew about the storage temperature of RBC (74%) and fresh frozen plasma (71%) but have less knowledge about storage temperature of platelets (11%). A question to assess knowledge of shelf time of platelets (36%) is also a concern.

The results of questions about doctors ability of recognizing and identifying blood products, showed that the most frequent question answered correctly by most subjects was the question about definition of whole blood (90%), while the question describing cryoprecipitate was answered correctly by approximately half of subjects (52%). Also, 32% of participants answered correctly the question assessing the knowledge of the time dissolved Fresh Frozen Plasma can be
preserved in a refrigerator. According to results, eighty-nine of the doctors seem to know which blood product cannot be extracted from whole blood (59%), but only sixty-two of them have knowledge about which blood product cannot be irradiated (41%). It is shown that 41% of doctors are well aware of the name of the procedure that is done to prevent GVH disease.

Furthermore, according to inferential chi-square tests, it was shown that statistically significant difference (p<0.05) exists between two department doctors answers to the question assessing knowledge about the shelf life of platelets and is also a significant statistically high difference (p<0.001) for the question asking about knowledge if a blood product can and cannot be raided.

**Conclusion:** The results showed that doctors knowledge of blood and its components was average and needs to be improved. According to comparison analysis, it reveals that doctors working in internal medicine departments answered more correct answers and performed better compared to doctors working in surgical departments.

Findings of this study will be used to plan and provide appropriate educational and training program for doctors and other health care workers in our hospital. Furthermore, the findings could be used by health system administrators and policy makers to update, refine, and reinforce blood transfusion policies, guidelines and procedures.

**Keywords:** Blood and blood products, blood transfusion

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**PP-33**

**Incidence of Minor Physical Congenital Anomalies in the Community**

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**Objective:** Congenital malformations are anatomical defects, chromosomal abnormalities or other genetic diseases that are present at birth. Minor congenital malformations are defined as those which do not have functional importance.

In this medical research we established the incidence of physical congenital anomalies in the community of Bezmialem University.

**Methods:** In Bezmialem University, School of Medicine we examined 60 people for minor congenital anomalies. The minor congenital anomalies that we inspected are hypertelorism, retrognati, prognati, dimples on the mandibula, fissured tongue, absence of lingual frenulum, single central incisor, crooked teeth, preauricular tags and pits, microtia, low set ears, ears slanted, lack of lobulus, branchial cleft sinuses, clinodactyly, camptodactyly, bifid nail, hypoplastic nail, syndactyly, narrow hypoconvex nail, simian crease, shortness of 4th and 5th metacarpals, aberrant mid-eyebrow patterning, posterior scalp hair, lack of preauricular hair growth, low posterior hairline, dimples on the body, birthmarks, and punched out scalp lesions.

**Results:** During the research, 60 people were examined for minor congenital anomalies. Among these people, 12 of them were men, 48 of them were women. The average age was 22. We have found minor congenital anomalies in 38 different people out of 60. There are 12 people (20%) with dimples on their back, 9 people (15%) with clinodactyly on third finger, 9 people (15%) with a birthmark, 3 people (5%) with retrognathia, 3 people (5%) with camptodactyly, 3 people (5%) with fissured tongue and 3 people (5%) with crooked teeth.

**Conclusion:** Minor physical congenital anomalies can present with syndromes as they can appear isolated. In a small population in Bezmialem University we showed that these minor anomalies can be seen isolated frequently.
PP-34

The Relationship Between Pregnancy-Related Pelvic Girdle Pain and Symphysis Pubis Distention

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Objective: Pregnancy-related pelvic girdle pain (PPGP) is a common musculoskeletal disorder that is localized from the level of the posterior iliac crest and the gluteal fold over the anterior and posterior elements of the bony pelvis. The aim of the study was to investigate the relationship between severity of pregnancy-related pelvic girdle pain and symphysis pubis distention by three-dimensional (3D) trans perineal ultrasound imaging.

Methods: 30 patients who suffered from PPGP during the study period were potentially eligible for inclusion in the study. Severity of pregnancy-related pelvic girdle pain is determined by The Pelvic Girdle Questionnaire. The distance between the two pelvic bones was measured by two points of the SP joint: widest and narrowest parts of the joint by 3D trans perineal ultrasound examination.

Results: The 30 participants were included in this study and divided into two groups according to those who suffer from PPGP or not. Demographic data and gestational weeks are similar for the two groups. A positive association between PPGP score and symphysis pubis length and height was not found. Weight, body mass index, and wide symphysis pubis width (PPGP Group: 9.94 ±1.05, Control Group: 8.54 ±1.4, p value: 0.04) were found high in the group suffering from PPGP compared to the control group.

Conclusion: Pregnant women who have a high pelvic girdle pain score have a wider symphysis pubis. Widening of the symphysis pubis could take place with etiology of PPGP.

Keywords: Pelvic girdle pain, symphysis pubis, 3D trans perineal ultrasound

PP-35

Assessment of Physical Activity Situations of 4th, 5th, and 6th Grade Students in a Medical Faculty

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Objective: In this study, we worked with 4th, 5th, and 6th grade medicine students who are being educated at Bezmialem Medical Faculties. I investigated the perceptions of the 4th, 5th, and 6th grade students about physical activity that doctors suggested to their patients. I aimed to find out how these future doctors will apply these recommendations in their own daily lives.

Methods: The study was conducted in December 2016 by applying a questionnaire to the students who were educated at Bezmialem Medical Faculties. 4, 5 and 6th grade students were included in this study. A total of 200 students participated in this study. In this study, a questionnaire consisting of 14 questions about physical activities of the students was applied. The volunteers who participated with the questionnaire that was prepared on the internet were requested to fill in the questionnaire and the results were evaluated.

