#### DISTRUBITION OF CENTRAL NERVOUS SYSTEM TUMORS

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**Introduction:** The aim of this study was investigate to analyse of cranial tumor surgeries at Ankara Atatürk Training and Research hospital.

**Material and Methods:** clinic of brain and nerve surgery, have been collected retrospectively in between February 2012 and March 2016. 90 male and 108 female, totally 198 patients have been operated for cranial and spinal mass in 4 years. **Results:** General age average is 47.8 years which 47 years for cranial mass and 52.8 years for spinal mass. Also we figured out distribution of these masses by types and location. Post-op RT has been applied to 80% of the patients who have malignancy in pathology result, and average lifetime is 1.6 years.

**Discussion:** CNS malignancies should be searched like other system malignancies, especially with our country's data for a clear view about etiology and epidemiology. In our project, dominance of female and cranial mass have been observed in all mass surgeries.

**Key Words:** Cranial Tumor, Surgery, Pathology

### CORRELATION BETWEEN LEVELS OF INFLAMMATORY MARKERS AND THIOL/DISULFIDE HOMEOSTASIS

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**Introduction:** Erythrocyte sedimentation rate (ERS) and C - reactive protein (CRP) are acute phase reactants that their levels increase non-specifically during infection. White blood cell (WBC) count is another test used to inspect acute infection. Albumin is the main plasma protein which contain sulfhydryl group (-SH) also called as thiols. Thiol/disulfide homeostasis is responsible from antioxidant protection, detoxification, apoptosis etc. in the body. The aim of this study is to examine the relationship between levels of inflammatory markers and thiol/disulfide homeostasis.

**Material and Methods:** Patients (n=455) that applied to Ankara Ataturk Training and Research Hospital between 11.01.2016-03.23.2017 were enrolled in the study. Correlation of native thiol with serum WBC, CRP and ESR values were investigated by using SPSS 22.0.

**Results:** All correlation tests were done by Spearman's test. Negative significant correlations were found between ESR and albumin (r= -0.63, p<0.001), ESR and native and total thiol values (r= -0.65, r= -0.66; p<0.001 respectively). While negative significant correlations were obtained between CRP and albumin (r= 0.66, p<0.001), CRP and native and total thiol values (r= -0.65, r= -0.68; p<0.001 respectively). Finally a negative significant correlations were observed between WBC and albumin (r= -0.38, p<0.001), WBC and native and total thiol values (r= -0.45, r= -0.43; p<0.001 respectively).

**Discussion:** Negative correlations between WBC, ESR and CRP with albumin, native and total thiol indicates that native thiol and albumin could be classified as negative acute phase reactant. Increased oxidative stress during inflammation cause oxidation of –SH groups on albumin and lead to decreased native thiol levels.

**Keywords:** Thiol/Disulfide Homeostasis, Inflammatory Markers, Acute Phase Reactant, ESR, CRP

#### MIGRAINE WITH VISUAL AURA OR OCCIPITAL ATTACK

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**Introduction**: Migraine and epilepsy are two sicknesses we encounter fairly common in all societies. The goal of our project is to emphasize their similar characteristics and the important clues about their distinctive diagnosis.

**Material and methods:** 3350 epilepsy patient files at ATRH were investigated. We included patients with occipital lobe epilepsy. Those with unspecified headaches, who stopped their follow-up for the past 10 years, with mental retardation, with unclear diagnosis were excluded from our project.

**Results**: 77% of the patients were females and the mean age was 35%. 66% of them used a single medicine which is anti-epileptic, 3.3% had polytherapy. The incidence for focal seizure was 33.3% generalized seizure 48.1%, occipital seizure 11.1%, and the incidence of patients that are non-convulsive were 7.4%. 59.3% of the patients suffered headaches. Seizures related to temporary visual complaints were determined on all of them. 20 patients had complaints about visual hallucinations such as coloured lights, circular rings and shiny balls. 15 patients complained about blind spots, blindness and partially lacking field of vision.

**Discussion**: Visual complaints related to epilepsy seizures carry fairly similar characteristics of aura that seen before headaches migraine patients. Furthermore, the only symptom may be these visual complaints, convulsion may not accompany. There is a probability that more than half of the patients would suffer headaches. OLE should be kept in mind for patients with temporary visual hallucinations or negative visual complaints of OLE patients that may be cause by false migraine diagnosis that delayed their treatment.

