INTERNATIONAL CONGRESS OF ANTHROPOLOGICAL SCIENCES (ICAS)



ABSTRACT BOOK April 9-11, 2015 www.icas2015.org





Dear colleagues,

We are honored to share with you the "International Congress of Anthropological Sciences (ICAS)" that is going to be held for the first time in Ankara, capital of Turkey, between April 9th and 11th, 2015. ICAS aims to provide a rich platform for the researchers, scholars and students from all over the world in the fields of Paleoanthropology, physical forensic anthropology anthropology. anthropology, and social Throughout the congress we wish to share and exchange our studies including theoretical arguments, methodological problems and new research trends as well as unique experiences in ethnographical studies.

"International Congress of Anthropological Sciences (ICAS) 2015" will take place at the National Library located in the city center which reserves an extensive rare manuscript archive. Two conference halls of the National Library are reserved for the congress. While the sessions related with biological and forensic anthropology will be hold in Hall A; social and cultural anthropology sessions will take place at the Hall B correspondingly.

We are honored with your interest and participation to ICAS2015.

Kind regards,

On behalf of the Organization Committee,

Prof. Ayla SEVIM EROL **Congress President**

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INTERNATIONAL CONGRESS OF ANTHROPOLOGICAL SCIENCES



ORAL PRESENTATIONS HALL A

Identification of Skeletal Remains in Bosnia and Herzegovina

Senem Skulj, Sandra Sostaric

With the end of the war in former Yugoslavia, around 40.000 people were presumed missing as a result of the conflict; some 31.500 persons went missing in Bosnia and Herzegovina as a result of mass executions during the 1992-1995 conflict. The presentation will inform attendees on the limitations of traditional identification methods and the importance of a DNA-led system which utilises scientific principles of forensic anthropology in a large-scale identification project. In 1995, several international groups and local institutions began exhumations of victims from graves in Bosnia and Herzegovina. Prior to the introduction of a DNA-led system, several thousand exhumed individuals were identified through traditional identification methods. Early in the effort it became clear that traditional methods of identification were insufficient to identify recovered mortal remains from mass graves; as, in some cases, traditionally identified persons proved to be misidentified. This was due to the lack of distinguishing antemortem medical data, coupled with a very large number of demographically similar individuals who went missing from the same region. Furthermore, the majority of recovered remains originated from secondary mass graves and natural caves, where disturbance, commingling, disarticulation and post-mortem damage of skeletal remains occurred. Due to a large number of recovered mortal remains that could not be identified through traditional means, the International Commission on Missing Persons (ICMP) launched a DNA-led identification system to assist local authorities in these identification efforts as accumulation of exhumed and unidentified mortal remains was posing a serious socio-legal issue. More importantly, families of missing persons were seeking answers and pressured the local and international communities to focus their efforts on identifications of the missing in order to restore dignity of exhumed victims, and to commemorate them. The challenges faced by forensic experts working in the identification process and the current agendas in the region will be discussed.

Keywords: Traditional identification methods, large-scale identification, DNA-led system, challenges of forensic experts; mortal remains accumulation

The Usability of Metacarpal Measurements in Sex Determination

Aula Sevim Erol, Alper Yener Yavuz, Erhan Tarhan, Ercan Nalbantoğlu

Anatolia has been a residential district in which many different civilizations were established and lived since the Neolithic Era. The skeletal remains belonging to the societies of these civilizations have been gathered in the excavations. With the examination of these skeletons, the history of humanity can be understood more clearly. The correct sex determination of the individual is the most important process of an anthropological study. There are two main methods used in sex determination. The first is the morphological method or anthropometric observation, the second is the anthropometrical method which is based upon measurements. There should be some other alternative methods in sex determination for the skeletons which are not found in a complete form from the archeological excavations. Thus, this study is done with the aim of identifying the sex of the individual in a reliable way by using the metacarpal measurements. In this study, it is aimed to determine the accuracy rate of the measurements taken from the 2nd metacarpal in sex determination. Within this context, the material of this study consists of 2nd metacarpals of 80 female and 80 male individuals belonging to different periods gathered from various archeological excavations and 2nd metacarpal measurements of 50 recent female and male individuals. This study shows that it is possible to determine the sex of the individuals by using the metacarpal bones when the human skeletons are not found in a complete form. In addition to this, with this study, both previous MC-MT studies will be tested and a database particular to Anatolia will be founded.

Keywords: Metacarpal, sex determination, Anatolia

Identification Study of a Group of Illegal Immigrants Drowned in a Shipwreck

Kara Nazmi Karacaoğlu, Erdoğan Kara, Safa Çelik, M.Feyzi Şahin, Rıfat Özgür Özdemirel, İsmail Çoban, Elif Ömeroğlu, Hüseyin Afşin, Melda Bekcan, A.Sadi Çağdır, Sermet Koç

Turkey has been an important illegal immigration route in recent years. Illegal immigrants try to pass into the countries located on the Western borders of Turkey through mostly sea routes. In these voyages, lots of fatal accidents occur because of poor quality boats, over-crowded ships, weather conditions and intentional sinkings. In our presentation, a shipwreck case occurred off the coast of Kilyos in which an over-crowded ship of 39 Afghan immigrants and a Turkish captain sank while trying to pass from Istanbul to Europe via Blacksea, is evaluated and discussed according to the literature and contemporary identification methods. In the discussed shipwreck, only 6 passengers survived. 28 of the victims have been identified, while 6 of the passengers are still missing. In the presentation, the process of identification and the obstacles faced in it are discussed. Illegal immigrants, deaths occurring during their voyages, and the identification of the victims will most probably be a serious international issue in the near future.

Keywords: Shipwreck, illegal immigrants, identification, autopsy

A Blind Accuracy Assessment of Morphological Analysis in Human and Non-human Bone Identification

M.Fatih Koca, Özgür Bulut

Introduction: Skeletal remains sent to Forensic Anthropology Laboratory for forensic analysis are carried out in a specific order and a systematic way. The first one of these works is the determination of whether the bones belong to a human or not. Material and Method: In this study; two separate sets are created (Set I and Set II). Each set contains 30 bones including 15 human bones and 15 non-human bones. The findings in Set I are complete bones, while in Set II the findings are fragmented bones. 3 Forensic Anthropologist were asked to distinguish whether the findings are human or non-human bones in both sets by using morphological analysis in accordance with their experience and knowledge in comparative osteology. Results and discussion: The success rate in Set I was; 100%, 93,33% and 100%, while the success rate in Set II was; 86,66%, 73,33% and 80% respectively. This study shows that the mean success rate was notably higher in complete bones (97,77%) than in fragmented bones (79,99%). In conclusion, the morphological method is reliable and useful in the application of human and non-human bone identification.

Keywords: Forensic anthropology, skeletal remains, human and non-human bone identification

The Use of Computed Tomography to Determine Sex **Estimation from a Turkish Sample**

Öznur Gülhan, Karl Harrison

The determination of sex is a significant step in the process of establishing the positive identification of human skeletal remains. Several studies have demonstrated that metric sex determination methods of the skeleton are population specific due to variation in size and patterns of sexual dimorphism. The main aim of this project is to examine the application of the measurements taken from the femur to assess sex, and to contribute to the establishment of discriminant function equations for the Turkish population for forensic application. A Turkish sample population, consisting of 200 adult individuals was examined via the interpretation of their volume-rendered CT scans using the OsiriX software. Following 3D reconstruction, an image of each femur was then segmented from the surrounding bones to ensure correct landmarks can be used as accurately as possible. The 3D rendered image of the femur was then automatically regulated to orientate the image in the desired plane. Thirteen measurements were acquired using a 3D viewer and were located and marked on the CT reconstructed femur. Thirteen anthropometric parameters were measured and analysed by basic descriptive statistics and discriminant analysis methods using the SPSS 21.0 software package. The intra-observer variation was assessed by obtaining the inter-cross correlation coefficient in order to evaluate the accuracy of the linear measurements taken. The accuracy of sex prediction ranged from 63.5% to 88% with single variables. In stepwise analysis, epicondylar breadth, femur vertical diameter of neck and medial lateral subtrochanteric diameter were found to be the most discriminating variables providing an accuracy of 91%. Ultimately, it is envisaged that this research study will produce data and interpretations that will inform on and improve standards of sex estimation from postcranial osteometric landmarks. Additionally, this research will consider how this data provides value for a developing discipline of forensic anthropology in Turkey.

Keywords: Computed tomography; segmentation; 3D reconstruction; sex determination; population specific standards;

How Pathology Can Be Invaluable to the Identification **Process**

Uyum Vehit, Photis Andronicou

The main Aim of this presentation is to demonstrate, the unique pathology present in this case which enabled an unequivocal identification. The grave site was located in a mountainous region. Information was provided and the field team begun to investigate. The excavation yielded a total of 7 seven individuals in three separate graves. The total duration of the excavation was less than a year. The case study XXCMP15 originates from one of the aforementioned graves. XXXCMP15 was in moderate to bad preservation. A fair amount of reconstruction was required. Biological profile was challenging due to pathology present which seemed to skew age estimation. The whole of the right side of the individual was affected, more specifically the shoulder and pelvic region (Figure 1),. The Humeral shaft exhibited clear signs of suparative osteomyelitis with the presence of cloaca (Figure 2). Additionally evident is the significant alteration of humeral head with concomitant compensation at glenoid epiphysis of scapula. Additionally the right Coxa also exhibits proliferative bone reaction and complete fusion of femoral head to the acetabulum (Figure 3). The combination of infection and joint fusion is condusive to septic arthritis. Given the above Post mortem data compared to the Antemortem information it was without a doubt that XXXCMP15 presented with pathology matching with with pathology matching with Ante-mortem Information concerning one individual. It is important to stress that the CMP has a strict policy to use Genetic identification in all cases and this case was no exception. But in cases where DNA is unavailable for any reason we show that a thorough Post-mortem analysis accompanied by a sound knowledge of Pathology and in turn followed by at least decent Antemortem information can be sufficient for Identification purposes.

Keywords: Septic arthritis, ID, pathology, CMP, Cyprus

Application of Methods of Forensic Skeletal Trauma Analysis to the Study of Antique Skeletal Remains of Minnetpinari and Güllüdere

Deren Ceker

Human skeletal remains preserve a wide range of evidence about past human lifestyles, as well incidents occurring at the time of death. Detailed study of these forms of data embellish our understanding of health and disease in the past, but can also increase our understanding of pertinent forensic questions such as mechanisms of trauma and cause and manner of death. These data should be collected and analyzed in a systematic manner which involves careful observations, documentation and interpretations based on scientific methods and principles. This presentation is about the application of methods of skeletal trauma analysis to the study of the antique skeletal remains of Minnetpinari and Güllüdere, with the goal of examining complications and commonalities in terms of trauma determination and interpretation.

Keywords: Forensic anthropology, skeletal trauma,

Evaluation of Foot Asymmetry in Relation to Hand Preference: Preliminary Results

Cağatay Barut, Erol Aktunc

Development of right and left extremities occur through similar morphogenetic mechanisms, however a perfect symmetry is out of the question. This may either be overtly presented as it is in some kind of musculoskeletal disorders or may be insignificant without being related to any pathological condition. The anthropometrical studies comparing two halves of the human body depict differences; however there is no study in the literature evaluating the foot asymmetry in relation to hand preference. The aim of the study was to evaluate the asymmetry of the foot in relation to hand preference and gender. 297 individuals (130 males, 167 females) aged between 18-44 years participated in the study. Body height, body weight, foot length, foot width and plantar area were measured. Body height was measured using an anthropometer while the participant is standing on a flat surface without shoes on. The body weight was measured using a standard scale while the participants have only their underwear on. The plantar images were obtained using a special designed podoscope system. These images were analyzed using Digimizer V4.3.0. Foot length, foot width and plantar area were measured for right and left foot. An asymmetry index is calculated for each pair of measurement with the following formula: RL. Hand preference of the participants was assessed according to the Edinburgh Inventory. Independent samples test was used for analyzing the asymmetry measurements obtained according to gender and hand preference. There were no statistically significant differences between males and females in terms of asymmetry index values of foot width, foot length and plantar area (p>0.05). There were no statistically significant differences between rightand left- handers in terms of asymmetry index values of foot width, foot length and plantar area (p>0.05). Depending on these results it can be suggested that asymmetry condition of the foot is not affected by gender and hand preference.

Keywords: Foot, anthropometry, asymmetry, hand preference, gender

An Investigation on "Sphenoid Sinus Volume and Type" of Turkish People

Seda Uyğun, Sinem Akkaşoğlu, Selin Bayko, Neşe Çetin, Hatice Mürvet Hayran

Introduction: The sphenoid sinus is located in the body of the sphenoid bone, but it may extend into the wings of this bone. It is unevenly divided and separated by a bone septum. The sinus opens to the sphenoethmoidal recess directly above the choana. The sinus has two functions that are to be filled with air and to help keep the weight of the skull balanced. The sphenoid sinus is located at the forward part of the skull that forms the fossa for the pituitary gland. Only thin plates of bone separate the sinus from several important structures: the optic nerves and optic chiasm, the pituitary gland, the cavernous sinuses, and the contents that are the internal carotid arteries, the oculomotor nerve, the trochlear nerve, the abducens nerve, the ophtalmic nerve and the maxillary nerve. Material and methods: The study includes 40 individuals (20 male and 20 female) with 24,95 mean age. The measurements are performed on paranasal sinus computed tomography images by the program named Osirix. Three measurements performed for each person: 1. Sphenoid sinus pneumatization type 2. Sinus volume 3. Quantitiv of septum Results: The volume of sphenoid sinus is 10,38+3,79 cm3 for women and 14,76+4,46 cm3 for men. Post-sellar type of sphenoid sinus which eases operations is seen %85 for men and %40 for women. Number of septum(s) varies from 1 to 5 and is specific to each individual. Conclusion: In preoperative term, knowing the anatomy of sinuses and the neighborhoods will supply getting data to fortify the surgical procedure of endoscopic transsphenoidal sinus surgery, endoscopic skull base surgery and endoscopic transsphenoidal pituitary surgery in particularly.

Keywords: Sphenoid sinus volume, sphenoid sinus type

Association Between Smoking and Dietary Habits with Gastrointestinal Cancers Occurrence

Nooshin Farahmandlou

BACKGROUND: The studies show that incidence of digestive system cancers is considerably high in Iran compared to other areas in Middle East. The present study was performed to determine the association between smoking and dietary habits with gastrointestinal cancers in Northwestern Iran. METHODS: The Cancer Registry data of 223 patients with gastrointestinal cancers were collected using individual questionnaire, food frequency questionnaire and face to face interview. The data were analyzed using tor Chi-square tests and ANOVA. RESULTS: The male to female ratio was 7.7/1. Smoking, habit of drinking hot tea and particularly huge and continuous consumption of the pickles were the main contributing factors in occurrence of gastrointestinal cancers in Northwestern Iran, CONCLUSION: Smoking and food habits play a pivotal role in occurrence of gastrointestinal cancers in North-western Iran, so, holding recommended food habits is a preventive measure against gastrointestinal cancer occurrence.

Keywords: Dietary Habit, gastrointestinal cancers

Smoking and Gender as Significant Risk Factors for Acute Myocardial Infarction in Human

Nasim Ramezani Doraki, Rahim Ahmadi

INTRODUCTION: Acute myocardial infarction (AMI) is prevalent in many populations and has serious consequences including re-infarction and death. Although the risk factors for AMI have been extensively studied in Western countries, they are less well documented in eastern communities including Iran. The main aim of this study was to investigate the risk factors for AMI in north western of Iran. METHODS: To determine the risk factors for AMI, we performed a retrospective study in patients with AMI. Risk factors were assessed in 357 consecutive patients with a first AMI (age, 20-94 years old) admitted to one of the major institutes. The data were analyzed using ANOVA RESULTS: 35% of cases were female and 65% of cases were male. Mean age in female patients was 59 years old and in male was 76.5 years old, indicating lower mean age in women than men.

Keywords: AMI, smoking, gender

Ancient DNA Studies in Turkey

Vahdet Özkocak

Ancient DNA, especially in recent years, has been an interdisciplinary field of research frequently used by anthropology, genetics, and even social scientists. It is a new method which has its own protocols and working conditions in determining the migration routes, population genetics, and used in Archeobotanic studies and the removal of family tree of extinct creatures Before giving information about ancient DNA; the information which will shed light on the scientists who want to study ancient DNA is presented within the widespread explanation of the issues such as General Genetic Information, The Human Genome Project, Human Evolution and Genetics, use of Ethical information in Anthropology, mitochondrial DNA, Ancient DNA studies conducted in Turkey, and Haplogroups and Ancient DNA. In this study; wide range of information is given about the significance of the DNA studies conducted or likely to be conducted in especially Geography of Anatolia and what kind of problems that the scientists will come across during their research.

Keywords: Ancient DNA Studies in Turkey, Ancient DNA, mitochondrial DNA, human evolution and genetics, haplogroups and ancient DNA

The Use of Ancient Dna Studies in Anthropology and Archaeology

Evrim Tekeli

Upon the progression of studies carried out in the field of genetics and the use of DNA analyses in archaeology, cogent evidences related to the history of humanity have started to become evident. The genetics information obtained from the human remains taken out of the excavations conducted in the archaeological sites are higly important for the field of anthropology and archaeology in forensic sciences. In the course of archaeological and anthropological excavations, skeletons and cracked bone specimens are captured. The DNA obtained from the biological specimens pertaining to the time long years ago is used with the abbreviation 'aDNA' in the meaing of "retrospective". In aDNA studies, skeleton, museum specimens, teeth, hair samples and coprolites are used. Among these, bone and teeth samples are the ones that are used most commonly. Because of the fact that it is the hardest structure of human body and very resistant against moisture, temperature and environmental conditions, teeth are used in a DNA analyses. Collagen and hydroxyapatite are the molecules built-in the own unique structure of the bone and enable the detection of the existence of DNA in the bones. In human related aDNA applications; sex determination can be made at personal level. If the skeletons unearthed as a result of the excavations are in a body, it is easy for the anthropologists to determine the sex of the person, yet if the skeleton is in a fragmented condition, morphological and metrical methods remain incapable in the determination of the sex. At this point, the determination of sex is possible only with the DNA analyses. Besides, if there are evidences of an illness in the skeletons as a result of the morphological examination, the gene area that cause that illness is reproduced and mutation screening with a regard to the illness can be made. As for the population level, lines of descent of a person can be determined by means of the mitochondrial DNA and Y chromosome haplotypes. In addition to these, human evolution, the migrations of human communities can be determined by means of antique DNA studies. Being in short supply from the archaeological remains thousands of years old, the DNA provides archaeologists and anthropologists with an opportunity to resolve our past or establish a connection between the past and today. The DNA studies that enable archaeologists, anthropologists and molecular biologists to study under a single roof, shed light to the history of humanity.

Keywords: aDNA, skeleton, moleculer anthropology, bone, teeth

Molecular Anthropology: Gene Cloning and Dna Analysis in Anthropology

Nermin Sarıgül

Molecular anthropology is a field of anthropology in which molecular analysis is used to determine evolutionary links between ancient and modern human populations, as well as between contemporary species. By examining DNA sequences anthropologists understand the evolutionary origins of modern humans, and the routes followed by prehistoric people as they colonized the planet. Ancient DNA can be isolated from different sources such as; dried skin, bone, tissue, teeth, hair shaft. DNA in ancient samples is typically a combination of endogenous and contaminant sequences degraded into short fragments, often averaging 40-60 base pairs, and of lower quantity than the DNA typical of modern biological samples. Molecular damages is categorized as; shortening lesions and miscoding lesions. Besides the degradation of ancient DNA, another major challenge for studies of paleogenetics is the contamination of the aDNA by extraneous genetic material. A theoretical limit of DNA preservation has been estimated between 100,000 and 1,000,000 years, but the retrieval of ancient DNA is not temporally-bound, as a specimen's age is not linearly correlated to the amount of surviving DNA, which is characteristic of the inherent variability of DNA degradation and percentages of surviving DNA across specimens and spatiotemporal contexts. PCR, multiplex PCR, cloning sequencing, shotgun, microarray, whole genome in-solution, primer extension capture, restriction enzymes and other molecular methods can be applied to aDNA for human evolutionary studies. Ancient human microbiome studies are provide to understand past human health, carriage rates and risks posed by endemic and dormant pathogens. Coprolites and dental plaque are used for ancient human microbial DNA isolation. New molecular methodologies including TRFLP, molecular fingerprinting, single target PCR, multiplex PCR, quantitative PCR, FISH and 16S rRNA-based microarrays, among others can be applied to understand ancient human life.

Keywords: Molecular anthropology, ancientDNA, cloning, sequencing

Prediction Equations For the Estimation of Body Weight on Elderly Using Anthropometric Measurements

Timur Gültekin, Yener Bektaş, Şükrü Acıtaş, Birdal Şenoğlu

Introduction: Body weight measurement is a fundamental data that support a complete nutritional evaluation and the design and implementation of a nutritional care plan for elderly persons. However, various situations make it difficult to obtain a patient's body weight, particularly patients who are unable to stand. In those cases, it is necessary to use predictive equations based on other anthropometric measurements. Objectives: The aim of the study is to obtain a multiple linear regression equation to estimate body weight for elderly persons living in Ankara, the capital of Turkey. In literature, coefficients of regression are estimated by using least squares (LS) method when the error distribution is normal. However, nonnormal distributions are more prevalent in practice; therefore we use the modified maximum likelihood (MML) methodology proposed by Tiku (1967) which is known to be robust against to nonnormality and to outliers. Methods: This crosssectional study was carried out on elderly people (ages > 65) living at nursing homes in Ankara, Turkey. The following anthropometric measurements were taken for a sample of 164 older adults: weight, wrist circumference, elbow width, knee width, biceps circumference, calf circumference, neck circumference. All of the anthropometric data were collected according to International Biological Programme. The statistical analysis was performed with the software package MATLAB. Results: We estimate the multiple linear regression models by using the LS and the MML methodologies for the men and women separately. Estimated equations for the LS and the MML are given below: v' (i.men)=-965,8998+0,0158.age+2,1906.wrist circumference+1,2330.elbow width+1,3272.knee width+0,8931.biceps circumference+ 1,2725.calf circumference+1,0821.neck circumference y _(i.women)=-711,6668+-0,6939.age+1,2519.wrist circumference+1,0619.elbow width+-0,2114.knee width+0,8751.biceps circumference+1,0590.calf circumference+1,5994.neck circumference and y "_(i.men)=-922,7109+-0,3593.age+1,8399.wrist circumference+ 1,2227.elbow width+1,1820.knee width+0,9957.biceps circumference+1,3874.calf y "_(i.women circumference+1,0056.neck circumference)=-720,1284+-0,7180.age+1,3013.wrist circumference+1,2575.elbow width+-0.2358.knee width+0,8368.biceps circumference+1,1576.calf circumference+1,4979.neck circumference, respectively. Conclusions: Both methodologies produce the same results. However, the results based on MML methodology are more reliable for both sexes. Because, they have smaller standard errors and p values.

Keywords: Body weight, elderly, anthropometry

Forensic Applications of Geometric Morphometrics: **Understanding Human Ear Variation**

Özgül Yahyaoğlu, Alev Özkök, A. Murat Aytekin

Personal identification and verification is a wide research field which includes forensic sciences, computer sciences and anthropology as well. Anthropometrics was the first scientific approach for identifying individuals. Its applications in the field of forensics can be traced back to the works of French police officer Alphonse Bertillon (1853-1914). He developed a method based on comparison of anatomical features such as face, nose and ear on mugshot and side view images. Over the last few decades, parallel to the developments in technology many automated authentication and verification systems have been developed. In this study, we aimed to represent main direction of variation of ear morphology within populations to sort out essential biometric features which could be useful to generate a low cost authentication system. 3D images are obtained from 34 voluntary participants (n=34, 23\, 11\, 11\, 1) via Breuckamnn triTOS-HE (Breuckmann GmbH, Germnay) structured light surface scanner. After that, geometric morphometric analysis is conducted and PCA scores are computed. While first principal component is related with length of helix, second principal component is related with protrusion of ear. The first three principal components represent %89 of variation among sample. Additionally, 2D coordinate data of specimens are generated from 3D coordinate data and euclidean distance matrix analysis is done between two datasets (2D dataset over 3D dataset). According to the results of euclidean distance matrix analysis, the difference between 2D and 3D images of three-dimensional structure is interpreted. As it is really common in forensic cases to collect evidence for the identity of suspects from surveillance camera images, this comparison seems crucial. Euclidean distance matrix analysis conducted with 4 landmarks which gives 6 interlandmark distances. Our findings show that there is no significant difference between the two datasets.

Keywords: Geometric morphometrics, Ear, EDMA, PCA, structured light surface scanner

Secular Variation on the Children Between 6-17 Ages That Living in Iran

Timur Gültekin, Leila Shahvirdi

Comes one of the most important anthropometric measurements of height, body weight and body mass index that reflecting the children's growth and development. The purpose of this research, the secular values of height, weight and body mass in children (6-17 years) living in Iran is to demonstrate change. Data from research carried out in Iran so far examining and evaluating the results of this data secular variation has been demonstrated for this purpose. Period of growth, which in different ages and different rates the transition from childhood to adolescence anthropometric values of all ages how to influence the direction how to change the growth rates in different age groups and proportional relationships between measures of anthropometric variables were examined for statistical in this scope of work. Iran and other countries and made comparisons with other studies on the same subject. Observed in Iranian children's growth secular change the subject field research is almost no. If we compare the data of the study positive secular trends emerge on children size in the intervening years in the age range studied. This phenomenon emerged as height and weight increase between the years 1980-2012 a positive change indicates the presence secular in Iran on the children's growth and development in period.

Keywords: Iranian students, height, weight, body mass index, anthropometry, secular variation

Examination of Tekirdag City Center Outdoor Design Elements in Terms of Anthropometry

Elif Ebru Sisman, Pınar Gültürk

Anthropomerty is generally defined as the science of determine the size of human or human body mesaurement and use. Accordingly used materials, working surfaces and volumes must be suitable on human size for the physical comfort and qualities to be at the highest level. People live with outdoor elements and urban furnitures (seating elements, pergolas, lighting elements, billboards, walls, floor coverings, etc.) in daily life. These places and landscape furnitures that define the availability of space use serve citizens many different needs to provide conveniences and psychological comfort. However, the application made without considering the anthropometric characteristics are adversely affect reducing urban quality as well as individuals life comfort. In this study considering the functionality of outdoor design elements and plantation elements in Tekirdag city center are examined in terms of anthropometric appropriateness. Drawn attention to the correct and incorrect application, developed recommendations on how to improve.

Keywords: outdoor, anthropometry, landscape, Tekirdag

Importance of Post Mortem Identification with **Fingerprint**

Fatih Kolay, Ersin Karapazarlıoğlu, Murat Mert

AFingerprints as biometric identification methods are used in more than a century. Fingerprint gives identity of suspects in antemortem period and identity of corpses in post mortem period. It is also used for Identity verification. The aim of this study is to examine the importance of the use of fingerprint in criminal cases as an identification method. In this study, three criminal cases, occurred on different dates are studied. These cases are solved largely through use of fingerprints in the identification and verification process. The cases took place in 2011, 2012 and 2013. Two of the cases involved in homicide and the other was a terrorist attack. The method of not only identification but also verification was carried out. In these cases, the identity cards of two bodies were found on them but the identity card of the other one was not found. The gender of five corpses were male and one corpse was female. All fingerprints of corpses were loaded in Automatic Fingerprint Identification System (AFIS) and searched on nationwide database. As a result of identification process two bodies' identity cards were detected as counterfeit cards. The other four bodies' identities were verified. Fingerprint results of four corpses showed the other involved crimes of them. In all three events, the fingerprint was used for identification, authentication and solving the events. This study, accordingly, argues that the fingerprint is very important for not only to determine the identification, also the authentication.