Results:
“Are you a member of any sports center?” 83.5% NO,
“Do you think you have enough time to do sports?” 86.5% NO,
“How much of your time a day do you spend to do sports?” 86.4% 0-30 MINS,
“How many days a week do you do sport?” 64.5% NONE,
“Do you think that the intensity of lessons / shifts prevents you from doing sports?” 91.5% YES,
“Where do you prefer to do your sport generally?” 61.1% Indoor
“Do you think that the sport you are doing is reducing your lesson and shift stress?” 82.1% YES,
“How long is your active sport duration?” 72.7% 0-6 MONTHS,
“Are you actively involved in school sports teams throughout your study life?” 69.3% NO
“Do you think doing sports improves your school success?” 72.4% YES
“If the intensity of lessons / shifts are reduced, will you spend more time doing sports?” 85.4% YES
“What kind of sports do you prefer to do often?” 81.5% w/o contact (tennis-fitness etc.),
” What kind of sports do you prefer to do often?” 57.7% Individual sports (archery-running etc.),
” Do you think that e-sports (professional computer-console games), which has become popular recently, is a real sporting variety??” 89.4% NO

Conclusion: According to the results of the questionnaire we have implemented, students are unfortunately not applying enough time for physical activity in their daily life. Especially because they can not find enough time and the intensity of lessons / shifts are excessive, they do not feel able to the complete a sport. It is obvious that the e-sports that have become popular recently are not considered to be physical activities. It is clear that physical activity is preferred in the closed area because of the lack of wide and various sports facilities in open areas. Students are among the data of the questionnaire which will give more time to physical activity if the lesson / shifts burden are reduced.

Keywords: Student, physical activity

PP-36
Plastic, Reconstructive and Aesthetic Surgery Perception and Career Considerations of Medical Students
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Objective: Plastic, Reconstructive and Aesthetic surgery (PRAS) is evolving rapidly, both technologically and conceptually. The purpose is to understand the perception and career considerations of medical students. Thus a survey was sent to all students who have completed their PRAS internship.

Methods: A questionnaire based survey was conducted among medical students. The questionnaire consisted of ten questions. The students were all randomly selected. The personal information about the students was kept confidential. We conducted a Web-based survey. A simple and concise questionnaire was devised and 67 surveys were sent.

Results: A total of 67 medical students were randomly included in the study. 38 of 67 students (56.72%) considered plastic, reconstructive and aesthetic surgery (PRAS) to be a risky department.

57 students (85.07%) have agreed that reconstruction surgeries are the most difficult part of PRAS.
55 students (82.09%) think that the plastic surgeries are one of the most difficult surgeries to have appreciation from the patient. 37 (55.22%) students agreed that during their PRAS internship their opinions about the department have changed. 61 students (91.04%) think it requires appropriate hand skills to become a plastic surgeon. 7 students (10.45%) consider PRAS as their first choice of specialization. 49 students (73.13%) agree that to choose PRAS for specialization they need to spend more time observing the operations. 8 of 67 students (11.94%) have never seen a plastic surgery operation. 30 of 67 students (44.78%) agreed that before they started studying medicine they thought that PRAS department’s main or only focus was aesthetic surgery.
Conclusion: Plastic surgery is overlapped by many other specialties unlike other surgical disciplines which have more clearly defined areas and restrict themselves to certain anatomical boundaries. Because of the breadth of plastic surgery and the diversity of the procedures, much information needs to be spread in the society. This study demonstrates about 56 percent of students are aware that PRAS is a risky department. Also, a majority of students agree that their opinions about the PRAS department have changed after completing the internship which suggests that after having a certain observation of the department students have developed new ideas about PRAS.

30 of 67 students (44.78%) agreed that before they started studying medicine they thought that PRAS department’s main or only focus was aesthetic surgery.

And this result demonstrates that despite the rapid growth of plastic surgery in the last two decades, a large portion of the population remains unaware of the wide aspects of the specialty.

PP-37

Scientific Research Perception and Competence Level of BVU Medicine Students

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Objective: This project aimed to evaluate scientific research knowledge, perception, experience and interest of Bezmialem Vakif University medicine students. This project was intended to increase the quality of education. In the long term it was to contribute to improving the efficiency of post-graduate research.

Methods: Cross-sectional survey study. Intended population: All of the students who were in their first and fifth year of study of medicine at BVU and accepted to be involved in this study. The questionnaire results of the two groups were compared regarding their perception, interest, knowledge and experience of scientific research.

Results: A total of 164 volunteers participated in the survey, 74 from the first grade and 90 from the fifth grade. Questions on the contribution of scientific research were mostly replied by the first-year students as broadening the point of view, developing analytical thinking, and social benefits. Among the participants in the fifth class, the three most popular responses are career contributions, mentor-student relationship learning and organization skills.

The most challenging stages implied by students were the literature review, data collection and ethics committee.

37% of participants think that their medical education was inadequate for scientific research.

While 36% of first-year students thought that undergraduate scientific research should not be obligatory, the number among fifth-year students was 62%.

The answers to the open-ended questions about the scientific committee that only the fifth grade students answered, focus on the following feedbacks: no time limitations, increasing the number of partners, providing convenience on ethics committee approval and mentor finding.

Conclusion: It is foreseen that planning scientific studies to be completed in the preclinical period by providing training from the first year onwards will contribute more to reduce the difficulties experienced by the students.

Keywords: Student research, research perception, research skills
Direct Medical Costs of Acute Ischemic Stroke Treated with Intravenous Thrombolytic Treatment or Endovascular Thrombectomy

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Objective: Stroke is the fourth leading cause of death and the leading cause of disability and it consumes a lot of health care resources. Early vessel recanalization with intravenous thrombolytic therapy (IVT) or mechanical thrombectomy (MT) in acute ischemic stroke has been shown to strongly correlate with improved clinical outcomes and reduced mortality. The aim of our study was to provide financial data on the direct medical costs of acute ischemic stroke patients who underwent IVT or MT in our center.

Methods: We analyzed our database consisting of patients with acute stroke retrospectively. Only patients treated with IVT or MT were selected. Demographic and clinical data were recorded on admission. Patients with hemorrhagical transformation were determined. Functional disability at discharge was assessed using the modified Rankin Scale (mRS) and patients were divided into three groups according to their mRS score: (i) independence: mRS 0-2, (ii) dependence: mRS 3-5; (iii) death: mRS=6. Costs were collected from official financial charts listing the respective budgets and expenditure of hospital departments. All costs were calculated in Turkish lira (TL). SPSS (Statistical Package for Social Sciences) for Windows Version 23 software was used for statistical analyses. Mean, minimum, maximum, and percentage values were calculated for descriptive data. Chi-square test was used to compare categorical variables. The Mann Whitney U test and Kruskal Wallis test was used to compare differences among groups due to non-normal distribution. Statistical significance was set at a p value of p<0.05.