Key words: Migraine, Epilepsy, Occipital Lobe

### PREANALYTICAL ERROR SOURCES IN ALKALINE PHOSPHATASE MEASUREMENTS: BLOOD COLLECTION TUBE SELECTION

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**Introduction:** Tube selection plays an important role in the pre-analytical period of ALP measurement because EDTA, a common anticoagulant in blood collection tubes, chelates the cofactor of ALP: Magnesium. Our aim in this study is to show the importance of blood collection tube selection on ALP measurement and to investigate the effect of blood-EDTA contact time on ALP levels.

**Material and Methods:** Subjects who applied to the Atatürk Training and Research Hospital were included in the study and two groups (Groups 1 and 2) were formed from these individuals according to blood-EDTA contact time: > 4 hours in Group 1 and < 5 minutes in Group 2. Each of Groups 1 and 2 was divided into two subgroups according to ALP levels (Normal:  $\le$  105 u/L, High: >105 u/L).

**Results:** Group 1's subgroup with ALP at normal level and subgroup with ALP at high level results were less than limit of detection (Lowest detection limit is 5 u/L). Group 2's subgroup with ALP at normal level results were less than limit of detection but the other subgroup having a high ALP level, 92,65% mean decrease was seen. In addition, a positive correlation and a statistically significant difference was observed in that subgroup. (p = 0.014) (r=0,539)

**Discussion:** If samples are poured firstly into an EDTA containing tube then to a biochemistry tube, serum ALP levels decreases according to time staying in an EDTA containing tube. Pouring samples from an EDTA containing tube into a biochemistry tube is a common pre-analytical error, and this may affect the clinician's diagnosis and may cause wrong therapy.

Key Words: Serum Alkaline Phosphatase, Pre-Analytical Error

## COMPARISON OF DAILY LIVING ACTIVITIES AND EMOTIONAL STATES OF BASIC, INTERNAL AND SURGICAL BRANCH PHYSICIANS

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**Introduction:** Which branch that medical faculty students will choose in their career is one of the basic questions that occupy the minds of the medical faculty students. It should be prioritized which of the basic, internal and surgical medical sciences will be chosen by students before their branch preference. For this reason, daily life activities and emotional states of doctors in these sciences are being wondered by medical faculty students. In this study, it is aimed to compare the daily life activities and emotional states of physicians working in basic, internal and surgical medical sciences of our university.

Material and Methods Total of 82 physicians who are working in our university were involved in this research. 9 of them were in surgical medical sciences, 16 in basic medical sciences and 55 in internal medical sciences. All physicians' characteristics such as age, gender, body mass index, duration of medical career, titles were recorded. In addition; SF-36, Pittsburgh sleep scale, Beck depression scale questionnaires were done to all participants. Statistical analysis was performed by entering SPSS 21.0 for Windows. Oneway ANOVA test was used for intergroup comparison. The Tukey test was used for post hoc analysis. The correlation between the results obtained from the questionnaires and characteristics such as age, duration of career and titles was evaluated by Pearson test.

**Results:** Demographic data was summarized in Table 1. SF-36 and Pittsburgh sleep scale questionnaires scores were similar in all three groups. The Beck depression scale values differed between the groups (p=0,018). Post hoc analysis revealed that the difference was due to internal and surgical sciences. It was observed that Beck depression scale values were higher in doctors working in surgical medical sciences. There was no correlation between demographic data and the result of the questionnaire.

**Discussion:** According to the results of our research, physicians in surgical medical sciences have more depressive mood. Our results should be confirmed by studies in which more physicians are evaluated

**Key Words:** Living Activities, Emotional Stress, Physicians

### RELATION BETWEEN ISCHEMIA MODIFIED ALBUMIN VALUES AND LEUKOCYTOSIS

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**Introduction:** N terminus of albumin is sensitive to reactive oxygen species and in oxidative conditions, it's modified into ischemia modified albumin (IMA). Increased leukocyte activity due to infection leads to the formation of reactive oxygen species. In this research, we aim to investigate the ischemia modified albumin levels in patients with leukocytosis and whether it can be used as a biomarker in infectious diseases. **Material and Methods:** The data of samples with high leukocyte levels and IMA values in 2017 March were taken from laboratory information system. Samples with leukocyte levels above 10 K/uL are classified as disease group. A control group synonymous with disease group in age and sex is determined.