Keywords: Fingerprint, biometrics, personal identification, forensic

Biometric Data for Police Investigations

Ersin Karapazarlıoğlu, Uğur Argun

Biometric data such as fingerprint, palm print, iris, face and speech recognition is used for forensic individualization. In these data, the oldest and most widely used one is fingerprint. Fingerprints still are most preferred by the police. The most important reason for the preference is having wide fingerprint database in the hands of the police. The purpose of this study is to discuss the importance of fingerprint for the police for identification in the post mortem period. In this study, three different incidents involving corpses, took place in 2006, 2007 and 2008, in Samsun solved by using fingerprints are examined. Two corpses in two incidents found in the open field and two corpses in one case were found under water. In the study, a total of four bodies were examined, the identity of a corpse was determined by DNA analysis and the other three bodies' identity were determined by fingerprint analysis. The Automatic Fingerprint Identification System (AFIS) was used for identification. Police start to investigation in center of ring and expand to the outside. The identity of corpse is set in center and therefore, this information is very important for criminal investigation. Thawed three events showed the effectiveness and importance of the fingerprint analysis in the identification of corpses.

Keywords: Crime scene investigation, fingerprint, biometric data, police investigation

Contribution of Forensic Antropometry and **Identification in Murder Investigations**

Uğur Argun, Ersin Karapazarlıoğlu, Murat Mert

The forensic science undeniably has an important place in criminal investigations. Every crime occurring on the Earth is composed of unique features. Even as it may seem similar in terms of cause-effect relationship crime formations differ in detail from the respect of the relationship between the victim-offender-scene. Especially homicides are usually based on a story between the victim and the perpetrator. However, the process which begins with identifying the victim's identity that will solve the connection between the scene the perpetrators and the victims in almost every event. If the victim's identity is uncertain, the offender will become much more difficult or even impossible to achieve. However, the contribution of the different branches of forensic science is tremendous on determination of the victim's identity. In this study the significant contribution of forensic anthropometry and personal identification is exhibited in the murder investigations in two different incidents and different dates are set out in Bursa. It is examinated In the first event over the body which was found wrapped in a sack in an open area without a head, and in the second over two legs which have only parts of below the knees found in the garbage truck and the results are analyzed. The first event is being tried to clarify through the victim's fingerprints and DNA, the second is through DNA first obtained from the legs and then from the scene and murder investigations have resulted with success. Worked on for months that the murder investigation shows in many crime it would be almost impossible to prove the crime and reach the perpetrator unless forensic science provide contribution.

Keywords: Murder investigations, forensic anthropometry, personal identification, fingerprint

Psychological Problems and Negative Life Events are High Risk Factors for Ovarian Cysts/Cancer in Human

Rahim Ahmadi

BACKGROUND: Psychological problems and negative life events are among significant risk factors underlying many diseases in human. This study was exerted to determine the common risk factors for ovarian cysts/cancers occurrence in women. METHODS: 500 female patients were diagnosed who have undergone operation due to ovarian cysts/ cancer. These cases were studied using hospital documentary data and standard questionnaires and interviews (particularly for psychological measuring). The data were statistically analyzed using SPSS 18. RESULTS: Ovarian cysts/ cancer have been occurred highly at reproductive age in patients (32-36 years old). Familial history of ovarian cysts was observed in 1/3 of patients. Psychological problems (distress, anxiety, psychological problems,...) and negative life events (familial death, spouse addiction, ...) were clearly apparent in 70% of patients. CONCLUSION: Reproductive age was high risk for ovarian cysts/ cancer occurrence. Psychological problems and negative life events were significant underlying conditions for ovarian cysts/cancer occurrence in women.

Keywords: Ovarian cysts/cancer, psychological problems, negative life events

Electronic Nose

Cüneyt Dalgıç, Cenk Kılıç, Fuat İnce, Serdar Kula

Recently, a very fast development has occured at the electronic and computer technology. Electronic nose technology is one of the systems which take a big advantage in industry and human life. This technology has been developed by imitating human nose. That makes a smell and aroma analysis like human nose and gives more objective results than human nose. Electronic nose is a device containing chemical sensor array and which is able to make a sensitive measurement on the smell which can not be detected by the human nose. A electronic nose consists of four parts; sensor array, microprocessor, signal processing, power supply. Electronic noses are the devices which can detect what proportion exists each smell in the matter measured and at the same time to which classes the smell belongs, besides detecting and defining a smell. A chain of reactions occur as result of the cofrontation of the gas emitted from the pattern measured with the sensor. The measurement is made according to potential change which occurs in the environment as a result of the reactions, the resonance change in its frequency or resistance change. Electronic nose is used in any fields ranging from food industry to space studies such as detection of illnesses in medicine, fume control in fire, detection of related to smell in the decaying food such as meat and fruits.

Keywords: Electronic nose, sensor array, microprocessor, signal processing, chemical sensor.

Branching Pattern and Morphology of Internal Iliac Arterv

Nese Cetin; Seda Uugun, Aysegül Fırat, Hatice Mürvet Hayran

The aim of this study is to review the morphologic studies about internal iliac artery which is very important for anatomists, cardiovascular surgeons, gynecologists, obstetricians, urologists and radiologists. In recent years the importance of this artery has increased by usage of the new technique named embolisation in invasive operations. Embolisation technique is commonly used in aneurysm resection, endovascular stent operations and bleeding control in several intrapelvic operations. Internal iliac artery has numerous variation types. Adachi was the first researcher who identified the branching pattern types of the artery. He defined, from I to V, five types (including subgroups as Ib, IIb and IVb; there are eight types totally) of branching patterns of the artery. Since then a lot of researcher studied the anatomy of internal iliac artery by Adachi classification or modified this classification. The most commonly used method in studies is cadaveric dissection on embalmed/nonembalmed cadavers. Radiologic procedure is less preferred. However by the developing technology angio computed tomography angiography (CT angio) and magnetic resonance angiography (MR angio) has become effective non-invasive methods of viewing arteries. So that viewing procedures may be good choise for studying internal iliac artery anatomy from now on. In addition studying on radiologic images would be easier, cheaper and reliable than embalmed cadaveric approach. Because by this way there is no need to cadaver procurement. Further more studying diameters on embalmed cadavers may be misleading because of fixation. All of these studies help to simplify the morphology of internal iliac artery as "branching pattern". The succes of operations is increased and complications are reduced by the knowledge of internal iliac artery's branching pattern.

Keywords: internal iliac artery, branching pattern

Reliability and Practicability of a Manual Casting Method in Facial Reconstruction

İsmail Hızlıol, Özgür Bulut

Introduction: Positive identification of human remains may not always be successful in all forensic cases. In these instances, facial reconstruction can be used to help identify the deceased. The main purpose of forensic facial reconstruction is to recreate the individual's estimated facial appearance from the skull. Creating a facial reconstruction on cast prevents further damage and destruction on real skull and leaves the skull available for additional studies and investigations. Having casts of a skull can also be helpful by allowing access to specialists and conducting investigations at the same time. Aim: The purpose of this study is to determine the reliability and practicability of a manual casting method systematised by our laboratory in facial reconstruction studies. Materials and Methods: The materials consist of five skulls and physical replicas of each original skull produced by manual casting techniques systematised by us in our laboratory. Twentysix cranial measurements were taken from the real skulls and the physical replicas of the skulls by the some forensic anthropologist. Measurements were collected three times on each skull, and the mean values of these three measurements were used. A paired t-test was used to determine statistical differences in measurements taken from the real skulls and the physical replicas of the skulls. Correlation coefficients were calculated using the Pearson Correlation. The significant difference level was set at p < 0.05 for all statistical analyses. Results: The results of this study suggest that there is no statistically significant differences in 23 out of the 26 measurements were taken from the real skulls and the physical replicas of the skulls. While, the width of the foramen magnum (w-fm), the height of the foramen magnum (h-fm) and the basion-bregma height vary in all five skulls and replicas. Differences in the measurements of the foramen magnum were observed however, this is due to the void being filled by casting material. Conclusion: The manual casting method systemised by us is practicable and reliable in facial reconstruction.

Keywords: Forensic anthropology; facial reconstruction; duplication

A Reproducibility Assessment of Manchester Method for Forensic Facial Reconstruction

Özgür Bulut

Facial reconstruction is the building of the face onto the skull or skull replica for the purpose of the identification of skeletal remains. This paper will discuss the reproducibility assessment of Manchester method for facial reconstruction. 6 practitioners were involved in this study. All practitioners have the same educational background, M.Sc. Forensic Art, University of Dundee. 3 skulls were reconstructed two times by 2 practitioners using Manchester method. Reproducibility of this method was assessed by 3D morphometric comparison between the first and second reconstructions of each skull. Shell-to-shell deviation maps were created using 3D surface comparison software, and the deviation errors between the first and second phase reconstructed faces were measured. Results showed that 79.2%, 84.7%, and 81.6% of the three facial reconstruction surfaces in phase I had.

Keywords: Facial reconstruction; reproducibility; morphometric comparison

Comparing The Efficiency of Odontometric and Dna Based Methods for Gender Determination on Ancient Samples

Yeşim Doğan, Sema Aka

The sex is the most studied demographic future. Determination of sex from human remains is critical for both anthropology and forensic sciences. In conditions where human remains are extremely fragmented a tooth, as the most durable part of human skeleton, can provide a lot of information. Determination of sex from a tooth is possible by two different methods; odontometric and molecular analysis. The sexual dimorphism in tooth dimensions differs in every population. In two studies representing Turkiye population mesiodistal and buccolingual tooth dimensions of Ankara University Faculty of Dentisty students were measured. The sexual dimorphism rate was found 84% for mesiodistal and 77% for buccolingual dimensions. In this study 60 teeth samples from Yoncatepe (3000 years) and 50 teeth samples from Adrasan (2000 years) were measured for both mesiodistal and buccolingual dimensions and the sex results obtained from odontometric analysis were confirmed by DNA analysis to discuss the applicability of the method. 48/60 samples from Yoncatepe and 42/50 samples from Adrasan gave positive DNA typing results. As a result, different success ratios in determining sex by odontometric analysis were found in these two populations. These ratios are respectively (77,08% MD; 72,92% BL) for Yoncatepe samples and (%76,2 MD; %85,71 BL) for Adrasan samples.

Keywords: Forensic odontology, gender determination, ancient DNA

Sex Determination from Discriminant Function Analysis of Odontometric Measurements of Northwest Indian Subjects: A Forensic Anthropological Study

Sehrawat Jagmahender

Anthropologists have expert knowledge of dental morphology, dental eruption patterns, and type of dental fillings and missing/supernumerary teeth, arrangement of teeth in oral cavity, occupational dental peculiarities, traumatic conditions, shape and size of dental arcade etc., of different individuals of diverse population groups worldwide. Teeth present as best forensic samples being the hardest and well-preserved part of human body which can better withstand various traumatic and taphonomic destructions and; are also richest sources of valuable DNA. Different anatomical, developmental, chemical and morphological features of human tooth have been used for estimating different components of biological profile of their owner including sex estimation. Eight odontometric measurements were taken on 115 (70 Male, 45 Female) human molar teeth (carious but anatomically complete and sound) collected from Northwest Indian subjects who reported to various govt. and private hospitals of the tricity (i.e., Chandigarh, Panchkula and Mohali) for therapeutic purposes and dentofacial modifications of their faces. Statistically significant differences were found in the mean values of two sexes for MD and MBDL using one-way ANOVA test for comparison of means. Present study odontometrics had different values than most previous studies including Indian ones. These variations might be because of differences in methodology or the samples itself because few of them were conducted either on dental radiographs or dental casts and archaeological samples but only a very few used modern teeth of contemporary populations for odontometric analysis. The mesio-distal diameter of molar teeth (MD) was found to be the best variable using multivariate stepwise discriminant function analysis, discriminating sex of about 62% subjects (64.3% males and 57.8% females) in original as well as crossvalidation data. The discriminant function quotient (Male: -27.997; Female: -24.97) and mesio-distal molar diameter (Male: 5.336; Female: 5.025) arrived in this study can be used to construct a discriminant function equation for estimating sex (group centroids: 0.169 for males and -0.262 for females) of an unknown tooth recovered from a forensic anthropological context. Though the accuracy levels obtained in present study are not suitable for forensic threshold but the findings may have significant bearings on final identification notes.

Keywords: Forensic anthropology, sex determination, odontometrics, molar, discriminant function analysis, Northwest Indians

Palaeomerycidae from Anatolia

Serdar Mayda, T.Tanju Kaya, Kazım Halaçlar, Seval Karakütük, Melike Bilgin

The extinct Palaeomerycidae (Ampelomeryx, Tauromeryx, Palaeomeryx) are quite common representatives of European Middle Miocene faunas which made their first appereance in the late early Miocene of Eurasia, suggesting that they migration could be linked to Proboscidean Datum Events (Aiglstorfer et al., 2014). Until early Late Miocene, Palaeomerycids were spread over all Southern and Central Europe faunas, from Spain to Turkey. Contrary to European records, Palaeomerycids were generally poor represented in Turkish faunas and they are so far restricted to the Middle Miocene with the Hominoidbearing localities of Paşalar and Candir. Due to limited numbers of the fossils, both collections were attributed to Palaemomeryx sp. in related papers (Gentry, 1990; Geraads, 2003) Here, for the first time, we presented the old Palaeomerycids collections from Candir fauna which were collected during early 1970's on behalf of MTA-German Lignite project and stored in German Institutes. All these collections has never been subject to any systematic studies and preliminary taxonomic analysis supports the assignation of the Candir Palaeomerycids to *P. magnus*.

Keywords: palaeomerycidae, middle miocene, çandır

Lower Pleistocene Fauna from Denizli-Kocabas and Its **Mobility Accross Eurasia**

Serdar Mauda, Nicolas Boulbes, Vadim V. Titov, M. Cihat Alçiçek

Pleistocene mammalian localities were sparsely found in Turkey, mostly collected from fluvial and lacustrine deposits located in Western and Central Anatolia. This pattern has changed as significant portion of large mammals that were previously collected from the travertine deposits in the Denizli basin were studied on behalf of an international Joint-Research group. The multidisciplinary study combining sedimentological, paleontological and paleoanthropological observations together with cosmogenic nuclide concentration and paleomagnetic measurements has provided an age of 1.1 my to 1.3 my, making it one of the best-dated deposits of Turkey. The faunal assemblage is relatively diverse and includes: Mammuthus meridionalis meridionalis, Equus cf. altidens s.l., E. cf. apolloniensis, Stephanorhinus cf. etruscus, Metacervoceros rhenanus, Cervalces (Libralces) ex gr. minor-gallicus and Palaeotragus sp. In addition to this, the cervid fossils of the fauna provided crucial new data in ungulate palaeontology for having the first record of this group in Anatolia. Biostratigraphic data indicate that the association resembles those from the late Villafranchian (MNO 19) of Southern Europe, mostly with Greece and partly with Eastern Europe and Western Asia that are older than 1.0 Ma since the giraffe Palaeotragus and the small elk which is closed to Cervalces (Libralces) ex. gr. minor-gallicus are unknown later than 1,2 My in aforementioned regions. Especially, the size and shape of the giraffe horn from Denizli is similar to those of Villafranchian forms of subfamily Palaeotraginae, attributable to Mitilanotherium inexspectatum (Southern Europe, South Eastern Europe, Transcaucasia) or Palaeotragus (Yuorlovia) priasovicus (the Sea of Azov Region, Transcaucasia) although Athanassiou (2014) regarded Mitilanotherium (together with Macedonitherium and Sogdianotherium) as a junior synonym of Palaeotragus. Besides these, the dental characters of the Denizli Mammuthus is similar to the type species which is typical for early-middle late Villafranchian forms. This research is supported by bilateral cooperation of TUBITAK-RFBR with grant number 111Y192.

Keywords: Late Villafranchian; early pleistocene; Turkey; Denizli Basin; travertines

First Hominins in Georgia, Southern Caucasus

Ana Mgeladze

The Southern Caucasus was occupied by human groups throughout the Pleistocene from 1.77 Ma. Dmanisi is the oldest site outside of Africa that records hominin occupations as well as the dispersal of hominins in Europe and Asia. The site yielded large number of artefacts from several periods of human occupation. This lithic assemblage gives insights into the hominin behaviour at 1.7-1.8 Ma in Eurasia. Dmanisi hominins exploited local rocks derived from either nearby riverbeds or outcrops, and petrographic study provided with data on patterns of stone procurement. The Dmanisi lithic assemblage is comparable to Oldowan sites in Africa in terms of reduction sequence, organisation of the removals, platform types, and the lack of retouched flakes. A long chronological gap currently separates this earliest assemblage from the first evidence of (Acheulean-type) bifacial technology, as assemblages with bifaces do not seem to be older than 500 ka. Acheulean sites are frequent on the southern edge of the Great Caucasus but are absent on the northern side. Most of these are badly or non-dated open-air sites. There are, however, three cave sites in Georgia with archaeological sequences comprising lithic assemblages related to the Acheulean: Koudaro I, III and Tsona, located on the Great Caucasus. The altitude of these sites ranges from 1 600 to 2 200 m (a.s.l.), indicating occupations in a high mountainous context. Acheulean groups occupied high altitudes during temperate periods and raw material procurement suggests hominin mobility between the low plateaus and the Caucasian valleys. Moreover, comparisons between Levantine and Georgian series suggest that the southern flanks of the Great Caucasus mountain range gave rise to a local evolution of Acheulean features with Levantine influences.

Keywords: Georgia, early pleistocene, dmanisi, Acheulean, koudaro I, tsona, technical behaviours

Corakyerler Locality- The Center of the Youngest Hominoids of Anatolia

Ayla Sevim Erol, Alper Yener Yavuz, Serdar Mayda

Corakverler vertebrate fossil locality, which is in the Central Anatolia Region of Turkey, is located in the boundaries of Çankırı province. Corakyerler vertebrate fossil locality, whose altitude is about 745 metres, is between MN11-12 zones (about 8-7 million years) according to both faunal and magnetostratigrafic dating. The locality, which is emerged with the low tide of Tetis Sea and located on Çankırı-Çorum basin, was first covered with forestland but then turned to semi savannah with the effect of dry climate in the late Miocene era. The fossils of the animals, which are extinct in Cankırı today but were alive in Çorakyerler in the late Miocene, are found in the excavations. As a result of the excavations held in the locality for more than ten years time, there found more than 3000 remarkable fossils and all of their restorations and conservations are done. Corakyerler, where so many different species of Late Miocene Era from Artiodactyla order to Perissodactyla order, from carnivora to primate order lived, is a very significant locality all around the world especially in the illumination of Anatolia paleoecology and paleofauna and the migration of mammals. In the excavations held since 2001, teeth and maxilla pieces are found belonging to five different individuals. The firstly found palate belongs to a male. The second finding, upper third molar, belongs to an adult individual. The third finding is a mandibula corpus that is thought to belong to a young male (juvenile). The fourth one is a mandibula piece belonging to a female. The fifth finding is a central incisive that also belongs to an adult individual. When CO 205 numbered male individual and CO 710 numbered adult female individual are examined both morphologically and metrically, the probability of the existence of two different genus in Çorakyerler is thought. We are in the opinion that findings of Çorakyerler hominoidea, which were recorded as Ouranopithecus turkae, should be discussed and named once again because teeth on the mandibula of CO 710 numbered female individual are quite different from the ones on CO 205 both morphologically and dimensionally.

Keywords: Corakverler, late Miocene, paleofauna

Paleodiet in Minnetpinari Population

Mustafa Tolga Cırak, Ayla Sevim Erol, Ali Akın Akyol

Minnetpınarı excavation region is located in Başdoğan Village, İnekçiler Neighborhood, Minnetpinari Region which is 90 km. away from the province; Kahramanmaraş and 5 km. away from the district; Andırın, whereas excavation field is located 2, 5-3 km. east of Minnetpinari region. 58 pieces of the skeletons found from totally 65 graves in 2003-2004 and trace elements and macro elements of the soil obtained from the region have been examined. Determining Minnetpinari population's strontium / calcium (Sr/Ca) rates and bringing out the vegetable and animal nutrition model have been also included within significant purposes of this research. In Minnetpinari Middle Ages population, Sr/Ca rate was lower in men compared to women. High rate of Sr/Ca has been showing us the vegetable nutrition while the declining rate has been pointing out the tendency toward meat sources. Sr /Ca rate which has been 1,05 in men has been found as 1,17 in women. Therefore it was said that women rather based on vegetable nutrition.

Keywords: Minnetpinari, elemental analysis, Sr/Ca, paleodiet

A Relatively New Method in Paleoanthropology: **Geometric Morphometry**

Ahmet İhsan Aytek

Geometric morphometry has started to play an important role in Paleoanthropology. Almost all new discoveries are examined with this method, and also old paleoanthropological material is re-examined in the light of this method. After the first application of morphometry studies, morphometrics has undergone a lot of changes, and a transition from traditional morphometry to geometric morphometry can be described. Traditional morphometry studies are based on measurement of lengths, depths and widths of structures, distances between landmarks, angles or ratios, and analysis of these measures with uni-, bi- and multi-variate statistical procedures. Linear, areal or volumetric variables are analysed. These measurements do not yield all information about shape and therefore a new method has started to be used, geometric morphometrics. The new method so-called "Geometric Morphometry" can be described as: the analysis of all geometric information of the data which are derived from Cartesian coordinates of landmarks (Slice 2007). In this method, data of shape are obtained with landmarks. Landmarks are the discrete anatomical points which can be repeatedly found in all studied material, in other words they are homologous. These points can be found reliably and repeatedly in different measurements. The configuration of a set of landmarks generates a "form", which we mention it in the explanation of "shape" (O'Higgins 2000). Form contains all information about size and shape together. If these two methods are compared, geometric morphometry applications show some advantages against traditional morphometry. Firstly, measurements in traditional morphometry can be limited, and therefore cannot cover all information between the landmarks. But in the coordinate system, all the information of distances between the landmarks is captured, which cannot captured in traditional morphometry. This more complete information provides better results but also a better visualization possibility in geometric morphometry.

Keywords: Morhpometrics, landmark, shape, size, form

A Preliminary Study of Megyesi's Formula for **Estimating Postmortem Interval from Accumulated** Degree Days in Anatolia Climate

Semih Bol, Özgür Bulut

Background: Human body is exposed to different modifications after death. Forensic Taphonomy, one of the sub-disciplines of Forensic Anthropology, aspires to understand post-mortem changes, reconstructs the events related to the death and estimates the post mortem interval. Estimation of the postmortem interval plays an important role on identification of the unidentified bodies, searching of the missing persons and solving of the forensic cases. In order to estimate the post mortem interval properly, applied research studies need to be done. Purpose: This project aims to find out taphonomic process and factors affecting all phases of decomposition. In addition, it aims to test the practicability of the "accumulated degree days" and Megyesi's formula in estimation of the post mortem interval in Anatolia summer climate. Materials and Method: A preliminary of quantitative variables, ADD and Megyesi's formula were conducted using three pig carcases, which weighed between 40 and 52 kg. Temperature was acquired from an onsite data logger and the local weather station; differences between these two sources were not statistically significant. Results and Evaluation: The study produced satisfactory results as two pig of 3 fell within the 95% confidence interval when using the Megyesi's formulae in the prediction of PMI in Anatolia. However, validation of this method for Anatolia climatic conditions needs be tested on large scaled sample on each geographic region.

Keywords: Forensic anthropology, forensic taphonomy, post mortem interval

The Role of Soil in the Decay Phase

Murat Mert

Soil has a very complex structure in terms of the mineralogical, chemical, biological and physical properties. Soil which igneous, metamorphic and sedimentary rocks that are formed by processes, atmospheric effects of fragmentation with inorganic and organic materials formed as a result of incorporating is the basic building block. The decay of buried corpses after death: climate, entomological activation, humidity of ambient, and ph, the elemental composition, the mineralogy of buried of the soil, and briefly the geology of the environment is very important. The structure of the soil in the burial area, where is dominated by the clays of the saturated with water, the decay is very slow but if in the field of burial is rich of iron and sulfur elements, the decay is very fast. The importance of soil structure in the determination of the time of burial and toxicological investigations are emphasized in a major publications. In this study, soil types of the affect the decay of buried corpses will be described with sample cases.

Keywords: Forensic soil, mineralogy, time fo bruial

The Use of Underground Wearing Out Features of Organic and Inorganic Materials in Forensic **Taphonomy**

Fatih Şahin, Hüseyin Bülent Üner, A.Sadi Çağdır, Deniz Oğuzhan Melez, İpek Esen Melez

One of the main aims of Forensic Taphonomy is to determine the postmortem interval. This is done by analyzing organic materials. However, inorganic materials can be found along with organic materials. Therefore, our study macroscopically evaluated the time dependent underground wearing out features of inorganic objects that have a high probability of being found with organic materials. The type of soil used for the study had been determined before starting the burying process and the city of Istanbul was chosen for the climate conditions. It was determined that cotton fabrics were worn out under the soil quickly and that organic woolen cloths were more resistant to wearing out. Samples of loosely knitted fabric were worn out by the seventh and 10th months, while densely woven denim became inconvenient to be evaluated before the end of the 16th month. However, it was determined that woolen fabrics could remain intact, with little material loss, until the 19th month. When original leather samples were kept under the soil for 19 months, changes in color and decrease in fiber structure were observed; however, no material loss occurred. It was determined that material loss of the 5 TL banknote started from the first month. However, there was no material loss at the inked sections until the 19th month. The security strip was intact until the 19th month due to its polyurethane-metal structure. In samples of polyester, polyurethane and polystyrene, no observable changes were determined until the 19th month. In all metal samples, an increase in wearing out was determined that was directly proportional to time. We believe that our study -with its constraints- is an important contribution to the scientific literature while future studies can be carried out for more precise results in PMI determination with different objects and different climate and/or soil conditions.