Results: Of 113 patients included into the study, 63 were men (55.8%) and 50 were women (44.2%). Mean age was 62.78 ± 12.2 (25-88). The mean of NIHSS at onset was 12.86±6.2 (2-25). Of all patients, 87 (77%) had Hypertension (HT), 40 (33.3%), had Diabetes Mellitus (DM), 14 (12.4%) had hyperlipidemia (HL), and 32 (28.3%) had Coronary Artery Disease (CAD). 23 (20.4%) patients had a smoking history and 14 (12.4%) patients had a stroke history. Total costs of all patients was 451,980 TL. Of these 8% was for laborotary investigations, 4.2 % for imaging modalities, 62.2% for medicine and 7.6% for beds and staff. Laboratory and medicine costs were significantly higher in the mRS = 6 group and mRS 3–5 group and than the mRS = 0–2 group (p:0 .001, p:0.001 respectively) whereas costs of bed/staff was significantly lower in the mRS=6 group than the other groups (p:0.006). Also, the mean age was the highest in the mRS=6 group (p:0.001). Of all patients, 46 (40.7%) underwent MT and 67 (59.3%) received IVT. For vascular risk factors, CAD was significantly higher (p:0.01) and the mean of age (p: 0.05) was lower in MT group. Total costs for patients receiving IVT were 180,602 TL and of the patients who underwent MT were 262,377 TL (p:0.000). Within total costs, laboratory and imaging costs were statistically higher in the MT group (p: 0.000, p:0.02 respectively) In the IVT group, laboratory and medicine costs were significantly higher in the mRS = 6 group and mRS 3–5 group and than the mRS = 0–2 group (p:0.03, p:0.01 respectively). In the MT group, medicine costs were significantly higher whereas bed/staff costs were lower in the mRS = 6 group and mRS 3–5 group and than the mRS = 0–2 group (p: 0.04, p:0.04 respectively). Neither IVT group nor MT group had statistically different costs according to the presence of hemorrhagical transformation. With regards to hemorrhagic transformation, only cost of laboratory examinations were higher in patients with hemorrhagical transformation (p:0.004).

Conclusion: To the best of our knowledge, this is the first study investigating the costs of ischemic stroke patients treated with IVT or MT. Imaging modalities constituted the highest percentage of total costs in stroke patients. Laboratory and medicine costs were higher in the mRS=6 group. Hemorrhagical transformation increased all the costs mathematically but only the cost of laboratory examinations was higher statistically. But hemorrhagical transformation did not lead to any significant cost increase in MT and IVT groups. The MT group had a higher total, laboratory and imaging costs than the IVT group, as in the literature. In a recent study comparing IVT and MT, MT was found to be cost-effective in spite of higher medical costs. Our study lacks information about the cost-effectiveness of treatment choices, for which future studies are warranted.

Keywords: Acute ischemic stroke, cost utility, endovascular thrombectomy, thrombolytic
PP-39

The Importance of Biomarkers in the Early Diagnosis of Pancreatic Cancer: Glypican1 (GPC1)

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Objective: Pancreatic cancer is one of the most life-threatening cancers worldwide. Although pancreatic cancer is a serious disease, it is difficult to diagnose in its early stage. At the time of diagnosis, most of the patients have advanced disease, so this condition makes surgery impossible. In this research, our aim is to confirm the higher level of GPC1 in patients with pancreatic cancer than the healthy group to find a noninvasive scanning and diagnostic biomarker for pancreatic cancer in the population.

Methods: In this research, serum samples are obtained by taking blood from volunteers with pancreatic cancer and healthy volunteers. The volunteer number is determined as 50 patients and 50 healthy people. Volunteers aged 18 and older were included. Exosomes were isolated from the serums that are obtained from the blood GPC1 at the mRNA and protein level was detected from the obtained exosomes by using ELISA and RT-PCR methods to conduct overexpression evaluation of GPC1.

Results: According to ELISA results, the average protein value is 100.29 ng/ml in patients and 88.25 ng/ml in the healthy group. In the T-test, the difference between the two groups was found to be 0.0352 and this is statistically significant (p≤0.05). GPC1 levels are found higher in the patients than the healthy group. In qRT-PCR, the measurement of GPC1 mRNA level was found 4.7 times more in patients than the healthy group. The fold change is 27.22 found.

Conclusion: The level of GPC1 is significantly higher in patients with pancreatic cancer than the healthy group, according to the ELISA and RT-PCR results. GPC1 can be used as a screening test for pancreatic cancer in the population. In patients with a high level of GPC1, early diagnosis and treatment can be performed by conducting advanced examination.

PP-40

The Quality of life of Children with Attention Deficit Hyperactivity Disorder and Their Parents

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Objective: This study aims to compare the QOL of children with ADHD and their parents to age and gender matched control groups. This study should confirm the correlation between lower QOL and ADHD compared to higher QOL in healthy children.

Methods: Children and adolescents between 6-18 years of age who were admitted with the Clinical Evaluation of ADHD and who were admitted to the survey completed the quality of life scales (PedsQL and WHOQOL-bref, respectively). In addition, a control group that does not have any chronic psychiatric and medical disorders matched by age and gender completed the same scales. Conners teacher and parental forms and strength difficulties questionnaire will be used to assess psychiatric disorder and assess severity of ADHD symptoms in the control group.

Results: This study showed that the QOL of healthy children is higher than that of children with ADHD. This has been shown with regards to physical, academic, and social aspects of life. Hence, this study confirmed the hypothesis.

Keywords: ADHD, Qualityof life, PedsQL, WHOQOL-bref
Assessment of Sleep and Nutritional Habits of 4-5-6 Class Students in Medical Faculty

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Objective: In this study, we evaluated 4-5-6th grade medicine students who are educated at Bezmialem Medical Faculties. In our faculty there are many future doctors in our faculty. One of the things that these students will most often recommend to their patients when they become a doctor is to change their life style. So I planned to measure sleep and nutritional compatibility to assess the awareness of 4-5-6th grade students at our medical faculty about this topic.