**Results:** Control group (n=41) consist of 19 females and 22 males with an age median of 62 years [interquartile range (IQR) 54.5-72], whereas disease group (n=46) has 22 females and 24 males with an age median of 78 years (IQR 61.7-84). In control group, median of IMA/albumin is 17.44 (IQR 16.7-20.2); but in disease group IMA/albumin's median is 26.7 (21.9-30.2). There is a significant difference in IMA levels and IMA/albumin ratios among two groups are observed. (p=0.02; p<0.001) Furthermore, significant correlation between leukocyte, neutrophil levels and IMA/albumin is obtained. (r=0.64, p<0.001; r=0.70, p<0.001; respectively)

**Discussion**: It's concluded that; in patients with leucocytosis IMA/albumin is higher than in control group also a significant relation between leukocyte, neutrophil levels and IMA/albumin ratio is detected. We believe that the increased leukocyte activity during infection causes oxidative stress and this leads to increased IMA levels. IMA is a promising marker of diagnosis and severity of infectious diseases.

**Key Words:** Ischemia Modified Albumin, Leucocytosis, Oxidative Stress

## MORPHOLOGICAL TRANSFORMATIONS UNDERLYING HEART TUBE FORMATION IN MICE

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**Introduction:** During early embryogenesis, the heart crescent goes from a flat into a tubular shape but the underling morphological changes are poorly characterized. To shed light on these basic morphological processes, whole mount and histological sections of different stages of mouse embryos subjected to in-situ and immunohistochemistry were analysed.

Material and Methods: The analysis was performed using optic and scanning electronic microscope and appropriate graphic software. This allowed to produce a 3-D digital reconstruction of the heart at critical stages showing the dynamic morphogenetic movements resulting from the two mechanical forces that the crescent is subject to. The heart crescent use the foregut endoderm as substrate and thus is subject to its morphogenetic movement in addition to its own intrinsic movement, the first event is the joining of the bilateral heart fields medially giving rise to the heart crescent at embryonic day 7.

**Results:** 7 (E7.7), then, the crescent is pulled caudally at E7.8. But soon after, the foregut pocket starts also bending the crescent from its caudal edge dorsally and concomitantly it rotates  $\sim 50^{\circ}$  at E7.9 cranio-caudally. In the next few hours the cranial edge of the crescent bends ventrally and keep rotating  $\sim 50^{\circ}$  further at E8.0. Then, the rotating caudal portion bulge as a double vesicle and peristaltic beating is initiated at E8.1. Next, the two vesicles merge into one sphere at E8.2 and start elongating and a tube takes shape at E8.3.

**Discussion:** The results shows an unappreciated complexity and provides new coordinates of the developing heart parts involved in heart congenital disorders.

**Key Words:** Embryogenesis, Heart Tube, Transformation

# THE EFFECTS OF SUBMAXIMAL EXERCISE ON SOME BLOOD AND CARDIAC PARAMETERS ON OVERWEIGHT YOUNG ADULTS (18-25) WHO HAVE SEDENTARY LIFE STYLE

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**Introduction**: It is a known fact that sedentary life style leads to high predisposition of some health problems such as cardiovascular and hormonal imbalances and is a one of the main causes of majority of chronic diseases which is associated with alterations of insulin, IGF-1, and IGFBPs levels. The aim of this study was to observe the effects of submaximal exercise using modified Bruce Protocol on growth hormone (GH), insulin like growth factor 1 (IGF-1), insulin, blood glucose, triglycerides, low density lipoprotein (LDL), high density lipoprotein (HDL), testosterone and heart rate (HR) on overweight (Body mass index (BMI)25-29.9) young adults (18-25) who have sedentary life style.

Materyal and Methods: In this research, a group of 10 overweight young adults (18-25) who have sedentary life styles are given an exercise program of 3 days a week for 2 weeks using a modified Bruce Protocol. Blood samples and Holter data will be taken before and after the exercise protocol. The following parameters: growth hormone, IGF-1, insulin, blood glucose, triglyceride, LDL, HDL, testosterone and HR will be evaluated.

**Result:** The acquired data show that the growth hormone was elevated while; the cholesterol, triglyceride, HR, and insulin were decreased.

**Discussion:** As a result of this study, it has been observed that in this short time given, the insulin sensitivity, GH, and blood lipid profile parameters were improved and HR values were affected just as expected. These observed changes seem to be backed up by data provided by similar studies in this field.

