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ORAL PRESENTATION ABSTRACTS BOOK

The ethical responsibility of the studies in this book belongs to the authors.

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Abstract

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INVITED SPEAKERS

A Maximizing Citations for Academic Papers: Strategies and Techniques

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Having an academic paper published in a journal is an important stage for sharing the findings with colleagues. However, getting sufficient citations from the article is another stage for the academicians, which is more important than publishing the paper. In this presentation, we aimed to provide comprehensive guidelines for increasing citations of academic articles, focusing on critical aspects of paper presentation and dissemination. This presentation covers essential factors like using a concise, informative title, including authors' names without typological mistakes, writing a clear and precise abstract containing quantitative data followed by relevant and sufficient keywords, and ensuring significant, novel findings are well-presented. We emphasized the importance of high-quality tables, figures, up-to-date references, and effective networking and collaborations. Adhering to these principles enhances academic papers' visibility, readability, and impact, significantly increasing the likelihood of high citation rates.

Keywords: Academic Publishing, Citation Enhancement, Article Dissemination, Presentation Quality, Research Visibility

3D Representation of Anatomical Atlas on Brain T1 Magnetic Resonance Images

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Aim: Magnetic resonance imaging (MRI) is an imaging technique to produce high resolution tissue contrast images of the human body. MRI is widely used to image and diagnose pathological conditions throughout the human body, especially in the central nervous system. Web based volumetric techniques have become widely used in neuroimaging studies of T1 MRI sequence such as Volbrain and Mricloud and etc. MriCloud and Volbrain

are a new automatic cloud system by which the observer can perform fully automatic segmentation for brain using this system.

Material and Methods: All MR TI datasets can be processed using volbrain and Mricloud, for this purpose a personal computer on a 32 or 64 bit PC, running a Windows 10 or 11 operating system can used. In this study, it was aimed to create a cross-sectional and three-dimensional visualisation of each structure in the brain and to create a brain atlas by parcellating the brain on T1 anatomical images created with Mricloud. This study was planned to better understand the brain anatomy as a result of the visualisation of each structure in the brain and to contribute to anatomy and clinical education. The resulting images obtained with Mricloud are selected from the images previously uploaded to the web using ROIEditor. Then, each brain region is saved as an hdr file and the image is recorded and retrieved both at the cut level and in three dimensions with MricroGL software. This process is repeated for each brain structure.

Results: This presentation will show how to obtain both normal brain MRI atlases and how to obtain individual atlases. Obtaining the volume values of brain structures in individual atlases will be a second advantage.

Conclusion: In conclusion, we believe that cross-sectional and 3D representation of the structures in the brain will be useful in understanding the brain anatomy and contributing to clinical problems.

Keywords: MRI, Mricloud, Volbrain, brain parcellation, brain atlas

Kocher-Langenbeck Approach for Acetabular Fractures

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Kocher-Langenbeck approach is a posterior approach commonly used by orthopedics and traumatologists for hip fractures, hip replacements, and posterior acetabular column and wall fractures. While using the approach, short external rotators should be divided from their insertion and care must taken to protect the sciatic nerve. The approach is limited for the proximal part due to superior gluteal vessels and nerve. If more cranial exposure is needed, trochanteric osteotomy can be performed.

Keywords: Posterior approach, acetabulum, fracture

Increasing Antibiotic Resistance; What Can We Do?

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Antimicrobials (antibiotics, antivirals, antifungals and antiparasitics) are drugs used to prevent and treat infectious diseases in humans, animals and plants. We see that the golden age of antibiotics, which began with the isolation of penicillin from the fungus Penicillium notatum, is coming to an end today. The fact that multidrug resistance, especially in Gram-negative bacteria, has begun to be reported in community-acquired infections as well as hospital infections, makes the picture even more pessimistic. In addition to its impact on mortality and morbidity, antimicrobial resistance (AD) also has significant economic costs. The World Bank estimates that AD could cause $1 trillion in additional healthcare costs by 2050.

To prevent antibiotic resistance;

- Prevention of all infections that may lead to inappropriate use of antimicrobials (compliance with general sanitation, disinfection, sterilization rules)
- Effective determination of infectious agents and antibiotic sensitivities
- Monitoring AD and antimicrobial use
- Development of new antibiotics

It is important to carry out such studies. In addition, knowing the resistance mechanisms of infectious agents can be guiding in determining the treatment. Antibiotic resistance mechanisms are basically two groups;

- Intrinsic (natural) resistance: Some microorganisms do not have transport systems for some antibiotics or microorganisms may not be suitable targets for antibiotics. Gram-negative bacteria do not have a glycopeptide binding site in their cell wall (Gram-negative bacteria are naturally resistant to glycopeptides).
- Acquired resistance: It is the resistance that can be transferred by resistant bacteria to susceptible bacteria through conjugation, transformation or transduction.

Determining the acquired resistance mechanisms of extended spectrum beta-lactamase (ESBL), carbapenemase, and Amp C beta-lactamase, which can be detected in gram-negative bacteria, is especially necessary for public health and infection control. According to CAESAR data, carbapenem resistance, which is reported as emerging resistance in E. coli strains in our country, has reached very high levels in Klebsiella strains. In our country, the frequency of carbapenemase in Klebsiella pneumoniae strains has been reported between 28.6% and 48.1% in studies in the last three years. The most important step in controlling antibiotic resistance is to prevent the emergence of infection. In particular, healthcare-associated infections, which can be caused by resistant microorganisms, need to be prevented.

Keywords: Antibiotic resistance, carbapenemase, infection prevention

Dementia and Associated Clinical Definitions

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Memory may weaken and some mental functions may decline in elderly over time. However, in some people, these changes occur beyond normal aging. In routine examinations, it may not be possible to show objective evidence of this loss with tests. This picture of some changes in memory and mental functioning, but without objective evidence, is often referred to as "subjective cognitive decline" (SCI; subjective memory impairment, subjective forgetfulness)

Mild cognitive impairment (MCI), mild cognitive impairment) is characterized by impaired cognitive abilities expressed by the patient himself/herself, by relatives or by a closely monitoring physician, and by impairment in one or more of the five cognitive domains (i.e. memory, executive functions, attention, language and visual-spatial abilities). In large series with longitudinal follow-up, the rate of conversion of defined MCI to dementia is 8-14% per year, compared to 50% at 5-year follow-up. In contrast, the incidence of dementia in the normal

population is 1-2%. Dementia, defined as the loss of acquired intellectual skills, has been known since ancient times. According to prevalence studies conducted so far in the world, Alzheimer's Disease (AD), which is 4-5% between the ages of 65-70, increases exponentially every 5 years and reaches up to 50% in the 90s. According to 2019 data, there are 50 million people diagnosed with dementia worldwide. It is assumed that this number will reach 82 million in 2030 and 152 million in 2050. AD ranks first among all types of dementia with a prevalence of 60-80%. AD is a clinical picture of insidious onset, slowly progressive, isolated progressive memory impairment in individuals over 65 years of age, with the addition of impairments in other cognitive domains over time, and finally the severity of mental inability impairs functioning by preventing independence in activities of daily living.
Keywords: Dementia, Alzheimer’s Disease, Mild Cognitive Impairment

Exploring the Science of Varma Therapy

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Siddha Medicine is a traditional and alternative medical system with a long history of practice and origins in classical remedies and its beliefs in treating the mind, body, and soul to ensure a complete state of health. This ancient wisdom is well reflected in the unique concept and composition of Varmam as well. The word Varmam belongs to the seventeenth century. That subtle energy that functions in the body is known as Varmam. In Siddha medicine, it is believed that the five elements, such as earth, water, air, fire, and space, have a huge impact on a person’s health. That is, Varmam is the manifestation of the subtle energy of the five elements: gases, naadis, vaasi, and kundalini. Those places where the energy resides and activates the body and life of Varma points. These points are in nerves, muscles, and bones. Varma therapy is the practice of stimulating these points through gentle manipulation therapy. Through stimulation of Varmam by various methods, the Prana Vayu (vital energy) existing in Varmam may be directed to remove blockages and stimulate energy flow, resulting in a healthy body, mind, and spirit. Varma treatment results in no reactions or side effects. The more intense the disease, the longer the treatment duration will be. At the same time, functional changes in the Varma points are the cause of diseases. Varma therapy is one of the therapies used to treat multiple ailments, especially those related to musculoskeletal, endocrine, and neurological deficits. Medical Varmology provides for the treatment of emergency cases and acute and chronic diseases. This article aims to provide an overview and explore the science of Varmam and Varma therapy.

Keywords: Manipulation therapy, Prana vayu, Siddha Medicine, Subtle energy, Varma therapy

Non-Surgical Management of Gall Bladder Stones by A Polyherbal Siddha Medicine Preparation

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Gallstones, mentioned in ancient Siddha terms as Pithapaikal, are a solid crystal deposit that forms in the gallbladder, which is a pear-shaped organ that stores bile salts. About 10–15% of the adult western population

will develop gallstones, with between 1 and 4 years of developing symptoms. In Sri Lanka, patients with choledocholithiasis are mostly referred for therapeutic endoscopic retrograde cholangiopancreatography. Gallstones are treated with a polyherbal preparation called Thalisadi Chooranam, mentioned in the text called Siddha Vaidya Thiratu. The Siddha formula was prepared with authenticated raw materials from Kaithady Siddha Teaching Hospital in Jaffna, Sri Lanka. A 42-year-old male patient was reported at the Outpatient Department of Kaithady Siddha Teaching Hospital in November 2022 as a diagnosed case of cholelithiasis with its full-fledged signs and symptoms. As per the patient, he had developed these symptoms in the past three years. Allopathic doctors were advised to undergo surgery, but the patient visited our hospital for conservative treatment. So far as subjective parameters are concerned, the patient started this treatment. After three months of therapy, he was advised to go for ultrasonography, which was compared with the previous scan. The results obtained are as follows: before treatment: Partially distended wall thickness is 6-7 mm; Lumen shows an echogenic shadow; s/o stones are 8–9 mm and 6-7 mm. After treatment: normal size, wall thickness of 3 mm, pericholecystic collection absent, lumen echo-free. Conclusion: In this case study, the patient has shown encouraging results during cholelithiasis management. Therefore, based on the observations and results of this case study, it can be inferred that Siddha medicine has the potential to treat cholelithiasis effectively.

Keywords: Cholelithiasis, Gallstones, Liver diseases, Siddha Medicine, Thalisadi Chooranam

Antidiabetic Cereals and Grains Currently Sold in Batticaloa District in Sri Lanka

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Diabetes impacted 537 million individuals aged 20 to 79 globally in 2021. Diabetes drugs include usual adverse effects such as changes in mood, severe fainting, difficulty breathing, and so on. In studies, grains consumption has been linked to diabetes prevention and management. Thus, the aim of the work is to find and record the antidiabetic grain species that are being sold in Batticaloa District, Sri Lanka. The fieldwork trips to the markets and shops were conducted from January 2019 to June 2023. The levels of antidiabetic scientific evidence available for the recorded grain species were evaluated by identifying relevant published works in the electronic databases Web of Science, PubMed, ScienceDirect, and Scopus until December 2023. A total of 34 grain species from eight families have been found, with the greatest number of grain species belonging to the Fabaceae and Poaceae families. A sum of 79% of grain species had antidiabetic scientific evidence. Among them many of the grain species had in vivo (41%), clinical (32%), and in vitro (6%) antidiabetic scientific evidence. Ten antidiabetic compounds were discovered from the reported grain species. Only sesamin isolated from Sesamum indicum L. had in vivo antidiabetic activity. The present investigation sets the basis for additional investigations into the grain species presently marketed in Batticaloa.

Keywords: Batticaloa, Diabetes, Fabaceae, Poaceae, Sesamum indicum, Sri Lanka

Antimicrobial and Natural Larvicidal Activities of Essential Oil from Different Citrus Species

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Recently, there has been a lot of interest in essential oils and plant-based extracts as potential bioactive ingredients. This study examined the antibacterial and antifungal effects of essential oils extracted from fresh peels of Citrus aurantifolia (lime), Citrus reticulata (mandarin), and Citrus paradisi (grapefruit) agsinst Escherichia coli (ATCC35218), Enterococcus faecalis (ATCC29212), Bacillus subtilis (ATCC-a-W), and Staphylococcus aureus (ATCC25923) and from Fusarium spp., Mucor spp., and Trichoderma viride. Additionally, the anti-larvicidal activity of these oils was tested against Culex tritaeniorhynchus in a controlled laboratory environment. Using three distinct doses of 0.5 mg/ml, 1 mg/ml, and 2 mg/ml in the agar well-diffusion experiment, E. coli displayed a larger inhibition zone of 21 mm at the highest level of C. reticulata, but E. faecalis exhibited no inhibition at all for any of the three varieties of oil. The least amount of C. paradise oil used showed a minimal growth inhibition impact of around 5 mm on E. coli. T. viride was found to have larger inhibition zones (21.2 to 10 mm) for all citrus oils at the highest concentration. The fourth instar larval mortality rate was measured in each of the three replicates following a 24-hour treatment period. Following the observation period, no significant differences were seen in any of the three distinct concentrations that were evaluated. From all extracted oil, a maximum of 100% mortality was observed. According to the findings of these various studies, citrus oil has potential use as a medicine, an organic insecticide that can inhibit certain microorganisms and a low-cost, ecologically beneficial way of controlling mosquito larvae. Additionally, for possible future usage, screening of the variety of accessible phytochemicals contained in three distinct oils has to be investigated.