Methods: 4-5-6th grade students from Bezmialem Vakif University Faculty of Medicine were included in this study. The study was prepared as an electronic questionnaire with 24 questions. The number of participants were 200. The answer section consisted of 13 questions for sleeping (2 open-ended questions and 11 questions; 3 questions for multiple choice and 11 questions about nutrition; 3 questions yes-no answer, 4 questions were open-ended questions, 4 questions 3 multiple choices. The volunteers who wanted to participate in the questionnaire, prepared on the internet, were requested to fill in the questionnaires and the results were evaluated.

Results:

SLEEP
-Do you sleep often after meals? 60.8% NEVER
-Do you want to sleep during the day (when driving a car or at work)? 47% 1-3 DAYS IN A WEEK
-Do you feel that you are not rested in the morning? 42.5% 1-3 DAYS IN A WEEK
-Do you have a problem to fall asleep? 43.5% NEVER
-Will you wake up often at night? 51.5% NEVER
-Do you have sleep attacks that you can not resist during the day? 50% NEVER
-Do you sleep at your usual hour every day? 43% 1-3 DAYS IN A WEEK
-How much time do you need to fall asleep? 60.3% 1-30MINS
-How many hours do you sleep per day? 57% 7-8 HOURS PER DAY
-Do you think you can not sleep a few nights a week like you want? 47% 1-3 DAYS IN A WEEK
-Do you wake up while you sleeping at night and do not fall asleep again? 71.5% NEVER
-Do you often wake up at an earlier time in the morning? 57.5% NEVER
-How often do you delay the alarm you set up to wake up? 50.5% MORE THAN 3 DAYS IN A WEEK

NUTRITION
-Do you smoke? 89% NO
-Do you consume alcohol? 91% NO
-Do you think you are fed enough and balanced? 54% YES
-What are the most common foods that you consume? 39.2% MEAT-CHICKEN-FISH
-What are the most common drinks that you consume? 81% WATER
-How many main meals do you eat per day? 54.5% 3-4 MEAL PER DAY
-Do you skip your main meal? 64.5% YES
-Which of the main meals do you skip most often? 64.2% BREAKFAST
-How many days a week do you eat snack meals? 47% MORE THAN 3 DAYS PER WEEK
-Would you like to eat outside the home? 56.5% MORE THAN 3 DAYS PER WEEK
-How often do you consume fast food? 50.5% 1-3 DAYS IN A WEEK

Conclusion: When we look at the results of the survey we have conducted, it was most often observed that students are trying to pay attention to their sleep and nutrition habits. There is a general awareness in students, however lack of spare time and
intensive education, were some details appearing to be omitted. This is also a sign of the positive response of the most critical questions. For example; most students choose 7 to 8 hours of sleep, minimal consumption of alcohol and cigarettes, and water as the most consumed drink. As a result, doctors of the future are aware of the quality of life that they will recommend in the future and it seems that they can not fulfill some details due to time and workload in practice.

**Keywords:** Sleep, nutrition, habit

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**PP-42**

**Television, Tablet and Smartphone Use in Preschool Children**

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**Objective:** Nowadays, children are born into a world immersed in technology. Are parents content with this situation? Do they want their children to avoid technology or not? Technology affects child development, family and social relationships, physical and mental health in both positive and negative ways. In this research, we aim to survey television, tablet and smartphone habits in preschool children and to find out if there is any correlation between these habits and behavioral-social problems, attention deficit and hyperactivity and peer problems.

**Methods:** 46 preschool children (ages between 2-6 years) were found. 2 surveys both consisting of 25 questions were completed by one of their parents. The first survey analyzed content (type of programs), context (co-viewing) and onset of watching television and, tablet and smartphone use. The second survey is the Strengths and Difficulties Survey (SDQ) which analyzes children's social relationships both with their peers and adults, and their behavioral patterns.

**Result and Conclusion:**

All the parents participating in this survey are living together with their partners. 32% of the mothers (mean: 34.5 years) and fathers (mean 38.6 years) are college graduates. Children watch television approximately 1.57 hours on week days and 2.12 hours on weekends. They watch television for a maximum of 3-4 hours (4.76%) on week days but 4-5 hours on weekends (4.76%). On week days 35.71% and on weekends 30.95% of children watch 1-2 hours of television. Tablet and smartphone use is approximately 1.16 hours on weekdays and 1.48 hours on weekends. 84.78% of children watch kids shows on TV. Similarly, they mostly watch kids shows on tablets and smartphones (56.52%). Non-violent adult programs are second most watched show following kids shows. 34.78% of children have started watching TV at 2-3 years of age. 45.65% on the other hand have started using tablets and smartphones after the age of 3. The majority of the parents see TV, tablets and smartphones as just tools for their children to spend their spare time. 13.04% of parents believe that watching TV improves their kids' speech and language skills.

There were difficulties in reaching an adequate number of children. We received less and deficient surveys from schools. Most of the schools did not even want to participate in the research. A minimum number of 100 preschool children should be analyzed to collect statistically significant results; therefore, SDQ questionnaires could not be statistically analyzed. Further research is needed in this research area.

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**PP-43**

**Asperger’s Syndrome: A Clinical Account, a Review of its Diagnosis and Treatment**

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Asperger’s syndrome is a developmental disorder characterized by significant difficulties in social interaction and nonverbal communication, along with restricted and repetitive patterns of behavior and interests. The clinical features, course, etiology, epidemiology, differential diagnosis and management of Asperger’s syndrome are described. Classification is discussed and reasons are given for including the syndrome, together with early childhood autism, in a wider group of conditions which have in common, impairment of development of social interaction, communication and imagination. Although the etiology of Asperger’s disorder is still undetermined, this project will review the assessment and treatment interventions that could improve the prognosis of this illness. The historical background, diagnostic features, differential diagnosis, and course and overall management/treatment of Asperger’s disorder will be discussed. Despite the absence of a cure for Asperger’s disorder, the awareness of its distinctive clinical features that differentiate it from an autistic disorder could improve its prognosis and differentiate response to treatment and comorbid conditions.