Key words: Exercise, IGF-1, Testosterone, Lipid Profile

### DOES THE EXCESSIVE DAYTIME SLEEPING AFFECT ACADEMIC PERFORMANCE AMONG MEDICAL STUDENTS?

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Introduction: Quality of sleep and excessive daytime sleepiness (EDS) affect cognitive ability and performance of medical students. Burnout syndrome is a three-dimensional clinical syndrome caused by stress at work. Maslach Burnout Inventory has 3 subgroups Cynicism(MBI-C), Emotional Exhaustion(MBI-EE), Professional Efficacy(MBI-PE) Daytime sleepiness may be related with burnout syndrome in health science students. The study aimed to examine the prevalence of daytime sleepiness and Burnout Syndrome and the relationship between daytime sleepiness and Burnout Syndrome among medical students and Health Vocational school of higher education students and to explore its relationship with academic performance, living place and physical activity.

Material and Methods: This was a cross-sectional study that was conducted among 135 undergraduate 1st, 2nd, 3rd year medical students and Health Vocational school of higher education students, using the Epworth Sleepiness Scale (ESS), Maslach Burnout Inventory (MBI) and a sociodemographic survey in Ankara Yıldırım Beyazıt University in term 2016-2017. Students were divided into 5 groups according to ESS score. SPSS 16.0 was used to analyse the data.

**Result:** 45 Students was men (%33,3) and 90 Students are women (%66,7). Average of age was 21,02 +/- 2,57(SD). Average of sleeping hours at night 7,5 +/- 1,3(SD). Average BMI 21,73 +/- 3,05(SD). Students with Academic success >=60 of 100 mean ESS score was 3,00+/-1,25(SD) and students with Academic success <60 of 100 mean ESS score was 1,78+/-0,84(SD)(p<0,01).

**Discussion:** ESS scores did not statistically correlate with sleep time and MBI scores. ESS scores were significantly higher in those who had academic success below 60 of 100 points.

**Key Words:** Daytime Sleepiness, Epworth Sleepiness Scale, Academic Performance, Burnout Syndrome, Medical Students

# THE PREVELANCE OF SMOKING HABITS ACCORDING TO AFFECT OF CARDIOVASCULAR DISEASE TO DETERMINE WHETHER SMOKING IS PHYSIOLOGIC DEPENDENCE OR PSYCHOLOGICAL ADDICTION

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**Introduction:** Smoking habit continues to increase in our country as it is all over the world and leads to important cardiovascular system diseases. For this reason, we conducted a study on the psychological effects of cardiovascular diseases on smoking habits and addiction. AIM: There are two types of dependence. These are physiological dependence and psychological dependence. We do not know what kind of dependence is on smoking addiction. Our goal is to monitor the effects of cardiovascular diseases on smoking cessation and to understand whether smoking addiction is psychological dependence or psychological dependence.

**Material and Methods**: First, we used a form showing the operation patient had and smoking habits of the patient. Our study was conducted in ANKARA ATATURK EDUCATION AND RESEARCH HOSPITAL AND ANKARA UNIVERSITY FACULTY OF MEDICINE (IBNI SINA HOSPITAL) over the 278 patients in cardiology clinics, cardiovascular surgery policlinics and cardiology service.

**Results:** Percentage of smoking cessation according to operation patient had: angiography:6o/78(%76,9) stent:44/59 (%74,57) bypass:32/39 (%82,05) MI(syncope):11/11 (%100). It means cardiovascular operations and disease are very effective on smoking cessation. So it shows that smoking habits can be changed and defeated with fear of death therefore this makes it psychological dependence. **Discussion:** Smoking cessation dramatically increases with the increased severity of cardiovascular disease, with a large sense of regret in patients so we can say that the person can strongly overcome smoking habits by mentally

Key Words: Smoking Habits, Cardiovascular Disease

### THE COMPARISON OF TWO DIFFERENT URINE PH MEASUREMENT METHODS

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**Introduction:** Urine pH is a biochemical marker for estimating treatment need and efficacy in many diseases, especially nephrolithiasis and who is receiving medical therapy for prevention or stone dissolution. Our objective is to compare the automated dipstick analyser with the pH meter in urine pH analysis.

**Material and Methods:** A total of 90 urine samples of the patients was included in the study. The urine samples were analysed using with the automated dipstick analyser and the calibrated pH meter, respectively. The results divided into three groups (low, normal and high).

**Results:** There was a high significant correlation between the automated dipstick analyser and the pH meter (r=0.909, p<0.001). Bland-Altman analysis showed a high level of agreement between the automated dipstick analyser and the pH meter (bias of -0.005) in all pH values. The automated dipstick analyser showed a proportional error when compared with the pH meter (bias of 0.03) in low urine pH.