Keywords: Postmortem interval, forensic taphonomy, biodegradation

Detection of Heroin Metabolites in Early and Late Postmortem Periods; Usability of Entomotoxicology

Yusuf Özer, M.Feyzi Şahin, Oya Yeter, Ersin Karapazarlıoğlu, Yalçın Büyük

The objective in postmortem toxicological examination is determined whether any chemical substances caused or contributed to death. Examination consists of detecting the presence of chemical substances in samples, using confirmatory tests and determining the amount of chemical substances in suitable samples. Commonly used materials for toxicological examination are blood, urine, vitreous fluid and bile fluid. When body fluids is contaminated or no presence depending on decomposition internal organ tissues may be use as an alternative samples. In advanced decomposed bodies that any tissue couldn't be determined Entomological Samples (ES) (larvae, prepupae, pupae) also may be use as an alternative samples. In many studies toxicological examinations had accomplished from ES, and in most of them a significant relationship was found between the ratios of detected substances in ES and tissue samples (TS). In this study, it was aimed to determination value of quantitative of heroin and metabolites (6-MAM, morphine) and to analyse TS obtained in autopsy performed immediately after death and in autopsy performed after 15 days of decomposition and ES collected from carcasses during decomposition by LC-MSMS. 6 of 9 rabbits used in this study is designed as experimental group, 3 of them is designed as control group. 6 rabbits were administered increasing dosages of pure heroin diluted with distilled water via ear vein. Then blood and TS are taken with small incisions. Each of rabbits was allowed to decomposition in cages. Environmental and body temperature of rabbits (rectally) were measured with dataloggers. ES were collected from carcasses at certain intervals during the 15 days of decomposition. At the end of 15 days all of carcasses were performed autopsies again and TS were taken. In conclusion we believe that analysis of ES with TS taken for toxicology in advanced decomposed body during autopsy will provide benefits to be able to comment in terms of cause of death.

Keywords: Heroin, intoxication, rabbit, entomotoxicology, tissue

Importance of the Methods Used During Excavation of **Skeletonized Remains**

Özge Ünlütürk, M. Feyzi Şahin

Examination of skeletonized remains is an entire process that includes the removal, transfer, and examination of remains in the laboratory, and in order to file a proper report, it is crucial to treat each stage of this process meticulously. Besides the changes on bones caused by environmental factors such as climate conditions, vegetation and animal interference, incorrect acts taken especially while revealing and collecting bones in the scene cause various fractures and defects on bony tissue. Careful evaluation of fractured or defected surfaces during examination provides information as to the cause of the lesion. However, these lesions which occur during the excavation or transfer of bones cause several problems in determination of the cause of death. The aim of this presentation is to emphasize the importance of the methods used in the excavation and transfer of the bones for enlightening forensic cases.

Keywords: Cause of lesion, skeletonized remains, excavation, transfer, methods

Dental Treatments In Ancient Populations

Pelin Taş, Ilgın Cansu Kamay

Skeletons and bones, which are found at archaeological excavations, set light to the history of human populations. Teeth are the most resistant tissues of the body against degradation, burning or other physical adverse conditions. Dental patologies such as caries, abscesses, abrasions and periodontal diseases have existed since the first humans, and the human civilisations have tried to find ways to cope with the pain which is caused by the dental diseases. The oldest ancient dental treatment we know was discovered in Pakistan, Mehrgahr Neolithic settlement, dating back to 9000 years ago, and caries removal from the molar teeth was found out. Cures and recipes written against teeth grinding, for teeth cleaning and about dental caries was found on the tablets those belong to Sumerian, Babylonian and Assyrian Civilisations; however, predominantly they were herbal treatments or cures which were made on animistic beliefs. In the 3000s BC in Egypt civilization, the development in the medicine field helped many specialists on dental treatments to come out, such as drainage canals were formed by making holes on mandible for curing the abscesses. Immobilisation of the mobil teeth with a golden wire (splinting), was another method used for treatment. This method was also used in Phoenicia in 5th century B.C. and in Etruscan Civilisation in 8-7th centuries B.C. Hippocrates started the scientific period in medicine and defined ethical rules which are still valid today for the medical attendants. His ways of treatment became models also to the civilisations in Anatolia such as Hittites. As for Romans, they placed medicaments in teeth by drilling the aching ones, pulled out the shaking teeth, did scaling. Wooden dentures and application of golden bridges could also be seen.

Keywords: Dental treatments, ancient civilisations, archaeology, paleostomathology

Oral Health in the Human Skeletons of Tokat (Niksar)

Pınar Gözlük Kırmızıoğlu, Nevzat Torun

The materials of this study were composed of jaws and teeth excavated from Tokat (Niksar) dated to Post Medieval period during the 2008 field season. In this study, dental remains (teeth and jaws) were studied in order to estimate the oral health status and nutrients, dietary customs, food preparation techniques and life styles of the Niksar society and to compare the these data with those from the other ancient Anatolian societies to reveal the similarities and the differences between them. In this study 88 adult jaws (31 maxilla, 57 mandible), 23 deciduous teeth, 267 permanent teeth were examined in terms of dental pathology. Of the permanent teeth, 10 belong to children, 115 to male, 45 to female, 30 to undefined adults. In addition, 67 teeth were studied as isolated. The rates of dental attrition, dental caries, hypoplasia, dental calculus, abscess, alveolar bone loss and antemortem tooth loss were calculated as 98,95%, 48,95%, 47,37%, 49,47%, 7,85%, 48,86% and 14,91% respectively in the permanent teeth. When the Niksar skeletal society was compared with the other contemporary skeletal populations, it was observed that the rates of dental caries, dental calculus and abscess were higher than those of them. Acording to the results, the inhabitans of Niksar society could be told as an agricultural life style.

Keywords: Tokat (Niksar), dental pathology, oral health, ancient Anatolian population

Dental Wear In The Population Of Iasos (Byzantine Period)

Nalan Damla Yılmaz Usta

The rate and pattern of wear observed on teeth can display quality of other different substances in addition to food contacting with teeth in mouth, and also illuminate some cultural patterns related to habit of feeding and life style of archaic people. The aim of this study is to demonstrate wear in teeth of Iasos population belonging to Byzantine period and to investigate the possible causes of these wear. Belonging to 143 skeletal individuals 1374 permanent teeth and 117 decidious teeth dated to Byzantine period were excavated between 1979 and 1987 from the Iasos Archaeological site. All teeth were examined morphologycally and analyzed by Brothwell's wear scale and Bouville and others' wear scale. According to these data, it was revealed the possible habit of feeding of Iasos population, and also it was observed different wear forms such as cultural deformation and erosion at some teeth.

Keywords: Dental wear, dental anthropology, byzantine period.

Ancient City Of Dara (Mardin) Late Roman Skeletion **Population Teeth Health**

Ausegül Sarbak

Ancient City of Dara is located in 30 km southeast side of Mardin, west side of Nisibis-Nusaybin, north side of Amuda in side of near Syrian. The material forming the subject of this study were obtained from the excavation in Ancient city of Dara between the years 2010-2011. Ancient city of Dara population by examining the teeth of the dental health of the population in terms of paleopathology, to learn about nutrition and socioeconomic structure and the Ancient city of Dara to determine its place among the other ancient Anatolian society in terms of dental pathology of the populations is the aim of the study. For this purpose, belonging to Dara ancient city of 1521 teeth, examined in terms of pathological formations such as premortem tooth loss, wear, tooth decay, hipoplasia, dental caries, abscess, loss of alveolar. Pathological formation on teeth that were found according to age and sexes are discussed separately. Also the data obtained were statistically evaluated. Ancient city of Dara populations have moderate wear of the teeth, suggesting they undergo a specific treatment before consuming food from people they soften after cooking make the grind flour. Tartar and tooth decay rate is higher in the ancient city of Dara Population. In many different studies, with the transition to agriculture, it was detected that an increase in the formation of tartar and caries prevalence. When analyzed in terms of teeth pathology of Ancient city of Dara place among other Anatolian populations, fed with hard and fibrous foods showed some differences in terms of teeth wear of Neolithic population, is close to grinding flour and fed with nutrients that make softer foods Hellenistic, Roman, Byzantine and Medieval. In terms of dental caries, loss of alveolar, abscess shows similar characteristics to populations with a high consumption of carbohydrates. As a result, ancient city of Dara populations shows similar characteristics to other agricultural populations with the contemporary in terms of dental health.

Keywords: Dara, late roman term, teeth health, paleopathology

Health and Disease in Byzantine Anatolia: Implications from the Herakleia Perinthos Population

F. Arzu Demirel

Ancient city of Herakleia Perinthos is situated within the Marmara Ereğlisi district of province of Tekirdağ. Excavations under the supervision of Tekirdağ Museum in Marmara Ereğlisi yielded a cemetery area datable to 9th to up to the end of 13th century. Skeletal remains of 109 individuals from 55 tombs were analysed to reveal the general profile and health status of the population. Among 109 individuals 66% (72 individuals) are adults and the subadults comprise the 34% (37 individuals) of the population. Osteological data obtained from the human skeletal remains provide wide range of information such as age and sex distributions, as well as the health status of the ancient populations which in turn offer information about the dietary habits and lifestyles in the past. The results of this study have shown that the ancient inhabitants of Herakleia Perinthos were experiencing pressure of insufficient food supply and poor hygienic conditions. This presentation aims to provide insight into the health status of the ancient inhabitants of the area, along with the general evaluation of the Byzantine populations in Anatolia.

Keywords: Herakleia perinthos, Byzantine populations, Byzantine Anatolia, paleopathology

Trauma, Osteoarthritis, Schmorl's Nodes and Periosteal Reactions in a Skeletal Sample from Hellenistic and Roman Boğazkale/Hattuša: Implications About Lifestyle

Handan Üstündağ

The sample studied here is a Hellenistic and Roman population from Boğazköy, which is well known as the Hittite capital Hattuša. It is located near modern Corum, in north-central Anatolia. The skeletal remains were excavated from a cemetery located at Tempel I and Südareal in Lower city between 1967 and 1977, and later at 2009. This presentation focuses on the incidence of trauma, osteoarthritis, Schmorl's nodes and periosteal reactions in the sample, in conjunction with age at death and sex. The purpose of this study is to provide insights into environmental stress and lifestyle at Boğazköy during Hellenistic and Roman periods. Trauma describes a wound or injury caused by an external source. Lifestyle, living environment, occupation, and interpersonal violence are important factors on the incidence of trauma in a population. Osteoarthritis means degenerative alterations of the joints influenced by many causes including intense physical activity. Schmorl's nodes are vertical herniations of intervertebral disc tissue into the neighboring vertebral body endplates. They may occur due to a trauma or degenerative changes associated with ordinary stress. Periosteal reactions can be defined as inflammation of the bone caused by infection, trauma, and metabolic or circulatory diseases. Relatively high prevalence of trauma, osteoarthritis, Schmorl's nodes and periosteal reactions were recorded in the sample. This may reflect many factors related to natural and social environment. Males were more affected than females of any of these conditions indicating a possible gendered division of the population.

Keywords: Trauma, osteoarthritis, schmorl's nodes, periostitis

Trauma on Skeletions of Giresun Island and Kütahva/Tokul

Asuman Cırak, Seda Karagöz Arıhan, Cem Erkman, Emel Acar

Studies dealing with health analysis of ancient Anatolian populations are among important study areas of Paleoanthropological science. Many diseases left their traces on bones in time. Trauma is one of them. Traumas are paleopathological cases which are formed with external mechanical impact. Disruption of bone integrity or detoriation of its structure are their characteristics. 7 cases of trauma were observed on 127 individuals which were dated back to IXth and XIIth centuries and excavated from Giresun Island between 2011 - 2012 years. Those fractures were observed on femur, ulna and tibia bones as fractures due to fall. Our other study population is Kütahya-Tokul. 4 cases of trauma were observed on 49 individuals which were dated back to Xth-XIth centuries. Those fractures were observed mostly on skull and as 2 different types of trauma. One of them is depression fracture and the other is trauma formed by sharp objects. Reasons for traumas formed with sharp objects may be because of struggles within population or among populations or because of individual accidents. In addition, to them traumas may be caused by accidents occurred during hard work or agricultural activities.

Keywords: Giresun Island, tokul, paleopathology, trauma, fracture

INTERNATIONAL CONGRESS OF ANTHROPOLOGICAL SCIENCES



ORAL PRESENTATIONS <u>HALL B</u>

Aging in Another Country: Old Turkish Migrants in London

Nilüfer Korkmaz Yaylagül

Introduction: Addressing only the last period of life in aging studies limits the assessment of the problems of old age. Aging studies require to consider the life course and surrounding social and cultural conditions in order to have a holistic approach. Anthropology is one of the field where this approach can be used in aging studies. Old age is a period where individuals can be physically and psychologically vulnerable. Migration as another factor creates an important split in the life history of the individual. Changing physical and social life conditions affect migrants life and create disadvantages in access to recources. The aim of this research is to evaluate the healh situation and life conditions of older Turkish refugees in cultural context. Methods: Being migrant and old are considered as disadvantaged situations in many researches. In this study, the life course of older refugees and health conditions are evaluated under the light of cumulative disadvantages and in life course context. 20 semi-structured interviews with older Turkish refugees and informal interviews with health professionals and the leaders of community centers have been conducted in London. The interviews were transcribed and analized using descriptive method. Results: The interviewees have generally poor health conditions and suffered from multiple diseases. Their cultural and social conditions affect the use of health services negatively. They use health services and other services in the host country but indirect ways. Conclusion: The research reveals that the migration histories and migration process of older Turkish refugees affected their health. The older refugees developed new (coping) strategies in the host country and these strategies have created a new lifestyle.

Keywords: health, older refugees, cumulative inequalities

Disease Perception among Mothers of Patients with Phenylketonuria

Özge Burgut

Research made use of the participant-observation method, together with formal and informal interviews at Istanbul PKU Family Association, the Metabolic Clinic of Adana Balcalı Hospital in Turkey and Istanbul Çapa Hospital. Interviews were carried out with mothers of PKU patients in various cities. The research purpose was to highlight mothers' understanding of their children's condition in terms of disease perception, including observations from the formal and informal interviews. Research aim was to provide mothers' view towards the disease, explaining how they respond to their situation in order to fashion meaning. Beliefs and expectations tend to impact patients' and families' life qualities, together with their social and cultural statuses in terms of social roles and responsibilities in the society as active individuals and this at times creates a placebo effect. Harmony of mind, body and spirit is crucial. Meaningmaking mechanisms, together with perception and its determinants, connections and relations between them are noted as the main determinants of disease perception. Difference between eastern and western region of Turkey has been noted when comparing determinants of disease perception: A difference in social habitus, structural differences in the medical systems issues of structural violence, socio-economic levels, gender discrimination, diversity of patient cultural and ethnic background, the need to grasp patient needs and importance of right approach, mistrust in medicine, ability to acknowledge and respect patient and family subjectivities, human capital, income deficiencies- have been noted. Notions of food and culture, connections and relations between the two have been investigated and problematized within the framework of the research objective.

Keywords: Disease perception; meaning-making; food and culture; Anthropology of Health

Traditional Belief and Practices That Determine the Sex of the Baby before Pragnancy and Estimate during Pragnancy in Isparta Area

Nalan Damla Yılmaz Usta, Hilal Yakut İpekoğlu

The purpose of the study is identified traditional belief and practices that determine the sex of the baby before pragnancy and estimate during pragnancy in Isparta area and assessed similarities and differences the belief and practices in other regions. To this end, is prepared interview form consist of open-ended questions. It is interviewed 23 females who have treated in Suleyman Demirel University, Faculty of Medicine, Department of Obstetrics and Gynecology about traditional methods of sex determination before pragnancy and sex estimation during pragnancy. The information obtained in these negotiations is categorized and compared with traditional medicine practice in various regions of Anatolia. It is determined that some of traditional practices used in Isparta area are similar to the other regions and common belief and practices but some practices are applied only this area.

Keywords: Traditional, Practive, Sex Determination, Sex Estimation

The Rationality of a Tradition: "Female Circumcision"

Ause Yıldırım

The female circumcision dated to 2500 years ago is known that being applied in forty countries today. Although the female circumcision is historically intense in North Africa and sub-Saharan Africa region, due to global migration it occasionally began to take place in the agenda of Western states and Turkey as a migratory route. However, it can be stated that a serious interest in female circumcision applied in a large geographic area on different religious and ethnic groups started to emerge in the last decades. Furthermore the date feminists handling the issue is not earlier than the 1970s. The discussions of the studies focusing on female circumcision seriously since the 1990s is carried out through two basical arguments: the two opposite sides consisting of universalism and cultural relativism. The ones emphasizing universalism are pointing out that circumcision, behind "tradition" armor, is serving the continuity of secondary and dependent role of women by health problems usually causing the death of women and girls The ones approaching female circumcision within the scope of cultural relativity, draw attention to the cultural context by stating that the application in fact is a pubescence ceremony. This study, no doubt influenced by the above-mentioned discussion, will basically consist of a tradition perusal regarding the "female circumcision" in Somalians sample with refugee status in Burdur. Following the data based on the field work, the dynamics turning this application into "tradition" will be discussed by including the description of female circumcision amongst Somalians refugees, covering religion, the control of women's sexuality and cultural myth.

Keywords: Female, circumcision, Somalian, cultural relativism

"Dancing Across Gender Boundaries - Queer Experiences in Bharatanatvam Abhinava

Sara Azzarelli

In the Indian classical dance Bharatanatyam, dancers use their body as a means to tell stories. In particular, Abhinaya, the narrative component of this choreutic form, provides performers with codified series of bodily attitudes and gestures through which they become any character of their narrations, moving between age, class and gender differences. While this play of impersonations is largely considered, among dancers and observes, as a matter of acting, my ethnographic work explores the experiences of a minority of social actors who perceive these performances as meaningful enactment of everyday reality. For these dancers, members of the LGBT (Lesbian, Gay, Bisexual, Transgender) community of Chennai (Tamil Nadu, South India), the impersonation of multiple characters happening in Abhinaya becomes a modality of crossing the cultural boundaries of gender and sexuality, of exploring and expressing identities and behaviours which are socially perceived as "non-normative". My ethnographic narration attempts to tell the stories of their non-mainstream experiences, approaching Abhinaya as a legitimate space where these dancers can transcend cultural margins of acceptability, as a legitimate space of agency for the performance of the illicit.

Keywords: Bharatanatyam, Abhinaya, Gender, Agency, South India

Association between Body Management and Social Acceptance in University Students in Zanjan-Iran

Alie Shekarbeigi

Background: Emergence of consumerist culture in developing countries, in particular, Iran has damaging effects on life style of men and women. Physical appearance and body management has been increasingly mulled over in the result of emergence consumerism culture. The main aim of present study was to determine the relationship between body management and the social acceptance of body in students of Zanjan province universities in Iran. Method: 370 students of Azad university and Payam Noor university in Zanjan Province in Iran were selected using multistage simple random cluster sampling and surveyed using questionnaire designed by researcher. Theoretically, the research was based on ideas of Erving Goffman, Bourdiu, Giddens, and Exchange Theory. The data were analyzed using Chi-square or t-student test. Results: The results showed that the average of body management was 83.46% for females and 72.66% for males, indicating significant higher rate of body management in females than males.

Keywords: Body Management, Social Acceptance, Iran

What is a Mother in Urbanised Turkish Context?: Some **Narratives on Maternity**

Cağlar Enneli

It is well known fact that unlike fatherhood, motherhood is based on naturally observable process of gestation. That means while motherhood is open to outside observations on the alterations of a mother's body, fatherhood does not involve any natural evidence, apart from the marriage as a kind of guaranteeing organisation of it, and more or less related to prediction, of whom the father is. For that reason several ethnographic cases lead anthropological theory to make division between pater as a socially recognised father and genitor as a father that is socially recognised to be the agent of impregnation. The anthropological theory, however, seriously lacks conceptualisation of motherhood with the distinction between mater, which is socially recognised mother, and genetrix, which is a mother experiencing pregnancy. Motherhood thought to be unproblematic in anthropological literature also leads the conceptualisation of supposedly natural relationship between the mother and her child. Maternity and paternity are, thus, subjects to significantly different assumptions on gender and nature. However, both developments in reproductive technologies that make possible the separation of ovulation and gestation in different bodies and inspiration of feminist approach noting that genetrix is also a cultural construct as much as genitor is on anthropological theory of kinship lead motherhood to be considered much more far away from a given fact than cultural construction. I will attempt to demonstrate in this paper how nature-culture dichotomy and social assumptions of gender provide justifications to motherhood in urbanised setting in Ankara. Preliminary analysis of data taken from the fieldwork in 2014 amongst women, categorised as unmarried, married without children and married with children, will provide narrations related to motherhood and be opened for further discussions aiding improvement in analysis.

Keywords: Maternity, Paternity, Nature-Culture Dichotomy

Transformations in Structure and Practecies in Northern Israeli Bedouin Families

Adel Ayada

It is very important to research transformations in social structure and in family practices of the Bedouins of Northern Israel, since this ethnic and Muslim community is experiencing multiple and rapid changes related to phenomena often described as economic and social modernization. In this sense, and like any other society affected by this kind of transformation, this community is paying a certain price. From the perspective of traditionalists, it is losing its uniqueness as a minority with its own values and laws, and strong relationships among the family members are weakening.

Keywords: kinship, gender role, modernization

"We Came and We Left, and We Took Nothing From Them": Oatar's Oral Folktale Tradition and the My **Identity, My Story Project**

Autumn Watts

Qatar is a small nation in the midst of explosive transformation. Its vast wealth and ambitions for the global stage have propelled swift modernization; yet in the astonishing pace of development, Qatar's past remains vividly inscribed in the diverse oral traditions of families descended from pearl divers, traders, and nomads with complex tribal histories. Rapid lifestyle changes, however, have led to a sharp decline in the oral storytelling tradition, as a dwindling number of folktales are now retold or remembered, disappearing along with the tribal dialects they often transmit. Despite a recent proliferation of government-funded efforts to preserve the intangible cultural heritage of Qatar on a national level, the oral folktale tradition has received comparatively little attention. In fall 2012, the author of this paper partnered with a small governmental organization to create the "My Identity, My Story" project: an outreach workshop series to illuminate and document Qatar's oral storytelling tradition, with an emphasis on community collaboration. Over six weeks, the project brought local storytellers, folklorists, and scholars together in Doha to deliver a series of free public talks and training sessions for Qatari youth, mentoring the students as they explored and documented their own folktale heritage through a research method that protected the rights of the storytellers and respected local customs. By partnering directly with the community, the project sought to help protect an endangered tradition and support an emerging generation of researchers and storytellers. This paper describes the Qatari oral folktale tradition and explores the "My Identity, My Story" project's successes, challenges, and future possible directions as a model for integrating government-sponsored initiatives with a communitycentered approach to heritage preservation.

Keywords: Qatar, folktale, oral tradition, intangible heritage, preservation

Music & Meaning: The Lives behind the Sounds of Aşık **Veysel's Folk Songs**

Sibel Karakelle

Turkey prides itself in its ethnic diversity (Smith, 2005). Each region of the country has its own cultural and social differences. Accordingly, values and norms vary with each region. The type of music that is listened to in each region simply demonstrates the variety of 11 musical influences that are present in the social life of that region. For example, in the East, people place greater value on folk music, and they adore performing in public and at social gatherings. Their music is usually improvised and is used to communicate and share opinions on a topic, which is often based on the social or political issues of Turkey. Inherent within this music is the social context in which the daily lives of the musicians take place. Individuals in the Eastern part of Turkey adhere to the traditional values and norms of their community (Karakelle, 2004; Kaynar, 1996; Özbek, 1994). By comparison, in the Western region of Turkey both classical and pop music are important in the people's daily life whereas in the South pop music is more favored than classical music. This is due to the large number of the youth in this region (Erol, 2002; Karakelle, 2004; Özbek, 1991; Solmaz, 1996). People in the Northern region of Turkey are similar to their neighbors in the East, as they prefer to listen to their version of folkloric music, which is reasonably different from the folkloric music of the East previously described (Karakelle, 2004). The type of music associated with daily life in Turkey simply illustrates the various social contexts of each region of the country. The purpose of the paper is to pursue how music of Aşık Veysel continues to be an integral part of not only cultural (local or regional) but also national identity. I look more explicitly at the " Music & Meaning: The Lives Behind the Sounds of Aşık Veysel's Folk Songs" by examining four instances where music became significant to symbolize events of life itself.

Keywords: Cultural identity, cultural relativeness, folk songs, meaning, music

Flow in the Mountains: An Anthropological Analysis of Horon Performance in the Harvest Feast

Sebnem Özdemir

This research focuses on the habitual performance of Horon - a ruraloriginated collective movement practice particular to the Eastern Black Sea Region in Turkey - in the context of a special type of traditional harvest feast, which is widely practiced in the region. The feast in question, called in Turkish Otçu Göçü Şenliği (Harvester's Migration Feast), is originally based on the bygone seasonal cycle of agricultural work and animal husbandry, which included an annual postharvest journey on foot to high plateaus within the mountains. These harvest feasts, in which Horon has always been a dominant activity, are still quite popular and vigorous, although today they are considered as a leisure activity and/or a traditional custom, rather than an unspoken obligation of the agricultural community. The discussion in this study is based on the anthropological material collected at İzmiş Harvest Feast, which took place at the county of Beşikdüzü, the city of Trabzon on August 25th, 2013. Although these feasts seem to bear many characteristics of calendrical rites and the Horon is rated among prominent folk dance genres of the country, the emic verb used by the actual performers to denote their activity is neither ritual nor dance, but play. This research aims to look at the current realisation of the Horon performance in the harvest feast through the lens of performance studies, which interpret play and ritual not in pure opposition, but in close collaboration in creating a performance. It interprets the Horon performance as a playful and at the same time ritualistic cultural instrument that offers its participants a collective experience of "flow", which results from channelling the energy to a physical activity in such a concentrated manner so that there emerges a sense of great joy.

Keywords: Horon, performance, ritual, play, flow experience

Begging Styles as Representation of Being Fallen and Escape-chase Game of Beggars with Municipal Constabulary

Meriç Kükrer

This study mentions how people begging in Ankara interrelate with society and municipal constabulary. The issue is turned into an object of research in context of the place "begging" and "beggars" point out in our semantic world, qualifications of interrelation of beggar- society- municipal constabulary are discussed in the way of social anthropology. By making an analysis beyond the general opinion about begging, the aim of this research is to show begging is not being in the gravy but has its own life world. In this context, by analyzing interrelations of beggars with society, with municipal constabulary and within themselves, in short by analyzing their interrelation with life, an existence form of human occurring through begging is attempted to be set forth. In this study, first of all, what kind of occupation begging is and what it includes are determined. It's determined that begging appears in the shape of a phenomenon that changes over time, among places and across circumstances. Begging has a religious content too, besides other things, for both beggar and people giving money to beggars. Begging is an economic activity that underlies money exchange. Begging appears as a theatrical performance that occurs during social flow. In the context all these determinations, as an experience open to be discovered "begging" and "beggars" are networks of relation and states of human existence. This study aims to understand by ethnographic fieldwork, that is the method of social anthropology, the world human created with performative interactions through begging. In line with this purpose, ethnographic field study is carried out by joining the beggar pick-up efforts of municipal constabulary from December 2011 to June 2014. Both fieldwork and street observations constitutes the data of this study. Demanding by putting one's self in a position below the person across is inherent to the action of begging. Styles of making opposite side feel this "fallenness" are various. In this context, the thing accentuated is "begging styles". In this study, how "fallenness", "neediness" and "poverty" are represented by beggars is discoursed. Based on a space of sense that "state of being fallen"

produced by document, body, representation and performance concepts, styles of begging in the context of proving "fallennes" are gathered under two categories as "licensed beggars" and "beggars whose license is embodied within their limbs". Performance aspect of begging is discussed theoretically as well. Body fiction of beggar is detected as vital for the success of the performance and interaction of performance and body fiction is evaluated in phenomenological context. Besides, that performances change according to information, space and time the performance is presented are narrated with blending fieldwork experience. In this research, routine of escape-chase game of beggars with municipal constabulary that takes place throughout the day is seen and analyzed as a game containing strategy and tactics. Narratives of everyday life in the "beggar's shelter" that belong to municipality the beggars are taken to after being caught by constabulary, include analyses about the space at the same time. As a result, begging is evaluated as a performance and this evaluation is set forth by analyses and examples within the frame of field research.