Keywords: Asperger’s syndrome, autism, Asperger’s disorder, autistic spectrum

PP-44

Comparison of Medical Waste Awareness Levels of Medical School Term 3 and Term 5 Students

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Objective: This study is to determinate knowledge of medical waste from our 3rd and 4th year medical students in our medical faculty.

Methods: We did this study from November 2016 - March 2017. The population of this study is class 3 and class 5 at Istanbul Bezmialem Vakif University Medicine Faculty. This population has 270 students who were studying during the 2016-2017 year. Sample has 100 students who accepted to be in the study. We received approval from the Ethics Committee and the office of Instrution. We collected information data by face to face meeting with the “Medical Waste Information Level Evaluation Survey” which included sociodemographic and medical waste classification questions. Data collection is a survey which has 11 questions. Questions one to three determine if students receive education about medical waste or not, if they receive education, their knowledge level was measured. Questions 4 and 5 contain problems which students have about medical waste. Questions 6 and 7 are about responsibility and risks. Question 8 is about wanting an education or not. Questions 9-11 ask if students have enough information about putting medical waste in the correct bags in the hospital.

Results: This study included 71 girls and 29 boys, with 50 of them in preclinical class and 50 of them in clinical class. Twenty-four percent of them were educated about medical waste. Seventy-six percent of them know to put medical waste which is contaminated with blood and body fluids in the red bag. Sixty-six of them know to put medical waste serum and drug bottles in the blue bag. Fifty-seven percent of them know to put
medical waste which is domestic waste in a black bag. Seventy-six percent of them think that they do not have enough information about medical waste. (see Graphic-1). Ninety-one percent of them think that if they do make a mistake about medical waste they could cause a contagious disease. Ninety-one percent of them demonstrates responsibility about this subject.

Students have some problems about medical waste in services. The problems are; 67% not enough knowledge, 24% not enough control, 9% workload. (see Shape 1)

Education necessity about medical waste of students has been determined. 89% of them think that information about medical waste should been educated at the medical faculty. Class 3 will be in clinic class without any information about medical waste. Class 5 does not have enough information about medical waste although they have had internship experience for 1.5 years. (see Graphic 2)

**Conclusion:** Medical waste has increased significantly in recent years in the world. According to data from the World Health Organization; the production quantities of medical waste vary according to the level of development of the countries, the level of income and the type and size of medical institutes. Purposes of waste management are; collecting waste by the most economic way without harming human health and the environment, recycling, using again and removing in a safe way. It is very important for medical faculty students to receive medical waste training in order to reduce environmental risks and to maintain the services of institutions without damaging their environment. According to results of this study we suggest medical waste education before students pass clinic class.

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**PP-45**

### Hamstring Strength Imbalance in Male Basketball Players

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The aim of this study was to describe the isokinetic thigh muscle strength profile of male basketball players in Turkey. Concentric (60 and 240) hamstring and quadriceps isokinetic thigh muscle strength was measured with HUMAC NORM dynamometer. The primary variables were bilateral concentric hamstring and quadriceps peak torque ratios and concentric hamstring-quadriceps peak torque ratios. Hamstring strength imbalance was defined as deficits in any 2 of: bilateral concentric hamstring peak torque ratio, 0.86, concentric hamstring-quadriceps ratio, 0.47, and mixed ratio, 0.80. Forty-eight strength tests involving 24 players were conducted. Nine players (36 %) were identified as having hamstring strength imbalance. Athletes with strength imbalance had significantly reduced concentric bilateral hamstring peak torque ratios at all angular velocities tested; and reduced concantric quadriceps peak torque (308$s^{21}$) in their stance leg, compared with those without strength imbalance. Approximately, 1 in 4 players had preseason hamstring strength imbalance; and all strength deficits were observed in the stance leg. Concentric hamstrings strength imbalance may impact in-season basketball performance and could have implications for future risk of injury.

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**PP-46**

### The Evaluation of Malignancy in Pancreas Cysts an Cystic Fluids Which were Sampled for Pathology Since 2012

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Objective: Pancreas cysts are one the most frequently discovered abdominal incidental lesions. In the pathological aspect, they consist of two categories: Pseudocyst and neoplastic cysts. Nowadays with the progress made in imaging techniques, cystic lesions of the pancreas have been more frequently discovered. The sensitivity of EUS in diagnosing cystic lesions of the pancreas is almost 100% and it is correlated with the experience of the specialist who is doing the procedure. EUS-FNA is 95% is effective in making the decision to operate on the patient. The sensitivity of EUS-FNA is 50%.

Neoplastic cysts of the pancreas are grouped into four categories in the pathological aspect: Serous cystadenoma, Mucinous cystadenoma, Intraductal papillary mucinous cystadenoma(IPMN) and Solid pseudopapillary neoplasm. The studies have shown that finding neoplastic cysts have been more frequent with older age. IPMN was shown to be the most frequently discovered pancreas cyst in older patients and also the most resected cyst of the pancreas in the normal population. According to the data from research, while mucinous cystadenoma constitutes 25% of neoplastic cysts of the pancreas, IPMN constitutes 50% of the neoplastic cysts.

Nowadays, with the progress made in radiological examinations, pancreas cysts are discovered more frequently and they do have the potential of being malignant. Therefore, pancreas cysts are an important subject in the medical field. In our research, we analyze CEA, amylase, cytologic and radiologic examinations, EUS findings and if resected, resection material in patients diagnosed with pancreas cysts who have been admitted to our hospital were reviewed. We aimed to find the correlation between the malignancy risk of pancreas cysts and these parameters.

Methods: The study was completed in Bezmialem Vakif University School of Medicine Hospital. The medical records of the patients are being analyzed, who have been diagnosed with pancreas cysts and admitted to the hospital between 2012-2016. The laboratory studies and radiological imaging of those patients are being evaluated. No further studies are needed in this research.