**Discussion:** To determine the urine pH in routine analysis, the automated dipstick analyser must be coherent with the pH meter. The Bland-Altman test revealed that the automated dipstick analyser was perfect agreement with the pH meter in all pH values. However, it was observed that the automated dipstick analyser tended to over and underestimate true pH readings in high urine pH, because of the random errors. The automated dipstick analyser is convenient in determining urine pH. In clinical decision making process of patients with low or high urine pH, random errors in the analysing process should be taken into account.

Key Words: Urine, pH, The Automated Dipstick Analyzer, pH Meter

### EVALUATION OF ISCHEMIA MODIFIED ALBUMIN IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION

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**Introduction:** The N-Terminal of albumin which is sensitive to oxygen radicals and under oxidative stress it will change into ischemia modified albumin (IMA). Oxidative stress play a role in myocardial infarction (MI) pathogenesis. It is thought that IMA can be used as an indicator of ischemia in early phase of MI. Our purpose is to find if IMA levels have been exceeded in MI.

**Material and Methods:** The test results of hs Troponin-T (hs-TnT) and IMA of the patients who applied to Ankara Atatürk Training and Research Hospital in March 2017, were received from the laboratory information system. Patients with high myoglobin, CK-MB and hs Troponin-T values which were increased during follow-up in MI as expected are determined as patient group. A control group with similar age and sex is included.

**Results:** Control group (n=32) consist of 17 females and 15 males with a median age 67.5 years [interquartile range (IQR) 47-75.25], whereas disease group (n=30) has 15 females and 15 males with a median age 67 years [IQR 53.7-79.5]. Median of IMA/albumin is 19.2 [IQR 17.4-20.6] in control group, and 22.6 [IQR 20.0-25.1] in disease group. A significant difference in IMA/albumin ratios among two groups are observed (p =0.001). Furthermore, significant correlations between IMA/albumin ratio and hs-TnT, myoglobin are obtained (r=0.58, p<0.001; r=0.31, p=0.01 respectively.) **Discussion:** IMA values increase in MI and there is a correlation between IMA and hs-TnT, and early marker myoglobin. IMA is believed to be a new biomarker that can be used in MI.

**Key Words:** Acute Myocardial Infarction, Ischemia Modified Albumin, Reactive Oxygen Species, Ischemia

### IDENTIFYING ANKARA YILDIRIM BEYAZIT UNIVERSITY FACULTY OF MEDICINE STUDENTS' NUTRITIONAL STATUS AND KNOWLEDGE LEVEL

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**Introduction:** The aim of this study is to identify Ankara Yıldırım Beyazıt University Faculty of Medicine students' nutritional knowledge level and habits.

**Material and Methods:** This descriptive study was carried with 331 students who studies at Ankara Yıldırım Beyazıt University Faculty of Medicine. Data was collected with a questionnaire with three section including questions about socio-demographic characteristics, nutritional habits and nutritional knowledge level between April 03-24, 2017

**Results:** Students' BMI values were similar compared to their semester, living place, income and physical activity status. Regular physical activity rate was found higher in semester III students (%48.1), and lower in semester V students (%21.9). Skipping meal rate was; %36.4 for breakfast, %35.6 for lunch and %18.1 for dinner. 13 of 331 students (%3.9) specified that they had never eaten, 13 (%3.9) of them every day, 58 (%17.5) of them 3-4 times a week, 113 (%34.1) of them 1-2 days a week, 118 (%35.6) of them remarked to eat rarely. 16 (% 4.8) of students didn't answer this question. Students' eating habits at night were investigated. 101 (%30.5) of students remarked that they didn't consume any meal or snacks at night, 94 (%28.4) student consumed every night, 133 (%40.2) student sometimes consumed meal for snacks at night. 3 (%0.9) students didn't answer this question.

**Conclusion:** As adequate nutritional knowledge improves nutritional habits, it is important to educate students about healthy nutrition. It is expected that this study will contribute developing necessary standarts on behalf of increasing students' knowledge level and improving nutritional status.

Key Words: Nutritional Status, Knowledge Level, Fast Food



#### CLINICANS AND PATIENTS' AWARENESS OF URINARY CATHETERS

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**Introduction:** Urinary tract infections are the most common nosocomial infections and almost every time it is related to urinary catheter (UC). The purpose of this study is to identify the awareness of doctors and the patients about UC.