Keywords: begging, performance, phenomenology, body, fear, strategy, tactic, fallenness, begging licensed, beggar's shelter, municipal constabulary.

Turning Invisible History to Visible One: A Multi Cultural Planning Etnography Museums in Turkey

Seyda Barlas Bozkuş

The scope of this study is mainly related to ethno-cultural history writing in ethnography museums which have been developed from the early 1930s in Turkey. The strategic mission of the ethnography museum is very crucial in terms of establishment and development of socio-cultural history writing. As a result of an organic link in which developed in the ethnography museum and national history writing, people recognize moral characteristics of local culture such as minorities, physical spaces, and neighborhoods. In general, ethnography museums collect, protect, and evaluate the past and assist national history writing. During the writing process of this paper, I will focus on academic literature on Turkish ethnography. Also, several books and exhibition catalogues on Turkish ethnography museums provide me extensive information about the development of ethno-spaces. This study will intend to enlighten the role of ethnography museums in the making of contemporary history writing through analyzing museum exhibitions catalogues that focuses on identity, culture and various ethnic groups. The basic question will be asked in the study: What is the future of ethnographic museums? What is the purpose of an ethnographic museum in the twenty-first century? Who are they for and what should they contain? Who has the right to own and represent the material culture of others? How can such institutions respond to the movement of people and things in an increasingly transnational and transcultural world?

Keywords: Museums, Ethnography, Cultural History, History Writing, Turkey

A Field of Applied Anthropology: Business Anthropology

Hilal Yakut İpekoğlu

The history of cultural studies in organizations are based on very old and have made substantial studies from past to present. On the contrary, in our contry, there are very few culture based study in organizations. Especially studies which have used anthropological perspectives and research methods are even less. In Europe and North Amerika, multicultural natures of the businesses explain the intensity of the study in this area. At the present time, in our country, the numbers of multicultural and multinational companies have remarkably increased as mandatory return of globalizations. In the long term, the companies have to correctly analize their internal dynamics and directed objectives which they have realized in order to they will make effective and efficient their labor. For his reason, the businesses will require studies which are detailed and profoundly by using anthropological perspectives and methods. The researches may be done in this area will be provided both an added value for the business world and new job opportunities for trained, skilled labor of anthropology community. To this end, in this study is evaluated history of business anthropology and anthropological practices in this field and discussed possitive and negative effects for business and anthropology fields in our contry.

Keywords: business, culture, anthropology

What Can Teachers Learn From Anthropology? Some Suggestions About the Utilisation of Anthropology in **Education of Teachers**

Sefer Yetkin Işık

Anthropology, like archeology and history, was a science that was supported by the state, in accordance with the process of nation-state construction and the programme of westernization, in 1920's and 1930's in Turkey. In Early Republic era, anthropology, studied in tow of pozitivist and racist paradigm of Europe, translated into Turkish, as a race science. But after Second World War, anthropology confronted its past and got out of that paradigm and head towards universal and cultural relativism while the same rapid changes were not observed in Turkey anthropology, due to reasons arising from internal political devolopments. Since 1990's, in connection with the general change process of capitalism, although social/cultural anthropology has attracted the attention of the students and the people in Turkey day by day, compared with other social sciences, anthropology is the least known science. Despite the fact that it was the first institute of social sciences of modern Turkey, such a neglect between postwar and the end of 1990's resulted in anthropology's becoming a nonoperative discipline in general culture, social problems or education in Turkey. In this paper, it is suggested that teachers who should be welleducated about cultural diversity of the country because of the fact that they may have to work everywhere -including villiages- should learn more about anthropology and have an understanding of 'other' from the integrative anthropological perspective in their training process and grasp cultural relativity and ethnographic methods which they can use in their professional life. In this way, education system and teachers's qualification can be improved and can contribute to the development of anthropology in Turkey.

Keywords: anthropology of Turkey, culture, cultural relativity, teacher training, understanding 'other'.

How would You Like Your Coffee? Making and Serving Coffee in Antakya

Alim Koray Cengiz

In this research, as a consuming material making and serving of coffee is studied in multicultural city Antakya which is on the Syria border of Turkiye. In the frame of the study, fifty local people from different gender and ages have been interviewed from different parts of Antakya. Besides, the owners of coffee-houses and coffee shops have also been interviewed. It is aimed to present when and in which situations people have coffee and the objects used to prepare and present the coffee are considered within the scope of material culture and the Anthropology of Consumption in this study. Through the information acquired from the field study, the place of coffee in daily life of Antakya and in traditional culture is discussed and its contribution to cultural communication atmospehere is studied.

Keywords: Coffee, Antakya, Material Culture, Anthropology of Consumption.

Anthropology and Protecting Cultural Heritages in **Turkey**

Feza Tansuğ

The basic rights of groups of people to be themselves and not to be deprived of their own distinctive cultural identities is a primary consideration in anthropology. However, anthropologists have additional reasons to be concerned about the disappearance of the societies and cultures they have studied traditionally. The need to acquire information about them has become increasingly urgent. If we are ever to have a realistic understanding of that elusive thing called human nature, we need reliable data on all humans. More is involved than this, though; once a traditional society is gone, it is lost to humanity, unless an adequate record of it exists. When this happens we are all poorer for the loss. Hence, anthropologists have in a sense rescued many such societies from oblivion. This not only helps to preserve the human heritage, but it also may be important to a cultural group that, having become westernized, wishes to rediscover and reassert its traditional cultural identity. Better yet, of course, is to find ways to prevent the loss of cultural traditions in the first place. Turkey, not only today but has ever been the spot for distinct cultures and civilizations. Therefore, cultural heritages have taken place in the focus of cultural policies ever. A pluralistic approach must be adopted towards the protection of historical build-up and all the cultures which have ever left and have been leaving a trace upon Anatolia must be taken into the scope of historical heritage. In this paper, it is from an anthropological point of view to be emphasized that the government should pioneer the collaboration of the relevant chambers of occupation and academical environments, organizations by the volunteers for cultural assets must be established, and the government must show due care when it comes to the preservation of the integrity of cultural assets within the scope of large investments.

Keywords: Cultural Heritages and Cultural Policies

Goffman on Shoppers' Social Identities in Singapore

Voon Chin Phua

Shopping as an activity is arguably a way of life in Singapore. It is also an activity that highly interactive in both verbal and nonverbal ways. Shopping is rarely performed in isolation and, save online shopping, is likely to be interactive. Even with internet shopping, consumers may directly consult others through chat or messaging or pursue product reviews in the virtual world. Some shoppers may go shopping alone and avoid interactions with other shoppers, and even sales associates. However, even if the purchase is performed alone, it is likely to involve some form of interaction verbally or not (physically/body language). Using data from participant observation and in-depth interviews, I examine how shoppers act when they shop and how they interact with other shoppers as well as sales assistants. I develop typologies of shoppers and discuss how shoppers manage their social virtual identities, drawing on Erving Goffman's dramaturgical framework. Social identities will be perceived and interpreted by others regardless of whether shoppers are strategically managing their self-presentation. Of particular interest is how the kia-su-ness (fear of losing) mentality plays out in merchandise selection habits and how this mentality consciously or subconsciously manifests in our routine practices. Class distinctions can be seen as distinction markers used by shoppers with one another. The interactions among shoppers and between shopper and sales assistants underscore the more subtle tension among people of different social class and nationalities in everyday life practices.

Keywords: shopping, Singapore, social identities

Urban Transformation and Sumer Neighbourhood in Zevtinburnu, İstanbul

Yüksel Kırımlı

Social Anthropology is a branch of social sciences that deals with human beings and everything that relates to human beings. Therefore, the people's need for housing always constitutes a field of research in social anthropology. Similarly, the Department of Anthropology at Istanbul University has been interested in the solutions proposed for housing problems of people migrating into Istanbul from rural areas since 1960, the year the department was founded, and has conducted research in Gültepe, Harmantepe, Çağlayan, Yahya Kemal and Zeytinburnu shanty settlements. The Department of Anthropology at Istanbul University has never lost contact with Zeytinburnu since 1960 and conducted researches in this area in 1980's, 1990's, 2000's and aimed to identify the changes in Zeytinburnu district. After the great Marmara earthquake in 1999, Zeytinburnu district in Istanbul was declared as the pilot region of Urban Transformation and Urban Transformation Project was initiated in Sumer Neighbourhood within the scope of the Disaster Law. The Department of Social Anthropology within the section of Anthropology at Istanbul University has not been indifferent to this transformation and has planned a research aiming to reveal how the need of housing, which is one of the basic needs of human beings, is shaped at the Project stage of this transformation, how the use of urban space is interpreted within the scope of urban transformation projects, how the space became commercialised, and how the residents of this area interpreted this transformation, and the department has conducted research in the area specified as the 1st stage of KIPTAS, in Zeytinburnu/Sumer Neighbourhood. The data of the research were collected by 13 students of the department of Social Anthropology under the management of the members of the staff in the department of Social Anthropology, between May 2013- August 2013, based on face-to-face interviews with 192 household heads and participant observation. In this presentation, which is entitled "Urban Transformation and Istanbul Zeytinburnu-Sumer Neighbourhood", the Urban Transformation Project that has been conducted by a private corporation after the area was specified as a candidate for disaster area by the state, will be evaluated. In other words, the severity of global capitalism's power of shaping will be discussed based on the case of Sumer neighbourhood in Zeytinburnu district of Istanbul.

Keywords: City/Urbanization, Urban Transformation, Zeytinburnu District, Sümer neighbourhood

Urban Ethnography on the Move

Berna Yazıcı

Urban ethnography is a rich subfield, covering many different aspects of urban life. In this paper, I would like to draw attention to a possible new research area in urban ethnography. By arguing for "urban ethnography on the move," I highlight the daily experience of urban transport as a fruitful site for socio-cultural analysis. I suggest that ethnographically tracing the daily experience of mass transportation on buses, metrobuses, dolmuş etc. may highlight the significance of public transportation as a socio-cultural domain entailing class-based and gendered encounters and tensions. I particularly draw attention to the gendered tensions, including sexual harassment itself, which emerge as significant in the daily experience of urban transport.

Keywords: urban ethnography, urban transport, gender

The Role of the Migration Process in the Culturaleconomic Changes of the Life of Kyrgyz Community in Van, Turkey

Zarina Urmanhetova

About 30 years ago a Kyrgyz community from Pakistan came as refugees to eastern Turkey. They were from Afghanistan and were already refugees in Pakistan at this time. Before coming to Turkey, this community was living in the Central Asian steppes as a nomadic community. Their motherland was in the Pamir valleys of Afghanistan before their exodus to the Pakistan after the Saur Revolution in 1979 in Kabul. Nowadays according to the Statistical Committee of TR they are about 1720 people living in the village of Ulupamir relating to the Erjish district, Van region of Turkish Republic. This paper aims to explain the cultural and economic changes in their life after the end of main migration process.

Keywords: Forced Migration, Ethnicity, Culture, Cultural - Economic Change

Ethnicity, Islam and Identity: The Kyrgyz Case

Barıs İnci Pembeci

This paper explores the ways in which religion and ethnicity are utilized by the Kyrgyz elite in construction of a new Kyrgyz identity. After the collapse of the Soviet Union and becoming an independent state, the secular and Muslim elite of the country have taken on the task of creating a new Kyrgyz identity. Despite some cases of convergence of ideas, the seculars and the religious have conflicting answers to the question of how Islam relates to Kyrgyz identity. In this paper, I analyze the debate between these actors on the question of how one can be both a Kyrgyz and Muslim, through a specific example of the dispute on burial practice. Burial ceremony is an instance of the larger debate around traditions between Muslims and seculars in Kyrgyzstan today. While Muslim authorities use it to criticize the Kyrgyz practices, others defend it as an important aspect of the Kyrgyz distinctiveness. The Islamist critique is based on the idea that Islamic scriptures provide a clear procedure for the burial of the dead and the local traditions associated with it are unnecessary and should be discontinued to accord with Islamic norms. Defense of the Kyrgyz burial practice, however, is based on the idea that the Kyrgyz should practice Islam in a way that is consistent with their own traditions and way of life. I argue that it is not the "rightness" or the "wrongness" of the burial rituals that are at stake. Rather, the concerns point to a larger debate, which is about different notions of Kyrgyz identity and Islam, specifically how these two should relate to one another. Ultimately, the debate about burial is a reflection of the continuous exploration of the meaning of being Kyrgyz in an uncertain era. The findings of this paper are based on 16 months of ethnographic fieldwork in Kyrgyzstan.

Keywords: Islam, Identity, Kyrgyzstan, Central Asia

Saint Veneration of Kurdish Alevis: through an Analysis of Khidr Worship

Hiroki Wakamatsu

The saint veneration has long been one of the most fascinating topics for Cultural or Social Anthropologists especially in the Middle Eastern Studies. Like all of scholars who concentrate on this theme, they have shown that humans will always be interested in dimension of faith, belief, and religion, and established that there is a crucial relationship between the holistic signification and the social institution. At the same time, they have laid out the various reasons why the religion is important for people, such as the way it enables a form of social solidarity between people to add meanings to human life and uncertainty (suffering, death, secret, and illness). For all human progress, the embodiments of religion and faith and the process of discovery are related to collective cultural structuring, social representation, and cultural function. While monotheism itself denies its relations with its past, religious practitioners within monotheism have established their own predecessors for belief systems. In this presentation, drawing on my own research data, I shall first discuss the zivarets in Dersim, and provide a brief outline of their meaning in Alevi theology. I shall then present the current situation of saint veneration and popular beliefs where Alevi sacred places are visited by other religious groups and discuss the underlying motives of the religious actors involved. Finally, I shall contextualize these cases within a broader theoretical and comparative perspective on "the sacred/the religious" through an analysis of Khidr worship.

Keywords: Kurdish Alevis, Dersim, Saint Veneration, Khidr Worship

Joking Relationships and ethnic humor (joke) in Some Selected EthnicGroups of Ethiopia

Mohammed Ali Musa

This paper describes a system of joking relationships and ethnic humor (jokes) that are found to exist between members of intra-ethnic and interethnic groups in Ethiopia. Ethiopia is a country of multi ethno-linguistic and religious diversity. It is home for more than 80 ethnic groups, each with its own cultural construction and markers. Across cultures there are different types of jokes which represent different degrees of cultural complexity: from intra-ethnic relations between clans or within the clan between categories of kin, age-mates or grandparents, to the stereotypical labeling between ethnic groups. Examining joking relationship and ethnic jokes as embedded and interactive within and between groups enable us to understand the kind of interactions and relations that exist among the groups. In doing this, I briefly begin by outlining the conceptual framework that informed joking relationship and ethnic jokes, as embedded and interactive within and between groups. The information is mainly collected from Ethiopian students studying in Ankara, Turkey, my own experience and review of related literature. The finding indicates that joking relationship exist within ethnic group based on the norm of the group, while the ethnic joke was based on ethnic slur and stereotype.

Keywords: Ethiopia, Ethnic-groups, Ethnic joke, Joking relationship, Humor

The Ethno-Culturel "Others" in the Collective Memory of A Kurdish Village

Ahmet Kerim Gültekin

Nowadays Yazidis and Armenians are the ethno-cultural communities who are the most affected by the international terrorism in Syria. The interesting intersection is that the Kurdish populations that those communities have conflicted hundreds years ago are also subjected to a similar form of victimhood. That shared victimhood provides the basis of a different cultural and politic interaction. Looking at the collective memories of the Kurdish population living in Beğendik/Bêdar regarding the Yazidi and Armenian communities, this paper offers examples of Kurdish populations' current construction of identity. In this paper, the traces of the ethno-cultural "other" in the collective memory of a Muslim Kurdish community, living in challenging natural environment which is relatively distinct from modern life, are analyzed. In addition, the paper offers examples of how oral history studies not only provide alternatives to the conventional historical studies, but also can depict the ways in which the people justifies their economic, political, religious attitudes and behavior and illustrate how they reproduce some historical elements. The data analyzed in the paper is collected during a multi-sited ethnographic research held in Beğendik/Bêdar for the purpose of the PhD project in Ethnology which was submitted to Ankara University. It should be noted that the ethnographic study also includes details about the cities, districts and villages and cemeteries that are in the economic, social and religious hinterland of Bêdars.

Keywords: Ethnology, Kurds, Yazidis, Ethnicity, Collective Memory

Trans-Border Minority Activism and Kin-State Politics: The Case of Iraqi Turkmen and Turkish İnterventionism

Güldem Baykal Büyüksarac

This paper offers a discussion on the problem of collective agency in minority rights movements by examining the equivocal position of the Turkmen, an Iraqi community that maintains cultural and historical ties to Turkey as a "kin-state." I examine the politicohistorical forces at work to delineate the limits of minority agency, where these forces transgress local, national and even regional boundaries. This implies transcending the conventional theorizations of "minority" by liberating the concept from the analytical constraints of the nation-state. I suggest treating minorities within the context of relationships among various socio-political actors besides and beyond the national government directly involved in the process of minoritization. I consider minority politics as a site of contestation and negotiation, where all actors instrumentalize the category of minority in their own ways, yet similarly resorting to strategic essentialism (ethnification or culturalism). Within such context, however, I am paying particular attention to the increasingly conflictual relations of Turkey and the Turkmen. The latter are caught up in a double bind between engaging in homeland politics independently of the Turkish government and enjoying its support at the risk of losing their voices. I ask how the Turkmen make sense of the minority status to which they have been assigned. I look as well at what they do with this status, in order to explore the historical dynamics and consequences of self-essentialism. Next, I demonstrate how kin-state politics, namely Turkish interventionism, has conditioned Turkmen activism in Iraq. Combining historical methods with ethnographic research, I analyze the complexity of the relationship between these two phenomena by revealing the dilemmas and ramifications emerging in the Turkmen community.

Keywords: Iraqi Turkmen, minority activism, (self-)essentialism, kin-state, Turkish irredentism

Romani inside Romani: Running Away From Being "Stranger"

Hülya Doğan

Despite being a small city, Bartin has the structure that separates the cities according to differences of people. Some of the differences are excluded because it is perceived as threat. One of the examples is the neighborhood named "Aladağ Mahallesi" where usually Romani people live at. However, the neighborhood shows some features that prevents us from using the concept of "stranger" which usually places at the centre of Gypsy studies. At first glance, especially at the "up the neighborhood" where Turkish people also live intensively, it seems as there is a consensus about the transivitiy between Romani and Turkish identities. In this study the dynamics of this feature were discussed within the context of "ethnicity". Data obtained from field research in June, July and August in 2013 was used to make the construction of Romani identity comprehensible. Of course, the power and assimilation relations of the dominant identity and problems of the Romani people in their reflections on this relationship have not been ignored. These dynamics also makes the agreement even more questionable.

Keywords: Romani / Gypsies, Ethnicity, Strangerness, Assimilation, Urban

Cultural Consumption Focusing on Music in Bandar-Abbas City, Iran

Shima Safa; Ahmadreza Asgharpour Masouleh

Consumption is a term which can help to conceptualize some critical parts of modern social life. Cultural consumption refers to amount and type of cultural products someone use in his/her life. In the modern society, cultural consumption can help to theorize social differentiation and identity. In Iran, which has a diverse ethnic culture and there are not much data and findings on cultural consumption doing such a research seems essential. This will help for cultural policy planning. Cultural consumption can be divided in two dimensions: quantity and quality of consumption. Although most members of any society may consume music, but it has different functions among diverse social categories. In this study referring to youth music consumption we have tried to understand their feelings about music and their tastes. We exploited qualitative research perspective, so we employed participative evaluation, semi-organized interviews, and deep interviews. In the second half of the research quantitative data gathered from a 300 random sample in the Bandar-Abbas city. Respondents who were youth (15 to 35 years old) answered a questionnaire to test the relationship among social stratification and music preference. Results showed that there are significant relationships among social prestige, power, economic status, and music consumption in Bandar-Abbas city.

Keywords: consumption, music, power, prestige, SES

Embodied Experience of Bathing and Hotspring: Japan vs. Turkey

Ceren Aksoy Sugiyama

At least from the Turkish point of view, the cultural similarities between Turkey and Japan -in fact a two distant geography- are strongly believed to exist. This "myth of similarity" is consistently repeated within the public regarding certain themes such as conservation of familial values, respect to the elders and dedication to traditions. However, deconstructing such a myth is not within the scope of this presentation. Yet there is another commonality between two cultures that is not as significant as other themes but still worth making a comparison between them in order to reveal the differences instead of inventing similarities.

Both the sentos (japanese public baths) and onsens (japanese hot springs) used to occupy an important place in the everyday life of the japanese. While sentos are constantly loosing its significance it used to have, with the reorganization of the facilities in order to confront the current demands, onsens can be said to substitute for sentos too. Yet bathing and onsens in the Japanese context, both as an embodied experience and as a social space can be argued to preserve its traditional meaning.

Although the embodied bathing and relaxing experience in hamams and hotsprings in Turkey resemble some of the aspects of the japanese version; there are also some significant differences as well. While the differences in the bathing practice can be said to epitomize the different perceptions among cultures concerning the historical relationship between environment and human beings; the common points can be argued to expose the similarities in the socialising strategies.

Key Words: Onsen, sentō, hammam, embodiment, public space

A Village Opened to Rural Tourism

Meryem Bulut

It is belived that rural tourism causes changes on the part of the villagers living in the area. Rural identity is affected in the villages transformed into tourism areas through rural development projects. Rural areas provide those villages with income. Yet, it is obvious that it causes pressure on the villagers. This study researches the effects of Rural Development Projects on villagers- that is to say, the reflections on rural identity. The research was performed on the basis of observations and interviews. Due to the fact that it was open to rural tourism and that it preserved its natural and cultural properties (that is, its relative authenticity), Beydili- a village of Nallihan district of Ankara- was chosen as the area of research. Beydili is a village which is included in the Rural Development Project and which serves to the tourists choosing to visit rural areas. The rural areas with natural and authentic local values have recently been popular spots for tourism activities. As the life in cities becomes more and more complex, people face towards places which have preserved their natural, cultural and visual values, and which attract people's interest with their authentic structure. In certain periods, congestion may be experienced in those rural areas. However, the residents in rural areas also need sources of income. Rural tourism meets those needs. Besides, for the continuity of rural tourism, the natural and cultural resources should be protected, and the properties of local identity (such as folk dances and local music) should also be brought into prominence. Natural and cultural properties as well as local identity are the important vehicles in rural tourism. On the other hand, with the growth of rural tourism in villages, local identity and local values undergo changes. The characteristics of rural behaviours are re-shaped by tourists' expectations. In Beydili also, tourism has shaped people's living quarters. And thus it is observed in the village that people try to display behaviours consistent with the expectations of the tourists.

Key Words: rural tourism, rural change, new gains in villages

Women in Legal Regulations in Ancient Times: The **Example of Sparta**

Türkan Banu Güler

Sparta, in the boundaries of today's Morea peninsula, was established with Doric invasion in the region between the Taygetos and Parnon mountains and where the Eurotas river extends and had a different development process from other Hellenic citystates. There are three different social classes in Sparta which was established by the union of five clans after Doric invasion. The first and the most influential class, the Spartans, shared the land by lot and they took this name because they lived in the center of Sparta. The second class has Perioikos which means 'living in the vicinity' and this class was independent to some degrees among themselves and in the administration of the region, but they were dependent to Sparta politically and militarily. The third class was called Heilot, they became slaves of the state after Messenian Wars and they cultivated the lands of Spartans and had no political, social and militarily rights. The living of this class structure was provided by 'Great Rhetra' which is accepted as the base of socialsim and was contituted by legendary law-maker Lykurgos in B.C. 8th century. Great Rhetra, which is not written and the information about it is learned from ancient sources, has information about state administration, institutions and regulations about the Spartan life and one of these regulations was about women. Although the main purpose of women was defined as regulating the marriage life and giving birth to healty boys for Sparta in Great Rhetra, Spartan women had some rights as having education the same as men. Thanks to this education, Spartan women joined to Olympics, won the competitions and made people wrote inscriptions about them. Except Great Rhetra, we learn from Plato and Aristotle that Spartan women had the right to have lands in B.C. 3th century. Again in B.C. 3th century, in Spartan Revolution, which was designed by Spartan king Agis and was applied by king Kleomenes, it is known that the mothers, wifes and daughters of the kings are influential. In this research, the palce of women in Spartan legal regulations is explained according to ancient sources.

Keywords: Sparta, Women, Great Rhetra, Legal Regulations, Lykurgos

Archeology and the Matriarcal Society in Anatolia in Legends

F. Eray Dökü, Alper Yener Yavuz

Man has tried to put a meaning in his existence, necessities, fears and death after beginning abstract thinking. With the mystery and magic, which he characterized with confusion and appreciation, he worshipped the unnatural with his unusualness. He decorated his space with the pictures and artifacts of natural forces, which he associated with his power. Thus, he created belief and ritual systems that are founded on his social background and his economical profits. In Anatolia, the hunter-gatherer societies have firstly made temporary or permanent settlements where wild plants and big games were affluent. They developed their subsistence methods, architecture and social models according to the geographical and environmental conditions, the existing flora and the faunal variety. The economical differences affected by changing geographical conditions are signs of the hunter-gatherer villages along with the Neolithic Anatolian settlements that were shaped by new production economies, grain production and animal domestication, starting from approximately 11,000 years BP. This new economy and sedentary lifestyle caused many important changes in social structure, especially in settlements that are agriculturally productive. Economies with agricultural production in Neolithic settlements have provided important leisure time to the people except for the sowing and reaping periods. Consequently, while males were getting away from the settlement for hunting and sheepherding, females were mostly active in child care and most importantly field care, with the effects of the agricultural identity gained earlier during gathering activities. For these reasons, the females should be active in social life, husbandry, social structure and agricultural rituals. The settlements founded by agricultural societies should have created a belief system that includes a goddess/mother earth, with metaphorical connections between the fertility of women, the earth that people needed and the fertility of nature. Accordingly, "fertility" was shaped by a fecund woman with well-rounded body, breasts and a deemful vulva.

Keywords: Anatolia, Matriarchy, Archeology, Neolithic

INTERNATIONAL CONGRESS OF ANTHROPOLOGICAL SCIENCES



POSTER PRESENTATIONS

Anthropology and Security

Aşkın İnci Sökmen

There are ways to link security and anthropology studies. The concept of security is a contested concept and has a different meaning for different people, regions and states. Included in the security debate are issues such as social security, environmental security, economic security, human security, gender security, migration, cultural security, cyber security and military security. Anthropologists, however, hesitate to assume that the concept of security is universal and globally shared. Anthropology is the study of humankind and explores human experience from human origins to contemporary forms of culture and social life. My aim is to explore the similarities of security studies and anthropology studies.