The parameters we used in our study are:
A)Age
B)Gender
C)Serum level of CA 19-9
D)CEA and Amylase levels in cystic fluid
E)String sign
F)Findings in EUS

Resected material

All patients who were diagnosed with pancreas cysts and underwent EUS-FNA procedure between 2012-2016 were included in our research.

Results: The research is still being continued. The number of patients in which pancreas cysts were discovered are 300. More than eighty percent of the lesions were incidentally discovered, and the patients are asymptomatic. Furthermore, more than 30% of the cysts are less than 10 mm, and hence undetermined. The correlation between the parameters and the potential of malignancy in cystic lesions of the pancreas are in the progress of being researched. The data will be added.

Conclusion: Endosonography is best suited for management, because it has the capacity for imaging, acquiring material for examination as well as for administration of therapeutic agents. The relationship between those parameters and risk of malignancy is being researched and the data will be added.

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A Qualitative Study on Young Adults’ Perceptions of Current Population Policies in Turkey

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Objective: Population policies gain currency as governments try to cope with the problem of ageing populations. Countries with this issue promote human reproduction and this policy is called pronatalism. In Turkey pronatalism was very popular between the years 1923-1960 because it was the post war times and Turkey had to increase its population to become a powerful country. There were public campaigns and abortion restrictions. Then antinatalism gained popularity in 1960. Correspondingly contraception became free. After 1960s fertility rates began to decrease, life expectancy was increased and infant mortality rate declined significantly. In the early 2000s policy makers stated that the population of Turkey has started to become older like developing countries. Therefore pronatalism gained importance again in 2013 and policy makers came up with a policy called “minimum of 3 children”. It basically encourages families to have 3 children as a minimum. It was declared that the government will pay 300 TL for the first child, 400 TL for second child and 600 TL for the third child. These payments are only once but there is also a new policy that encourages grandmothers to babysit their grandchildren. The government will pay 420 TL monthly to grandmothers for babysitting their own grandchildren. Additionally maternal leave is increased to 6 months and paternal leave is now discussed. The question is what do people understand from current population policies? In our study we aimed to determine young adults’ perceptions of current population policies in Turkey.

Methods: This study is a qualitative research and in-depth interview method is used. Patients who applied to internal medicine and gynecology policlinics at Bezmialem Vakif Hospital were interviewed. 20 male and 25 female patients contributed. Patients are in the age range of 20 to 40 years old. 11 questions are asked including patients’ age, marital status, educational status, and socio-economic status. Interviews are recorded. Patients are informed that it is a scientific study which will be used only for scientific purposes and patients’ identities will never be disclosed.

Results: In this section every question in the interview and answers to these questions are written.

1) What is the ideal life you plan for your children?

Answers to this question are very similar to each other. People who belong to a higher socio-economic level mostly emphasized that they would like their children to get a better education. They indicated that the education system in Turkey is insufficient and should be developed by the government. A female college student who had a chance to get education in both Germany and Turkey claimed that critical thinking is not taught in Turkey. She also said that she would want her children to be educated in Germany. Also people who belong to a higher educational level argued that economic difficulties should not be a problem for those who demand to have a good education. They said that they would support their children economically even after college. On the other hand people who have low educational status stated that children should take care of themselves after high school economically.

2) What do you understand from the expression of “minimum of 3 children”?

Generally people think that this expression is used to encourage every family to have 3 children as a minimum. Most of them believe that it is necessary to have a young population in Turkey. People are aware of the fact that Turkey’s population becomes older and in order to prevent this issue policy makers suggest this policy called “minimum of 3 children”. A male master degree student said “considering that there is no investment in high technology in our country, the only asset that our country has is unfortunately its young population.” However a 30 year old high school graduate male patient strongly believes that having a young population is the only way to become a developed country. He clarifies his statement by giving examples from European countries. Additionally most of the patients supported the idea of only the people who can afford it should have 3 children as a minimum. They simply said “quality is more important than quantity”. “If a family will not be able to afford a future for their 3 children, then they should have 2 children or less.” A young male stated. Some of the patients drew attention to the growing rate of unemployment. Their question is “how will the government afford a future for this young population”? To sum up, a number of the people who think that “quality is more important than quantity” is very high. So they think that not every family in Turkey should have 3 children as stated in the expression.

3) Are you influenced by current population policies?

Even the people who support these policies said that they are not influenced by them. People who want 3 children or have 3 children emphasize that it is because of their free will not because of this policy. All 45 participants have the same answer to this question.

4) Do you observe any activation parallel to current population policies?

As mentioned in background section there are so many activations parallel to the policies but unfortunately few patients are aware of them. Even the intellectual class could not elucidate the details of activations.

5) What should the government do to influence people with this policy? How should the road map be?

Since most of the patients already highlighted the education and economic problems, they suggested that the government should develop better education systems and focus on the difficulties that families might face while raising their children.
Do you face any problem accessing contraception methods?

All the patients stated that they don’t face any problems accessing contraception methods but a female college student who lived in Canada shared some thoughts. “In Canada, contraception methods are explained and well taught in high schools and students are able to reach them easily. A student can go to a clinic by him/herself and have condom or oral contraceptive pills free of charge. In Turkey, all methods are getting more expensive each year and people are not educated about how to use them properly.”

Conclusion: In conclusion, pronatalist policies are not welcomed among intellectual people. They demand high quality of education and believe that having a qualified young population is more important than having an unqualified young population. If the government wishes for a qualified population, they should create a powerful country which has a powerful economy and solid education system. After that intellectual people will already feel comfortable and start to have more children. Also policy makers should make a better statement like "people who are able to provide a good life for their children should have at least 3 children". All the patients are familiar with the problem of Turkey’s aging population but they think that firstly we should improve our country and then grow populations into a brighter future. Nevertheless, there are many supporters of this policy who do not want to have 3 children but think that it is a good thing for our country.

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The Evaluation of Time Spent with Technological Devices and Physical Activity in Obese Children

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Objective: Nowadays the prevalence of obesity is increasing at a very high rate in our country. The equilibrium between eating habits and physical activity play an important role in the development of obesity in children. Individual factors (anthropometric and behavioral), life style changes and school time may affect the prevalence of obesity. The aim of this study is to evaluate the screen time, the time spent with technological devices and physical activity of obese children.