**Material and Methods:** Two different surveys were applied. Collected data included the characteristics of patients and catheter use, reasons for UC use, change of activities of daily living, knowledge of doctors about UC.

**Results:** A total of 30 patients and 42 doctors were included. The avarage duration of work years of this hospital was 3.4 years. 71% of doctors were research assistant, 26,1% of them were specialist. 88% of the patients were informed before the insertion of UC and 88% of the doctors evaluated the indications of UC, 61.9% of them controlled care conditions of the UCs every day. 64.3% of doctors stated that they changed the UCs at different intervals, although the routine change was not recommended unless the urinary catheter integrity was impaired. The average age of the patients (13 female, 17 male) was 67.9. Twenty-five patients were hospitalized in surgical clinics. Condom catheter was observed only one patient. 46.6% of patients were informed before the insertion of UC. 88% of among of them known the necessity of UC, 28,5% of them known how to maintain UC. The most frequent complaints of patients were limitation of mobility and urethral pain.

**Conclusion:** Increasing awareness of appropriate use of UCs by HCPs and patients is crucial for the reduction and prevention of nosocomial urinary infections.

**Key Words:** Urinary Catheter, Awareness, Education

# THE PREVALANCE OF HELICOBACTER PYLORI FROM THE ANTRAL BIOPSIES OF PATIENTS WHO WERE REFERRED FOR ENDOSCOPY FOR VARIOUS REASONS WITH CLINICOPATHOLOGIC FEATURES

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**Introduction**: Helicobacter pylori (HP) infection plays a role in the pathophysiology of many gastric and extragastrointestinal diseases as well as being a common health problem in Turkey. We conducted a study to determine the prevalence of Helicobacter pylori in the antral biopsies taken for any reason within a defined period and the clinicopathologic features of these patients. Aim of this to determine the distribution of HP according to age and investigate the relationship between the development of intestinal metaplasia and age and HP infection.

**Material and methods:** We reviewed the records of patients from whom antral biopsies were taken during upper gastrointestinal endoscopy at the Endoscopy Unit of the Atatürk Training and Research Hospital for 8 months (January, February and July to December). The study included 351 HP negative (Group 1) cases and 424 HP positive (Group 2) cases. Patients with a gastric mass lesion were not included to study. **Results:** The mean age of Group 1 cases was statistically significantly higher than Group 2 (53.97  $\pm$  15.3 vs 49.18  $\pm$  15.1, p = 0.000, respectively). The presence of intestinal metaplasia was significantly higher in the Group 1 than in the Group 2 (17.9 vs 12%, p = 0.021, respectively).

**Discussion:** It is known that HP prevalance increase with age.But HP negative group were found to be older. This may be related to the patients in this group had been previously given HP eradication treatment. Intestinal metaplasia was more common in the HP negative group, which may be explained by the fact that the patients in this group are older.

**Key words:** Helicobacter Pylori, Endoscopy, Antral Biopsy



### KNOWLEDGE AND ATTITUDE OF HEALTHCARE WORKERS AND PATIENTS ABOUT ISOLATION PRECAUTIONS

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**Introduction:** Isolation precautions are measures taken to prevent spread of microorganisms in healthcare settings. Although healthcare workers' commitment is important, the attitude of the patient and their relatives is also equally important. The aim of this study is to reveal the knowledge and attitude of the healthcare workers, patients, and their relatives regarding the isolation precautions.

**Material Methods:** A point prevalence study is conducted in Ankara Atatürk Education and Research Hospital. Separate surveys were applied for each group. Data were recorded in number sand percentages.

**Results:** A total of 17 patients and 79 health workers were included in the study. Mean age of the relatives of the patients and the healthcare workers were 45 and 29 years, respectively. Both physicians (53%) and nurses (52.9%) were aware of the isolation guidelines. Nurses were more educated about isolation precautions when compared to doctors. Compliance to isolation precautions rate was higher in the nurse group. It was observed that all the healthcare workers are aware of the importance of hand hygiene. Most of the relatives of the patients (80%) had information about the reason for isolation. Only 29% of the patients and their relatives were informed about isolation precautions by health workers. Seventy-six percent of the patients' relatives stated that they had washed their hands after contact with the patients.

**Conclusion:** Isolation precautions are essential for infection control. The success of these methods depends on compliance of healthcare workers, patients and their relatives in unison.