Keywords: anthropology, security, conflicts, war

Great War centenary - what is left? Facts are building memory, memory is (re)building facts - case study of exhumations of the I World War human remains in Zdziary (Poland)

Michał Czarnik, Kamil Karski, Dominik Kurek, Katarzyna Skowron, Tomasz Tokarczyk

The aim of the poster is to present, how archaeology may be helpful in recreating memory of important historical facts. In 2014 archaeological excavations in Zdziary (Nisko county, Poland), initiated by Podkarpackie Voivodeship Office, were begun. The research focused on the gravesite of soldiers fallen in I World Warin the bloody battle between Russian and Austro-Hungarian Armies. During the excavations archaeologists discovered 11 collective graves and explored two of them. 16 individual skeletons were exhumed and analyzed by anthropologist. Awareness of the scale of the conflict and its impact on history is growing up among the locals. This is mainly due to some local activists, who are trying to safeguard the memory from entire oblivion. Studies on the II World War and its hecatomb sidetracked the attention of people and researchers from issues related to the Great War. But this picture is changing now. Both archaeological and anthropological studies emphasize that WWI was also the time of great humanism crisis. These two dramatic episodes - WWI and WWII are one of the most influential parts of the past, undeniably building our cultural present. Especially in Poland, which had to face both catastrophic wars and must be considered as one of the most affected countries. This is still apparent on the ground of politics, science (humanities) and culture. In the case study of Zdziary researchers were able to give material proofs (considered as a new epistemic perspective) - they located the mass graves, did research on soldiers' skeletons and the ordnance relics found alongside the dead. Despite the "memory" of the WWI is known by the people, the diversity of "stories" is extraordinary. These are the stories of war, heroism, death, patriotism and oblivion. And first of all archaeology is giving the chance to countercheck it.

Keywords: exhumations, memory studies, historical identity

Birth As Social Activity

Filiz Gün

"Birth" is an event that only a women can have and live among human species. It is also a biological function that differentiates human female and male. "Birth" is a natural event which is most basic and simple. However, considering other characteristics of "Birth", It is a complex event which cannot be only biological. "Birth" is an biopsychosocial cultural event. Human is also a socio-cultural being, as in many of his actions, biological and sociocultural things may intertwined and they both affect each other. Many examples can be given for such human actions. Sex, Death, Diseases etc. For example, sex is just too complex to be explained as "only a relation between two human". Although there may be some minor differences between different cultures, value judgments are made, organizations are improved, formal and informal laws are put in related with this action. Birth also has similarities with above listed human actions, sex, death, diseases. Birth is striking event which occurs in woman body has important social effects in human societies. When considering social, personal and political properties of the body, these properties can be observed in "Birth". Because, "birth" occurs in the body but it has social consequences as well, the number of births, method of birth, birth vacation rights for working woman etc. As governments are making social laws on "birth", it is also also a political event. At the same time, because of personal needs and social status of individuals, it is also a personal event. Especially, giving birth is important in determining the gender characteristics of women. "Birth" is also very important for humanity. "Birth" event helps further progress of human species; carriers of human culture are born, and these newborn teach their culture to their siblings in the future as they continue to breed. So, human "Birth" culture carries itself through these newborn. is biopsychosociocultural event that creates rituals, social activities, traditions and symbols on itself. Note: This summary is taken from an abstract of ongoing doctorate thesis, Narratives "Birth" Patient, Their Relatives and Medical Workers Specialized in Birth.

Keywords: Birth, Gender, Body, Social Activity

On Marriage of Academicians

Onur Hayırlı

There is a problem about marriages in Turkey, we are going to try to prove that with our Phd thesis work example and other field works. This problem shows itself on academicians example in high proportions. Our changing culture always tells us to become individuals and alienate us. Individualism also brings loneliness. Money or career don't come with satisfaction. Being a lifetime student when stress due to work is added affects careers and marriages of academics. marriage and job satisfaction are two associative point of lifetime. They both effect each other and can change a person's life. It is also same from structrulist-funcsionalist view. Prediction is the last purpose of science but after looking at marriage and divorce statistics we can clearly say something going wrong here. This study wants to be trailblazer and wants to show what is wrong with society. And it claims that most people are unhappy and doesn't satisfy with their work and marriage. I will talk about that with my presentation.

Keywords: marriage, academicians, marrage satisfaction

Hymen and be Defective

Cenk Kılıç, Rivahi Kalay, Erol Kılıç

Many cultures have believed that tearing the hymen caused pain on first intercourse. Some cultures have insisted on female virginity when she married. This false belief has been used for many years in the medical examination. This examination eliminates to woman's right on her own body and leads to some problems in women. First sexual intercourse for women means that the fear of testing whether or not virgin. These women share fear of wedding night with the next generation of women. Thus they create, places and reproduces fears of young women. The hymen can have many different configurations. If this membrane completely covered the vagina, the woman would know by the time she first menstruated. In some women, this tissue is not found, thus bleeding and torn does not occur during first intercourse. Hymen control is not a part of medical examination depending on the routine or health problems. Physicians has right to refuse to demands of hymen control and its repair. Except the forensic cases admitted after sexual assault, demands of hymen control should be returned and genital examination results should not be reported. In case of the women can request hymen control or its repair at their own volition, physician's ethical responsibilities are informing women about demand and rejecting the transaction. However many physicians operate on patients who request hymen repair. We believe that this repair process would contribute to the belief that women must a virgin when she married. Arranging training programs is of great importance.

Keywords: defective, hymen, virginity

Silicone Plastination of Mammalian Bones With Low-Temperature Technique: an Alternative Method for The Preservation of Osseous Structures

Okan Ekim, Remzi Orkun Akgün, Caner Bakıcı, Burcu İnsal

Preservation of the anthropological bones has always been a matter in question. Depending upon the time, field conditions, humidity and many other parameters osseous structures can be very fragile and sometimes can easily be broken or damaged during the cleaning or identification process and reconstruction of ancient bones becomes a trouble. Both anthropologists and anatomists are seeking for new techniques to protect the integrity of bones and to make it more durable. Plastination is a modern anatomic method and has currently being used for the preservation of the biological tissues. The aim of this study is to observe the effectiveness of silicone plastination on mammalian bones and to indicate the practicability on ancient osseous structures. Four scapulae for flat bones, 4 femurs for long bones and 4 proximal phalanges for short bones obtained from dog and sheep species were plastinated for this study. All of the bones had been macerated previously. Different parameters such as time, temperature or concentration were monitored and recorded for each step of plastination. After the plastination process plastinates were not only durable but also more elastic than the previous ones. In crosssections the silicone polymer was detected within the spongious substance and in the medullar cavity either. For the further studies it has been planned to apply silicone plastination technique to the ancient bones to observe the effect of dehydration and silicone impregnation.

Keywords: Anatomy, anthropology, bone, plastination, preservation

Paleopathological Analysis of Mount Nif (Olympos) **Research and Excavation Project**

Alper Yener Yavuz, Ahmet Ankul, Büsra Aladağ, İ.Semih Onur, Serdar Yurdagül, Uğur Ayyıldız

Mount Olympus is located in the east of Smyrina Gulf, and around the joint borders of Kemalpaşa, Buca, Torbalı provinces. In the North Kemalpaşa (Nif-Kryos Çayı) lowland and Mount Manisa, in the east Karabel Strait; and in the South Torbalı lowland are situated. In the areas that have been studied, the remains, which date back to 8th century BC and 13th century AD, have been revealed. In Başpınar, a structure, which probably stretches back yo Laskaris Period; in Dağkızılca a necropolis which contains various tomb types; and a settlement in Karamattepe in Arcaic Periods; and a site which was used as necropolis in Helenistic Age have been determined. As for Ballıcaoluk rampart and Kulekıyı, it is possible to date them back to Helenistic Age. In this study, the skeletons, which have been obtained from 4 different excavation sites, have been assessed in terms of Nif Olympus Mountain Research Project. In the course of study, each skeleton in the excavation site has been examined both separately and jointly. On all skeletons, the diseases reflected in the bones have been determined. Nif society, the majority of which was made up of male individuals, was, in general, made up of individuals in middle-adult age group. The pathological findings that have been determined on 100 individuals that make up the material: osteofit, schmorl nodules, trauma, osteoartrit, osteomiyelit, anemia, osteolysis, arthritis, diarthrosis problems, infections, tuberculosis, have been determined.

Keywords: Nif, paleopatoji, osteofit

The Influence of Lead Exposure on The Metabolism of **Bone Tissue**

Ebru Gürleyik, Aslıhan Avcı

The exposure of toxic heavy metals like lead, cadmium, and mercury is an important public health problem and an agent leading to rapidly increasing environmental pollution. The biological effects of these toxic heavy metals on human are still undefined. Environmental and occupational exposure to heavy metals, found to be widespread in nature, may lead to acute or chronic toxic effects in various organ systems. Lead (Pb), found in organic or inorganic forms, is the oldest known and one of the most important toxic metals in nature. Clinical and science studies have suggested that lead is devastating to the human body. Lead enters the human body from the environment by inhalation and through the digestive system. However, 95% of lead in the body is deposited in the bones. The aim of this study is to evaluate the influence of lead exposure on the metabolism of bone tissue.

Keywords: Heavy metal, lead, bone, toxicity

Localization and Distribution of Foveolae for Arachnoid Granulations on the Adult Dry Skulls

Necdet Kocabıyık, Ahmet Dursun, Soner Albay

INTRODUCTION Irregular depressions, foveolae for arachnoid granulations (FG), which become larger and more numerous with age, lie on both side of groove for superior sagittal sinus (GSS) and they house arachnoid granulations. The aim of this study was to investigate the localization and distribution of FG on the adult dry skulls. METHODS This study was made on 11 calvariae, 19 frontal bones and 24 craniums. FG in bones was identified and counted according to GSS or sagittal suture, whether the right or left positions. The average distance to the midline was determined according to frontal crest or GSS. RESULTS On the right side in one of calvariae FG was no observed. FGs were calculated as the average on the right 2.4; on the left 2.8. In calvariae, FG to GSS measured on the right side the farthest distance 17mm; the nearest distance 6mm, on the left side the farthest distance 16mm; the nearest distance 3mm. FG was no observed right side of six frontal bones and left side of five frontal bones. Number of FG was calculated as the average on the right 1.4; on the left 1.2 in frontal bones. FG was no observed right side of a cranium and left side of two craniums. CONCLUSIONS The results of this study imply that potential complications can be minimized by avoiding these areas and by harvesting in situ bone grafts from the absolute and relative safe zones described in this study.

Keywords: Granular foveolae, foveolae for arachnoid granulations, groove for superior sagittal sinüs, calvaria

Electric Charge and Its Effect on Body Structure

Melike Özlem Bilgili, Bilge Gecioğlu, Ersel Gecioğlu

The importance of electrical and electronic devices in our lives has been increasing day by day and hence, for people who has modern standarts of living, it is out of consideration for these people to live without these devices. The people living in multilayered workplaces and apartments, maintain their lifes isolated from soil. In such syntetic environment, it is not possible for them to remove the energy savings in their bodies. The studies on electronic field states that, those who had been exposure to wi-fi frequency from the prenatal period, has growth failure and growth hormone defect. On the other hand, electromagnetic fiedls also have fundamental areas of usage. In case of traumatized bone fractures, due to pioze electricity discharges cell deaths and exchanges in sodium and potassium ions values are recorded. According to this thesis, a treatment system is created which returns Sodium and Potassium ions to their original value by using magnetic field and enables the cell to revival. It is also possible to explain the treatment method of acupuncture in this way. During the acupuncture aplication the conductivity of human body becomes stimulated. Therefore, a microelectric current occurs at skin and muscles because of friction and pressure. This electric current, by creating electromagnetic field, fixes the electromagnetic abnormality in the electromagnetic holographic embryo. At the same time, by transmitting this information to the related area with biological connections, it fixes the eletromagnetic abnormality and treats the diease.

Keywords: Acupuncture, magnetic field, wi-fi frequency, electromagnetic abnormality, holographic embryo

Awaking of The Underwater Remains

Hülya Ozar, Merve Parlakgörür

Until recently, archeological and anthropological records from coastlines around the world contain comprehensive and profound informations on the history underwater ecosystems. In this review, we want to emphasize that historical ecology, environmental change and human impacts in their area for understanding the nature of human impacts to underwater ecosystems. The marine zone on the world is about more than 70 percent of our planet. Human populations grow gradually year by year. In addition to this, unfortunately, manmade pollution, habitat and natural ecosystem loss, so that global warming is inevitable coming. Growing of interdisciplinary studies and sessions, scientists also gained insight into much more knowledge about underwater archeology& anthropolgy, and also biological informations. For instance, we can get some knowledges about human or animal bones and teeth from human remains and also ceramic records, such as mtDNA, ancient DNA. In recent decades, there has been more interest in archeological study of human impacts on ancient ecosystems. The goal of this review is to provide basic information about underwater archeological and anthropological records related with human resources.

Keywords: Marine archeology&anthropolgy, DNA, ceramic records

Anthropological Characteristic of the Remains of Soldiers from the First World War Exhumed in Zdziary (south-eastern Poland)

Ioanna Rogóż

In 2014, near the village Zdziary in south-eastern Poland, unmarked mass graves of soldiers of the Army of the Russian Empire were located. The soldiers died in the area during World War I in the battle for the crossing on the San in the area of Nisko. The archaeologists discovered 11 mass graves, however, in 2014 only two of them were explored, that is seven from one grave and nine from the other. The remains were deposited in two layers and in different positions, making it difficult to explore. After finishing the fieldwork, the anthropological analysis, as accurate as possible, was carried out by the anthropologist, in accordance with the standards of the anthropological research. The anthropological studies aimed at, inter alia, determination age at death, sex confirmation, estimation of body height and calculation of the indicators according to the anthropometric measurements. Particular attention was paid to the skulls: analysis of the teeth, non-metric traits and, most of all, difficult interpretation of the cavities, holes and damage within them. The primary task was, in fact, an attempt to answer the question about the cause of death of those buried men. Sex of the individuals was confirmed and age at time of the death was established. They were all men, died in the majority of the early class adultus. A significant part of the damage within the skull developed postmortem. On the one skull a short black hair was preserved, the other turned out to be highly asymmetric. In two cases the gunshot track was confirmed, a probable cause of death. Interestingly, the teeth presented a number of characteristic traits, including the rotation, fusion, survived deciduous tooth root, enamel hypoplasia, traces of the treatment of cavities etc. In 2015 further work will be taken in order to exhume the other graves.

Keywords: Exhumation, mass grave, skull, teeth

Medİcal Educatİon And Turkey

Sedat Develi, Adem Parlak, Nehir Parlak

The nation's healthcare system is at a crossroads of both extraordinary risk and unprecedented opportunity. With unsustainable growth in spending for medical care on one hand and the momentum to improve the health of the population on the other, Turks can no longer afford to endure a system that woefully underperforms in containing costs and ensuring quality. In this presentation, we aimed to increase awareness of academic members about future's medical education. Discussion: Essential to the national conversation on reform, however, is the discussion of the need for redesigning medical education to align with the new changes. Patient safety, quality improvement, systems thinking, and work redesign must be universal principles of the new healthcare system. This will require that physicians and other healthcare workers be able to incorporate important new skills into their daily practice: continuous quality improvement, prevention and analysis of medical errors, seamless care transitions, teamwork, evidencebased outcomes, and performance measures related to value and cost. Conclusion: As natural leaders in health care, physicians have to be prepared to not only participate in the movement for healthcare quality, but to lead it. Physician leaders with these skills can ignite and sustain the widespread, transformational reform required to address and rectify unreliable, unsafe, and inefficient care, and put the healthcare system on the trajectory of financial sustainability and improved population health for years to come. Unfortunately, the current medical education system is not yet deliberate in ensuring that physicians - or other health professionals have these abilities.

Keywords: Medical education, healthcare

Median Nerve in the Forearm and Martin-Gruber **Anastomosis**

Feray Güleç, Gülgün Şengül

The Martin-Gruber anastomosis is a neural connection between the median and ulnar nerves in the forearm. The aim of our study was to explore the morphology of the Martin Gruber anastomosis and discuss the evolutionary significance. Fifty forearms of 25 (23 male and 2 female) formaldehyde fixed cadavers were dissected and the cours and branching patterns of the median nerve were recorded. Martin Gruber anastomosis was detected in totally 6 forearms (12%); one cadaver bilaterally, on left side in one, on right side in three forearms unilaterally. Complex motor functions specific to human hand are very important for functionality and life quality of the individual. Maintanance of these functions is an important issue in routine clinical practice mainly for practitionars in orthopedics, neurology and physical therapy and rehabilitation. The advance in medical technology needs more details than the classical anatomy textbooks contain and detailed anatomical studies of the forearm and the median nerve maintain their importance.

Keywords: Median nerve, forearm, Martin Gruber anastomosis

Cases of Identification of Unidentified and Derelict People Who Are Sent for Autopsy

M.Feyzi Şahin, A. Sadi Cağdır, Kara Nazmi Karacaoğlu, Yalcın Büyük

Investigations of forensic cases which end with a fatality start with the identification of the victim. In the cases in which the corpse is in intact, body identity can be determined easily. In the cases with decayed corpses and skeletal remnants, there is a lack of data. Body identification is not always enough for the forensic identification. In some cases, legal identity cannot be determined. Lack of an identity testifier and of some documents regarding the victim's identity, might leave the victim unidentified. According to the regulations of the Council of Forensic Medicine, corpses which remain unidentified for more than 15 legal days are given to the municipality which buries them into the cemeteries of the nameless. Pursuances of the unidentified corpses are carried out by the Morgue Department in the Council of Forensic Medicine. Records of photographs and examination entries are stored, DNA samples are taken, and they are compared with the documents retrieved from the appeals of the relatives of the missing people. Cases with corpses decayed to the point that they are no more recognizable are investigated with DNA analysis, dental records, superimposition and facial reconstruction. One of the most significant problems in such investigations is the coordination issues regarding the matching between the unidentified corpses and the missing people. In order to overcome this problem, data of the missing people should be collected in a single central database that also should be easily accessible to the experts who are investigating such cases. Moreover, the way of recording data from the missing people and unidentified corpses should be standardized. Comparison and analysis of such records would increase the rate of positive identifications.

Keywords: Forensic identification, Autopsy, Missing Persons

Which one is the truth? Is it what we see or what we can prove? - A Case Report

M.Feyzi Sahin, Özge Ünlütürk, Kara Nazmi Karacaoğlu, Sermet Koc

In incidents resulting in death, crime scene investigation and the consequent corpse examination procedure are crucial. At this stage where a decision is made on whether an autopsy is to be conducted, consistency between the findings identified on the corpse and the incident is as important as collecting information on the incident. It should be definitely remembered that the identified wound might have occurred through multiple different mechanisms in certain cases. So, in case of doubt, an autopsy should certainly be conducted to demonstrate the actual mechanism leading to the wound. In cases where an opinion was reached about the reason, mechanism and origin of death without an autopsy performed, the obligation to conduct exhumation emerges as a result of consequent allegations; however, the findings that can be obtained are significantly reduced. For these reasons, it is important to demonstrate the reason for death in such a way as to leave no room for doubt in cases where a decision for burial is taken without an autopsy. An examination was conducted on the bone tissues of a minor who was reported to have died after falling off the roof in a village approximately one year ago at the Osteology and Odontology Division of the Morgue Department of the Council of Forensic Medicine. In the bone tissue examination performed, it was revealed that the minor's death was due to medullary shock secondary to gunshot injury. According to the macroscopic appearance of the remains of the corpse, a probably 9-mm-diameter, oxidized, jacketed cartridge bullet deformed on the front side was obtained. Based on this case, it was aimed to discuss the importance of crime scene investigation and corpse examination as well as the pitfalls that may arise due to mistakes committed at this stage.

Keywords: Forensic Anthropology, Trauma, Gunshot

Sulcus Sinus Sigmoideus and **Mastoid Emissary Vein**

Feray Güleç, Mete Ertürk, Gülgün Şengül

Morphologic changes in the dural sinuses and emissary veins of the posterior fossa relate closely to the development and evolution of the human brain. Emissary veins participate in the extracranial venous drainage of the dural sinuses of the posterior fossa, in addition to the internal jugular vein, or instead of this vein if it is aplastic or thrombosed. The purpose of the present study is to show the relation of sulcus sinus sigmoideus (SSS) and internal opening of mastoid emissary vein (IOMEV). The present study included 200 adult human temporal bones of West Anatolian origin which from the gross anatomy laboratory of Ege University, Department of Anatomy. The exact age and gender of the specimens were not determined. Bones which showed pathological changes at the surface were excluded from the present study. 118 of the temporal bones were from the left and 82 of them from the right side. IOMEV on SSS was observed single in 55 left (47%) and 56 right (68%) temporal bones, double in 45left (38%), right 19(23%) bones, triple 14left (12%), right 6(7%) bones, The foramen was absent in 4 left (3%) and 1 right (2%) bones. The mean diameter of the IOMEV was 2,2 (0,8-7,1) mm on left and 2 (0,6-5,3) mm on right side. Development of the intracerebral veins and their extracranial drainage is complex in humans. It is believed that the adaptation of a bipedal hominid position was associated with anatomical and physiological changes in the venous system of the skull base to adapt to the concomitant changes in intracranial venous blood flow. The knowledge of anatomy of these structures is important to understand the clinical presentation and treatment of complications such as thromboembolism and intracranial increased pressure syndrome.

Keywords: Sulcus Sinus Sigmoideus, Mastoid Emissary Vein

Efficacy of Veterinary Anatomy on Anthropology Education

Okan Ekim, R. Merih Hazıroğlu, İsmail Önder Orhan

Anthropology education can be defined as an intensive process including social and life sciences and humanities. However anthropology mainly focuses on the past and the present of mankind, various animal species have generally been included to the anthropologic studies due to close relationship between the man and the animals. Animals have played an important role in the cultures, social and daily lives of the communities and this relationship frequently leads the researchers. While exhuming and examining physical and biological properties of osteological structures, anthropologists encounter a great number of different animal remains as well as human bones. Therefore, a proper identification of animal bones in terms of species, breed, gender and age can give substantial and important information about the socio- cultural structure of that civilization. Today anthropology students are taking "Palaeontology of Vertebrates" or "Comparative Anatomy of Hominoids" lessons in their undergraduate program. However, detailed information about the animal osteology comes within the veterinary sciences' field of expertise and these courses are given through the veterinary anatomy departments. Anthropology students of Ankara University receive practical education of animal bones within the scope of "Osteology of Domestic Mammals" course which is given by Faculty of Veterinary Medicine. Animal osteology is delivered through the domestic mammal bones. Fourteen different topics including animal odontology and designation of age and gender are given to the students with 3 hours of practice per week. After 14 weeks of practical course the knowledge level has been tested by an oral examination. And this exam demonstrated that students achieved the main principles of animal osteology. A quantitative assessment of the success level through statistical analyses has been planned for further researches. And a satisfaction survey could also help us to understand the productivity of this course and to increase the motivation of the students.

Keywords: Anatomy, anthropology, osteology, veterinary

Caliper Measurement Values in Healthy Young Individuals

Seda Sertel, Sebnem Avcı, Özlem Özer

Anthropometric measurements are comperative studies of parts of human body. The human body is expected to grow predictably and proportionately. The relationship of measurement to each other is expected to be constant at specific ages (1). In this study we aim to show some specific caliper measurement values from young males and females. Also we aimed to contribute anthropometric databases with our results. Method: We included 39 women and 38 men with the mean age of 21,82±0,85 and 22,34±1,19 respectively. We measured their heigth and body weight and calculated their body mass index. We used standart calipers for measuring shoulder, biacromial, biiliac, bitrochanteric, knee, ankle, elbow and wrist distances. Results: Body mass index from female participants was 22,35±2,28 and the same value for men was 22,71±3,03. Anthropometric values of body parts is seen in table below. Conclusion: To understand standarts of body parts and differences between genders and races those kind of measurements should be performed in larger groups.

Keywords: Anthropometry, Caliper Measurements, Young Individuals, Gender

Anthropometric Measurements of Foot in Healthy Young Individuals

Seda Sertel, Şebnem Avcı, Özlem Özer

Anthropometric measurements can be used as reference data in physical examination. In this study we aim to show specific foot length measurement values from young males and females. Also we aimed to contribute anthropometric databases with our results. Method: We included 39 women and 38 men with the mean age of 21,82±0,85 and 22,34±1,19 respectively. We measured their height, body weight; their body mass indexes then calculated. We used standart measuring tape to evaluate lengths on both feet. Results: Body mass index from female participants was 22,35±2,28 and the same value for men was 22,71±3,03. Anthropometric values of body parts is seen in table below. Conclusion: To understand standarts of body parts and predict some abnormalities or diseases, anthropometric measurements could be helpful.

Keywords: Anthropometry, Foot, Young Individuals, Gender

Those who contributed to Physical Anthropology in Turkev

Vahdet Özkoçak

Those who contributed to Physical Anthropology in Turkey The history of Anthropology, meaning "Humanscience", starts with Ataturk's support in the very first years of Republic, in the early 20th century. During those years, there were a number of Biological / Physical Anthropology studies. However, from the mid-1930s onwards, along with rural studies the number of which increased significantly especially with the foundation of "Rural Institutes", Social Anthropology studies have increased as well. The Anthropology studies which were carried out during those years focused on the morphological features of Turkish society with the aim of determining the place of Turks among Western countries. Today, owing to the geographical location of Anatolia, both biological and physical anthropology studies are conducted in parallel with each other and in accordance with natural and cultural history of humankind and the importance it has today. The basic research area of Biological anthropology, also named as Physical anthropology, is to analyze the physical features of human beings and the changes that occur in these features during the course of time as its name suggests. To wrap up, biological anthropology can be defined as a branch of science that tries to explain the human evolution, his adaptation to the environment and the variety it has today by searching for the causes. The subject area of biological anthropology through fossil resources includes hominid evolution, human genetics, the physical adaptation of human (the adaptation of the body to temperature, height etc), human growth and development, monkeys and biological, behavioral and social manners of hominids which are not human like gibbons. For this reason, biological anthropology is interrelated with biology, zoology, geology and medicine. Our precious scholars who pulled their weight to Physical Anthropology, with the foundation of Ankara University Faculty of Languages, History And Geography in 1935 are: Ord. Prof.Dr.Sevket Aziz Kansu, Prof.Dr.Afet İnan, Prof.Dr. Seniha Tunakan, Ord. Prof.Dr. Muzaffer Şenyürek, Doç.Dr. Armağan Saatçioğlu'dur. As for today, our instructors Prof.Dr. Galip Akın, Prof.Dr.İzzet Duyar, Prof.Dr.Timur Gültekin, Prof.Dr.Mehmet Sağır, Prof.Dr.Başak Koca Özer contribute to Physical Anthropology.