Keywords: Antimicrobial activity, Citrus aurantifolia, Citrus paradise, Citrus reticulata, Culex tritaeniorhynchus

ORAL PRESENTATIONS

Multidisciplinary Study with a Child Suspected of Abuse: Case Report

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In the study; With a case report, it is aimed to draw attention to the importance of multidisciplinary work with children who have been exposed to/suspected of sexual abuse.

M.A. a 14-year-old girl in the hospital who was being treated for suicide. Following the psychiatric examination, she was consulted to the medical social service unit to be evaluated for appropriate social work interventions. In the professional interview with the child she stated that she was sexually abused by her cousin when she was 7.It was understood that the child was traumatized after the sexual abuse she claimed to have experienced in the past years and therefore was insufficient to cope with the problems she encountered in life. A professional intervention was planned with the child and her family and the judicial process was wanted to be initiated. However, M.A.'s mother stated that her father wasn't know the situation and that he had a heart disease, and expressed her concern about his health. M.A.'s situation was handled within the scope of social work intervention and individual and family interventions were planned and carried out. In order not to endanger human health and not to confront the family with a new crisis, individual and family studies were carried out by a multidisciplinary team consisting of social workers, cardiologists, child and adult psychiatrists.The abuse situation was explained in the family meeting and the judicial process was initiated.Currently, the child is regularly monitored by the social service unit and psychiatry as part of health precautions.

In the work carried out with the child and family as a result of sexual abuse/suspect, it is important to consider health in all its dimensions and intervetion with a multidisciplinary team approach while considering the best interest of the child.

Keywords: Medical social work, child abuse, multidisciplinary teamwork

Examining the Change in the Distance of Morphometric Measurements Taken From the Auricles of Healthy Young Female Individuals to the Midline of the Face, Depending on Somatotype

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Aim: The aim of this study is to examine the distance of morphometric measurements taken from the ears of women with different somatotypes to the midline of the face.

Material and Methods: A total of 104 female individuals between the ages of 18 and 32 participated in the study. The photographs of individuals who participated in the study were taken from a distance of 1.5 meters in 'Frankfurt Horizontal Plane'. The lengths between the supaurale(supa), tragion(t), subaurale(suba) points on the

auricle and trichion (tr), nasion (n), pronasale(prn), subnasale(sn), stomion(sto), gnathion(gn) points on the midline of the face were measured. Each measurement was performed by taking 18 linear measurements from the right and left sides of individuals. Indirect anthropometric measurements were performed with Image J program. In order to determine the somatotype and body composition of individuals, 10 direct anthropometric measurements were taken. Somatotypes were calculated within the data obtained by using Heath-Carter method.

Results: According to the somatotype analysis of the data obtained, 21 individuals had balanced ectomorph somatotype, 10 individuals had central somatotype, 11 individuals had endomorph-ectomorph somatotype, 10 individuals had endomorphic mesomorph somatotype, 26 individuals had mesomorph-endomorph somatotype and 26 individuals had mesomorphic endomorph somatotype. According to the results of the Kruskal Wallis H test, statistically significant difference was found in parameters other than age ($p<0.05$). No statistically significant difference was found between indirect anthropometric measurements taken from the auricle and somatotypes ($p>0.05$).

Conclusion: This study is one of the first studies examining the relationship between ear morphometry and somatotype, which is important in terms of aesthetic and body image. Our study will be guiding and inspiring for many future studies. Supporting this study with a study conducted with a larger participation will make great contributions to making the data base stronger.

Keywords: Auricle, somatotype, morphometry

Investigation of the Burden of Blood and Urine Culture Contaminations to the Microbiology Laboratory and Sample Rejection Rates

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Aim: Errors in the preanalytical process are errors in the process from the beginning of the test order to the acceptance of the samples to the laboratory. The undesirable effect of the prenatal process in the Microbiology Laboratory is contamination. In our study, the effects of contamination rates in blood and urine cultures on the laboratory were evaluated in terms of cost and time; our sample rejection rates were calculated.

Material and Methods: The total number of samples sent to Düzce University Faculty of Medicine Medical Microbiology Laboratory between January 2019 and January 2022 were obtained retrospectively from the data system of our hospital.

Results: A total of 821236 samples were sent to the Medical Microbiology Laboratory, and 11905 of them (%1,45) were rejected without being evaluated. A total of 43606 urine culture samples were sent, and 11223 (%25,7) samples resulted in contamination. It was found that the contamination rate in urine culture was higher in women than in men, while in the pediatric emergency department (%38,1) it was higher than in other departments. A total of 13397 blood

samples were sent in a menstrual blood culture bottle. Of these patient samples, 916 (%6,8) samples resulted in contamination. It was found that the contamination rate was higher in emergency departments (%9,1) than in other departments. The cost of blood and urine culture samples resulting in contamination has been calculated as a total of 51700 TL. Laboratory employees had to spend 506 hours for contaminated samples.

Conclusion: In order to prevent contaminations and sample rejection, it is thought that the "correct sample collection and transfer" trainings, which are carried out with appropriate frequency in our hospital, should be increased in sections with high contamination and rejection rates.

Keywords: Contamination, microbiology laboratory, the preanalytic process

Complications and Nursing Interventions in Intensive Care After Cardiovascular Surgery Operatio: A Review

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The aim of the study is to examine the complications and nursing interventions seen in the intensive care unit after cardiovascular surgery, based on the literature. The primary cause of all deaths is cardiovascular transplantation, and its content is quite high. This disease, which we encounter frequently, can result in surgical operation, and in addition, quite complex care is required in terms of care, treatment and complications during the intensive care unit process after the surgical operation. These complications; Pain, Anxiety and Depression, Acute Renal Failure, Delirium, Infection, Gastrointestinal Complications, Cerebrovascular Disease, Heart Rhythm Disorders, Bleeding, Cardiac Tamponade, Respiratory System Disorders, Sleep Problems, Wound Care, Oral Intake and Nutrition. After cardiovascular surgical interventions, which have many complications, it is vital that the intensive care nurse detects any negative factors in the process, takes precautions, eliminates them, creates care plans and carries out interventions and treatments for the individual. In this sense, we should evaluate patients holistically and remember that all complications are interconnected. Otherwise, it negatively affects the risk of morbidity and mortality. This compilation was created by examining studies on the subject as well as appropriate books and journals.

Keywords: Nurse, intensive care, cardiovascular

Effects of Morphine Dependence and Morphine Withdrawal on Bladder Smooth Muscle

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Aim: Although the effects of morphine on renal functions and bladder have been investigated, it has not been studied yet whether the long-term morphine dependence and related withdrawal syndrome have a different effect on the bladder. Aim of the study is to investigate the effects of morphine addiction and morphine withdrawal on bladder smooth muscle.

Material and Methods: Adult male Wistar-Albino rats (n:30) included in the study were randomly divided into 3 groups. 10 mg/kg 0.9% NaCl solution was injected subcutaneously once a day for 7 days. 10 mg/kg morphine was injected subcutaneously once a day for 7 days in morphine and morphine-withdrawal group. After two hours of the last injections, 3 mg/kg 0.9% NaCl solution was injected intraperitoneally in both control and morphine groups, while 3 mg/kg naloxone for morphine-withdrawal group. Then the behavior of the animals was observed for thirty hours. Afterwards, the bladders were rapidly extracted and their tension was recorded in the isolated organ bath.

Results: Morphine withdrawal behaviors were observed in rats in the morphine withdrawal group. When the bladder contractions of the groups were examined, no statistically significant difference was found between the tension values ($p>0.05$).

Conclusion: In summary the study carried out in rats with morphine addiction, it was observed that being addicted to morphine or being on morphine withdrawal did not affect bladder contractions.

Keywords: Isolated Organ Bath, Contractility, Bladder, Morphine Addiction, Naloxone

Treatment of White Spot Lesions on Anterior Teeth with Resin Infiltration Method: Case Report

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White spot lesions; It is the earliest sign of caries seen on smooth enamel surfaces. The 'resin infiltration technique', a minimally invasive approach to the treatment of white spot lesions, has become very popular in recent years. With this technique, low-viscosity resin infiltrate is filled into the hypomineralized area without perforating the tooth, thus obtaining an appearance similar to intact enamel. The enamel like appearance resulting from infiltration highlights these treatments in terms of aesthetics. In this case, it is aimed to present the treatment of white spot lesions with the resin infiltration method. The patient, who applied to our clinic with the complaint of deterioration in the aesthetic appearance of the teeth after fixed orthodontic treatment, was

also found to have poor oral hygiene control. It was observed that there was loss of mineralization on the front surfaces of all the teeth of the 13-year-old patient, and yellow-brown discoloration and cavitations occurred in some areas. In this case, the upper anterior incisors were treated with the resin infiltration method. As a result of resin infiltration application, natural dental aesthetics were achieved without causing any material loss in the teeth. Resin infiltration method can be applied as an alternative to other restorative treatments in the treatment of white spot lesions.

Keywords: White lesion, resin infiltration, hypomineralization

Gender Estimation from Morphometric Measurements of Mandibular Lingula by Using Machine Learning Algorithms and Artificial Neural Networks

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Aim: Our aim in this study is gender estimation with morphometric measurements taken from mandibular lingula, an important structure on the mandible, by using machine learning algorithms and artificial neural networks, which will be done for the first time.

Material and Methods: The images were obtained by retrospectively scanning from Picture Archiving Communication Systems (PACS) in the department of Oral, Dental and Maxillofacial Radiology of İnönü University, Faculty of Dentistry. Scanned images in Digital Imaging and Communications in Medicine (DICOM) format were transferred to RadiAnt DICOM Viewer (Version: 2020.2) program. The images were brought to 3-D format by using the 3D Volume Rendering console of the program. Eight anthropometric parameters were measured bilaterally from these 3-D images based on the mandibular lingula.

Results: As a result of the machine learning (ML) algorithms analysis conducted, the highest accuracy (Acc), specificity (Spe), sensitivity (Sen) and F1 score (F1) values were found as 0.88 with Random Forest (RF) and Gaussian Naive Bayes (GaussianNB) algorithm. Accuracy rates of other parameters were found to vary between 0.78 and 0.88.

Conclusion: As a result of the study, it was found that morphometric measurements centred on the mandibular lingula showed high accuracy in gender determination and it is thought that they can be used for gender determination in addition to bones such as pelvic and skull. The study also contributes to the determination of the location of mandibular lingula by gender and population. The results can be important for oral-dental surgeons, anthropologists and forensic experts.

Keywords: Gender estimation, Machine Learning Algorithms, Artificial Neural Network, Mandibular lingual

Play Therapy Application in Children with Selective Mutism

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Aim: Selective mutism is a definition that occurs in early childhood and is used for children who know how to speak but do not want to communicate verbally. The aim of this study is to evaluate the feasibility and effectiveness of group therapy for children with selective mutism.

Material and Methods: Play therapy was applied in groups to 10 children (4 girls, 6 boys) diagnosed with selective mutism. A theme was created each week and an effort was made to interact with the children in pairs. A 10-week program was created with the children participating in the programme. Parents of children coming to these play groups were informed about anxiety, communication disorders and behavioral disorders in the school environment. It is thought that this information will be useful, considering that the parents of children with selective mutism have as high anxiety as their children.

Results: It was observed that the participants generally harmonized with their playmates and communicated verbally. Social communication between children and their families, whose speaking self-confidence increased, was strengthened.

Conclusion: It is thought that programmed group therapy is appropriate for children with selective mutism, and their parents should definitely be informed about mutism.

Keywords: Selective Mutism, Play Therapy, Anxiety Disorder

Malocclusion Caused by Mandibular Retrognathia, Aesthetic Problems and Treatment: Case Report

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Mandibular retrognathia is a condition that occurs as a result of insufficient development of the lower jaw bone in the sagittal direction. The presence of this condition brings along aesthetic and functional problems for the individual concerned. Mandibular retrognathia can be observed as a result of the relevant examination of the orthodontist or dentist. In the diagnosis and treatment part, it is vital not to miss the puberty period, otherwise intervention in the mandible with orthognathic surgery is required at later ages. This case report aimed to discuss the clinical, radiological findings and treatment of mandibular retrognathia in the light of current literature. Our 11-year-old patient, who came to our clinic for orthodontic examination complaining of malocclusion, was diagnosed with mandibular retrognathia at the end of the examination. Situations observed in our patient due to this condition: snoring at night and Angle CII malocclusion. The first question that comes to mind for the Twin-block appliance, which we used for an average of 15-16 hours a day for 12 months in this treatment, was ensuring patient compliance, which was the most critical point for the treatment. By applying Twin-block treatment for

12 months, the patient's mandible was positioned more anteriorly in the sagittal plane. It was observed that the complaints initially diagnosed during the examination disappeared at the end of the treatment.