Key Words: Isolation, Prevention, Education

### SEEING FAMOUS AND FAMELESS PEOPLE: COMPARISON OF EEG-BETA WAVES IN TEMPORAL LOB

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Introduction: R. Q. Quiroga and his colleagues investigated single neurons in the brain which are devoted to single people or objects in 2005. Various pictures of Jennifer Aniston elicited a response in a single neuron inside the temporal lobe and they named the neuron as Jennifer Anderson Neuron. In this study we aimed to explore bioelectrical aspects of this phenomena by electroencephalography (EEG). Material and Methods: EEG recordings were taken from 2 healty volunteer participants while they were watching pictures of famous (20) and fameless (15) people with a 32 channel EEG recording system. Beta power values were calculated from the EEG recordings for the temporal lob.

**Results:** Beta power value for famous people was 20, 15 $\mu$ V2 while it was 12, 25  $\mu$ V2 for fameless people in the temporal lobe.

**Conclusion:** Beta is one of the EEG waves which responsible for higher cognitive functions and also visual neurons are located in the temporal lob. We interpreted higher beta power value for famous people as famous-specific neurons create more electrical activity than non-specific visual neurons in the temporal lob. These findings are primary results of our research we hope that this study pave the way to explore the electrical source of 'Jennifer Anderson Neuron'.

Key Words: Eeg-Beta Waves, Temporal Lob, Visual Neurons

### THE EFFECT OF CENTRIFUGATION ON URINARY PROTEIN ANALYSIS IN HEMATURIC AND NON-HEMATURIC URINE SAMPLES

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**Introduction:** It is recommended that urine samples should be centrifuged prior to protein analysis. The present study was carried out to investigate the impact of centrifugation on protein levels by analysing urine samples with normal and elevated erythrocyte count.

Material and Methods: 68 routine urine specimens were divided into 5 groups according to erythrocyte count (negative, +1, +2, +3, +4) based on urine strip analysis. Protein levels were measured in the same specimens before and after centrifugation at 1000 x g for 5 min. Total protein measurement was done by using Cobas 501 auto analyser. All statistical analyses were performed using IBM SPSS (version 22.0). Results: In our study, centrifuged urine had significantly lower levels of protein than uncentrifuged urine, regardless of erythrocyte count (P<0.001 all). The mean urinary protein levels of the groups before and after centrifugation were determined as 9.8mg/dL, 17.8 mg/dL, 18.6 mg/dLand 63.7 mg/dL and 8.7 mg/dL, 17.4 mg/dL, 16.5mg/dL and 61.9 mg/dl for negative, +1, +2, > +3 positive hematuric samples, respectively.

**Discussion:** Protein levels in urine declined with centrifugation, regardless of hematuria levels determined, but the magnitude of the decline was largest when specimens had erythrocyte count over +3. Hemoglobine in heamaturic samples might cause false elevated protein levels and centrifugal processing causes these proteins to precipitate. Proteinuria and hematuria are findings in the urine that can be symptoms of kidney disease and we should be aware of the effect of centrifugation on urinary protein measurement.

**Key Words:** Hematuria, Protein Measurement, Centrifugation, Urine Strip Analysis

### EFECT OF BLOOD PLASMA ANTIBODIES ON MESENCHYMAL STEM CELL PROLIFERATION

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**Introduction:** Observing and evaluating the effect of using human plasma instead of animal plasma that use in mesenchymal stem cell culture.

Material and Methods: The study performed in the Stem Cell Laboratory of Ankara Dışkapı Yıldırım Beyazıt Training and Research Hospital. At first, the mesenchymal stem cell that obtained from bone marrow cultured with animal plasma. Then the study divided into 2 groups. In the first experiment, human plasma that contains different titer of antibody added to mesenchymal stem cells. In the second experiment, human plasma that obtains from different blood groups added to mesenchymal stem cells. In both experiments, cells observed with invert microscope and performed vitality test method. After all of these, cells cultured with animal plasma and observed their proliferations.

**Results:** In the first experiment, we observed the plasmas that have a different titer of antibody show a different effect on cells' proliferations. In the second experiment, plasmas obtained from different blood groups show a different effect on cells' proliferations. For the first experiment, the plasma has a low titer of antibody showed an assistive effect on cells' proliferations. On the other hand, in the second experiment, plasma that has a high titer of antibody showed a pressor effect on the cells' proliferations.

**Conclusion:** As a result, experiments show that the antibodies have effect on mesenchymal stem cells. Antibodies have apoptotic effect on mesenchymal stem cell. Our study in progress with various.