Keywords: The history of Anthropology, Physical Anthropology, Biological Anthropology, University Faculty of Languages, History And Geography

Mastoid Emissary Foramina and Evolutionary Implications

Feray Güleç, Mete Ertürk, Gülgün Şengül

The mastoid emissary vein (MEV) and its foramen have anthropological significance in transition to bipedalism and preferential intracranial venous flow into the vertebral plexus in the upright man. Detailed descriptions of the MEV and the foramina through which they travel are lacking in the literature. Therefore, the aim of our study was to explore and delineate the morphology, topography and morphometry of the mastoid foramen (MF) which is the mark of MV on the temporal bone. The present study included 200 adult human temporal bones of West Anatolian origin which from the gross anatomy laboratory of Ege University, Department of Anatomy. The exact age and gender of the specimens were not determined. Bones which showed pathological changes at the surface were excluded from the study. 118 of the temporal bones were from the left and 82 of them from the right side. The mastoid foramen was observed single in 46 left (39%) and 48 right (58%) temporal bones, double in 45 left (%38), 23 right (28%) bones, triple 17 left (14%), 8 right (10%) bones, quadruple 6 left (5%) and none of right bones. The foramen was absent in 4 left (5%) and 3 right (4%) bones. The mean diameter of the MF was 2,04 (0,6-4,8) mm on left and 2,08 (0,5-6,2) mm on right side. The emissary foramina allow the passage of emissary veins that connect the intracranial venous sinuses with extracranial veins of the scalp. The frequency of emissary veins and related foramina has been found to be much higher in humans than in ape species. The results of this study will provide better understanding of the identification of structures for regulation of intracranial pressure, regulatory mechanisms in bipedality, and clinical cases of endolymphatic hydrops and pseudotumor cerebri in human.

Keywords: Mastoid emissary foramina, bipedality, pseudotumor cerebri

Revision of Morphological Changes Observed in the Kocabas Frontal Bone (Denizli, Turkey)

Oussama Baker, Bérénice Chamel, Hélène Coqueugniot, Amélie Vialet, Mehmet Cihat Alçiçek

Tuberculosis has been considered for a while as the archetype of the type of infections resulting from cattle domestication during the Neolithic period. Recently, studies in molecular phylogeny totally challenged this dogma, as they actually exposed that this human infection was probably much older than the domestication processes. A paleopathological study would then be able to discover cases predating the earliest evidence of animal husbandry. In 2008, presumed morphological changes attributed to TB were discribed by Kappelman and coworkers on the endocranial surface of a fossil of Homo erectus at kocabaş from Turkey (Kappelman et al. 2008). The fossil is dated from 510 to 490 ka according to this article, but new dates were recently proposed for this fossil at, at least, 1,1 Ma (Lebatard et al. 2014, Vialet et al. 2014). However, the validity of this diagnosis was refuted by Roberts and coworkers (Roberts et al. 2009). Complementary studies are planned on the endocranial lesions in order to clarify their morphological aspect. Furthermore, new macromorphological and 3D imaging analyses could help to assess the type of this paleopathological process. This research is supported by bilateral cooperation of TUBITAK-CNRS with grant number 110Y335.

Keywords: 3D imaging, paleopathology of TB, frontal bone, Homo erectus, Denizli

A Different Outlook on Forensic

Hüseyin Çakan, Filiz Ekim Çevik

In forensic sciences, crime scene investigation and evidences obtained from aforementioned area make up the major part of a criminal investigation. Many different evidences could be found in a crime scene investigation area, varied according to a type of a crime, how this crime has taken place, and a result of a crime. These evidences could be physical, chemical, and biological evidences. One of the important sciences is forensic anthropology which continues its works with the forensic medicine and bases on identification of skeletons. Although forensic science is a multidisciplinary field, it branches many work areas such as forensic medicine, forensic microbiology, forensic genetics, forensic pathology, forensic psychiatry as well as forensic anthropology. Mummies have become one of the interesting areas which illuminate many issues from determining the presence of diseases to determining color of hair with joint works of forensic microbiology, forensic genetics and forensic anthropology. One of the best works on this subject is Ötzi which is one of oldest mummies founded with 5300 years of age. Ötzi is different from other mummies because of the shape of mummification. In most of the mummified bodies belonging to Egyptian pharaohs and other cultures, have been mummified for ritual purposes, internal organs are removed from body to prevent deterioration of organs. A variety of chemicals are given to dead body which will remove fluid in the tissue to accelerate mummification. This process causes the cells lose water, because of this reason; these types of mummies are called as "dry mummy". But Ötzi has been mummified between ice as a whole with its casual clothes, internal organs and food in its stomach. Thus, it gives us information about genetic structures of people in the Bronze Age Europe and information about what they were wearing and which kind of tools they were using. Genetic studies were also conducted as well as a variety of physical examinations. In addition to this study, there is joint work of forensic anthropology and forensic microbiology in Arap Baba Mausoleum in Turkey. Ultimately, studies of forensic anthropology with other science fields about mummy issue which is one of interesting field and also its place in forensic science will be discussed by detailing examples in this study.

Keywords: Forensic Science, Mummy, Forensic Anthropology, Forensic Microbiology, Forensic Genetics

Superimposition Applied Identification of a Corpse Found in the Sea

Erdoğan Kara, Kara Nazmi Karacaoğlu, Ahmet Sadi Cağdır, Ahmet Necati Sanlı

The skull-photograph superimposition is a very efficient method in the cases in which there is a skull along with a number of photographs of a group of people which might match the identity of that skull. Skull-Photograph superimposition method has been used in forensic sciences for many years. Once practiced with a variety of apparatus, later conducted with video cameras, and finally today it is applied with the help of computers. 3d scanning of the skull provides a great help in the application. One of the most significant problems in this method is the incompatibility of identity photographs. In this specific case, the skull of a corpse found in the sea was 3d scanned, and it was compared applying superimposition method with the photograph of a foreign national missing person which was sent by the public prosecution office. In the process, craniometric points on the skull and the photograph were marked, and with the help of a suitable computer software, the superimposition comparison was conducted on these points. As a result of this study, it was found out that the skull belonged to that missing person.

Keywords: Superimposition, identification, autopsy

Different perspective aganist obesity: GAVAGE

Kübra Mina Yoldaş

Women in moritanya which is the northen country of Africa are carrying out a nurtrition method named gavage. According to this method; women are aiming not to take over weight while eating even though. How much it is related with indication of wealth and beauty. It can be caused the health problems and obesity by these caunted reasons. I have purposed to examine(observe) the same negative effects of taking over calories indaily life by the women who was exposed the this method name gavage also which anthropology of nutrion is including. I have benefied from the documentry researches of women who was carried out gavage on them and also researchers who was carriedout gavage on the while researching the gavage which was named " as spontaneally(by aneself) epedemic of obesity" by the Thomas MORTON. It can be said that; this method can affect to quality of fertility, and can restrict the required diminish the movements(behovicurs) and can drive the disarders of heart. As a result nutrition with gavage I mean method of nutrition as an abligation can an enhance the individual's calorie level till the 15.000. This circumtance can affect the individual's tealth in negative aspect. Therefare we can say that can breed same questions in the anthropology of health and nutrition.

Keywords: Obesity, gavage, calories, moritania, women

Trauma and Fractures In Physical Abused Children

Dilek Tektaş

This review aims to explain child abuse, physical abuse against children, the frequency and causes in Turkey and the world, the impact on the children, morbidity and mortality caused by posttraumatic symptoms and the type of fracture occurs during physical abuse.

Keywords: Child abuse, Physical abuse, Fractures, Trauma

Torture and the Methods Used in Medieval Europe

Ilgın Cansu Kamay

Torture is inflicting pain physically or mentally on someone for the purpose of obtaining information or confessions, threathening or coercing. In Medieval times, torture was especially used for confession or punishing the people who were accused of heresy and witchcraft; however, the main reason was to establish obedience towards the religious or monarchical authority. Tortures done without using any tormenters were mostly seen during history, but the human race developed tormenters which are simple but useful for physical tortures. Some of the tormenters such as "Judas Cradle", "The Head Crusher", "Iron Maiden", "The Rack", "Heretic's Fork", "Coffin Torture", "Thumbscrew", "The Pillory", "The Breaking Wheel" were invented during the Middle Ages, but some of them were used since the ancient times. Of those, "Judas Cradle", "Iron Maiden" and "Heretic's Fork" cause serious injuries on muscles and blood vessels. But devices like "The Rack", "The Breaking Wheel" and "Thumbscrew" were used more for confession and ended up with disjointing and broken bones. Medieval times was a dark and oppressive era with no concern about issues like human rights, so it could be said that torture was commonly and easily used in this era.

Keywords: Medieval Europe, torture, interrogation, torture methods

Caveman Diet of Modern Humans

Melis Serena Solakoğlu

Homo sapiens, or anatomically modern humans, who appeared approximately 200,000 years ago in Africa, have gained their modern behaviors somewhat 50,000 years ago. They are the only living species in the genus Homo and have many skills and traits such as to stand erect bipedally, to have the ability of thinking abstract, to have a culture and transferring their culture to further generations. Along with these traits, humans also evolved different nutritional strategies during their evolution. Various physical activities for hunting and eating cooked meal with the use of fire have changed the anatomy of humans for hundreds of thousands of years. Nutrition, having a very important impact on health, is affected by what, when and how much you eat. For that reason, humans tried many different diets in order to keep themselves healthy. Caveman Diet, or popularly known as Paleolithic or Paleo Diet, is one of these diets that aims to keep the person healthy. Though it is considered healthy, the evolutionary changes in human body over the years and the way that we procure food now makes it difficult to apply the Paleo diet in modern times. It is being justified that we need to prevent ourselves from the meat and milk in that diet. Some research showed that feeding with food of animal origin or saturated fat are causing many disorders such as heart disease, paralysis, gallstone, rheumatism, increased risk of cancer and ketosis, a psychological disorder. Besides all of these, milk and dairy products can cause mutations in human body if these are consumed too much. The lactose intolerance indicates that the people of the Stone Age have not consumed milk as modern humans do now. Furthermore, the Stone Age people had to work about 15-20 hours in a week to survive and this time period does not include the food preparation time, rather the collection time. If the collection, preparation and cooking time is involved, the total duration of work hours can be increased approximately to 44,5 hours a week for men and 40,1 hours a week for women. Even though these durations seem long, they are still less than the spent time by modern humans on house and work. For this reason, it is difficult for humans to stay healthy with so less movement during the day and by being able to procure food very easily. Consequently, this study argues that the limited consumption of carbohydrate and an increased protein rate caused weakened muscles and a decrease in metabolic rate. It also aims to explain that the adaption of paleo diet by modern humans may not be correct in a nutritional anthropology perspective, because of the evolutionary differences between modern humans and their ancestors.

Keywords: Diet, paleolithic, caveman, modern humans, nutritional

Estimation of the Time of Death: A Comparative **Analysis of Methods**

Ekin Özcan, Ersin Karapazarlıoğlu

Most accurately estimating the time of the death or post-mortem (PMI) is vital for forensic anthropologists. From this aspect, clarifying the details of the death cases is fundamental process in criminal investigation. There are various methods -which are constantly changed and developed- used by forensic anthropologists to identify an accurate PMI. Methods used by anthropologists are mainly qualitative including disciplines such as forensic botany, entomology, and biochemistry use more quantitative methods where insects, plants, or soil samples are available, to estimate the PMI. Yet pathologists prefer mostly to use medical methods in order to estimate the time of death in the early postmortem phases. In estimation of the PMI, both forensic anthropologists and pathologists focuse closely on the decay of soft tissues. Decomposition of the soft tissues is usually divided into four broad categories as Fresh, Bloat, Putrefaction and Putrid dry remains. To determine a minimum or maximum time estimate, signs such as decomposing of the epidermis or the collapse of the bloated abdomen are to some extent useful, but is not exactly exhaustive. Soft tissue decomposition is a sequential process with numerous small changes occurring throughout. If the broad, qualitative categories of decomposition were redesigned to specifically reflect these smaller sequential changes, the state of decomposition could be described more precisely, as a semi-continuous or continuous variable. In line to this evidence, in this study, we aim to compare all the methods used to estimate the PMI or death time and introduce pros and cons of each of these methods.

Keywords: Forensic Science, forensic anthropology, forensic entomology, decomposition, postmortem interval

Golden Mean of Nose in Turkish Population

Selin Bayko, Nese Cetin, Seda Uygun, Sinem Akkasoğlu, Hatice Mürvet Hayran

Introduction: Golden mean (golden ratio, golden section) is an ancient term. It is unknown who it was first used by. But its popularity started with Leonardo Da Vinci's diaries including his "Vitruvian man" study. This ratio is considered as a symbol of beauty and functionality. Golden mean is used by mathematicians, geometricians, arthitects, artists from of old. At the present time it is also used in plastic surgery. To provide the golden mean, ratio between two variable should be 1,618. Methods: The aim of this study is to research the accordance between several nose diamaters and golden mean in Turkish population. The study includes 40 individuals (20 male and 20 female) with 24,95 mean age. The measurements are performed on paranasal sinus computed tomography images by the programme Osirix. Six measurements performed for each person. Calculation of the ratios are "division of two related measurements" as follows: 1- Lateral view: nose lenght / anterior posterior width (projection lenght) 2- Anterior view: nose width / width between nostrils 3- Inferior view: total length / anteroposterior length of nostrils The results are evaluated statistically on IBM SPSS statistics 21 programme. Descriptive statistics are used for each result. Results: Mean value of the results are; for the first ratio 1.600± 0.203, for the second ratio 1.436±0.075 and for the third ratio 1.756±0.502. In female population the values are 1.582±0.174, 1.460±0.77 and 1.745±0.293. In male population they are 1.617±0,232, 1.411±0.660 and 1.766±0,273 respectively. Conclusion: These values and relations beetween the Turkish male and female population and golden mean will be guide espetially for reconstrictive operations of the face. Being aware of the values, ratios, relations or differences with the golden mean will offer satisfactory and pleasing results.

Keywords: Golden mean, plastic surgery of nose

Anatomic Landmarks for Nasal Reconstruction

Sinem Akkaşoğlu, Seda Uygun, Selin Bayko, Neşe Çetin, Hatice Mürvet Hayran

Introduction: Facial reconstruction is the process of recreating the face of an individual (whose identity is often not known) from their skeletal remains through an amalgamation of artistry, forensic science, anthropology, osteology, and anatomy. Facial reconstruction has proved successful frequently enough that research and methodological developments continue to be advanced. In addition to remains involved in criminal investigations, facial reconstructions are created for remains believed to be of historical value and for remains of prehistoric hominids and humans. Material and methods: Seven measurements were done by using paranasal sinus computed tomography on 20 men and 20 women who are between 20-30 years old. 1. Bone angel of nose root 2. Soft tissue angel of nose root 3. Soft tissue tickness of nose root 4. Tickness of soft tissue which is located at the end of nasal bone 5. Width of nose 6. Width of piriform aperture 7. Angel of anterior nasal spine Results: Bone angel of nose root is 146,59+15,570 for women and 136,33+13,070 for men, soft tissue angel of nose root is 154,61+7,80 for women and 150,76+9,980 for men, soft tissue tickness of nose root is 6,13+1,47mm for women and 7,28+1,34mm for men, tickness of soft tissue which is located at the end of nasal bone is 1,8+0,51mm for women and 1,86+0,55mm for men, width of nose is 3,47+0,3cm for women and 3,87+0,33cm for men, width of piriform aperture is 2,31+0,14cm for women and 2,45+0,21cm for men and angel of anterior nasal spine is 106,85+18,90 for women and 110,53 +17,150 for men. Conclusion: Nasal region is the most suspicious region in facial reconstruction. Principally to consider in this procedure are the landmarks on the bony structures.

Keywords: Fascial reconstruction, anatomic landmark, nose reconstruction

Assessment of Intraosseous Cannulation Techniques of **Proximal Tibia in Turkish Population**

Sedat Develi, Adem Parlak, Yusuf Emrah Eyi

INTRODUCTION In emergency medicine practice, intravascular access is an important component of resuscitation along with an open airway and breathing. It is crucial that intravascular access should be large enough for replacement of essential liquids and should not be interrupted while transporting the patient. It is difficult to obtain an open intravascular access in hypovolemic or circulatory collapsed patients. Intraosseous cannulation is used as an alternative procedure when standard intravascular access methods cannot be provided. In this procedure; infusion is performed via veins draining cavitas medullaris of long bones. We aimed to evaluate published guidelines in dry bones of Turkish adults. MATERIAL AND METHOD A total of 31 dry Tibia of unknown sex in Department of Anatomy were examined. (16 left, 15 right). All bones were belonged to Turkish adults and there was no pathology in all bones. In cannulation of proximal tibia, insertion site is described as 2 cm medial and 1 cm above the tibial tuberosity. We stated insertion site in all bones and observed anatomical structures close to it. RESULTSDISCUSSION In 10 of 31 bones (32.25%) nutrient foramens were observed. In five of bones; there was one nutrient foramen. In two of bones there were two foramens and three foramens in two samples. We measured the length and width of foramens with digital caliper. Mean length and width was found as 1.61 mm, 1.16 mm, respectively. These foramens were larger than other nutrient foramens in this region. This region is close to epiphyseal plate of tibia in young adults. We think that vessels draining into these nutrient foramens are important especially in young adults. CONCLUSION Although sample size is low, we suggest to 2 cm medial and 1 cm below of tibial tuberosity as insertion site in Turkish population, in order not to damage nutrient vessels.

Keywords: Intraosseous Cannulation, Proximal Tibia

An Anthropometric Assessemnt of Craniofacial Growth Differences Between Middle Adolescence Male and Adulthood Male

Semih Bağlıcakoğlu, Mehmet Enes Özenli

Facial region contains numerous characteristic in terms of identifiability and identification. The bone tissue is too much importance at formation of this characteristic structure. The face form is also affected by the changes occurring in bone tissue. Craniofacial growth has been important role for medicine, anthropologic, aesthetic surgery etc. reserches during many years. These reserches focus on evaluation of how bones show differences as dimension and shape while growing in time. The bones show growth and devolopment based on age. No part of the body remains in the form of prenatal but it is growing continuously by changing the current form(Coughlan, 1997:9). There are continuous bone formation and resorption activities which is provided by osteoblasts and osteoclasts in bone tissues. These activities in bone tissues continue from birth to death. The formation rapidity has the upper hand the reseraption or reverse situation in some periods of life. For craniofacial growth, it is not true that no part of head and face is effected others. Although, all component of craniofacial region has an unique growth, looking at the big picture it is seen that every component are relation with other parts. In our study, middle adolescence male (ages 16 and 18 individuals) and adulthood male (ages 25 individuals) will be investigated differences in growth of facial and head skeleton with measuring some lenth between anthropometric landmark. Anthropometric techniques that is metric measurement techniques of the human body will be used in the collection of survey data. The datas will be taken by the Crosssectional method. After istatistical analyses on collected data, it is put forward to whether any changes will be occured on craniofacial structure according to age or not.

Keywords: Growth, anthropometry, craniofacial growth

Assessment of Intraosseous Cannulation Techniques of Distal Tibia in Turkish Population

Sedat Develi, Adem Parlak, Yusuf Emrah Eyi

INTRODUCTION In emergency medicine practice, intravascular access is an important component of resuscitation along with an open airway and breathing. It is crucial that intravascular access should be large enough for replacement of essential liquids and should not be interrupted while transporting the patient. In particular it is difficult to obtain an open intravascular access in hypovolemic patients or patients with circulatory collapse. Intraosseous cannulation is used as an alternative procedure when standard intravascular access methods cannot be provided. In this procedure, infusion is performed via veins draining cavitas medullaris of long bones. We aimed to evaluate published guidelines in dry bones of Turkish adults. MATERIAL AND METHOD A total of 31 dry Tibia of unknown sex in Department of Anatomy were examined. (16 left tibia, 15 right tibia). All of the bones were belonged to Turkish adults. There was no pathology in the distal part of each tibia. In cannulation of distal tibia, insertion site is described as 1-2 cm above the medial malleolus. Insertions can be done by manual catheters or intraosseous cannulation devices. We examined distal tibia in terms of nutrient foramens and length for safe insertions. RESULTS In all bone examples, no significant nutrient foramen was observed. We measured the length of malleolus medialis with digital caliper. Mean length was found as 16.05 mm (ranges from 9.15 mm to 19.61 mm). DISCUSSION Intraosseous infusion is used as alternative venous access procedure especially in hypovolemic patients. In this procedure insertion should be successful since it is used in life threatening conditions. Although sample size is low, our results show that insertion site should be at least 3 cm above the malleolus medialis in Turkish population, in order not to cannulate intraarticular space.

Keywords: Intraosseous Cannulation, Distal Tibia

Ankyloglossia: Report of two cases

Sedat Develi, Gürcan Men

INTRODUCTION Frenulum linguae is a plica located on the midline, under the tongue. It extends vertically from inferior surface of tongue to the floor of the mouth. Frenulum of tongue, vinculum linguae, tongue web are the synonyms. Congenital short frenulum linguae is called ankyloglossia (tongue-tied). In this disorder, frenulum is hypertrophic or restrictive and limits protruding, cupping or elevation of tongue. In serious cases tongue cannot be extended beyond the teeth. Clinically it is important because it may cause breastfeeding and speech problems. In this paper we present two cases with ankyloglossia. Case 1 Our first patient was a 3 month old baby boy. His parents were admitted to outpatient clinic for difficulty in breastfeeding. In physical examination a short frenulum linguae and blisters on the upper lip due to sucking was observed (Figure 1). His weight was in normal limits. Examination of other systems was normal. Case 2 Our second patient was a 3 year old boy. His parents were admitted to outpatient clinic for speech delay. In physical examination a restricted frenulum linguae was observed (Figure 2). In this case frenulum was reaching to inferior alveolar ridge. Examination of other systems was normal. Both patients were Caucasian and referred to surgery. DISCUSSION A prevalence of 0.02-10% has been reported in literature. Ankyloglossia is classified in terms of functions and appearance of tongue. Patients may be asymptomatic but clinical findings vary in symptomatic patients. Blisters on lips, bubble palates, retracted tongue, difficulty in breastfeeding (choking, frequent resting), deglutition problems (residual milk), speech delay or difficulty in lingual-alveolar sounds (especially "1") or interdental sounds (such as "t") are some of clinical findings. Lingual frenectomy is used in treatment and usually a safe procedure. CONCLUSION We think ankyloglossia should be kept in mind patients with breastfeeding problems or speech delay.

Keywords: Ankyloglossia, Tongue-tied, Frenulum linguae

Estimation of Sex From Morphometric Values of Clivus and Foramen Magnum and Volume of Posterior Cranial Fossa by Using Computerized Tomography Images

Sümeyra Demir, Ayşe Kurtuluş, Kadir Ağladıoğlu, Kemalettin Acar

It's commonly possible to estimate sex by using the skull which keeps its integrity. But it may be more difficult in the disintegrated skulls. This research is an attempt to study on determining sex differences by using only bottom parts of the skull. We used the temporal computerized tomography images taken from 219 cases who had applied to Radiology Department of Pamukkale University Medical Center in Denizli Turkey, in September 2012-February 2014. The cases were 18-65 years old, 126 of them were female and all of the cases hadn't any pathological findings in their diagnostic CT reports. Images were monitored on the screen and measurements of the foramen magnum's anteroposterior diameter, transverse diameter, area, circumference; clivus's length, width, narrowest region; and finally the volume of posterior cranial fossa by Cavalieri's method. The anteroposterior diameter, transverse diameter, area and circumference of foramen magnum, the length and width of clivus were found to be significantly larger in males than females

Keywords: Sex estimation, foramen magnum, posterior cranial fossa volume, clivus

The Relationship Between Postural Stability and Bi-trochanteric Distance in Obese Women

Seda Sertel, Sebnem Avcı

Purpose: Obesity is a condition related with musculoskeletal disorders due to excessive fat accumulation in lower extremities. With or without disorders in musculoskeletal system, it may affect balance and gait. Obese people usually show slower gait speed, and lower postural control. This study was planned to investigate the effect of bi-trochanteric distance (BTD) on balance in obese women. Methods: 60 women who have had X-Ray images from their pelvis included into this study. Their mean age was 55,81±5,79. Their mean BMI was 33,19±3,84. The distance between two trochanter majors was measured on X-Ray image in the special computer program. Biodex posturography was used to evaluate individuals' dynamic and static postural stability. Functional balance tests -6 meter walking, standing on one leg, timed up and go- were done. Results: Mean bitrochanteric distance was 29,60±1,49. The correlation results between BTD and balance showed that there was a negative correlation between BTD and left leg stance (r=-0,254; p=0,050) and whole static balance test score significantly worsen (r=0,308; p=0,016) (Table 1). Conclusion: Results showed that the larger distance between trochanters, the lesser left leg stance and the worse static balance. According to momentum principal in pelvis, longer lever needs more gluteus medius strength. In the light of the results of this study we suggest adding gluteus medius strengthening exercises in balance education programs especially for obese individuals.

Keywords: Bi-trochanteric distance, obesity, postural stability, radiography

Effect af Height and Weight Anthropometric Characteristics on Balance in Young Swimmers

Seda Sertel, Turgut Meyvacı

Purpose: In order to protect the balance of the body, central nerve system depends on the correct working of vestibular, visual, proprioceptive systems providing the relation of the body and space and balance is influenced from anthropometric characteristics of the person. The purpose of this study is to search the effect of height and weight anthropometric characteristics for the balance in swimmers. Methods: 10 female swimmers with the average age 10,54±1,86 years, height 148,36±14,22 cm, weight 42,90±11,96 kg and 12 male swimmers with the average age 11,90±1,70 years, height 156,73±15,27 cm, weight 43,90±15,26 kg total 22 swimmers were included to the study. Swimmers were practicing for 3.6±2.2 years in avarage. 'Clinical Test for Sensory Integration of Balance', Postural Stability Test (static and dinamic form) and atlethic single test were used for balance assessment. Procedure of Clinical Test for Sensory Integration of Balance was consisted 4 tests; eyes open firm surface, eyes closed firm surface, eyes open foam surface, eyes closed foam surface. In the Biodex Balance System, Postural Stability Test procedure, is was evaluated as static and dynamic balance with surface difficulty adjusted respectively level 0-4. Functional balance tests 6 meter walking, standing on one leg, timed up and go were done. Results: Correlation coefficient (r) and p values obtained in the result of the examination of height and weight with balance parameter variables with one another in the swimmers were calculated. When the values, there was meaningful relation found in negative direction between height and weight with eyes open firm surface test (r=-0.634; p=0.002; r=-0.501;p=0.018). There was meaningful relation found in positive direction between the weight and dynamic mediolateral (r=0,498; p=0,018;). On the other hand, there was no meaningful relation met between the other variables (for each one p>0,05). This result has shown us that having height and weight increase in the swimmers decreases eyes open firm surface test score in other words, has positive impact on the balance performance but having the increase of weight parameter shall have negative effect on dynamic mediolateral balance test results. Based on our findings, we propose also providing dynamic balance exercises to land exercise programs of the swimmers.