Methods: Thirty obese children (17 females-13 males) and 30 non-obese children (18 females-12 males, between 11-18 years old) were enrolled in this study. The survey, including parents’ information and questions which determines the time spent with technological devices including smart phones, televisions, tablet computers and personal computer and reporting the level of physical activity of obese and non-obese children were completed by children and their families in both groups. The demographic, clinical and laboratory features including age, gender, height, weight, body mass index, educational and labor status of the parents were recorded. All subjects underwent a detailed physical examination to evaluate for syndromes and endocrine diseases as well as a laboratory evaluation including routine tests which are glucose, insulin, HDL, LDL, total cholesterol, triglycerides and thyroid function tests levels were obtained from the medical records retrospectively for obese children. We compared obese and control groups regarding age, gender, anthropometric measures and the response given to the questions of the completed survey. All statistics were performed using the program SPSS for Windows. Groups were compared with t-test, and ratios were compared with chi-square tests.

Results: The mean age and sex ratio were not statistically different between the obese and control groups. The mean weight and BMI of the mothers were higher in the obese group than those of the controls (83.44±13.3 vs. 64.89±12.75 p<0.001, 31.23±5.58 vs 27.08±3.50 p<0.001 respectively). The mean weight and BMI of the fathers were higher in the obese group than those of the controls (88.82±16.82 vs. 74.66±14.37 p<0.001, 29.82±5.41 vs 25.46±4.68 p<0.001 respectively). The labor status of parents, the incomes of families, the numbers of televisions, tablet computers and PCs were not statistically significant between obese and control groups. The time spent by using electronic devices including television, PC, tablet computers and mobile phone was no different in both groups. However, children in both groups stated that they were using electronic devices at least 2 hours daily. Moreover, there was also no difference between groups regarding physical activity.

Conclusion: The major risk factor for adolescent obesity was parental weight status. The socio-economic status showed no significant difference between obese and control groups. The time spending on electronic devices were high in obese and control groups. It may be estimated that obesity may develop even in lean adolescent with time because the same habits of physical activity. However, it has been suggested that eating habits may play more important role than physical activity in this age group.
Smallpox: The Unintentional Bioweapon

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From the beginning of the conquest of America, starting with Columbus’s voyage in 1492 the Spanish conquistadores, despite the fact that they were far outnumbered against the Native Americans, have been incredibly successful. While their technological advancements have indeed contributed to their success, most of the Native Americans have died because of the diseases brought from Eurasia, rather than from the battles. But the conquistadores have suffered rarely from the endemic diseases of the New World. To lay out the foundation of this inequality in the transmission of the diseases, we have to look into the development of the two populations.

Emergence of the human specialized epidemics can be traced back to the rise of agriculture, 10,000 years ago. The transition from the hunter-gatherer to intense farming has led to a more stable food production, which can provide for more people. With the food production exceeding the populations need, new specialized professions appeared such as builders, soldiers and leaders. More complex hierarchies were formed and the first cities appeared with densely packed populations. The differences in population densities range from 1 per square kilometers at most for hunter gatherers to 100-1000 per square kilometers for traditional farming.

Higher population densities have created a perfect breeding ground for infectious diseases. The current livestock which fed the population offered the first step in the evolution of epidemics confined to humans. Hunter-gatherer populations did not have enough population density to support a disease only transmitted through humans. Diseases of such populations are usually sporadic infections with an animal or soil reservoir. Long periods of exposure to organisms in soil or livestock which cannot or can only sporadically cause disease in humans has led some of them to mutate to adapt to humans and high density populations enabled them to survive without another reservoir.

Native Americans, who depended on hunter – gathering, were unable to produce a human confined epidemic due to low population density and even if they did produce one, it failed to sustain itself without any trade routes to spread it between communities.

Humans of Eurasia has been exposed to smallpox for over 3,000 years before the conquest of America. The periodic epidemics spread to the cities left their population with thousand of deaths and the remaining immune. Over time the disease left the population with only the most adapted members. The spanish unintentionally brought a selective killer with them which themselves had the highest resistance and the Native Americans had none.

Nutrition and Sport Habits of Medicine Students

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In our country with inadequate and unbalanced nourishment and also a life style being far from supporting sportive activities among the university students causes substantial problems for the students. The student group that encounters these problems is the medicine faculty students. The years in a Medicine Faculty is somehow the start of a new period in life of doctor candidates in respect to nourishment as well as many other affairs. Due to the intensive courses in the Faculty, accelerated daily living is also causing the students to develop an unhealthy and irregular life. The changed nourishment and sportive praxis concern the mind and physical status of the Medicine Faculty Students and also it may be affecting their school performance indirectly. From this point of view, defining a nutrition and sportive praxis for Medicine Faculty Students, arranging all these praxis and avoiding such problems caused by irregular and inadequate lifestyle is important. Therefore, the purpose of this study is to determine the nutrition knowledge and habits/praxis of individual medicine faculty students as well as their healthier lifestyle requirements, and regular sportive activities, their smoking and alcohol consumption levels, and lastly, to provide suggestions suitable for them. In
this part of the framework and limitations of the research are described and data collection process are described. The hypothesis was comprised by determining the relationship between the habits of nutrition & sportive activities and school success of the university students are also presented in this part. According to the figures I found, in order to diminish the problems that the students of Medicine Faculties confronted, some organization can be made for breakfast in the morning hours between the very first lessons. In order to increase the sportive activity ratios, inadequate Sport Facilities in the Medicine Faculties in our country should be increased and the incentives for diverting the doctor candidates to the sport should be provided.

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Mothers’ Awareness Towards Double Screening Test and Triple Test
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Objective: To explore the awareness and attitudes of pregnant women towards prenatal testing.

Methods: This is an observational study based on a knowledge, attitude, and practice survey. A total of 67 Turkish participants: all of them having at least their second pregnancy. Mothers completed a structured questionnaire about their attitudes towards prenatal testing.