Key Words: Blood Plasma, Antibodies, Stem Cell

#### RELATION BETWEEN THIOL GROUPS AND CORTISOL LEVEL

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**Introduction**: Cortisol is an important glucocorticoid hormone. It effects activity of antioxidant enzymes so it is thought to be associated with oxidative stress. Reactive Oxygen Species (ROS) are formed during a variety of biological processes for all cells. Thiols contain a sulfhydryl group (-SH) that plays an essential role against ROS, and they are important for the antioxidant cascade. In the present study, it was aimed to investigate the relationship between thiol levels and cortisol levels.

**Material and method:** The patients' cortisol and native thiol levels were screened retrospectively between January 2017 and March 2017 in laboratuary information system of Ataturk Training and Research Hospital. A total of 59 patients were included in this study. All data were analyzed in SPSS 23.0 version.

**Results:** Mean values of cortisol and thiols are 13.72  $\mu$ g/dL and 285.1  $\mu$ mol/L. The results showed a significant negative correlation (r= - 0.465, p <0.0001) between thiol and cortisol level.

**Discussion**: There are numerous known interactions between the endocrine system and metabolism. The present studies showed that cortisol increases in response to an acutely stressful event have the potential oxidative damage. Thiol groups are located on the antioxidant balance side in the defense mechanism of the body against this damage. As expected, there is a negative relationship between thiol and cortisol that is known as the stress hormone.

**Keywords**: Oxidative Stress, Cortisol, Thiol

### MEASURING THE COGNITIVE DISTINGUISHING POWER OF THE NEUROLOGY PATIENTS WITH THE MONTREAL COGNITIVE ASSESSMENT SCALE

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**Introduction:** The Montreal Cognitive Assessment Scale (MOCA) is a test that can be used to detect mild cognitive impairment. Our aim in this study is to determine the power of cognitive discrimination between groups and between sets by measuring the functions of visual spatial functions, naming, memory, attention, language, abstract thinking, delayed recall and orientation among healthy volunteers with neurological disease with MOCA.

Material and methods: The MOCA test was administered by researchers to 21 volunteer participants (9 males, 12 females) and 39 healthy volunteer participants (14 males, 25 females). The MOCA test consists of 8 sets of visual spatial functions, naming, memory, attention, language, abstract thinking, delayed recall and orientation and the ability to distinguish the cognitive measurement from the answers given by the participants was evaluated.

**Results:** The mean total MOCA score of the neurological patients was 18.71 while the mean total score of the volunteers was 25.53. Healthy individuals were found to be 17% higher in visual spatial functions, 14% in naming, 24% in attention, 26% in language, 23% in abstract thinking, 25% in delayed recall, and 12% in orientation from neurological patients. The highest mean score difference (1.54) between neurological patients and healthy subjects was obtained from the attention set, and the lowest mean score difference (0.43) from the nomenclature set.

**Discussion:** The MOCA test showed that cognitive perceptions decreased, primarily in language and attention, in neurological patients. This interpreted the MOCA test as having the greatest power to distinguish the attention and language from the cognitive processes from the other cognitive processes.

**Key words:** The Montreal Cognitive Assessment Scale, Attention, Neurology

#### EFFECT OF TIME ON WHOLE BLOOD PARAMETERS

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**Introduction:** Stability of cellular components stored in EDTA is limited. Sometimes delayed arrivals of the samples to the laboratory is observed especially in large hospitals. This preanalytical error's effect on the tests might be overlooked. Our aim in this study is to examine the effects of waiting period on complete blood count parameters in our hospital.

Material and Methods: Thirty blood samples stored in K<sub>2</sub>-EDTA, which were analysed on a SYSMEX XE-2100 haemotology analyser in Ankara Ataturk Training and Research Hospital routine laboratory were used. After first analyses within 1 hour, the samples were stored in room temperature (RT) for 6 hours, and then reanalysed. A third analysis of samples were performed at 24 hours. Results of 0, 6 and 24 hours were transferred to SPSS software.

**Results:** WBC, RBC, HGB and MCH levels were stabil until 6 hours, whereas percentage of MON, NEU and LYM were stabil until 24 hours. Percentage of EOS, level of PLT and MCV were stabil less than 6 hours.

**Discussion:** This study provides evidence that helps defining acceptable delay times and storage conditions when a short time between sample collection and processing is not possible.

**Key Words:** Storage Time, Whole Blood Count, SYSMEX XE-2100