Keywords: Mandibular retrognathia, twin-block, orthodontics

Peripheral Giant Cell Granuloma Detected at an Early Age and Its Treatment: Case Report

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Peripheral giant cell granuloma; They are exophytic lesions seen in the gums and alveolar mucosa, arising from the periodontal membrane or connective tissue of the periosteum. Although its etiology is not known, it is stated that there are local irritants such as dental tartar, microbial plaque, traumatic tooth extractions, occlusal trauma, periodontal surgery, malposed teeth, faulty prostheses, food accumulation and orthodontic treatment. Although it is seen in all age groups, it is more common in the 4th and 6th decades. Peripheral giant cell granulomas seen in children have been reported to be more aggressive and cause tooth gaps. It is more common in women than in men and in the mandible than in the maxilla. In this case report, it is aimed to discuss the etiology, clinic, radiological findings and treatment of peripheral giant cell granuloma in the light of current literature. A 7-year-old patient who applied to our clinic complaining of pain due to decayed teeth, had a raised, red-purple pathological formation in the lower left mandibular region. The patient's lesion was excised with cautery and sent to the pathology laboratory. Post-operative control was performed 1 week later and a very successful recovery was observed. It is important for clinicians to correctly diagnose and effectively treat peripheral giant cell granulomas, which are known to be aggressive and have high recurrence, to differentiate them from possible malignancies and to prevent them from damaging the surrounding bone and teeth.

Keywords: Epulis, oral lesion, peripheral giant cell granuloma

Comparison of Speech Comprehension Skills in Children with Unilateral and Bilateral Cochlear Implants

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Aim: Comparison of speech understanding skills in noise and determination of differences in children with unilateral and bilateral cochlear implants.

Material and Methods: Twelve children (3 girls, 9 boys) between the ages of 6 and 12, who had been using cochlear implants regularly for at least five years and received special education, were included in the study. 7 of the participants were using unilateral cochlear implants and 5 were using bilateral cochlear implants. First of all, the Meaningful Auditory Integration Scale (MAIS) was applied and then the Hearing in Noise Test for Children (HINT-C (Hearing in Noise Test for Children)) was administered.

Results: When comparisons were made between groups of unilateral and bilateral cochlear implant users, a significant difference was found in the MAIS and HINT-C tests. Unilateral cochlear implant users had lower speech understanding scores in noise than bilateral cochlear implant users. In MAIS results, better scores were again obtained in bilateral cochlear implant users. There was a significant difference between groups. It was understood that the participants' age at cochlear implantation affected language development.

Conclusion: HINT-C can be applied to children with cochlear implants. Bilateral cochlear implant application has been found to be more advantageous than unilateral cochlear implant application.

Keywords: HINT-C, Bilateral Cochlear Implant, Unilateral Cochlear Implant, MAIS

Nursing Care of a Pediatric Patient Who Had Liver Transplantation: A Case Report

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Liver failure is a pathological condition that can result from autoimmune diseases (such as primary biliary cholangitis, primary sclerosing cholangitis, etc.), Hepatitis B or C Virus, and metabolic issues like siderosis. The only treatment for liver failure is liver transplantation. The aim of this study is to contribute our experience-based nursing care approach for children who have undergone liver transplantation to the literature. Personal information regarding the case was collected based on Gordon's Functional Health Patterns Model, and nursing care was provided accordingly. There were no unethical practices related to the case, and all necessary approvals were obtained, and the presentation was prepared following ethical and scientific regulations. The case involves a 1-year-old female child with congenital liver failure due to Non-Alcoholic Steatohepatitis (NASH). The patient received care during both the preoperative and postoperative periods. During the postoperative period, specialized nursing care was provided for the patient's abdominal area due to the use of synthetic material, namely, a plastic wrap. The patient's abdominal area was covered with lightly moistened non-sterile gauze, and then a plastic wrap, secured with adhesive tape, was placed over it. Effective nursing care was provided during the postoperative period to help prevent surgical site infections for pediatric patients with reduced immunity due to immunosuppressive medication. Both the nursing staff providing care to the patient and the child's parents were ensured to maintain extra vigilance regarding hygiene and consistently wore surgical masks. Additionally, visitor access to the patient was restricted. In conclusion, systematic nursing care was provided to the pediatric patient. Multidisciplinary nursing approaches and interventions contributed to maintaining the patient's well-being at a higher level.

Keywords: Surgery, Surgical nursing, Liver failure, Organ transplant, Nursing care

Investigation of the Effects of Chitosan-Based Hydrogels Containing Wormwood (*Artemisia absinthium* L.) Extract on Experimental Rat Burn Model

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Aim: The aim of this study was to investigate the effects of chitosan-based hydrogel wound dressings containing different doses of wormwood (*A. absinthium* L.) extract on rat burn model.

Material and Methods: Certain phenolic compounds in ethanolic wormwood extract were quantitatively determined by LC-MS/MS. Antioxidant activities of low (2%), medium (5%) and high (10%) dose wormwood extracts were measured by DPPH. The antimicrobial activity of the dressings was tested on *Staphylococcus aureus* (ATCC 29213) and *Pseudomonas aureginosa* (ATCC 27853) strains by disk diffusion. Tissues procured from 48 Sprague-Dawley female rats on the 3rd and 21st days of the experimental burn model were histopathologically examined in eleven categories. In addition, IL-1α, IL-6, IL-10 and TNF-α levels in the tissues were determined by ELISA. The data obtained from histopathologic examination and tissue cytokine levels were statistically evaluated.

Results: Fifteen phenolic compounds in the wormwood extract were determined at the µg/L level. The antioxidant activities of high, medium and low dose wormwood extracts were 91.1 ± 0.054%, 89.6 ± 0.012% and 84.1 ± 0.02%, respectively. Hydrogel wound dressings did not show antimicrobial activity on the indicated bacterial strains. Fibrosis results obtained on the 21st day of the experiment were statistically significant. Although not statistically significant, granulation tissue formation, collagen increase and regular scar appearance were higher in the wormwood treatment groups compared to the other experimental groups. Wound contraction was completed in all three wormwood groups. The remodeling phase, which is the last step of healing, started on day 21 in the high dose wormwood group.

Conclusion: Wormwood is quite rich in phenolic compounds and has strong antioxidant potential. It was concluded that it promotes wound healing through various mechanisms of action, shows immunomodulatory effects and is suitable for clinical use as a chitosan-based hydrogel wound dressing.

Keywords: Burn, Chitosan, Wormwood, Wound dressing

Investigation of NK Cell Receptor Expressions in Patients with *DCLRE1C* Mutation

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Aim: *DCLRE1C* gene mutations generally cause severe combined immunodeficiency (SCID). On the other hand, hypomorphic mutations occurring in the *DCLRE1C* gene result in leaky SCID clinic. In addition to frequent disease, it is also seen in malignancy in patients. Innate cancer (NK) are important improvements in the fight against cancer and infectious agents in which the innate immune system is important. Therefore, the study aimed to evaluate the expressions of positive and negative NK cell receptors (CD16, CD56, CD94, CD96, NKG2A, NKp30, NKp44, TIGIT, NKp46, NKp1A).

Material and Methods: Eight *DCLRE1C* mutation patients and five healthy controls were included in the study. NK cell gene expressions were determined by real-time polymerase chain reaction (qPCR) method. Study results were compared as patient/control and transplant/control.

Results: In the patient/control comparison, the expressions of NKp30, NKp44 and NKp46 in positive NK receptors were significantly down-regulated in patients, while there was no significant change in NKG2D expression. There was no significant change in negative receptors. In the transplant/control comparison, patient/control expressions were similar to the controls.

Conclusion: NK cell receptor expressions in patients with *DCLRE1C* mutation were investigated for the first time, and positive NK receptor expressions were found to be significantly low in the patients. In addition, NK receptor expressions in patients with stem cell transplantation were found to be similar to controls. In this case, it has been shown that NK cells can recover as a result of stem cell transplantation.

Keywords: *DCLRE1C*, NK, SCID

Hidden Heroes of the Glenohumeral Joint; A Review

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Articular surfaces of the glenohumeral joint, the most mobile joint of the body and, a spheroidal joint type, are overlapping by only 30%. Dynamic and static structures such as “shoulder joint ligaments”, “rotator cuff muscles” and “glenoid labrum” to provide stability. In addition to well-recognised ligaments such as glenohumeral, coracohumeral and transverse humeral ligaments, some ligaments such as "Coracoglenoidal Ligament","Fasciculus Obliquus" and "Glenocapsular Ligament" have been described in the literature, although not included in the "Terminologia Anatomica". Also, in this joint, the concepts of "Rotator Cable" and "Rotator Crescent", which are biomechanically important and located close to the insertion of the rotator cuff muscles were defined in 1993. The rotator cable, also termed the "transverse band" and "ligamentum semisirculare humeri" consists of arc-shaped, thickened fibers extending perpendicular to the supraspinatus and infraspinatus

insertions. The rotator crescent, comprising the distal parts of the infraspinatus and supraspinatus muscle insertions, is avascularly thickened laterally from the rotator cable. Biomechanically, the location of a rotator cuff tear impacts prognosis more than its size due to these structures. The "Coracoglenoidal Ligament" was suggested to be the coracohumeral ligament's deep section, possibly the pectoralis minor insertion's part, a remnant of this muscle, or a fiber bundle extending from the coracoid process above the labrum and capsule. The "Glenocapsular Ligament," identified through cadaver dissections, originates from the supraglenoid tubercle and neck of the scapula, terminating in the rotator cable. Another ligament, the "Fasciculus Obliquus", also called "Ligementum Glenohumerale Spirale", was defined as a ligament, superficial to the anterior genohumeral capsule, extending obliquely between the infraglenoid tubercle and the posterosuperior surface of the supscapularis and long head of the biceps brachii. More studies are needed to investigate more deeply these ligaments and structures, crucial for shoulder biomechanics.

Keywords: Rotator cable, rotator crescent, coracoglenoidal ligament, fasciculus obliquus, glenocapsular ligament

Investigation of Ahsg (Alpha-2 Heremans Schmid Glycoprotein) Gene Polymorphism in Patients with Polycystic Over Syndrome

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Aim: In this study, we aim to investigate the effect of two polymorphisms (rs2077119 and rs4918) in the fetuin-A (Alpha-2-Heremans Schmid Glycoprotein, AHSG) gene and their relationship with Polycystic Ovary Syndrome (PCOS).

Material and Methods: We enrolled 122 patients with PCOS who were referred to the Harran University Medical Faculty Obstetrics and Gynaecology Outpatient Clinic. We also enrolled 124 healthy women without PCOS as controls. The molecular analysis of these polymorphisms, 767 C>G and 4613 T>G of the AHSG gene, was performed on whole blood using the real-time PCR method. The amplification curves of the polymorphisms in the samples were obtained as a result of the real-time PCR method and genotyped.

Results: As a result of our study, homozygous GG genotype, which is polymorphic in terms of fetuin-A gene 767 C>G polymorphism, was observed in 6 of the 122 patient groups, while it was observed in 10 individuals in the 124 control group. The difference between homozygous GG and homozygous CC genotypes in the control and patient groups was not statistically significant ($p > 0.05$). The homozygous TT genotype, which is polymorphic in terms of the fetuin-A gene 4613 T>G polymorphism, was observed in 35 individuals in the 122 patient group, while it was observed in 26 individuals in the 124-person control group. There was no statistically significant difference between homozygous TT and homozygous GG genotypes in the control and patient groups ($p > 0.05$).

Conclusion: According to the data obtained as a result of this research, it is concluded that both the AHSG gene 767 C>G (rs4918) and 4613 T>G (rs2077119) polymorphisms are not related to PCOS.

Keywords: Gene, Polymorphism, Fetuin-A, AHSG, PCOS

Morphological Examinatıon of The Oblique Cord on the Forearm; An Anatomical Cadaver Study

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Aim: The oblique cord has been described as a ligament, a fascial band, part of the interosseus membrane of the forearm, or a separate structure from the membrane. Due to this uncertainty in the literature, it is aimed to make the anatomical and morphological description of the oblique cord by dissection of adult cadavers.

Material and Methods: The oblique cord was defined by dissecting 12 bilateral forearms of 6 cadavers, and their topographical relations were evaluated. Its lengths, the width of the origin and insertion, angle of the fibers, the length of oblique cord to the styloid process of the ulna, radius, and the distance to the interosseus membrane were measured. They were defined and their relationships were examined using nonparametric analysis and correlation methods on the SPSS program.

Results: The oblique cord was defined as a fascial band associated with the supinator, flexor pollicis longus, flexor digitorum superficialis, and profundus muscles. It was found as a separate and more anterior structure from the interosseus membrane. Gantzer's muscle, which has a rate of 41,66% in this study, was linked with the oblique cord via flexor digitorum profundus muscle. The mean lengths in pronation and supination and origin, insertion width, respectively, were 21,90; 25,37; 9,44; 10,86mm. The mean angle of the fibers was 147,35°. The mean distances to the interosseous membrane, styloid process of ulna, and radius, respectively, were 9,14; 188,64; 178,89mm.

Conclusion: We aim that the information obtained from this study will contribute to anatomy education and guide histological and biomechanical studies on the oblique cord.