Results: Among all mothers, 16.4% mentioned that they didn’t have enough information about prenatal tests and what they were done for. 11.9% of the mothers who participated did not perform prenatal testing in their first pregnancy. When they are questioned for the reasons, 75% specified they would not terminate the pregnancy even if the pregnancy was affected. 14.9% of total participants declared they are not planning to perform the test in their current pregnancy and 70% of them were because of the same reason.

Conclusion: Pregnant women who were advised for prenatal testing, have a tendency for not performing them and this may be due to lack of information, costs or husbands’ opinions but it is clear that the determination of maintaining the pregnancy, no matter what prenatal tests’ outcome is, has a huge impact on decision making.

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Investigation of the Students ‘Acquisition to Be Fabricated with the Methods of Learning Students in the Medical Faculty
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Objective: There are many medical faculties in different institutions in Turkey. In these faculties, students are exposed to different training, albeit with similar aspects. This suggests that there is no consensus on medical education in our country and that there is a situation where we are trying to be re-planned and developed. Taking this into consideration, we wanted to evaluate the perceptions of the students in the education they received. Our main aim in this study was to contribute to the development of the medical education system which is being standardized.

Methods: 1st, 2nd, and 3rd year students studying in medical faculties located in Istanbul. Class students participated. The study was prepared as a questionnaire with 24 questions. The answer section is structured as 5 choices, absolutely agree, agree, undecided, disagree and strongly disagree. The questionnaire was distributed via internet and the results were evaluated. Survey questions are:
1. At the beginning of the lessons, the learning objectives of the course are explained and the learning is positive.
2. The use of different learning methods in lessons facilitates learning.
3. Educators use learning methods effectively.
4. It becomes easier to learn when the order of the words is supportive of each other.
5. Number of targets given in credits are suitable for course duration.
6. The relationship between the trainer and the student makes it easier for the student to find answers to the questions.
7. Tests are prepared to support learning.
8. I understand easily by combining the contents of the content with my previous information.
9. Theoretical lessons taught during the course will provide learning.
10. The number and qualification to provide practical training during the course of the committee.
11. The more I apply the more I train, the better I understand.
12. I believe that the training based on the nature of the research and the presentation of the learner are more efficient.
13. I understand better if the lesson is only in the form of lessons taught by the trainers.
14. Training methods used in practice are facilitating learning.
15. There was an integrity between the subjects of the branches in the board of directors.
16. In basic medical classes, I can understand the relationship between subject matter and each other.
17. There is no idea if it would be useful for me to learn the basic concept when I go to the clinic.
18. I understand the lessons learned by drawing on the western side.
19. Lessons taught in real life situations or cases are more permanent.
20. The number of people in practical practice groups is appropriate in terms of effective learning.
21. The training material provided and are available in the course committee is sufficient.
22. Inform me before the exam about the midterm exam and pass-through criteria.
23. I think that the exams applied at the end of the rehearsal board measure what we learn.
24. The grades are prepared as appropriate to assess the level of achievement of the course board learning objectives.

Results: A total of 275 students participated in the study.

I strongly agree and agree with the answers to the questions 86.3% in the first question; 45%; 7.6% in the third question; 95% for the fourth; 20% for the 5th; 86.1% for the 6th case; 19.4% for the 7th case; 53% for the 8th case; 47% for the 9th case; 33.6% for the 10th case; 90% for the 11th case; 61.1% for the 12th case; 16.7% for the 13th; 90.3% for the 14th; 58.4% for the 15th; 62.5% for the 16th; 48.6% for the 17; 73.7% for the 18; 95% for the 19th; 77.8% for the 20th; 25% for the 21; 66.7% for the 22nd; 19.4% for the 23rd and 18.1% for the 24th.

Those who were undecided about the answers to the questions were 7.5% for the first question; 32.5% for the second; 32.6% for the 3rd; 40% of the 4th; 9th percentile in the 5th; 40% in the 6th; 27.8% for the 7th case; 29.2% for the 8th case; 19.4% for the 9th case; 30.6% for the 10th case; 23.6% for the 11th case; 6.9; 19.4% for the 12th case; 40.3% for the 13th; 8.3% for the 14th; 29.2% for the 15th; 20.8% for the 16th; 26.4% for the 17th; 16.7% for the 18th; 2.8% for the 19th; 13.9% for the 20th; 34.7% for the 21; 9.7% for the 22nd; 27.8% in the 23rd and 34.7% in the 24th, and the remaining percentages are strictly non-participating and not participating.

Conclusion: When we look at the results of the questionnaire we have applied, we see that determining the learning objectives for that lesson at the beginning of the lesson positively affects the learning of the students. Educators seem to be inadequate to benefit from different learning methods during the course, but if they are used, productivity will increase. Going from the case examples in the subject expression positively affects the learning ability of the subject. In addition, it is seen that students’ views on the board instead of the slide are positive. Practical support of theoretical lectures is one of the survey’s findings that increasing the number of practical lecture hours and materials used has positive effects on learning.
Objective: The purpose of this study was to investigate if cases of diabetic macular oedema (DMO) associated with serous macular detachment (SMD) have a different topographic profile of retinal thickening compared with DMO cases not associated with SMD and to determine whether there was any differences in the size and orientation of retinal edema distribution in SMD and non-SMD cases in type 2 diabetes mellitus patients.

Methods: Optical coherence tomography scans of 148 eyes from 148 patients with centre-involving DMO and central subfield thickness >350 mm were identified. Measurements were taken of the neural retina at the highest point of thickening within the central subfield (H) and lateral extent of retina thicker than 350 mm (W). Group means were compared between eyes with SMD and eyes without SMD.

Results: SMD was present in 52 eyes (35%). H was lower in eyes with SMD than in eyes without SMD (394 mm vs 550 mm, p<0.001) while W was higher in eyes with SMD compared with eyes without SMD (4.72 mm vs 4.16 mm, p=0.011).

Conclusion: We showed that there were distinct differences in topographical profiles of retinal thickening between eyes with SMD and eyes without SMD. We tried to explain our findings by suggesting that SMD is mechanically bending-out in response to edematous dilatation of the retina in the plane parallel to the retinal plane. SRD height did not correlate with retinal thickening and SRD does not seem to be related either to the severity of DME or to its reabsorption.