Keywords: Swimmers, Anthropometry, Postural Stability

Effect of Bi-trochanteric Distance on Gait and Balance in Obese Women

Seda Sertel, Turgut Meyvacı

Purpose: Gait cycle consists of 2 main phases as stance and swing. In normal pattern, swing phase forms 37-40% of the entire gait cycle. In this phase, foot does not have contact with the ground and it is important for the continuation of the phase by with gluteus medius muscle stabilizing the opposite hip. When moment principle is taken into consideration, it is known that lever arm shall extend when bi-trochanteric distance increases, thus the load taking place on glueus medius muscle shall increase and balance shall be affected in a negative way. This study has been planned as retrospective in order to search whether or not there is a difference of bitrochanteric distance between obese individuals and individuals having normal weight. Methods: Total number of 92 computerized tomography images were examined by belonging to 46 obese women having the average ages of 50,67±8,44 with 46 women in the control group with the ages of 37,19±10,13 and having normal weight. For every case, after transferring the images taking place in the archive to radiology department work station, bitrochanteric distance was measured with device's own program. Results: Bitrochanteric distance depictive value was found as 30,28±1,78 cm in obese cases and as 28,33±1,65 cm in normal weight cases. When bi-trochanteric distances of obese cases are statistically compared with the ones taking place in the control group, it was seen that bi-trochanteric distance of obese cases was significantly higher

Keywords: Bi-trochanteric distance, obesity, gait, postural stability, computed tomography

Morphometric Analysis of Hard Palate Sutures

Serra Özturk, Muzaffer Sindel, Günes Aytac

INTRODUCTION Form of the hard palate and shape of the transvers palatine sutures are important structures for orthodonthic surgeries. The aim of this study is researcing the variations of the palatine suture lenght and types. MATERIAL AND METHODS This study performed in Akdeniz University Medical Faculty, Department of Anatomy. 80 adult dry skulls were examinated. The lenght of palatine sutures were measured with digital caliper and types of transvers palatine sutures were examinated. RESULTS The following measurements are found in males; length of the mid-palatal suture 26,59375 mm±3,544362, length of the interpalatine suture13,1875 mm± 2,575064 ,length of sagittal sutural system of the hard palate 39,78125mm ±3,47996, length of the transvers suture 31,09375±2,787266. The following measurements are found in females; length of the mid-palatal suture 25,375 mm± 1,927866, length of the interpalatine suture 13,5 mm± 2,683282 ,length of sagittal sutural system of the hard palate 38,875 mm \pm 3,556684, length of the transvers suture 28,875± 2,753785. CONCLUSION The lengh of the palatine sutures and types are important anatomical landmarks for better understanding the anatomic variations of this region and this informations might be useful during the surgical procedures.

Keywords: interpalatine suture, transvers suture, hard palate

Effects of Bruxism in Alteration of the Structure of Teeth

Nihan Öngay

One of the subjects of the subpart of anthropology, dental anthropology, is tooth enamel erosion which is an important factor in researching and determining state of health of communities. One type of enamel erosion which is bruxism is known as rasping of teeth. This pressing and rasping are causes of unpreventable movements of mandible during sleep. The purpose of this research is to identify, analyze and find out; • The causes, reasons of bruxism • The differences of bruxism and other enamel erosion types • The types of bruxism • The dissimilarities of erosion on mandible For this research, the references and sources are outcomes of dental x-ray of 14 different bruxism case from different clinics, samples of teeth and mandible molds and opinions and suggestions of experiences dentists. During preliminary research and study, it is observed that bruxism has distinct differences among erosion types and one of the reasons of bruxism is trouble in the temporomandibular joint muscle. In addition to these observations, it is observed that periodontal losses are one difference of bruxism among other erosion types. As a result of this preliminary research, some prefindings stated below are get. • Characteristic differences of bruxism among teeth erosion types • That formation of bruxism is psychological as much as it is physiological • That life quality of a person is directly affected negatively by causes of bruxism.

Keywords: clenching of teeth, erosion, bruxism, mandible

An Exhumation Case: Gunshot Wound in Bone

Fatih Gönen, M. Cihad Gül, M. Feyzi Sahin, İbrahim Uzun

Introduction: Exhumation is the act of digging up a buried corpse with an aim of re-examination. If an individual dies in suspicious circumstances, the prosecutor may request exhumation to determine the cause of death or for another reason as part of a criminal investigation. The trauma signatures associated with gunshot wounds in the bony thorax are useful in determining the direction of fire. Studies shows that bullets can leave distinctive markers on ribs including depressed fractures, bone fragments displaced in the direction of the bullet's path, and beveling that indicate the direction of fire. Case: The deceased was found inside a car in an uninhabited area in countryside of southeast Turkey. The car and the deceased inside were totally burned. Forensic autopsy was performed. The deceased was defined as high degree burned male body. Because of the high degree burn and carbonization findings of the body, detailed soft tissue examination were not performed completely. The prosecutor referred the case to the First Board of the Council of Forensic Medicine. The Board requested exhumation of the body for re-examination of the remains. A notch-shaped lesion compatible with gunshot entry wound was determined on lower end of the right 7th rib 6 cm away from vertebral side. An external beveling measured 2.5x1.5 cm with fracture lines around was found the internal surface of the rib. In consideration of these findings, The First Board of Forensic Medicine reported that gunshot wound injury as the cause of death. Conclusion: Through this case study, we aim to emphasize the importance of exhumation and skeletal trauma analysis. In cases like this case when the deceased was burned with carbonization, the examination of the soft tissues may not give enough information. Hence, skeletal trauma analyses become more important.

Keywords: Gunshot, bone, beveling, death, exhumation

An Anthropological View to the Burial Ceremony of **Ancient Anatolian Populations**

Derya Eryılmaz

Man has ceremonies and these are important characteristics of becoming human. Ceremonies reflect our complex social structure and an important part of human culture. Ceremonies provide indirect evidence of man's intellectual and cultural development. Most cultures have a concept of a life after death. The Neanderthals were probably the first people who had ceremonies for their death. There is evidence for such ceremonies at several sites where Neanderthal remains have been found such as in Shanidar cave. Iraq in the Middle Paleolithic Period. During the Neolithic Age in Anatolia people buried their death under the floor of house and gardens. Ancient Anatolian Bronz Age populations buried their death in hocker position into the stone cists, pots, pithos or to the ground. Iron Age people used rock graves, simple pits, sepulchre and also they kept their cremated deaths into the urns. Diversity of the burial ceremony reached to the top level at about first millenium B.C. in the ancient Anatolia. The burial gifts give us some information about the cultural changing of the ancient societies. Considering the Neolithic, Chalcolithic, Bronze and Iron Ages in Ancient Anatolia has been encountered the different types of burial positions, called as hocker, dorsal, group burial, inhumation and cremation. In this poster presentation some important burial types will be given to understand the ancient Anatolian populations from the cultural differences point of view.

Keywords: Burial types, grave types, burial gifts, burial ceremony

Middle Pleistocene Human Femoral Diaphysis From Turkey (southern Anatolia, Karain E)

Tonu Chevalier, Kadriue Özçelik, Marie-Antoinette De Lumley, Beregay Kosem, Henry De Lumley, Ishin Yalcınkaya, Harun Taskıran

The Middle Pleistocene femoral diaphysis from Karain E Cave in Turkey is culturally positioned in a Mousterian level and biologically ascribed to a 16 to 18-year-old individual. Considering the chrono-ecogeographical context, we focus on the endostructural morphological similarities between Karain and Neanderthals in comparison to Middle/Upper Paleolithic modern humans and Middle Pleistocene Homo particularly, with special attention to the distribution of cortical bone thickness. Our results show that the femoral diaphysis from Karain offers the opportunity to identify for the Middle Pleistocene some characteristics frequently observed in the Neanderthal femoral structure. Although the size of some variables is more similar to Middle Pleistocene or Upper Paleolithic samples, this diaphysis combines a high degree of circularity and a strong midshaft posteromedial reinforcement (and not only medial) of the cortical thickness on the medial side. This later and newly described feature can be related to the medial spiral distribution pattern of cortical thickness (observed by mapping) in the midproximal shaft, which is present at Karain and in all the mapped Neanderthals. This spiral distribution was not identified in recent modern humans and would probably be absent from Homo with femoral pilaster (i.e., Middle/Upper Paleolithic modern humans). However, without more comparative human data from the Middle Pleistocene, it would be premature to attribute the structural pattern of the fragmentary femur from Karain to a strict chrono-ecogeographical origin and to discuss the taxonomic affiliation of this bone (which probably belongs to Homo heidelbergensis or Neanderthal).

Keywords: Human evolution, femur, biomechanics, endostructural pattern

Influence of Supraorbital Foramina or Notch on Gender

Eren Öğüt, Muzaffer Sindel, Fatos Belgin Yıldırım

Introduction: The aim of the study was to examine the Supraorbital Notch and Foramen related to gender and side. The SupraOrbital Notch and SupraOrbital Foramen are important anatomical landmarks to facilitate surgical, local anesthetic and other invasive procedures for oral and maxillofacial surgeons. Material and Method: A total of 80 adult dry human skulls (160 sides) were investigated to find the frequency of occurrence of supraorbital foramen and notch were collected from the Department of Anatomy, Faculty of Medicine Antalya in Turkey for study purpose. Male 53 (%66) and female 27 (%34) respectively. Comparisons were made between genders and sides and statistical analysis was done where appropriate using Student's t test. Results: 80 skulls (160 sides) were eligible for analyzing the position of SOF and SON. Among them 143 sides (%73) had notch, 36 sides (%18) had foramen. 17(%9) sides had both notch and foramen, one sides found to have double foramen summing to one side that had accessory foramen. The study revealed that the SOF (% 20 on right, % 40 on left and %40 on both side in male, % 42 on right, % 25 on left, %25 on both side and %8 of accessory foramen in female,). SON (%10 on right, %4 on left, %86 on both side in male, %20 on left, %13 on right and %67 on both side in female. SON was more frequently found than the SOF. Conclusion: SON were more seen women than in men on the left side and SOF were found to be more on the right side in women. The accessory supraorbital foramina were more observed in women. Differences on side suggest that gender should be considered when applying the anatomical variation data to an individual subject.

Keywords: Supraorbital notch, supraorbital foramen, accessory supraorbital foramina, gender

Silver-Russell Syndrome - Anthropometric Characteristics of a Cohort of Polish Patients

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Background: Silver-Russell syndrome (SRS) is a heterogenous congenital imprinting disorder associated with hypomethylation of ICR1 domain in chromosome 11p15.5 (50-60% patients), or maternal uniparental disomy of chromosome 7 (mUPD7, 5- 10% cases). SRS children are characterized by intrauterine and postnatal growth retardation, relative macrocephaly, triangular face and body and/or face asymmetry. Material and methods: 81 SRS patients (41 boys, 40 girls), including 66 (81.5%) with ICR1 hypomethylation (ICR1hm) and 15 (18.5%) with mUPD7 were diagnosed and followed in one centre. There were 21 premature births: 12 (18.2%) among ICR1hm and 9 (60%) with mUPD7. Birth parameters were standardized accommodating gestational age and expressed as SDS score. Postnatal data were age- and sex-standardized, according to Warsaw children growth charts. Results: Mean body weight and length at birth were significantly smaller in ICR1hm group than in mUPD7 (-2.9±1.1 vs -2.3±1.0 SDS and - 1.9±1.4 vs -1.0±1.1 SDS), head circumference was larger in ICR1hm group (-0.6±1.2 vs - 1.0±0.8 SDS). Relative macrocephaly (difference between head circumference and body length ≥1.5 SDS) was observed only in ICR1hm group. Difference between head and chest circumference was greater, but statistically insignificant in ICR1hm, comparing to mUPD7 group (5.7±3 cm vs 5.1±1.5 cm). Postnatal mean body weight and height were smaller in mUPD7 group than in ICR1hm (-3.3±0.9 vs -2.8±1.3 SDS and -4.0±1.1 vs -3.2±1.4 SDS, respectively), head circumference larger in mUPD7 (-0.2±1.3 vs -1.0±1.1 SDS), chest circumference comparable in both groups (-2.9 SDS), BMI lower but statistically insignificant in mUPD7 patients (-2.1±0.9 vs -1.8±1.5 SDS). Conclusions: 1. The approximate difference of 5 cm between head and chest circumference is specific for newborns with SRS regardless of the (epi)mutation type and can be an useful diagnostic criterion 2. Postnatal body parameters were opposite to birth parameters, i.e. smaller in mUPD7 patients, probably due to prematurity in this group.

Keywords: Silver-Russell Syndrome, ICR1 hypomethylation, maternal UPD7, relative macrocephaly

Case Report: The Contribution of Different Lesion Types To Determination of Cause of Death in **Skeletal Remains**

Özge Ünlütürk, M. Feyzi Şahin, Nazmi Karacaoğlu

While conducting trauma analysis on skeletal remains, first, the existing lesions must be separated into the categories of antemortem and postmortem, then, all features of lesions must be dealt with together and the effect of these lesions to the body must be assessed. In cases where there are more than one type of lesion, features and localizations of the lesions are important, especially for determining the cause of death. In this study, bones of a married couple, who had been missing since the year 2008 and found in their curtilage after the digging following a notice. In the examination of the cases done at the Forensic Osteology and Odontology Division, it was found that there were gunshot enterence wound on the left parietal bone of the skull of the male, and on the sagittallambdoid suture intersection of the female. In addition, it was confirmed that the bodies had been dissected with a saw or a tool as such. In examinations, it was assessed that death of both of the individuals had been caused by intracranial changes following the injury by a gunshot. In this study, it is aimed to propound the subjects that must be given attention in trauma analysis on skeletal remains which have more than one type of injury, and to assess the effects of lesions determined, discussing these with literature.

Keywords: Skeletal remains, gunshot injury, trauma analysis

Case Report: Importance of Identification in Forensic Cases

Özge Ünlütürk, M. Feyzi Şahin

In studies of identification from skeletal remains, along with analyses run on the bones, judicial investigations are also of significant importance. Especially in cases when grave-digging is done, it is required that information and documents sent from the prosecution are evaluated with findings from bone examination, and that these two are compared. In this study, based upon the claim that this individual, born in 1980, has been killed in 2000 and buried without notice, bones that had been sent after being dug were examined. In the examination of the case done at the Forensic Osteology and Odontology Division, it was seen that there were soft tissues in patches, that there was a disposable underpad in green color in on the pelvis, that there was a catheter near the bones, probably placed inside the body for medical purposes; and in the examination done after the bones were cleaned, it was seen that the bones probably belonged to a female at forties, who probably died at a hospital or under medical care. However, when all of the findings were evaluated together, on the incident that the bones sent might have belonged to someone other than the individual claimed, the prosecution was notified, afterwards, with the DNA comparison on blood samples that were sent, it became certain that the bones belonged to someone else. In this study, it is aimed to contribute to the literature as to identification by discussing the crucial importance of information acquired from forensic investigations in the analysis of skeletal remains, and it's contribution to the process of reporting.

Keywords: Identification, skeletal remains, judicial investigation

Effects Of Age And Gender on the Eye and Orbit **Anthropometry**

Seda Sertel, Belgin Bamac, Tuncay Colak, Atakan Sengöz

The purpose of this research was to measure eyeball and orbit size and to determine the effects of age and gender on the eye and orbit anthropometry. The CT data of 120 Turkish adults (60 male and 60 female) with healthy eyes were collected. In this study, the patients with documented ophthalmologic disorders, myopia, emmetropia and hypermetropia were excluded. We compared two age categories: young (25-44 years) and middle (45-65 years). All the CT scans were obtained by the Siemens Somatom Spirit dualslice CTscanner. We analysed the following anthropometric parameters in all participants: orbital depth, height and width, intraorbital distance, extraorbital distance, sclera to sclera diameter of the eyeball and retina to retina diameter of the eveball. Factorial analysis of variance was used to judge the stastistical significance. We observed statistically significant difference between age groups in both gender with respect to intraorbital distance and retina to retina diameter of the right eyeball. The intraorbital distance was found smaller in the young compared to the middle in both gender (p= 0.001). The retina to retina diameter of the right eyeball was found greater in the young compared to the middle in both gender (p= 0.023). There were statistically significant differences between male and female in intraorbital distance (p= 0.001), extraorbital distance (p= 0.001), right and left orbital height (p= 0.05 and p= 0.017), right and left orbital width (p = 0.001 and p = 0.001), retina to retina diameter of the right and left eyeball (p= 0.041 and 0.009) and right and left orbital depth (p= 0.001 and 0.001). These values were greater in the male subjects. Precise knowledge about normative size of the eyeball diameters and orbit size might be useful in ophthalmological, oculoplastic, and neurological practice.

Keywords: orbita, eyeball, age, gender

Evaluation of Supernumerary Teeth in Panoramic Dental X-Ray

Sedat Develi, Hakan Dağ, Semih Görgülü

INTRODUCTION Existence of accessory teeth additional to normal compliment is called supernumerary teeth or hyperdontia. Accessory tooth can be primary or permanent. Reported prevalence ranges from 0.1% to 3.8%. We aimed to evaluate the panoramic dental x-rays of patients who were admitted to orthodontics clinic in order to obtain descriptive statistics and relations other facial disorders among Turkish population. MATERIAL AND METHOD A total of 190, panoramic x-rays of patients who were admitted in last 3 year were evaluated. 90 of the patients were male and 100 were female. Mean age of the patients was 17.1 years (range, 10-28). RESULTS Supernumerary tooth was found in 6 of 190 patients (22 of 51 missing teeth were 3rd molars). 3.15% of the patients had a supernumerary tooth. All patients had only one supernumerary tooth. 4 of 6 patients (2 male, 2 female) had maxillary accessory tooth, (one mesiodens, one lateral, one molar, one premolar). 2 of 6 patients had mandibular accessory tooth, both patients were male and accessory teeth were premolar. 4 of accessory tooth had a dysmorphic shape and 2 of them had a conical shape. Mean age of patients was 17.3 years and all accessory teeth were in vertical position. Prognathia superior is seen in 2 patients. Retrognathia of mandible is seen in 1 patient. DISCUSSION Reported prevalence ranges from 0.1% to 3.8%. We found a percentage of 3.15%. Although sample size is low, our results seem to be similar. On the other hand in literature, most common accessory teeth are maxillary and take place in anterior region. According to our results, supernumerary teeth are maxillary but in posterior region in our population. This scanning will be a preliminary study in order to obtain descriptive statistics and optimum preventive medicine approaches in terms of supernumerary teeth in our population.

Keywords: Supernumerary teeth, Hyperdontia, Accessory tooth

Evaluation of Congenital Missing Tooth in Panoramic Dental X-Ray

Sedat Develi, Hakan Dağ, Semih Görgülü

INTRODUCTION Absence of primary or permanent tooth is called congenital missing teeth. Absence of up to five permanent teeth (except 3rd molar) is called hypodontia. Six or more missing teeth are called oligodontia and missing of all teeth is called Anodontia. A congenital missing tooth is clinically important, in terms of malocclusion, retention and protection of primary teeth in the hypodontic region. We aimed to evaluate the panoramic dental x-rays of patients who were admitted to orthodontics clinic in order to obtain descriptive statistics about congenital missing tooth among Turkish population. MATERIAL AND METHOD A total of 190, panoramic x-rays of patients who were admitted in last 3 year were evaluated. 90 of the patients were male and 100 were female. Mean age of the patients was 17.1 years (range, 10-28). RESULTS Congenital missing tooth was found in 51 of 190 patients (22 of 51 missing teeth were 3rd molars). 15.2% of the patients had a missing tooth (29 of 190), 11.5% of the patients had at least one missing 3rd molar (22 of 190). Missing teeth were mandibular in 11 patients, maxillar in 20 patients and both in 20 patients. 6 of 22 patients with missing 3rd molar were male (6 male 16 female). 12 of 29 patients with missing tooth except 3rd molar were male (12 male, 17 female). Most common missing teeth were mandibular 2nd premolars and most common missing 3rd molar was left maxillary 3rd molar. DISCUSSION Reported prevalence of missing tooth (except 3rd molar) range between 2% - 6%. Our results seem to be higher. Most common missing tooth is mandibular 2nd premolar and our results are similar. This scanning will be a preliminary study in order to obtain descriptive statistics in terms of malocclusion types, preventive medicine and optimum treatment modalities in our population.

Keywords: Congenital missing tooth, Hypodontia, Oligodontia, Anodontia

Supratrochlear Foramen In Turkish Population

Sedat Develi

INTRODUCTION Supratrochlear foramen is an opening, seen in distal humerus, communicating fossa olecrani and fossa coronoidea. In literature, it is also defined as septal apertura or foramen olecrani. Inadequate ossification of the bony septum between fossa olecrani and fossa coronoidea causes this variation of humerus, MATERIAL AND METHOD A total of 32 dry humeri of unknown sex in Department of Anatomy, 16 of the right, 16 of the left, were examined. Humeri were belonged to Turkish adults. There was no pathology in the distal part of each humerus. Presence of supratrochlear foramen, its shape, transvers and vertical dimensions were noted. RESULTS In 1 of 32 humeri, supratrochlear foramen was found (3.1%). It was on the left side and oval shaped. Its vertical dimension was 2.7 mm, transvers dimension was 4.3 mm. DISCUSSION Supratrochlear foramen is first described in 1825 by Meckel. The incidence varies between 0,3-58%. Existence of this foramen is reported to be higher in Arkanas Indians, Africans and Australians than Greeks, American whites and Dutch people. Although sample size is low, our results are similar with European statistics. Clinically this foramen may lead to misdiagnoses in imaging of distal humerus such as bone cyst or osteolytic lesion. Also supracondylar fracture is the most common pediatric fracture in the elbow. Also, wide range of incidence may be useful for anthropologists in determining interracial relations. CONCLUSION We think that it would be useful to keep supratrochlear foramen in mind as a variation of distal humerus. This foramen may be diagnosed as a radiolucent lesion in imaging modalities. On the other hand, this foramen's incidence depends on racial characteristics. It is seen more common in some races and rare in other races. Since its race dependent incidence it should be remembered in bone identification, classification and interracial relations.

Keywords: Supratrochlear foramen, Septal Apertura, Foramen olecrani

Evaluating Dimensions Of The Sella Turcica In Turkish Adults From Cone-Beam Ct Images

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Introduction: Deviations in the dimensions of the sella turcica may express cranial, intracranial or systematic diseases. However, individual deviations are reported in normal individuals in shape and size of the sella. Normal standards are needed for describing abnormal morphology in various craniofacial aberrations and syndromes. Objectives: Dimensions of the sella turcica in a population of healthy Turkish adults with a normal facial appearance and occlusion were assessed and compared in accordance to genders in this study. Materials and Methods: Cone-beam CT images of 80 adult patients (40 male, 40 female) that were taken in Gazi University Oral and Dentomaxillofacial Radiology, clinic were evaluated. Both samples were with normal facial appearance and occlusion, having no systematic diseases or craniofacial trauma. Two groups were constructed in accordance to gender. The length, depth, and diameter of the sella were measured by Romexis software program. All statistical analyses were performed using SPSS 20 statistic program The data obtained were submitted to variance homogenity test (Levene's test) and a normality test (Kolmogorov-Smirnov). Next the parameters that would be analyzed using the parametric (Independent t-test) and non parametric (Mann Whitney U) tests were determined. Results: The mean lengths of the sella were 9,88 and 10,20 mm in female and male groups respectively. The mean depths were 9,18 and 8,77 mm and mean diameters were 12,32 and 12,11mm in female and male groups respectively. Between the genders no statistically significant diffferences were found for any of the variables. Conclusions: There may be a wide noticeable variation in dimensions of the sella turcica in this population of normal adults although revealing nonsignificant interdifferences of the genders. The results can be of importance in comparison with patients with craniofacial aberrations and syndromes.

Keywords: SellaTurcica dimensions, Turkish adult, morphology

An Aspect From Egypt to the Traditions of Interment At Hellenistic Period: Hadra Hydrias

Pelin Tas

Hadra Hydrias, which were one of the most important pots of Hellenistic Period, were firstly found in 1883-1884, by the help of the excavations, at Alexandria necropolis, the capital city of Ptolemaioses. Those were the vases which were used for putting ashes of legionnaires, ambassadors and other statesmen who probably died while visiting the royal palace and sending the ashes to their country. On some of them, there were inscriptions giving information about the dead person. These inscriptions included the person's identification and the time of death which was dated by indicating the king of the period. The writings, which were about the dead person, were sometimes written on the base of the pot, but sometimes they were written on the pot's body, a few centimeters under the holders. The inscriptions on the Hadra Hydrias there were the date of the prevailing kingdom, and it helps about dating the pots correctly. Most of the inscripted pots which were excavated from Alexandria were dated to 254-197 B. C. Rarely, brim of the pots were closed with some objects. On the brims, pots were decorated with the geometrical designes, between the horizontal holders there were laurel wreaths mostly, on the body girland ornaments were exist usually and on a few centimeters lower from the holders, there were geometrical designs again. They were decorated with grape leaf, ivy, laurel wreath, olive which were essentials of the ancient world, also there were other decorations describing the activites of the people or animals. Hadra Hydrias, which were exist a lot in Alexandria, were also found in Athens, Eretria, There, Rhodos, Cyprus and Ukraine; in the Anatolia they were unearthed from the Olympos Mountain- Karamattepe, Kelenderis and Magnesia ancient settlements.

Keywords: Hadra, Hellenistic, pot, ash.

Anthropometric Measurements of Distal Femur Using Magnetic Resonance Imaging In Turkish Population

Sefa İşıklar, Senem Turan Özdemir, Namık Şahin

Background The key factors to a long term success in total knee arthroplaty are accurate bone cut and appropiate implant size. Current available implants for total knee arthroplasty (TKA) are based on the morphometry of the Caucasian knee. We believe that there are significant morphometric differences between the population in morphometric measurements of distal femur. In addiction, knowledge of gender differences is important for TKA. Recently, much attention has been given to gender differences in TKA. Also, morphometric measurements in case of pathologic process such as knee osteoarthritis are also being curious and investigated. The primary purpose of this study was as follows: 1. to determine reference data of the distal femur morphometry for Turkish population 2. to compare distal femur morphometry between male and female 3. to compare distal femur morphometry in subjects with and without osteoarthritis. Material and Methods Our study group consisted of 62 patients, including 33 males and 29 females and the control group consisted of 133 healthy individuals, including 62 males and 71 Females. Magnetic resonance images were obtained from above the patella to below the tibial tubercle. MRI sections were examined, and the most prominent point of the lateral epicondyle and the deepest point of the sulcus were determined using consecutive scans that showed the lateral epicondyle and/or the sulcus of the medial epicondyle. These slices were used in the measurements. Distal femur data were collected from the two-dimensional digital images using TPSDIG 2.04 software. Results Nine morphometric measurements of the distal femur were performed on axial MR images. These measurements are epicondylar width, lateral condylar width, medial condylar width, transverse width of the intercondylar notch, femoral lateral distance, femoral medial distance, maximal height of the intercondylar notch, notch entrance width and anteroposterior height of the distal femur. Significant differences were found for all distal femur measurements according to gender. When comparing measurements taken from osteoarthritis of knee with healthy subjects were found significant differences except femoral lateral distance and anteroposterior height of the distal femur (p>0,05). Discussion Recently, much debate and discussion have focused on the effect of genderspesific total knee arthroplasty. The issues of a gender specific knee implant design is based on the theory that there are clinically important morphological differences between male and female knees. Taking into account the etnisity, race, communities is important to identify these differences. It is also important to be aware of the impact of the disease. This work is a morphological study was carried out for the Turkish population.