Keywords: Elbow joint, interosseous membrane of forearm, oblique cord, proximal radio-ulnar joint

The Beneficial Effect of Exercise and Vitamin D Supplementation on Comorbidities Associated with Systemic Lupus Erythematosus: A Review

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Systemic lupus erythematosus (SLE) is a chronic autoimmune disease characterized by recurrent and relapsing attacks that may affect the locomotor system as well as the liver and kidneys. Vitamin D deficiency is thought to play a role in the pathogenesis of SLE. Therefore, our primary aim in this literature review was to determine the role of vitamin D deficiency on SLE symptoms. Our secondary aim is to explain the benefits of exercise on SLE-related comorbidities. A comprehensive literature review on SLE symptoms, biochemistry, and pathophysiology was performed via Google Scholar. The effect of exercise on SLE comorbidities was investigated. Some studies suggest that SLE is caused by environmental and genetic factors. There is evidence that vitamin D deficiency is associated with symptoms of SLE. In addition to drug treatment for locomotor system involvement in SLE patients, physiotherapy applications are also included. In this study, the positive effects of exercise on pain, fatigue, and sleep problems caused by both disease-related and side effects of pharmacological applications used

in treatment are reported in SLE patients. Information is provided on the effects of vitamin D deficiency in SLE and how exercise contributes to ameliorating these effects. Vitamin D deficiency in the symptoms seen in Systemic Lupus Erythematosus cannot be corrected by vitamin D supplementation alone. Exercise provides possible benefits in correcting vitamin D deficiency. Prescription of exercises deemed appropriate for SLE patients by the physiotherapist may help to improve/reduce fatigue, sleep problems, and pain symptoms seen in SLE, improve the quality of life of patients, and eliminate vitamin D deficiency due to SLE. In this direction, the importance of physiotherapy applications should be emphasized in addition to medical treatment in SLE patients. Future studies should be planned to create an appropriate exercise prescription for SLE.

Keywords: Systemic lupus erythematosus, exercise, fatigue, sleep disorders, vitamin D

Gender Prediction Using Cone Beam Computed Tomography Measurements from Foramen Incisivum: Application of Machıne Learning Algorithms and Artificial Neural Networks

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Aim: This study aims to predict gender using parameters obtained from images of the foramen (for.) incisivum through cone beam computed tomography (CBCT) and employing machine learning algorithms (ML) and artificial neural networks (ANN).

Methods and Materials: This study was conducted on 162 individuals in total. Precise measurements were meticulously extracted, extending from the foramen incisivum to the arcus alveolaris maxillaris, through employment of Cone Beam Computed Tomography (CBCT). The Machine Learning (ML) and Artificial Neural Network (ANN) models were meticulously devised, allocating 20% for rigorous testing and 80% for comprehensive training.

Results: When applying the Two Sample T test to the non-normally distributed parameter, the distance between foramen incisivum and sutura palatina transversa (IFTPS-L), a significant gender difference was observed (p = .000). In the models with the highest Acc rates, 14 out of 17 male individuals and 13 out of 16 female individuals in the test set were correctly predicted.

Conclusion: Logistic regresyon (LR), linear discriminant analysis (LDA), Random Forest (RF), and ANN yielded high gender prediction rates for the measured parameters, while Decision Tree (DT), Extra Tree Classifier (ETC), GaussianNB, Quadratic discriminant analysis (QDA), and K-nearest neighbors algorithm (k-NN) methods provided lower predictions. We believe that the evaluation of measurements extending from foramen incisivum to arcus alveolaris maxillaris through CBCT scanning proves to be a valuable method in gender prediction.

Keywords: Gender prediction, machine learning, artificial intelligence, foramen incisivum, maxilla

Metaphor Analysis for the Concept of Violence Against Women: The Case of Nursing Students

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Aim: Violence against women is a major human rights violation and a global public health problem. The most common form of violence against women is intimate partner violence and global estimates suggest that one in four women will experience physical and/or sexual violence by her husband or intimate partner in her lifetime. This study aims to describe nursing students' metaphorical perceptions of violence against women through metaphor.

Material and Methods: This study was conducted with metaphor analysis technique based on phenomenological method. Ethical approval, institutional permission, and informed consent were obtained from the participants in order to conduct the study. This study was conducted with a total of 126 fourth-year nursing students. The research data were collected between October and November 2023 with a questionnaire form prepared by the researcher. In the first part of the questionnaire, questions about socio-demographic characteristics were included, and in the second part, the sentence "Violence against women is like ....., because ....." was included. Content analysis was used to evaluate the metaphors.

Results: In this study, students produced a total of 126 valid metaphors about the concept of violence against women. The metaphors revealing the students' perceptions of the concept of violence against women were grouped into 4 categories; "Category related to the feeling of inadequacy", "Category related to disrespect for humanity", "Category related to the loss of vitality" and "Category related to the use of force". In the study, it was determined that the category that produced the most metaphors was "related to the loss of vitality".

Conclusion: The most common metaphors produced by the students were incapacity (16), violence against society (8), violence against humanity (4), cruelty (4) and meanness (4).

Keywords: Violence against women; Violence; Nursing students; Perceptio

Irisin (FNDC5) Gene Polymorphisms in Patients with Gestational Diabetes Mellitus

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Aim: In the study, it was aimed to investigate the effect of two polymorphisms (rs726344 and rs16835198) in the Irisin (FNDC5) gene, which is known to have an effect on serum irisin level, and their relationship with GDM.

Material and Methods: According to ADA criteria, 110 patients diagnosed with GDM and 123 healthy individuals were included in the study as a control group. DNA was isolated by using the spin column method and the

Genomic DNA isolation kit, and the analysis of the relevant polymorphisms was performed with the Real-Time PCR.

Results: The distribution of the FNDC5 gene rs726344 G>A polymorphism in the GDM patient and control groups was examined. In the GDM group, homozygous GG genotype was detected in 97 individuals (88%), heterozygous GA genotype was detected in 13 (12%), and homozygous AA genotype was not detected in any. Likewise, the genotype distribution of the FNDC5 gene rs16835198 G>T polymorphism in the GDM and control groups was examined and the homozygous GG genotype was found to be in 64 individuals and at a rate of 58%. Heterozygous GT genotype was found to be 31% in 34 and homozygous TT genotype was found to be 11% in 12 individuals of the patient group.

Conclusion: It was concluded that FNDC5 gene rs726344 and rs16835198 polymorphisms are not related to GDM.

Keywords: GDM, FNDC5, ırisin, polymorphism, gene

Evaluation of Happiness Levels in Diabetes Patients According to Disease Awareness and Acceptance

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Aim: To determine the awareness and acceptance of the disease and happiness levels of individuals with diabetes and to examine the relationship between them.

Materials and Methods: The descriptive, quantitative and cross-sectional study was conducted between July-October 2023 with 128 individuals over the age of 18 who were hospitalized in the Internal Medicine wards of a State Hospital in a city in Southeastern Anatolia. Data were collected using the Descriptive Information Form, Diabetes Awareness and Acceptance Scale and Oxford Happiness Scale Short Form.

Results: The total score of the DFAS was 71.28±24.68 (min:23, max:115), the total score of the awareness subscale was 45.09±15.49 (min:14, max:70), the total score of the acceptance subscale was 26.71±9.91 (min:9, max:45), and the total score of the OMS-S was 20.0±6.32 (min:7, max:35). There was a positive, weak (rspearman =0.268, $p<0.05$), moderate (rspearman=0.347, $p<0.05$) and statistically significant correlation between the total score of the FCAS and the total score of the OMOS-K; a positive, weak (rspearman =0.196, $p<0.05$) and statistically significant correlation between the total score of the acceptance subscale of the FCAS and the total score of the OMOS-K; and a positive, weak (rspearman =0.196, $p<0.05$) correlation between the total score of the awareness subscale of the FCAS and the total score of the OMOS-K. A statistically significant difference was found between the participants' previous hospitalization status and the total score of the DFQQ and the total score of the mindfulness subscale ($p<0.05$).

Conclusion: It is thought that the study will contribute to the literature since awareness of the disease and acceptance of the disease increase the happiness levels of the individuals.

Keywords: Diabetes, Awareness, Nursing, Happiness.

Evaluation of Os Hyoideum Fusion Deficiency as a Fracture: Review

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The aim of our study is to raise awareness that lack of fusion of the os hyoideum should not be interpreted as a fracture. Os hyoideum is the only bone in the body that does not articulate with any other bone and its mobility in all directions contributes to protect it against fractures. The os hyoideum may show unilateral or bilateral fusion between the corpus hyoideum and cornu majus, or it may be non-fused. Studies on the ossification process of os hyoideum are very few. The mean age of unilateral and bilateral fusion in men was 38.25 and 53.16 years, respectively. The mean age of unilateral and bilateral fusion in women was 38.00 and 48.50 years, respectively. In a similar study, bilateral fusion was not seen before the age of 40. Another study reported that the cornu majus rarely fused with the corpus hyoideum until 35-45 years of age. Isolated os hyoideum fracture due to blunt trauma is rare except for hanging and strangulation and constitutes 0.002% of all fractures. Lack of fusion in the cornu mas can be interpreted as a fracture line or dislocation. When we examined the cases of individuals under 35 years of age who were evaluated as suspected fractures, we suspected that these cases may be os hyoideum cases that do not show fusion. Therefore, we think that when diagnosing os hyoideum fractures, it would be useful to consider the possibility of fusion loss, especially in individuals under 35 years of age, and to make the diagnosis by using the 3D feature of tomography.

Keywords: Os hyoideum, fusion deficiency, misdiagnosis

Comparison of Balance, Flexibility, Aerobic Capacity and Agility Performances in Healthy Women Who Do Recreationally and Regularly Clinical Pilates Exercise and Swim

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Aim: We aimed to compare the effects of clinical Pilates and swimming exercises modalities on physical fitness parameters in healthy women.

Material and Methods: A total of 30 female participants were involved in this study. To compare the differences, participants were divided into three groups as; an intervention group A, an intervention group B and a control group. While the participants in the intervention group A involved with a Pilates exercise program (PG), intervention group B received swimming exercise program (SG) for 45-60 minutes a day, 3 days a week for 8 weeks and control group (CG) remained sedentary during this time. To compare the differences between and within the groups, aerobic capacity, balance, agility and flexibility measurements were evaluated before and after the exercise program for each group. Also, Y Balance Test, Stork Stand Test, Sit and Reach Test, 20m Shuttle Run Test and Hexagon Test were assessed before and after the interventions. As the results revealed a nonparametric distribution, the difference of means of the intergroup was analyzed by Kruskal-Wallis H Test,

intergroup analysis before and after the exercise program were analyzed by Mann Whitney U Test, intragroup analysis before and after the exercise program were analyzed by Wilcoxon Paired-Sample Test.

Results: The PG had superiority in balance and flexibility changes according to SG and CG. In the SG, there was a superiority in aerobic capacity and agility changes according to the PG and CG. The PG and SG had no superiority in some post-test parameters according to CG.

Conclusion: Depending on these results, both of these exercise modalities are effective to increase some physical performance parameters when compared with the control group. However, when it is aimed to increase all those parameters Pilates exercise and swimming could be applied together.

Keywords: Aerobic capacity, agility, balance, Pilates, flexibility

A Rare Condition in Acute Abdomen Patients: Mesenteric Ischemia Mimicking Ovarian Cyst Rupture

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Acute abdomen refers to non-traumatic abdominal conditions requiring surgery. Rupture of an ovarian cyst can cause mild to moderate abdominal tenderness. However, if there is massive intra-abdominal hemorrhage, symptoms of severe peritoneal irritation like widespread tenderness, guarding, and rebound may occur. Acute mesenteric ischemia presents as sudden, severe abdominal pain that is diffuse and disproportionate to physical exam findings. The incidence of acute mesenteric ischemia is 1-2% among all cases of acute abdomen. The clinical presentation of both conditions may be similar. This is a case presentation of acute mesenteric ischemia that was initially mistaken for ovarian cyst rupture. A 43-year-old female patient presented to Şahinbey Practice Research Hospital complaining of abdominal pain. Physical examination revealed acute abdominal findings. Abdominal CT reported a 22x18 mm cyst in the patient's left ovary and 40 mm of free fluid in the pelvis. The patient was consulted from the Emergency Department to the Gynecology and Obstetrics Clinic. The ultrasonography conducted at the Gynecology and Obstetrics Clinic revealed a 20mm follicle in the left ovary. Additionally, extensive free fluid was observed in the douglas and subhepatic area. The bowel loops near the left adnexal area were immobile, dilated, and edematous. After sterile conditions, the patient underwent diagnostic laparoscopy under general anesthesia. During the observation, it was found that the small bowel loops were hyperemic, edematous, had lost peristalsis, and were necrotic. A 20 mm follicular cyst was observed in the uterus, bilateral tubes, and right natural left ovary. The patient was transferred to the General Surgery clinic while still on the operating table. In patients with abdominal pain, it is helpful to consider rare conditions such as acute mesenteric ischemia, which can mimic the symptoms of ovarian cyst rupture.

Keywords: Acute Abdomen, acute mesenteric ischemia, ovarian cyst rupture

Happy Natural Killer Cells: Effect of Dopamine on NK Cell Proliferation

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Aim: We aim to investigate the effect of dopamine on the number and activation of NK cells, which are immune cells.

Material and Methods: NK-92 cells were seeded in 12-well plates at a density of $5x10^5$ cells/ml and incubated for 48 hours. Dopamine at doses of 0, 1, 10, and 100 µM was applied to cells that had reached sufficient proliferation for a duration of 24 hours. After being treated with dopamine, cell cytotoxicity was evaluated with the MTT method and cell proliferation was measured by counting the number of cells by Trypan Blue. Cells stained with CD 107a antibody for activation were evaluated on a flow cytometer, while NK cells were identified with CD56 and CD 16 antibodies.

Results: The results of cell proliferation studies show that at 0, 1, 10, and 100 µM concentrations, the numbers were $6.85 x10^5$, $1.34 x10^6$, $1.21 x10^6$, and $7.64 x10^5$/ml, respectively. There was no cytotoxic effect reported when the studied doses were compared with the control group in the MTT results. According to the flow cytometry results of NK-92 cells, the CD56+ percentage was 94.7, while the CD107a percentage decreased, unlike the control group (12.5% vs. 5.3%).

Conclusion: It has been reported that it is involved in the modulation of NK cells by increasing the number of DA receptor subtypes through stimulation of the D1R/D5R-cAMP-PKA-CREB signaling pathway. According to our study findings, it is thought that the increased number of NK cells increases with their interaction with a similar receptor.

Keywords: Natural killer immune cells, dopamine, immunity

The Relationship Between Pressure Pain Threshold and Extremity Functionality in Individuals with Fibromyalgia

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Aim: The aim of this study was to examine the relationship between pressure pain threshold and lower and upper extremity functionality in individuals with Fibromyalgia (FM).

Material and Methods: 57 women with FM were included in the study. Upper extremity function was evaluated with Disabilities of the Arm, Shoulder and Hand Questionnaire (DASH); grip strength with electronic hand dynamometer; lower extremity functions with Lower Extremity Functional Scale (LEFS) and chair-stand test and pressure pain threshold with a pressure algometer (Commander Echo). The tender points evaluated were m. trapezius, elbows (lateral epicondyle), m. quadriceps femoris and knees (medial). Total 8 tender points were measured 3 times each and the average value was recorded. The relationship between continuous variables was

examined with Pearson and Spearman Correlation Analysis. The significance level was accepted as p<0.05 and interpreted. r <0.2 was categorized as very low; 0.2-0.4 as low; 0.4-0.6 as moderate, 0.6-0.8 as high, >0.8 as very high level of correlation.

Results: Grip strength-right had low correlation with pressure pain threshold of right (r:0.334) and left lateral epicondyle (r:0.392) and right (r:0.285) and left trapezius (r:0.321). Grip strength-left had low to moderate correlation with pressure pain threshold of right (r:0.279) and left lateral epicondyle (r:0.407). AEFS had low correlation with pressure pain threshold of left quadriceps femoris (r:0.262), right (r:0.309) and left medial knee (r:0.277).

Conclusion: The decrease in lateral epicondyle and trapezius pressure pain threshold is associated with a decrease in grip strength. The decrease in quadriceps femoris and medial knee pressure pain threshold may be associated with a decrease in lower extremity functionality.

Keywords: Fibromyalgia, pain, functionality

Being Ready for Discharge from Patient Perspective: The Case of Inpatients in Surgical Clinics

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Aim: This study was conducted to investigate the factors determining the discharge readiness levels of patients hospitalised in surgical clinics.

Material and Methods: The population of this descriptive study consisted of patients who underwent surgery in the surgical clinics of a university hospital between March 2021 and March 2022. The study sample consisted of 221 patients who agreed to participate in the study. “Descriptive Characteristics Form" and "Short Form of Discharge Readiness Scale" were used for data collection. Data were collected by face-to-face interview on the day of discharge. In statistical analysis; number, percentage, mean, independent sample t test, one-way analysis of variance, Welch test, Mann-Whitney U test, Kruskal Wallis test, Tamhane's T2 test were used.

Results: The mean age of the patients was 52.81±18.026 years, 60.2% were male. It was found that 57.5% of the patients had undergone previous surgery and 98.2% were informed about discharge. It was found that the mean total score of the "Short Form of the Readiness for Discharge Scale" was 8.69±1.034, the mean score of the personal situation subscale was 7.59±1.939, the mean score of the information subscale was 9.22±1.153, the mean score of the coping ability subscale was 8.43±1.802 and the mean score of the expected support subscale was 9.52±0.886. A statistical difference was found between the mean scores of the readiness for discharge scale and the patients' educational status, occupation, place of residence, hospitalisation clinic, presence of any disease, and the status of being informed about discharge (p<0.05).

Conclusion: As a result of the study, it can be said that the level of readiness of the patients for discharge is at a high level. It is thought that informing patients about discharge has a positive effect on their readiness for discharge.

Keywords: Surgical clinic, readiness for discharge, nurse

Physical Therapy Process in a Patient Diagnosed with Warburg-Micro Syndrome Type 1: Case Report

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The aim of the study is to evaluate the physical therapy movements and examine the physical therapy process of a rare case diagnosed with Warburg-Micro Syndrome Type 1 (WARBM1).

WARBM is a rare autosomal recessive neuro-ophthalmological disease characterized by developmental delay, microcephaly, microphthalmia, microcornea, congenital cataract, optic atrophy, cortical dysplasia and corpus callosum hypoplasia/agenesis. The most common pathological variant (75%) is the RAB3GAP1 gene. Our case is a girl aged 6 years and 5 months. The parents had a first degree consanguineous marriage and our patient is the first child of the family. The patient has had cataract and left hip dislocation surgeries so far. When the patient files were examined retrospectively, clinical findings such as dysmorphic face, bilateral congenital cataracts, hypotonia, joint laxity, corpus callosum hypoplasia and cerebral atrophy were found. Physical evaluation revealed joint contractures, muscle shortness and weakness, poor head control, and ability to sit with support. The physical therapy program consists of ROM movements, muscle strengthening, stretching, proprioception exercises and electrotherapy, 2 days a week for 45 minutes each. Physiotherapists may encounter rare cases in their professional lives. Knowing the patient and his disease well will be supported by a good evaluation and treatment program. In this study, WARBM1 disease was evaluated from the perspective of a physiotherapist.

Keywords: WARBM1, physical theraphy, case

Tympanometric Evaluation: A Review

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Acoustic immittance measurements are one of the measurement methods that evaluate middle ear functions in general, give objective results and are frequently used in audiological test batteries. The concept of immittance; It is a term that refers to admittance, impedance and their components. The difficulty shown by the eardrum and middle ear system against the acoustic energy coming from the external ear canal is called acoustic impedance, while the ease shown is called acoustic admittance. Immittancemetric tests; It includes tympanometric evaluation, acoustic reflex measurements and eustachian tube function tests. Tympanometric evaluation is an important application of the immitansmetric test battery. The tympanic membrane, middle ear muscles, middle ear ossicles and middle ear cavity within the middle ear system are evaluated as a whole. The test can be applied to all age groups and all individuals without any differences. The measurement is made through a probe inserted into the external ear canal. Measurement results can be shown with a graph called tympanogram, based on the changes in outer ear and middle ear pressures and the amount of sound reflected back. Different tympanogram results are obtained in different pathologies. Although tympanometric evaluation

is very important in detecting middle ear pathologies, it should be evaluated as a whole with other audiological tests.

Keywords: Acoustic immittancemetry, tympanometry, tympanogram

Treatment of Odontogenic Keratocyst Occurring in Two Quadrants of the Posterior Mandible: A Case Report

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The aim of this case report is to describe the treatment of odontogenic keratocyst, which has features such as locally aggressive behavior, high recurrence rate and distinctive histological appearance. During the clinical and radiological examination of the patient, who did not have any systemic disease and came to our clinic for routine check-ups, a sharply circumscribed, non-expandable radiolucent formation was detected in the left mandibular posterior region, seen in two separate sections, the middle of which was separated by the mandibular tooth number 7. After the teeth number 7 and 8 of the patient, who was operated on for excisional biopsy, were extracted, the pathological tissue was carefully cleaned from both the extraction site and the mesiobuggal of tooth number 7 by opening a window. Pathological tissue was sent separately as anterior and posterior regions. As a result of the examination, a diagnosis of surface parakeratinized odontogenic keratocyst was made, which showed similar histological findings in two different regions. The patient was informed about recurrence and followed up with annual check-ups. Odonotogenic keratocyst is a cyst that rarely expands and has a high risk of recurrence. Dentists should take this situation into consideration when evaluating their patients and carefully evaluate suspicious formations and refer them to a specialist.

Keywords: Odontogenic keratocyst, oral surgery, oral pathology

The Effect of Indicator Tracking on the Rate of Babies Given Colostrum in the First 6 Hours After Birth in the Neonatal Intensive Care Unit on the Rate of Babies Given Colostrum in the First 6 Hours After Birth in the Neonatal Intensive Care Unit

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Aim: Indicators are important because they measure the effectiveness of health services, provide improvements and increase service quality. The Rate of Babies Given Colostrum in the First 6 Hours of Birth in the NICU Indicator refers to the rate of babies given colostrum within the first 6 hours after birth among babies admitted to the NICU. By monitoring this indicator, the health of babies is protected by increasing the rate of babies given colostrum in the first 6 hours after birth in the NICU. The aim of this study is to investigate the effect of monitoring the relevant indicator in the NICU on the rates of giving colostrum to babies in the first 6 hours after birth.

Material and Methods: In the research, data from the first and last months of the year when the indicator started to be followed were compared. Indicator Data Collection Form was used to collect data.

Results: The Rate of Babies Given Colostrum in the First 6 Hours of Birth in the NICU was found to be 0% in the first month of monitoring the indicator. The reason for this situation was investigated and in order to increase the quality of the service provided, the midwives/nurses in the birth clinic and NICU were given the necessary training and the nutrition follow-up form was started to be used. As a result of these improvement efforts, the rate increased in the following months and reached 31.11% in the last month of the year.

Conclusion: This result shows that, thanks to the relevant indicator, the rate of babies given colostrum in the first 6 hours after birth in the NICU has increased and that neonatal nurses and puerperal clinic midwives/nurses in the NICU are primarily responsible for breastfeeding.

Keywords: Neonatal intensive care, colostrum, quality indicators in health

Anatomical Approach in Patients with Shoulder Impingement Syndrome: A Review

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The aim of this study is to investigate impact of anatomical structures in shoulder joint on impingement syndrome (SIS) in patients with shoulder impingement. In this study, recent articles from last 5 years were reviewed to summarize effects of anatomical structures in shoulder joint on impingement syndrome. SIS is a pain condition that occurs as a result of compression of rotatorcuff tendons between upper end of humerus and acromion and ligamentumcoracoacromiale during abduction-flexion of arm. It was first described as shoulder impingement syndrome by Neer(1972). Biglianiveark.(2013) determined three different types of acromion morphology in cadavers with rotatorcuff tears. authors encountered type1(straight) acromion in 17%, type 2(anterior curved) in 43% and type 3(hooked) acromion in 40%. Other factors that lead to impingement syndrome in literature review:

1 Os acromiale 2.Articulatio(art.) acromioclavicularis degeneration: 3.Coracoid impingement pain, 4. Art. glenohumeralis instability 5.Internal anatomical impingement 6.Jamming due to overload 7.Impression caused by interconnected tendinopathy 8.Pain caused by age-related degeneration in tendons of rotatorcuff muscles

It has been reported that measurement of acromion-cavitas glenoidalis and acromion-processus coracoideus is an important parameter in terms of rotatorcuff muscle tears and impingement syndrome. As a result, according to recent studies, extrinsic factors in pathogenesis of rotatorcuff and pathologies seen in anatomical structures of shoulder joint and scapula cause impingement syndrome, and type of acromion, non-closure of acromion, and excessive/incorrect use of rotatorcuff muscles and age-related degeneration lead to impingement syndrome.

Keywords: Shoulder impingement syndrome, scapula, anatomy, anatomical landmarks

Test-Retest Reliability of a New Balance Assessment System in Adolescent Idiopathic Scoliosis Cases: Pilot Study

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Aim: In scoliosis somatosensory disorders causes postural stability problems and to evaluate postural stability many studies uses objective methods. The aim of this study was to determine the test-retest reliability of the "Postural Stability" (PST) and "Stability Limits" (SLT) tests using a newly developed AlBalance Balance Evaluation System in Adolescent Idiopathic Scoliosis (AIS).

Materials and Methods: This study included ten participants with AIS (8 girls, 2 boys; mean age 14.72±3.19 years) and "AlBalance" device was used for postural stability evaluation. Participant's demographic information and Cobb angles were recorded. Static and dynamic postural stability evaluated with PST and SLT, respectively. Tests were performed with barefeet and feet positioned at identical coordinates and consisted of 3 trials (30 seconds with a 1-minute rest between tests). For test-retest reliability, measurements were collected 7 days apart, at two separate times. PST and SLT were used for Anterior-Posterior (AP), Medial-Lateral (ML), total stability (OSI) and average directional control performances (%), average test times (sec), respectively.

Results: Mean BMI and Cobb angle of major curvatures were 18.57±2.80 kg/m^2 and 28.36°±10.06°, respectively. Significant correlation was found between the first and 7th day scores for all test parameters ($p<0.05$). For the first and 7th day's intraclass correlation coefficients (ICC) of AP, ML and OSI scores in PST were 0.89, 0.98, 0.93, respectively. In SLT the ICC value for average directional controls was 0.93. The ICC values for AP, ML, OSI, and directional controls on the first three days were 0.91, 0.95, 0.93, and 0.95, respectively.

Conclusion: Test-retest reliability of PST and SLT postural stability tests of the AlBalance device, was found to be high with AIS. The newly developed balance assessment system can be used as a reliable method for postural stability assessment in cases diagnosed with AIS for researchers and clinicians.

Keywords: Scoliosis, postural stability, reliability

Investigation of Wrist Proprioception, Grip Strength and Fine Motor Skills in Individuals with Chronic Neck Pain

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Aim: This study was conducted to compare wrist proprioception, grip strength and fine motor skills between individuals with chronic neck pain and those without neck pain.