Keywords: Distal Femur, Morphometry, Magnetic Resonance Imaging

Gender Differences In Gonial Angle, Ramus Height, Bigonial Width, Bicondylar Width and Ramus Flexure In **Turkish Society**

Serife Değerli, Gülsün Akay, Ciğdem Sarıkır, Meryem Toraman Alkurt, Kahraman Güngör, İlkay Peker

Morphological configuration and metric values of mandible are indicator for sexual dimorphism. To evaluate the morphology of the mandible, we measured gonial angle, ramus height, bigonial width, bicondylar width and observed ramus flexure Objective: Investigation of and gender differences in gonial angle, ramus height, bigonial width, bicondylar width and ramus flexure in Turkish society using cone-beam computed tomography images. Material and method: Gonial angle, ramus height, bigonial width, bicondylar width were measured and ramus flexure is observed on 50 patients' (100 hemimandibles) using cone-beam computed tomography images. The patientswere randomly selected and consisted of 20 males and 30 females. Results: Ramus flexure was observed bilaterally in 14 patients, (28%), unilaterally in 2 patients (4%). Twenty-three patients'(46%) flexure were straight bilaterally while 6 patients(12%). flexure were straight unilaterally. 5(10%), patients' flexure were unclassified. Ramus height, bigonial width and bicondylar width were measured. The mean ramus height was 67 mm in males and 60,2 mm in females. The mean bigonial width was 98 mm in males and 86,2 mm in females. The mean bicondylar width was 129,2 mm in males and 119 mm in females. Gonial angle was calculated and the mean value was 121,570 in males and 122,9 0 in females. Conclusion: The results of this study showed that flexure of ramus is a gender indicator which could be obtained on cone-beam computed tomography images. The results of this study confirmed that ramus height, bigonial width and bicondylar width are higher in males. In our study only gonial angle was different from previous studies as it was higher in females. According to this study, cone-beam computed tomography images can provide reliable results for anthropometric and forensic medicine studies.

Keywords: gonial angle, ramus height, bigonial width, bicondylar width, ramus flexure

Examining the Thickness of Facial Skin and the Soft Support Tissues Anatomically tnd Anthropologically

İlke Görür. Lokman Öztürk

Introduction-Purpose: In this study, by the results that are obtained from the comparison of the literature and the measurements, the purpose is to determine the facial skin thickness and the thickness of the soft support tissues which are supporting the skin of the people who live in İzmir. Material-method: Measurements were made by pinching needles to specific points of the face of the 7 adult male cadavers which are fixed with %10 formalin and situated in Ege University Medical School Department of Anatomy Macroscopy Laboratuary. For each of the cadavers 30 measurements were made and the results are compared with the ones in literature. Discussion-Result: The old age and the dental missing of the cadavers makes the points difficult to measure that are on mandibula and maxilla. The thickness of the skin in buccal area and the soft support tissue varies excessively by the age, gender and specifically the weight of the individual.

Keywords: facial soft tissue, face reconstruction

Computerized Assesment of Skeletal Dental Arch Asymmetry For İmportance of the Clinical Orthodontics

Pınar Cağımnı, Figen Govsa, Mehmet Asım Özer, Zuhal Kazak

Dental arch size and form among individuals according to tooth size and position, craniofacial growth pattern, genetic and environmental factors. Given its morphology and position, the palate is a key anatomical structure determining skeletal patterns. Asymmetry has been found to play a crucial role in its restoration is an essential problem in oral maxillofacial surgery. The aim of the study was to analyze the morphological characteristics of the dental arches and skeletal asymmetry in adult hard palate. The reference points on the arch length, intercanine width, intermolar width, ratio of the maxillary to palatinal surface were studied in 100 hard palates. Using vertical and horizontal reference lines of bilateral points was appeared to be most appropriate. In the intermolar field, at the intersection point of the median palatine suture and transverse palatine suture on the distance from right palatine groove was 19.77 ± 1.6 mm, the distance from the left palatine groove was 18.80 ± 1.6 mm. Asymmetry between right and left hard palate was observed. Using a computer software program was allowed calculating meaningful asymmetry values. In this study, it was possible to investigate the form and arch dimensions of the hard palates, to provide detailed information on the characteristics of dental asymmetry and to calculate the distances of palatal reference points with the help of certain software.

Keywords: Dental arch, facial identification, asymmetry, photogrammetry

Anthropometric Norms with Different Face Types for Importance of Facial Identification: A Photogrammetric **Analysis**

Suzan Sirintürk, Figen Gosva Gökmen, Hassan Bagheri, Yelda Pınar, Mehmet Asım

The increase in the use of photographs on individual identification credentials such as driving licences, credit cards, security passes and passports has led for purpose of criminal activities. The ID photographs requires the cooperation of two predominantly visual disipline; forensic photography and morphological anatomy. The aim of this research is to accurate anatomical measurement and tracing of facial features, which allows direct physical comparison of ID document images. Standart photographs (frontal, lateral and base views) of 100 female and 100 male Turkish adults (both parents of Turkish ancestry) between the ages of 18-24 were digitally acquired. Twenty-six standard anthropometric measurements were obtained using a computer software program. Photographed faces were classified based on eight established types such as round, oval, square, rectangular, diamond, triangular, inverted triangle and trapezoidal faces. The faces were scored for attractiveness. These ratios were overall face length to bizygomatic width, temporal width to bizygomatic width, bizygomatic width to bigonal width, temporal width to bigonial width, upper-face height to middle-face height, middle-face height to lower-face height, upper-face height to lower-face height. Results showed that the degree of variability in facial measurements can be great as the variability of facial measurements between different measurements. Surgeons require access to treat congenital or post-traumatic facial disfigurements succesfully, they need to craniofacial databases based on accurate antropometric measurements. The facial anthropometric norms derived from this study are important for planning treatment of the reconstruction and personalized design, forensic practice for personal identification.

Keywords: Facial norm, facial identification, face types, face classification, photogrammetry

Experimental Studies of Orthopaedics and Traumatology

Serkan Akpancar, Cenk Kılıc

Trend towards experimental research in the medical field has been increasing in recent years. Orthopedics and Traumatology is one of the branches that Experimental studies can be conducted very often. Experimental studies in Orthopedics are carried out to determine the impact of local agents (ESWT, ultrasound, injections, etc.), therapeutic effect of pharmacological agents (hormones, drugs, cytokines, etc.) or the treatment efficacy of surgical techniques and orthopedic implants. Experimental studies have very important place due to the lack of appropriate and homogeneous control and patient groups, the presence of a large number of the variability, little patient groups to create statistical significance. Animal experiments, cell culture (in vitro tests), biomechanical, cadaveric studies and movement analysis are types of orthopedic experimental studies. Nearly half of the experimental studies that carried out in orthopedic research were animal studies and the other types were carried out very little. Such conditions that are difficulty of working conditions and excess number of patients per physicians and limited knowledge make it difficult for physicians to perform these studies. In the AAOS meeting that has an important place in orthopedics, experimental studies were 26.2% of 465 presented studies in 1996. In the 22th National Turkish Orthopedics and Traumatology Congress that carried out in 2011, only 77(8.95%) of the accepted 860 reports were experimental research. This review is intended to review the principles of the experimental studies and to act as a guide for researchers interested in this field.

Keywords: Experiment, cadaver, Orthopedics, Traumatology

Maturation of Maxillary and Mandibular Second and Third Molar Teeth In Turkish Population

Zühre Zafersoy Akarslan, Kahraman Güngör, Cemal Atakan

Objectives: To assess the maturation stages of permanent maxillary and mandibular second and third molar teeth among Turkish children and young adults having no dentoalveolar anomaly. Material and Methods: Digital panoramic radiographs present in the archive of the radiology department taken from 1070 patients (678 females, 392 males) aged between 4-20 years were evaluated. The maturation stages of all teeth were assessed according to the Demirjeans method (a-h stage), in addition to 'no follicle' and 'follicle' stages. Symmetry in maturation between teeth on the left and right quadrant was also evaluated. Descriptive statistics, Mann Whitney U test and Wilcoxon rank sum test was used for statistical analysis. Results: All maxillary and mandibular molar teeth of males reached to the h stage earlier than females (p0.05). Conclusions: These reference values for maturity of second and third molar teeth could be useful in age determination in Turkish population in dentistry, forensic science, archaeology, and anthropology.

Keywords: Age estimation, Agenesis, Teeth, Turkish

Prevalence of Second Mandibular Molars Root Variation in the Selected Turkish Population

Nur Atak, Gülsün Akay, Kahraman Güngör

Second mandibular molars have many different root variations. The aim of this retrospective study was to determine the prevalence of second mandibular molars root variation in selected Turkish population. Conebeam computed tomographic (CBCT) imaging is a 3-dimensional (3D) imaging technique that can be useful for diagnosing irregular anatomy. Recently, CBCT imaging has been found to be useful and accurate in assessing root canal morphology. CBCT scanning is a noninvasive method that provides for multi planer observation of each tooth and makes it easier to diagnose variation of the roots. A total of 450 patients (231 males and 269 females) retrospective dental CBCT images, which had already been recorded in Gazi University, Faculty of Dentistry, Department Oral and Dentomaxillofacial Radiology. A total of 900 mandibular second molars examined. Second mandibular molars were analyzed using axial slices and variation of roots were classified as follows: Single Root, Two roots in mesial side, one roots in distal side, One root in mesial side, two roots in distal side, two roots in mesial side, two roots in distal side. The majority of mandibular second molars root variations were found single root (73 teeth, 8.11 %), two roots in mesial side, one root in distal side (11 teeth,1.22 %), one root in mesial side, two roots in distal side (3 teeth, 0,33%), two roots in mesial side, two roots in distal side. (2 teeth, 0.22%). The variation roots in mandibular second molars in the selected Turkish population seems rarely. These findings may help the anthropologist to identify Homo sapiens and resolve anthropological problems.

Keywords: Cone-beam computed tomography, mandibular second molar, antropology

The G-Spot: Is It A Scientific Fraud?

Cenk Kılıc

The anterior wall of the vagina has been a focus of interest for many researchers, due to be a sexual arousal region. In 1950, Gräfenberg mentioned about the role of the urethra in female orgasm. However, in this article there is not an defined point in the vagina. The term of G-spot, was used by Addiego et al. in 1981. It is defined as "sexually sensitive spot". This point can be palpated on the anterior wall of the vagina and is located in the pelvic urethra. However, until today the location of the G-spot and its definition are unclear. There are conflicting data and statements associated with the presence of the G point. In 2007, Spike, a bioethicist at Florida State University's College of Medicine, considered that doctors who claim to develop the women's G-spots are benefiting from women's insecurities and "they are engaging in something more like medical fraud.". Spike stated that G-spot is like a folk tale. Published in 2007, "Committee opinion" refers to the following: "Other procedures, including vaginal rejuvenation, designer vaginoplasty, revirgination, and G-spot amplification, are not medically indicated, and the safety and effectiveness of these procedures have not been documented. Women should be informed about the lack of data supporting the efficacy of these procedures and their potential complications, including infection, altered sensation, dyspareunia, adhesions, and scarring.". G-spot, has become the center of a multimillion-dollar business. G-spot amplification, is a cosmetic surgical procedures for temporarily increasing the size and sensitivity of what some believe to be the G-spot. All published scientific data indicate that the G-spot does not exist and the female prostate has no anatomical structure that may cause an orgasm. G-spot amplification is an unnecessary and ineffective medical procedure.

Keywords: G-spot, female sexual function, G-spot amplification

Female Priapism Not Persistent Genital Arousal Disorder

Cenk Kılıç

Priapism is defined as a persistent (continued for hours) painful erection that is not associated with sexual arousal. The incidence of the priapism in women is not known. Female priapism is a case rarely encountered in the literature. The mechanism of female priapism is not well known. However, it is similar to that of male priapism. Female priapism should not be expressed as similar to the persistent genital arousal or the restless genital syndrome. As a result, women may feel abnormal about sexuality and these shares should not be caused. Female priapism is not a sexual medicine disease. Female priapism is is a gynecological or urological problems. Pharmacotherapy for erectile dysfunction, haematological neurological causes, Post-trauma, Solid tumours, drugs, segmental thrombosis of the corpus cavernosum, total parenteral nutrition, appendicitis, amyloid and rabies in etiology of priapism have been reported. Priapism is a urological emergency requiring accurate diagnosis and treatment. There are many strategies for the treatment of priapism.

Keywords: Priapism, genital arousal, female

The Evaluation of Dental Arch Dimensions By Using **Conebeam Computed Tomography**

Ciğdem Sarıkır, Serife Değerli, Gülsün Akay, İlkay Peker, Kahraman Güngör, Meryem Toraman Alkurt

The measurement of dental arch dimensions is the forensic tool in determination of gender as well as orthodontic treatment planning. Conebeam computed tomography (CBCT) provides precise and accurate threedimensional information of the orofacial structures. The high quality images can be obtained in short time and lower radiation dose compared with conventional computed tomography. The aim of this study was to retrospectively evaluate the dental arch dimensions by using CBCT images. This study included CBCT images of 50 patients were randomly selected. Inter-molar arch width, arch length, inter-canine and inter-molar widths were measured and recorded as millimeter in maxillary arches. The distribution of these distances were calculated according to gender with descriptive statistics. The study sample consisted of 32 females (64%) and 18 males (36%) age ranged between 7 and 55 (mean age±standard deviation=27,76±11,2). The means of inter-molar arch width, arch length, inter-canine and inter-molar widths were found to be greater in males than in females. The recording and archiving of dental arch dimensions are important indicators for forensic specialists, anthropologists and dentists. CBCT images are reliable for evaluation of dental arch dimensions.

Keywords: Dental arch dimension, cone-beam computed tomography, forensics, dental anthropology

Morphometric Analysis Of Foramen Magnum By Using Cone Beam Computed Tomography

Gülsün Akay, Çiğdem Sarıkır, Şerife Değerli, Kahraman Güngör, İlkay Peker

The foramen magnum is an important landmark of the skull base and particular interest for anthropology, anatomy, forensic medicine, and other medical fields. The purpose of this study was to investigate the morphometric parameters and variations the shape of the foramen magnum by using Cone Beam Computed Tomography (CBCT). This study included CBCT images of 178 individuals (88 males and 90 females) were randomly selected. The sagittal diameter, transverse diameter and circumference of the foramen magnum were measured as millimeter (mm). Additionally, the shape of foramen magnum was classified as round, hexagonal, oval, eggshaped, tetragonal, pentagonal, irregular A and irregular B. The mean sagittal diameter of foramen magnum was higher in males (36,4 mm) than in females (34,6 mm). Also, the mean transverse diameter of foramen magnum was higher in males (31,2 mm) than in females (29,6 mm). Regarding the mean foramen magnum circumference, it was lower in females (120,8mm) than in males (121,3 mm). The majority of foramen magnum shape was found to be round (23%) and followed hexagonal (17,4%), irregular A (14,6%), oval (12,9%), egg-shaped (6.3%), tetragonal (6,7%), pentagonal (8,4%), and irregular B (9.5%), respectively. CBCT images can provide valuable information related with the morphometric analysis of foramen magnum and can be reliable method for further investigations in anthropometric and forensic medicine.

Keywords: Foramen Magnum, Cone-Beam Computed Tomography, Forensic, Anthropology.

The Morphometric Measurements of **Humerus Segments for Byzantium (13. century)** and Present Time

Nazan Güner, Senem Turan Özdemir

Introduction: Knowing the mean values of humerus segments is very important for anatomic and forensic science. In addiction, these data give evidence to indicate the characteristic features of a population for archeological materials. The aim of the present study was to determine the lengths of humerus segments in the ancient times and compare these with the data of present time bones. Right and left side bones were measured in both times bones for comparison. Methods: In this study we used to 89 Byzantium and 25 present time humerus. The bones were collected from Uludağ University Department of Anatomy. The bones examined in the present study are part of the collection of bones excavated from a Roman amphitheater in Nicaea, Anatolia. The humerus of both period were photographed using standard method and transferred to digital platform. Four segments were divided into longitudinal axis of the humerus. Twelve different measurements were performed on digital images using TpsDig2 software programme. For statistical evaluation Student's t-test and Mann-Whitney test was performed using SPSS 20.0 software. Results: Among the measurements of the humerus of Byzantium period and present-day, there were significant differences in four measurements. These measurements are height of humerus

Keywords: Humerus, Morphometry, Byzantium, Anthropometry

A comparative Study of Morphometric Measurements of Human Coxae Between late Byzantine (13. Century) and **Present Period**

Nilgün Tuncel, Senem Turan Özdemir

Introduction: Inter- population differences can be studies metrically and metric studies reflecting the population characteristics are fundemental to anthropological assesment. The obtained measurements can plays an important role in human evaluation and biological research. The main objective of this study was to compare lineer morphometric measurements of coxae between Late Byzantine and Present period. Material and Methods: This study was carried out on 25 coxae of Late Byzantine period (13. century) and 32 present day coxae. The material was stored in the osteological collection of the Department of Anatomy of Uludag University, Turkey. The coxae examined in the Niceae, Anatolia. The coxae of both period were photographed using standart shooting method and transferred to digital platforme. Ten linear distance have been measured digitally from photographs using TPSDIG software programme. The obtained data were analyzed with SPSS 22.0 software programme with t test and Mann Whitney U statistics tests. Results: When coxae of each periods were compared there are significant differences between total coxae lenght, lenght from the roof of acetabulum to pubic symphysis midpoint and from the base of the acetabulum to the lowest point of coxae's measurement (p0.05). No significant difference was found in the morphometric measurements between left and right side specimens. Discussion: Total lenght of coxae, from the roof of acetabulum to pubic symphysis midpoint and from the base of the acetabulum to the lowest point of coxae measurements are remarkable varies for both era's bones. Our study gives us morphometric data of coxae for two different periods. This study in which two different periods are compared by obtained linear measurements can provide useful information for human evaluation, biological research and anthoropological research.

Keywords: Coxae, Measurements, Byzantine Period

Anthropology As An Useful Tool Supporting Diagnosis Of Rare Disease

Agnieszka Różdżyńska-Światkowska. Anna Tylki-Szymańska

Background. A rare disease is any disease that affects a small percentage of the population. In Europe, a disease is considered to be rare when it affects 1 person per 2000. Most rare diseases are genetic, and thus are present throughout the person's entire life, even if symptoms do not immediately appear. There is no single, widely accepted definition for rare diseases. Some definitions rely solely on the number of people living with a disease, and other definitions include other factors, such as the existence of adequate treatments or the severity of the disease. However, the European Commission on Public Health defines rare diseases as "life-threatening or chronically debilitating diseases which are of such low prevalence that special combined efforts are needed to address them. Many of this syndromes involve body stature and craniofacial abnormality. Experienced specialist often make an immediate diagnosis by recognizing characteristic phenotype features of syndrome. OBJECTIVE. To show contribution of clinical anthropologist in the diagnostic process of rare diseases. METHODS. Usefulness of standard anthropometric techniques and methods in diagnostic of rare disease such as analysis of demographics, birth date, percentile charts, growth patterns, bioimpedance analysis, somatometric profile, craniofacial profile, body proportion's indexes and was showed based on rare diseases examples. RESULTS AND CONCLUSIONS. All methods was used in rare disease diagnosis and showed that anthropology is a very useful tool supporting not only diagnosis but also enable to learn of a natural history of a given rare genetic disease.

Keywords: clinical anthropology, dysporphology, rare diesease

Photogrammetric Analysis of the Facial Soft Tissue Profile of Turkish Young Adults: Angular Measurements

Serdar Babacan, Senem Turan Özdemir

Background: One of the most important components of profiloplasty is the evaluation of angular measurements of soft tissue facial profile according to gender and populations. The aim of this study were determine angular measurements of facial soft tissue profile for Turkish young adults and was to compare the soft tissue facial profile in terms of genders. Methods: Angular measurements of the facial soft tissue were taken from 63 male and 92 female volunteer Turkish young adults aged between 18-24. The soft tissue facial profiles digitally analyzed using angular measurements made with standardized photogtographic records. In this study 13 standardized anthropometric facial landmarks were determined and 11 measurements were obtained using TPSDIG software programme. The obtained measurements were evaluated in terms of gender differences. Statistical evaluation Student's t-test was performed using SPSS 20.0 software. Results: A statistically significant differences was found between males and females 6 of 11measurements taken. The nasofrontal angle, nasolabial angle, mentolabial angle, mentocervical angle, prn-trg-ls angle and ls-trg-pg angle between genders were found statistically significant

Keywords: Face, angular measurements, morphometry, profiloplasty,

Is Ultrasound Application Effects the Erector Spinae Muscles of Obese Women?

Seda Sertel, Ayşe Numanoğlu Akbaş

Purpose: Ultrasound (US) is an electrotherapy modality which frequently used by physiotherapist in clinics for thermal effects and minimizing edema, muscle spasm and pain in soft tissue. Especially for lumbal region pathologies US is an important part of the therapy. In lumbal region applications target issues are erector spinae muscles. In literature it has been reported US effects tissues from skin surface to 5 cm deep. The aim of this study is determine the distance between skin and muscle tissue in lumbal region of obese women. Method: For this purpose abdomen Computerized Tomography (CT) scans of 35 obese women whose mean age 50,54±9,38 has been examined. Abdomen CT scans in archive transferred to Department of Radiology work station and examination had been done on 5 mm section thickness with own software of the device. Total axial thickness of skin and adipose tissues of L1-L5 vertebra level measured. For every lumbal vertebral level two measurements performed as right and left. Measurements recorded as centimeters. Means, minimum, maximum and standard deviation values of the measurements are assessed. Results: Mean values of the axial thickness of skin and adipose tissues were 2,83±0,89 cm on right, 2,84±0,83 cm on left in L1 level, 3,37±1,08 cm right, 3,25±1,04 cm left in L2 level, 4,09±1,24 cm left 3,91±1,21 cm in L3 level, 5,22±0,98 cm right 5,21±0,9 cm left in L4 level, 5,77±0,7 cm right, 5,61±0,7 cm left in L5 level. Conclusion: This result shows that US application doesn't reach target tissue at the level of L4-L5 of obese woman. In L3 level only the surface of the target tissue affects from the application. According to our results we recommend that topographic and anthropometric properties should be considered for lumbal region US application especially in L3-L5 levels.

Keywords: Obesity, Ultrasound, Anthropometry, Computerized Tomography, Lumbal Vertebrae

Recurrence of Post Mortem Pink Teeth Phenomenon among the fatalities during the Ops Daulat 2013 Sabah, Malaysia

Norhayati Jaffar, Mohd Shah Mahmood

In 2013, a conflict military standoff had erupted in Lahad Datu, Sabah, located in the East Malaysia from 11 February to 24 March 2013 between a group of militants who called themselves as the "Royal Security Forces of the Sultanate of Sulu and North Borneo" from Tawi-Tawi island in the Southern Philippines and the Government of Malaysia. After several unsuccessful negotiations between the two parties, the invaders were declared as terrorists and Ops Daulat Lahad Datu, Sabah 2013 military operation was launched by the Government of Malaysia on the 1st of March 2013. Altogether, a total of 78 casualties had been reported with 68 from the terrorists' side and the rest were from the Malaysian side. During the post mortem odontology examination of the terrorists' bodies, a significant number of them showed the post mortem pink teeth phenomenon, together with pink facial bone in some cases. In this military conflict situation, most of the bodies were recovered at a significant later date after their death with some of them were found buried in wet shallow graves with the cause of death attributed to the gunshot injuries to the head or around the body. Although many literature had cited that there are no forensic significance between the occurrences of this phenomenon with the cause of death other than just part of the decomposition process itself, the findings of quite a substantial numbers that had this condition in this armed conflict situation make it worthwhile to be reported on.

Keywords: forensic, pink teeth, Malaysia

Regional Differences İn Menarche And Secular Trends

Gamze Sönmez, Gülüsan Özgün Basıbüyük, Abdullah Alan, Akgül Dalkıran

All are common in human growth and development is a process that occurs in living biological change. Developments occurring during puberty; the emergence of secondary sexual characters and the period covering the adult transition from childhood. Menarche occurring within the period of puberty; the signs of sexual maturity in girls is a phenomenon that is the beginning of menstruation and women's fertelit to gains. Age at menarche, a biosocial phenomenon is effective in determining the health and welfare of society. Population differences between the socioeconomic status of the population, are sensitive to nutritional status and environmental differences with features. The history of scientific studies related to menarche goes back 158 years. Average age of menarche beginning of the 20th century ended and the 21st century has been decreasing since. Ranging between 17-18 years of age at menarche at the end of 1800; 1900 has decreased in the last 160 years age. 13-14 and age at menarche has fallen systematically observed in developed countries. Today, in developed countries, while secular static exchange shows continuity in developing countries. According to the obtained data; menarche years between secular change continents, countries in the same continent, in the same countries, the urban-rural, wealthy low-income shows significant differences between the narrow sections. In conclusion; process of forming the building blocks of female puberty early withdrawal of life has become a global phenomenon.

Key Words: Secular Trend, Menarche, Puberty, Regional Differences.

The Importance of the Supratrochlear Foramen of the Humerus in Humans: An Anatomical Study

Senem Erdoğmus, Münevver Güler, Serpil Eroğlu, Nizami Duran

Background: The supratrochlear foramen (STF) is an important and relatively common anatomic variation in the lower end of the humerus in humans. Its structure has received increased attention in recent years. Anatomical knowledge of STF is useful for anatomists, anthropologists, orthopedic surgeons, and radiologists. This aperture is of great interest to anthropologists who claim it as one of the points in establishing a relationship between humans and lower animals. The goal of this study was to describe the features of STF of the humerus in the Turkish population. Material/Methods: All bones were obtained from the Department of Anatomy, Faculty of Medicine and Department of Antrophology, University of Mustafa Kemal, Hatay. A total of 166 dried humeri (83 right side and 83 left side), of which 78 belonged to males and 88 to females, were examined to determine the presence of supratrochlear foramen. Digital vernier calipers were used to measure the maximum width (transverse) and height (vertical) of the STF. Results: Out of 166 bones, the foramen was present in 18 humeri (4 right side and 14 left side), showing the incidence as 10.8% with unpaired humeri. We observed 4 types of shape: oval, round, triangular, and sievelike. The average diameter of the long (transverse) axis was 5.93±1.68 mm and the short (vertical) axis was 4.06±0.89 mm. Some of the bones showed translucency of the bony septum, found in 17 (20.5%) on both sides of the humeri. Conclusions: There are few studies about STF in the Turkish population. Knowledge of supratrochlear foramen in the distal humerus in humans is important in diagnostic orthopedics, in intramedullary nailing of the humerus, and in possibly increasing the risk of future low-energy fractures. In addition, STF is a radiolucent area in radiographs and may be misinterpreted as an osteolytic or cystic lesion.

Keywords: Anatomy, Humerus, Observer Variation, Supratrochlear Foramen

Body Fat Estimates Using Bioelectrical Impedance and its Correlation With Anthropometric Indicators

Yener Bektas, Timur Gültekin, Galip Akın

Introduction: While an excessive amount of body fat is a risk factor for many obesity related diseases even in young adults, for its assessment easy, precise, reliable, cost-effective, and broadly applicable methods are necessary in population-based studies. Objectives: The purpose of this study is to evaluate the percentage of body fat and its correlation with anthropometric indicators. A cross-sectional study was carried out on four hundred undergraduate students who averaged 22.57 years old. Methods: In this study, triceps, subscapular and supraspinale skinfold thickness were taken and also Quetelet Index (BMI), Conicity Index (CI), Waist-Height Ratio (WHtR) have been calculated. All of the anthropometric data were collected according to International Biological Programme. The statistical analysis was performed with the software package SPSS 18.0. Results: Mean body fat percentage assessed by bioelectrical impedance analysis was 15.99 + 5.64 in men, 25.34 + 7.19 in women. Our observation has also established that there were positive and significant correlations between body fat percentages and given anthropometric indicators in both sexes

Keywords: Body fat, bioelectrical impedance analysis, anthropometric indexes, young adults