Material and Methods: This cross-sectional study was conducted on 40 young people aged 18-25 with and without neck pain. After taking the sociodemographic characteristics of the participants, their pain intensity was evaluated with the Numerical Pain Scale (NPS), their cervical region functionality was evaluated with the Neck Disability Index (NDI), and their mental status was evaluated with the Beck Depression Scale (BDS). A goniometric

platform was used to evaluate wrist joint position perception in four different positions (flexion, extension, radial and ulnar deviation). Participants' gross hand grip was measured with a Jamar hand dynamometer. Coordinated movements and skills of hands, fingers and arms were evaluated with the Purdue Pegboard Test, and wrist joint range of motion values were evaluated with a universal goniometer.

Results: Participants with neck pain were found to have moderate neck pain (4.38±1.68) and mild to moderate disability in terms of neck disability levels. A statistically significant difference was found in terms of insomnia problems in participants with neck pain compared to those without neck pain ($p<0.01$). A significant difference was found in Beck depression levels between these groups ($p<0.05$). There were no significant differences between joint position perception, gross grip strength, and fine motor skills of participants with and without neck pain ($p>0.05$).

Conclusion: In conclusion, wrist position perception, grip strength and fine motor skill results were similar in young people with and without chronic neck pain. These findings highlight that chronic neck pain may be linked to other physiological or psychosocial factors and therefore, it emphasizes the importance of adopting a broader perspective.

Keywords: Chronic neck pain, wrist proprioception, grip strength, fine motor skills

Digital Gaming and Internet Addiction in Children Effect on Eating and Sleep Disorders

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Aim: The research was conducted to determine the effect of children's digital game addiction and internet addiction on eating and sleep disorders.

Material and methods: The sample of the descriptive research; A total of 532 people were formed, including secondary school students (266students) and their parents (266parents) who met the research criteria. The data of the research is that parents filled out the Family-Child Internet Addiction Scale and Child Sleep Habit Questionnaire scales, while the children filled out the Child Digital Game Addiction Test and Eating Attitude Test scales. Descriptive analyzes were used to evaluate data, and Chi-Square test, Pearson and Spearman correlation analyzes were used to analyze categorical variables.

Results: In the study, 52.6% of secondary school students are girls and 39.1% of mothers are primary school graduates. 1 students are in the "internet addict" class with a very high probability of internet addiction, the rate of students in the "risky group" class in digital game addiction is 47.4%, and eating behavior is 64.7%. It was determined that the student was at the "normal eating" level and that 94.4% of the students had a "sleep problem" terms of sleeping habits and the scale score was at a "clinically significant" level. In addition, 39.5% of the students were underweight and 50% were underweight.

Conclusion: While internet addiction and game addiction are expected to be at similar percentages under normal conditions, the research found that the percentage of internet addiction was lower and children's digital game

addiction was higher. The main reason for this is that different people filled out the scales, and it can be thought that families are not aware of internet addiction in children or their knowledge about it is insufficient. For this reason, it is recommended to organize educational seminars for parents about internet and digital game addiction.

Keywords: Digital game, internet, addiction, eating, sleep

Toxicokinetics Of Beta Amanitin In Rabbits

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Aim: Mushroom poisoning is health problem that still maintains its importance worldwide. Research on the subject has found that the deadliest mushroom genus is Amanita phalloides. Limited research has on beta amanitin, one of the amatoxins found in Amanita phalloides. This study was planned to investigate how beta amanitin behaves pharmacokinetically in the body.

Material and Methods: To understand the pharmacokinetics of beta amanitin, firstly, Amanita phalloides extract containing 4 mg/kg beta amanitin was administered orally to rabbits by oral gavage. After toxin application, 5-10-15-20-30-40-50-60 minutes and 2-3-4-5-6. Blood samples were collected at 24 hours and made ready for analysis. The analysis was carried out with the HPLC system. C18 separator column and diode array detector were used. The column temperature was set at 400C. The mobile phase was used as 15% acetonitrile and 15% methanol. The mobile phase flow rate was set isocratically at 1 mL/min.

Results: Our analysis showed the plasma concentration of beta amanitin increased rapidly following oral mushroom extract administration. The plasma concentration of Beta amanitin, which increased especially at the 5th minute, reached an average of 15 ng/ml. The plasma concentration of the toxin reached the highest average at the 10th minute, at 18 ng/ml and decreased slowly until the 60th minute and then kept reducing rapidly. After 24 hours, it decreased to its lowest level, an average of 2 ng/ml.

Conclusion: As a result of our research, it was found that beta amanitin was at the highest concentration in the blood within the first hour after oral administration of Amanita phalloides extract to rabbits. This result provides strong evidence that treatment in the first hour after consumption of the mushroom will be an important determining factor in terms of the prognosis of Amanita phalloides mushroom poisoning.

Keywords: Beta amanitine, rabbit, toxicokinetic, HPLC, Amanita phalloides

Evaluation of the Relationship Between Gender and Pain in Cases with Adhesive Capsulitis

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Aim: Adhesive capsulitis is a disease caused by contraction of the joint capsule, fibrous thickening, narrowing of the joint cavity, adhesion in the synovial structures. This condition creates joint movement restriction and pain

in the shoulder. It is observed more in women than in men. The aim of our study is to examine the relationship between gender and pain in cases with adhesive capsulitis.

Material and Methods: The study was conducted on a total of 134 patients, 91 of whom were women and 43 men, diagnosed with adhesive capsulitis at the Department of Physical Medicine and Rehabilitation of Duzce University; between the ages of 18 and 80. Visual analog scale (VAS) was used for pain assessment. Statistical analyses of the data were performed by SPSS (ver. 26, usa) was performed using the analysis program.

Results: The mean VAS score of female patients was 5.02, while the mean VAS score of male patients was 5.72. According to the results of the Anova Test, this difference between the sexes is statistically significant. A significant relationship was found between the genders of the patients and values (p=0.008). This situation shows that the gender of the patients has a significant effect on pain.

Conclusion: As a result of the analyses conducted in our study, we see that there is a significant difference between the perceived level of pain between male and female patients. When the VAS scores are examined, it is observed that female patients have a lower pain level compared to male patients.

Keywords: Adhesive Capsulitis, Gender, Pain, Visual Analog Scale

Long-Term Recurrence-Free Follow-up of a Case of Thumb Enchondroma Filled with a Graft Taken from the Distal Radius: Case Report

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The aim of the study is to present the long-term recurrence-free follow-up of a 20-year-old patient with enchondroma localized to the middle phalanx of the thumb after surgery and physical therapy. A 20-year-old female patient who applied to the outpatient clinic with swelling, pain, deformity and loss of movement in her right thumb was diagnosed with enchondroma. The radiological imaging findings confirmed the preliminary diagnosis and the decision for surgery was taken. The lesion was accessed by opening the bone valve through a lateral incision under axillary anesthesia. A pathology sample was taken and the cavity was cauterized with extensive curettage and it was filled with cancellous bone graft taken from the dorsal of distal end the radius. After 6 weeks of splinting, the aim is to increase normal joint range of motion and muscle strength during physical therapy. After 8 weeks of treatment, full joint range of motion was achieved. Periodic follow-ups were performed at 6 months and annually thereafter. At the 5th year follow-up, it was observed that there was no recurrence and the patient had full hand functions. Condoms that have expanded in small tubular bones are often difficult to detect as there are no physical examination findings other than palpation of swelling and tenderness. Since it is not noticed, the probability of recurrence and worsening is high. Recurrence can be controlled with long-term follow-up after surgery.

Keywords: Enchondroma, thumb, radius

Examination of Somatotype Changes in Lip Morphometry of Healthy Young Women

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Aim: Lip shapes today; plastic, aesthetic and reconstructive surgery changes for many people as a result of injuries and traumas related to the face and neck. Our aim in this study was to determine the relationship between lip morphometry and body types in healthy female subjects aged 18-25 years without any trauma or surgical intervention in the face region.

Material and Methods: Ten anthropometric measurements were performed to determine somatotype. Height measurement, weight measurement, skinfold thickness measurements of 4 different regions (triceps, subscapular, supraspinal, calf), bone diameter measurements of two regions (knee and elbow width), and circumference measurements of two different regions (muscular arm and calf) were taken. For lip morphometry measurements, the volunteers were photographed with a clear view of the nose and mouth area, and measurements were made digitally concerning specific measurement points.

Results: As a result of our study, the p value was found to be significant in the measurements between lip-lip, lip-nose and lip-chin. Somatotypes of balanced ectomorphic and endomorphic mesomorphic individuals showed significant differences in the parameters between lip-lip and lip-chin, central and endomorph-ectomorphic individuals showed significant differences in the parameters between lip-lip and lip-chin, and endomorphic ectomorphic and endomorphic mesomorphic individuals showed significant differences in the parameters between lip-lip and lip-chin.

Conclusion: For women who are not satisfied with the appearance of their lip area, resorting to plastic surgery may not be the first option. As an alternative to surgery, having certain body measurements may be sufficient. Thus, a reduction in plastic surgery operations, which are becoming increasingly common today, can be achieved and women can maintain their natural appearance. In addition, precautions can be taken against the risks of applications being made in non-professional centers, which are preferred because they are more affordable.

Keywords: Somatotype, Lip morphometry, Aesthetic surgery

Comparison of Emotional Reaction Score and Oral Sensory Sensitivity Score in Individuals Diagnosed with Autism

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Aim: Inability to achieve regulation is frequently observed in individuals diagnosed with autism. However, they exhibit stereotypical movements in order to calm themselves. Multiple study methods are used in autistic individuals receiving Sensory Integration Therapy for this condition, but there is no specific treatment protocol in the literature.

For this reason, therapists focus on many different areas of the body. In this study, we aimed to investigate whether there is a relationship between individuals' emotional response scores and oral sensory sensitivity scores. Accordingly, activities involving the oral area can be added to the therapy process for individuals with autism who have emotional difficulties.

Material and Methods: A total of 29 individuals, 13 girls and 16 boys, aged 4-7, diagnosed with autism, participated in our study. Dunn Sensory Profile Questionnaire was used to determine emotional response score and oral sensory sensitivity score. The survey was in the form of a 5-point Likert scale, with always 1 point and never 5 points. Total scores were determined for each individual and data were analyzed using SPSS.

Results: As a result of the analysis, no significant difference was found between male and female individuals. The p value for scores among female individuals was found to be significant 0,005. The scores among male individuals were found to be significant with a p value of 0,00. It showed a significant difference among all participants with a p value of 0,00.

Conclusion: It was concluded that gender did not make a significant difference between the oral sensory sensitivity score and the emotional response score, but they were interrelated parameters. In this case, it would be beneficial for therapists who apply Sensory Integration Therapy to include activities that cover the oral area in their therapy processes for individuals experiencing emotional difficulties.

Keywords: Sensory Integration Therapy, Autism, Emotional difficulty

Comparison of Pain Status in Caregivers of Individuals with Autism Who Receive and Do Not Receive Sensory Integration Therapy

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Aim: As the diagnosis of autism has become widespread today, it is seen that the daily lives of not only diagnosed individuals but also caregivers are affected.

This not only affects daily life, but is also accompanied by the health problems we, as therapists, hear from caregivers in the field. Our aim is to investigate whether Sensory Integration Therapy, which is frequently used in individuals diagnosed with autism, affects the pain situation in caregivers by reducing mobility or irritability in individuals and enabling them to become independent.

Material and Methods: The caregivers of 13 male individuals who received Sensory Integration Therapy and the caregivers of 13 male individuals who did not receive Sensory Integration Therapy participated in our study. Pain conditions were evaluated with the Self-Assessment Pain Scale. The data obtained was analyzed with SPSS. Care was taken to ensure that the caregivers participating in the study did not have a chronic disease.

Results: Looking at the results of statistical analysis; It was observed that the caregivers of individuals who did not receive sensory integration therapy had more back, waist, left hip, left arm, and left leg pain than the caregivers of individuals who received sensory integration therapy.

Conclusion: Caregivers of individuals with autism who receive Sensory Integration Therapy experience less pain in certain parts of their bodies compared to caregivers of individuals who do not receive Sensory Integration Therapy, and since this type of therapy added to the education of children with autism will reduce behavioral problems in individuals and enable them to take part in daily life activities more independently, caregivers will be more effective in daily life. It is predicted that with less support for their children, their responsibilities will decrease and the quality of life of caregivers may increase.

Keywords: Autism, Sensory Integration Therapy, Pain Scale

Alzheimer's Disease and Perivascular Spaces: Review

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Alzheimer's disease affects cognitive function and memory as a global health problem, while the lack of effective biomarkers leads to challenges in early diagnosis and intervention. Recent studies on the role of the glymphatic system and perivascular spaces (PVS) have made a significant contribution to the understanding of Alzheimer's disease. The enlargement of perivascular spaces (ePVS) has emerged as a potential determinant of Alzheimer's disease progression and is associated with amyloid-β and tau deposits in the PVS, which can be observed by Magnetic Resonance Imaging (MRI). ePVS and Alzheimer's research aims to understand the timing of ePVS in disease progression and whether it is causal or epiphenomenal. In this context, ePVS has been shown to be associated with decreased glymphatic clearance and this has been linked to an increase in amyloid-β. However, it is not yet fully understood whether ePVS is the result or the driver of protein deposition and how the volume and number of ePVS change. On the other hand, studies of perivascular spaces have emphasized their role in the clearance of brain interstitial fluid and waste, especially during sleep, by examining the passageways around arterioles, capillaries and venules. Perivascular space enlargement observed on MRI may be a marker of microvascular dysfunction or neurodegenerative diseases, and preclinical studies suggest that this enlargement may signal disruption of normal brain fluid and waste clearance. In conclusion, enlarged perivascular spaces as a potential biomarker of Alzheimer's disease and research on the pathophysiology of these structures play an important role in understanding the complexity of Alzheimer's disease and developing early diagnostic criteria and intervention strategies.

Keywords: Alzheimer, Perivascular spaces, Glymphatic system

Utility of a New Sepsis-Related Prognostic Score: hs-CRP-to-Albumin Ratio for In-Hospital Mortality Prediction among Infective Endocarditis Patients—A Single-Center Retrospective Cohort Study

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Aim: Our objective was to examine the prognostic significance of the hs-CRP-to-albumin ratio (CAR) in predicting in-hospital mortality among patients admitted with infective endocarditis (IE).

Material and Methods: A total of 201 consecutive patients diagnosed with IE at our center were retrospectively enrolled in the study. Demographic, and laboratory results were recorded. Independent predictors of in-hospital mortality were identified through Boruta feature selection and logistic regression.

Results: In-hospital mortality occurred in 70 patients (34.8%). Except for mean age (54.6±17.8 *vs.* 62.2±16.7%; p=0.004), diabetes rate (29.0% *vs.* 42.9%; p=0.048), and ejection fraction (EF) (54% *vs.* 48%; p<0.001), other demographic characteristics were similar in both groups. The mortal group showed higher rates of heart failure, acute renal failure, and shock on admission (p<0.001, p=0.023, p<0.001, respectively). In terms of laboratory parameters, creatinine (0.87 *vs.* 1.21 mg/dl, p<0.001), neutrophil-to-lymphocyte ratio (4.7 vs. 7.6, p=0.003), and CAO (11.9 vs. 22.2; p=0.007) were significantly higher in the mortal group, while hemoglobin (11.5±2.2 *vs.* 10.6±2.4 mg/dl; p=0.005) was lower (Table 1). In regression analysis including the parameters selected by the Boruta method (Figure 1), age (OR=1.033; 95 % CI: 1.007-1.060; p=0.012), septic shock upon admission (OR=18.529; 95% CI: 5.430-63.234; p<0.001), EF (OR=0.931; 95% CI: 0.897-0.966; p<0.001), CAR (OR=1.185; 95% CI: 1.059-1.326; p=0.003) were found to be independent predictors of in-hospital mortality (Table 2). In ROC analysis, CAR cut-off value >74.8 predicted in-hospital mortality with a sensitivity of 30% and specificity of 95.4% (AUC: 0.615; p=0.009) (Figure 2).

Conclusion: The primary findings of this study can be summarized: Age, septic shock at admission, EF, and CAR were identified as independent predictors of in-hospital mortality among patients hospitalized with IE. In conclusion, CAR emerges as a readily available and reliable parameter for assessing the risk of mortality in patients with IE.

Keywords: Infective endocarditis, in-hospital mortality, hs-CRP/Albumin ratio

Measurement of Hippocampus Volume Using Volbrain in Essential Tremor and Healthy Subjects

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Aim: The hippocampus is functionally important in memory, spatial orientation, and learning. This study aimed to examine the volumes of the hippocampus and its subfields [subiculum, gyrus dentatus, cornu ammonis (CA1, CA2, CA3, CA4)] and SR-SL-SM (strata radiatum/lacunosum/moleculare) using Volbrain using magnetic resonance images of healthy individuals and individuals with essential tremor (ET).

Materials and Methods: In our study, 18 ET patients with only bilateral upper extremity tremor who continued for at least 3 years and no other surgical findings, and 18 healthy patients without any malfunction or cognitive impairment were not treated, eligible for registration in the 2018 Consensus Report of the IPMDS Tremor Study Group. High-resolution T1-weighted 3D images of these individuals were used. 'Volbrain (v1.0, https://volbrain.upv.es)-Hippocampus subfield Segmentation (HIPS) Winterburn protocol' was used to analyze the hippocampal volumes. The volumes of the hippocampus and its subfields and the ratio of these volumes to the whole brain volume were obtained.

Results: As a result of essential tremor and control group data analysis; the left CA2-CA3 hippocampus regions were found to be statistically significantly larger in the ET group compared to the control group ($p<0.05$). The rate of CA2-CA3 asymmetry was found to be statistically significantly higher in the ET group compared to the control group ($p<0.05$). In the CA2-3 asymmetry parameter, the right hippocampus is larger than the left hippocampus in the ET group. There was no statistically significant difference between the groups in the CA1, CA4-DG, Subiculum and SR-SL-SM parameters.

Conclusion: Results emphasize the need to consider essential tremor as a group of multifaceted diseases such as dementia and cognitive impairment rather than a single disease. We think that hippocampal volume differences will contribute to understanding whether there are structural changes in the brain between people with essential tremor and healthy people.

Keywords: Volbrain, hippocampus, essential tremor

Deep Anal Fıssor Wound Care Treatment In A Case Of Acute Myeloblastıc Leukemıa: A Case Report

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Deep soft tissue infections are an important cause of morbidity and mortality in immunosuppressed patients especially receiving chemotherapy. It is draw attention to the need to provide education on this subject to pediatric patients and their families. 16 years old, male patient diagnosed with acute myeloblastic leukemia and under intensive chemotherapy; he had severe pain and bleeding during defecation. There was an ulcerated lesion in the anal region. There is an anal fissure laceration at the six and twelve o'clock positions. Other examinations are normal. F: 37.6 0C, Pulse: 164/min, 24/min BP: 110/ 60 mmHg. Wbc: 300 mm3 Hb: 8.7 g/d L Hct: 26% plt: 12000 mm3 CRP: 80mg/ L procalcitonin: 52.3µL Biochemical parameters are normal. Deep soft tissue infection was considered in the patient. Since the anal area is a moist, closed environment where the patient is located, infections in this area can progress very quickly without the patient noticing. The patient was evaluated as having febrile neutropenia. As treatment; Teicoplanin, meropenem and metronidazole were started as treatment. Due to low hemoglobin and platelet count, erythrocyte and platelet suspension replacements were performed. As a result of 3 weeks of treatment, ulcer lesions in the anal area improved. The patient and his family were given anal and genital area care training. The patient has recovery and he was started on outpatient follow-up and treatment. This case report may provide a resource for the planning and implementation of correct medical treatment interventions for the patient and his family who have difficulty in managing soft tissue infections.

Keywords: Acute Myeloblastic Leukemia, Deep Anal Fissure, Wound Care

Approach to Oral Mucosity Developing in a Child Patient With Myelodysplastic Syndrome: A Case Report

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Myelodysplasia is rare in children. It is a disease suggestive of Fanconi anemia, an autosomal recessive disease presenting with pancytopenia and macrocytosis, with progressive bone marrow failure and increased susceptibility to malignancies, especially AML. Although the course of the disease and treatment vary among patients, despite new treatments, it is a hematopoietic stem cell disease that still has no curative treatment other than allogeneic stem cell transplantation. In this case report, a 13-year-old male patient was being prepared for unrelated stem cell transplantation treatment with the diagnosis of hypoplastic transfusion-dependent myelodysplastic syndrome; He applied to the pediatric hematology outpatient clinic with the complaint of sudden pain in the mouth at the level of the upper 2nd Molar tooth. In his physical examination, it was observed that there was hyperemia in the oral area and a white-yellowish fungal plaque adhered to the hard upper palate, and his vital signs showed a high fever. Invasive fungal infection was considered in the patient and antibiotic treatment was started. Since oral intake is not good, appropriate hydration and oral care are planned to be given.

After two weeks of medical treatment and nursing care, it was observed that the plaques in the mouth were healed and the soft palate mucositis was resolved. In conclusion, this case report is presented to provide resources for the planning and implementation of correct nursing interventions for a pediatric patient and his family who have difficulty managing invasive fungal infection while preparing for allogeneic stem cell transplantation treatment.

Keywords: Child, Myelodysplastic Syndrome, Oral Mucositis

Investigation of mRNA Expressions of Kisspepeptin, Neurokinin B and Their Receptors in Mesenchymal Stem Cells Isolated from Human Placenta

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Aim: Kisspeptins and interacting GPR54 or KISS1R receptors are highly expressed in the placenta, pituitary, pancreas and medulla spinalis. Loss of KiSS-1 expression during cell degeneration has been associated with esophageal squamous cell carcinoma and bladder cancer. Therefore, it is important that kisspeptins and their receptors are functional, especially in patients who will use mesenchymal stem cells (MSCs) for a neurodegenerative disease. In our study, we investigated the presence of kisspeptin (KP) and neurokinin (NK) and aimed to compare their gene expression.

Material and Methods: The MSCs used in our study were obtained from the chorionic membranes of the placenta samples of 5 surgically delivered babies, which were considered as medical waste, with the informed consent of the mothers. They were then analyzed by flow cell meter using surface markers and RNA isolation was performed. Expression of KP, NK and their receptors was analyzed by real-time polymerase chain reaction (RT-PCR).

Results: Flow cytometry analysis of the cultured placenta tissue cells confirmed that they were MSCs. RT-PCR results showed that the expression of Kiss1 and Kiss1r mRNAs decreased depending on the number of passages. It was found that NK and NK receptor were not expressed in the placental MSCs.

Conclusion: In our study, as the number of cell divisions and passages increased, there was a decrease in parental features and a decrease in the amount of KISS1 and KISS1R expression was observed. Our results will help future studies to determine the roles of KISS1 and GPR54 receptor interaction in neuroendocrinology.

Keywords: Kisspeptin, kisspeptin receptor mesenchymal stem cell, RT-PCR

Is Idiopathic Cuneate Gyrus Herniation an Incidental or Coexisting Finding in Pediatric Patients? A Magnetic Resonance Imaging Based Study

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Aim: We aimed to investigate whether idiopathic cuneate gyrus herniation (ICH) is an anomaly or a normal variant, its prevalence, whether there is a coexisting finding or pathology, and to define it with magnetic resonance imaging (MRI) findings.

Material and Methods: The study included 738 patients aged 0-17 years with optimal brain MRI imaging between 2021 and 2023. The scans were performed with a 1.5 Tesla MRI scanner (Philips Ingenia, Netherlands). A standard brain MRI protocol was applied. Congenital brain malformations detected on MRI were grouped as posterior fossa abnormalities (PFA), commissural and cortical developmental anomalies (CCDA), and midline malformations. The accepted statistical significance was $p<0.05$.

Results: Inclusion and exclusion criteria were met by 691 brain MRI patients aged 0–17. The mean age was 5.93 ± 3.4 years. 48.77% male, 51.23% female. The cases were evaluated for the presence of ICH, variation, and anomalies. ICH (+) 32 patients had a mean age of 6.19±4.02 years, with 40.63% male and 59.37% female. The prevalence of ICH was 32/691 (4.6%). 63 (9.11%) individuals had congenital brain malformations, and ICH (+) and ICH (-) groups differed significantly ($p = 0.005$). This was because PFA and CCDA had different proportions. PFA ($n = 8$) was significantly higher in frequency in ICH (+) congenital brain malformation patients than ICH (-). CCDA ($n = 23$) and PFA and CCDA associations ($n = 12$) were significantly higher in ICH (-) individuals with congenital brain malformations. In 32 ICH patients, congenital brain malformations were significantly higher, with 50% ($p<0.001$).

Conclusion: We found that ICH is more common than reported and may be coexisted with congenital cerebral malformations. Recognizing ICH helps prevent unneeded procedures and distinguish it from pathologies. ICH cases should also be checked carefully for congenital brain malformations.

Keywords: idiopathic, brain herniation, cuneate gyrus, malformation

The Effect of Music Activities on Non-Verbal Communication Skills in Children with Autism Spectrum Disorder

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Aim: To investigate the development of preverbal and naming skills of individuals with autism by adding musical practices to speech and language therapy.

Materials and Methods: A quasi-experimental design with a pretest-posttest control group was applied. Turkish Early Development Language Test was administered to four autistic participants between the ages of 6-8 before therapy. According to the observer chart consisting of seven items, the non-verbal skills of the cases were

monitored on the chart before and throughout the therapy process. Therapies were 15 minutes long and were applied for 10 sessions.

Results: Individuals who received Music Therapy in addition language therapy showed success in acquiring skills in joint interest, attention, imitation, eye contact, communication initiation/maintenance skills, and name naming skills.

Conclusion: Conclusion: In children with autism who have limitations in establishing joint interest, attention span, maintaining eye contact, imitation skills, initiating communication, maintaining communication skills and naming skills, adding musical activities to the therapy will make the therapy process more effective

Keywords: Autism, language therapy, speech therapy, music therapy, preverbal skills

Investigation of the Relationship Between Kisspeptin and Neurokinin Gene Expressions of Mesenchymal Stem Cells from Adipose Tissue and Passages Number

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Aim: Kisspeptin (KP) and neurokinin (NK) genes play critical roles in reproductive health. Mutation of genes encoding KP or NK signaling results in congenital hypogonadotropic hypogonadism and pubertal developmental abnormalities. In this study, we investigated the activity of KP and NK receptor genes, which play an effective role in pubertal onset, in adipose tissue-derived mesenchymal stem cells (MSCs), which have a high potential for therapeutic application. In addition, we aimed to examine the relationship between the passage number and KP and NK receptor gene expressions of MSCs.

Material and Methods: MSC were obtained from rats adipose tissue. And than, they were confirmed to be MSCs by flow cytometry using surface markers and RNA isolation was performed. Gene expressions of KP, NK receptors were investigated by real-time polymerase chain reaction (RT-PCR) and their relationship with the passages number was compared. Tukey multiple comparison test followed by Welch paired t-test and one-factor analysis of variance (one-way ANOVA) were used for statistical analysis of gene expressions. Significance was accepted as α=0.05 and β=0.20.

Results: The cultured adipose tissue cells were determined to be MSCs. When RT- PCR results were evaluated, it was observed that tachykinin receptor gene expression increased 15-fold, tachykinin gene expression increased 30-fold in the 5th passage, and KP receptor gene expression increased 3-fold in the 7th passage compared to the 4th passage ($p \leq 0.05$).

Conclusion: MSCs can be obtained from an easily available tissue such as adipose tissue is thought to shed light on the medical science for the future. In addition, it was concluded that the passages number should be

considered when analyzing the expressions of KP and NK receptor genes, and the passages number should be selected by considering the gene expressions in the passage to be used.

Keywords: Kisspeptin, mesenchymal stem cell, neurokinin, puberty

Investigation of the Effect of Intrauterine Electromagnetic Field Exposure on Calmodulin and Superoxide Dismutase Enzymes in Later Life

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Aim: Electromagnetic field exposure (EMF) is one of the most important environmental factors today. Although there are many studies on the effects of exposure to EMF on individuals, the effects of exposure during pregnancy on the fetus is a current topic of research. Studies have shown that exposure to EMF causes anxiety. In our study, we aimed to investigate calmodulin (CaM) and superoxide dismutase (SOD) enzymes, which are thought to be effective in anxiety, in hippocampus tissue and serum samples.

Material and Methods: The rats used in our study were exposed to EMF at a frequency of 50 Hz/1.5 mT for 2 hours every day during gestation. The activities of CaM and SOD enzymes in the hippocampus tissues and serum samples of male offspring were examined by enzyme-linked immunosorbent assay (ELISA).

Results: CaM enzyme decreased in hippocampus and serum samples compared to control. SOD enzyme showed no change in hippocampus tissue and serum samples.

Conclusion: In accordance with the literature, our results showed that CaM enzyme has the same tendency in hippocampus tissues and serum samples of male offspring in case of anxiety. It has been reported that EMF exposure has no effect on SOD enzyme and anxiety behavior, and in our study, no change was detected in hippocampus tissue and serum samples. Our results show that CaM enzyme is affected in anxiety caused by exposure to EMF, but SOD has no effect on this mechanism.

Keywords: Calmodulin, electromagnetic field, ELISA, superoxide dismutase

Locus Coeruleus: Its Role and Mechanisms in Cognitive Processes

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Aim: This study aims to gain more insight into the complex structure and functions of this important neuronal nucleus by investigating the neuroanatomical connections of the Locus Coeruleus (LC) in detail.

Material and Method: Researches conducted using keywords such as "locus coeruleus", "norepinephrine", "cognitive function", "neurotrophins" in PubMed, Web of Science and Google Scholar databases were scanned.

Results: The locus coeruleus(LC) is a noradrenergic nucleus located in the brainstem. The LC influences cognitive processes (attention, alertness, learning, memory, emotion) by releasing norepinephrine to many regions of the brain. The role and mechanisms of the LC in cognitive processes have been investigated in animal and human

studies. In animal studies, electrical or chemical stimulation or inhibition of the LC has been shown to alter cognitive performance. In human studies, the activity of the LC has been measured by brain imaging techniques or pupillometry. The activity of the LC varies during cognitive tasks. Various models have been proposed to explain the role and mechanisms of the LC in cognitive processes. According to these models, the activity of the LC depends on the salience of environmental stimuli, task difficulty, probability of error or reward expectation. The activity of the LC is also affected by factors such as stress, sleep and aging. Understanding the role and mechanisms of the LC in cognitive processes can contribute to the treatment of cognitive impairments caused by dysfunction of the LC in conditions such as neurodegenerative diseases(Alzheimer's, Parkinson's) or psychiatric disorders(depression, anxiety).

Conclusion: LC regulates cognitive processes by releasing norepinephrine to many regions of the brain. LC's activity is also influenced by factors such as stress, sleep and aging. Understanding the role and mechanisms of LC in cognitive processes can contribute to the treatment of cognitive impairments by enhancing neuroplasticity.

Keywords: Locus Coeruleus, norepinephrine, neuroanatomy

Relationship Between Electronic Cigarettes and Myocardial Infarction

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In recent years, there has been a growing interest in understanding the potential relationship between the use of electronic cigarettes (e-cigarettes) and the occurrence of myocardial infarction, commonly known as a heart attack. This study aims to investigate the complex interaction between e-cigarette use and myocardial infarction. Numerous studies have investigated the impact of e-cigarette aerosol, which contains a variety of chemicals, including nicotine and other potentially harmful substances. The inhalation of these substances is believed to trigger inflammatory responses within the cardiovascular system, a phenomenon implicated in the development of atherosclerosis and an increased risk of myocardial infarction. One of the primary concerns is the role of nicotine, a common component in e-cigarettes, in contributing to adverse cardiovascular effects. Nicotine is known to elevate heart rate and blood pressure, and chronic exposure may contribute to the progression of cardiovascular diseases. In addition, the vasoconstrictive properties of nicotine, blocking blood flow to the heart and other important organs, raise concerns. This potential reduction in blood flow could be a significant factor in the overall cardiovascular impact associated with e-cigarette use. However, it is essential to note that research on this topic is still evolving, and findings may vary among studies. The long-term effects of e-cigarette use on cardiovascular health are an area of active investigation, given the relatively recent emergence of these products and the continuous evolution of their formulations. In conclusion, this study underscores the importance of ongoing research to fully comprehend the relationship between e-cigarettes and myocardial infarction. As our understanding of this complex issue continues to deepen, it becomes increasingly crucial to inform public health policies and individual choices based on the most up-to-date and reliable scientific evidence.

Keywords: E-cigarette, Myocard infarctus, atherosclerosis, aerosol, nicotine

Investigation of Anticancer Activity of Programmed Death Ligand 1 and Platelet-derived Growth Factor Receptor β Inhibition in Glioblastoma Multiforme Cells

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Aim: The study aimed to assess the efficacy of JNJ-10198409, an inhibitor of Platelet-Derived Growth Factor Receptor β (PDGFRβ) following the silencing of Programmed Death Ligand 1 (PD-L1), and to measure the anticancer activity of this combinational therapy via apoptosis and autophagy pathways in the Glioblastoma multiforme (GBM) cell line.

Material and Methods: In the U87 human glioblastoma cell line, siRNA (small interfering RNA) was used to inhibit PD-L1 followed by the JNJ-10198409 molecule to inhibit PDGFRβ. Expression levels of apoptosis and autophagy-related genes were evaluated by qRT-PCR. Autophagy activity was also evaluated with a CYTO-ID® dye-based fluorometric kit. In addition, PDGFRβ, Beclin-1, and HIF-1a protein levels were determined by western blot analysis.

Results: JNJ-10198409 treatment with siRNA PD-L1 decreased the IC50 value to 4.22 µM. Combinational treatment reduced the autophagic activity compared to control group ($p<0.01$). Reduced expression levels of autophagy genes and increased apoptosis genes were obtained. Inhibiting PD-L1 and administering JNJ-10198409 reduced HIF-1α, PDGFRβ, and Beclin-1 protein levels compared to the control group ($p<0.001$).

Conclusion: JNJ-10198409 treatment may have anticancer effects by modulating the expression of apoptosis-related genes and suppressing autophagy following inhibition of PD-L1 expression in U87 cells.

Keywords: Glioblastoma multiforme, PD-L1, JNJ-10198409, autophagy, apoptosis

Probiotic Yeasts and Their Effects on Health

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Although the positive effects of probiotics on health were revealed in studies conducted in the late 19th century, their therapeutic properties were used centuries ago. Probiotic bacteria (lactobacilli and bifidobacteria) are generally used in disorders of the gastrointestinal system, especially those caused by the irregularity of the intestinal flora. In recent years, yeasts have come to the fore due to their various advantages in probiotic properties. Yeasts are preferred as probiotics due to their large cell size, inhibitory properties against pathogenic bacteria, not colonizing the intestine, and not being affected by antibiotics. *S. cerevisiae, Pichia* sp., *Metschnikowia* sp., *Yarrowia* sp., *Candida* sp., *Debaryomyces* sp., *Isaatchenkia* sp., *Kluyveromyces* sp. *and Torulaspora* sp. are yeasts with probiotic properties. However, S. boulardii is the only probiotic yeast that has been accepted as safe by EFSA (European Food Safety Authority) and is allowed for use in humans. Since 1950, *S. boulardii* has been used in the treatment of diarrhea in many countries and commercial preparations have

been produced. *Saccharomyces cerevisiae* is used as a probiotic additive in biological control against *Clostridium difficile*, which causes inflammation of the large intestine (colitis). Probiotic yeasts also have an antagonistic effect against the opportunistic pathogenic yeast *Candida* sp. In addition, probiotic yeasts can be used to regulate the intestinal flora as an alternative to probiotic bacteria in patients receiving antibiotic treatment. In this study, yeast species showing probiotic properties and their characteristics were examined. In addition, the effects of probiotic yeasts on the intestinal microflora are examined and the areas where they are used for therapeutic purposes are indicated.

Keywords: Probiotic, yeasts, health

Investigation of Antioxidant Activity of Progesterone Hormone at Different Doses by DPPH Radical Scavenging Capacity Method

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Aim: Progesterone is a hormone that plays a role in the menstrual cycle, pregnancy, and embryogenesis. The present study aimed to investigate the antioxidant activity of progesterone by the 2, 2-Diphenyl-1-Picrylhydrazyl (DPPH) method.

Material and Methods: Progestan ampoule 50 mg/1ml (Koçak Farma, Turkey) was used as progesterone. The DPPH method was used as antioxidant scavenging test. DPPH was dissolved in methanol to prepare 0.6 mmol/L concentration. 200 µL DPPH solution was added to 100 µL test solution (progesterone 0–50 mg/mL) and DPPH reagent dissolved in methanol was used as a control group. The control group and samples were kept in the dark for 1 to 24 h. Then, the antioxidant capacities of the samples were measured in their absorbances spectrophotometrically at 517 nm per h by measuring the neutralization process of a strong free radical DPPH. Additionally, gallic acid was used as a positive control. All experiments were conducted at Balıkesir University Science and Technology Application and Research Centre (BÜBTAM).

Results: IC50 value of Gallic acid, the positive control: 0.837 µg/mL was found. DPPH radical scavenging activity of 0-50 mg/ml progesterone solution was not detected and the IC50 value was 0.

Conclusion: Progesterone is a hormone with very important physiological functions. At doses between 0-50 mg/ml, radical scavenging and antioxidant activity could not be demonstrated by the DDPH method. Progesterone may have antioxidant activity at higher doses. It may have indirect effects on living organism through different antioxidant systems. Therefore, more studies are needed.

Keywords: Antioxidant activity, DPPH, progesterone

Examination of Lamina Papyracea Structure and Variations in CT Images

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Aim: Lamina papyracea(LP) is a thin bone structure located on the face of os ethmoidale that faces the orbit and contributes to the formation of the medial wall of the orbital wall. In endoscopic sinus surgery(ESS), the LP can be broken iatrogenically and entered into the orbit and serious complications can occur. It is important to know the structure and variations of LP in order to prevent possible complications.

Material and Methods: Patients who underwent face, cranium, sinus paranasales CT between 2021 and 2022 at Düzce University Research and Application Hospital were included in the study. The 101 randomly selected female and 102 male patients were identified and measured for the right and left side of LP.

Results: Among the 203 patients we included in the study, 3 individuals were found to have LP dehiscence. A total of 400 LPs, including the right and left sides, were measured in 200 patients. It was observed that Type I was the most common in LP, followed by Type IIa, Type IIb, Type IIIa and Type IIIb, respectively. The incidence of left LP types varied depending on gender, but the incidence of right LP types did not change depending on gender. The left LP types were compared with the right LP types, and the incidence of LP types did not change based on the presence on the right or left side.

Conclusion: The incidence of the types of LP we found in our study was consistent with the rates reported in the literature. Statistical evaluation of whether LP dehiscence chooses gender, age and parties could not be done because the data were insufficient. Our study will help to avoid serious complications that may occur in ESS with better knowledge of the structure of LP.

Keywords: Lamina papyracea, lamina orbitalis, orbit

Investigation of Morphometric Properties of Processus Styloideus Os Temporale According to Age and Gender

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Aim: Processus (proc.) styloideus os temporale is a spiny projection located anteromedial to proc. mastoideus. In our study, it was aimed to investigate the length of the proc. styloideus and its angle with the horizontal axis in the sagittal and coronal planes according to age and gender.

Material and Methods: Our study was performed on Computed Tomography (CT) images obtained from patients admitted to Düzce University Hospital. CT images of 180 patients with a mean age of 42.73 years were analysed. The angulations of the proc. styloideus were measured on the coronal and sagittal plane images. Length measurements were made on the sagittal plane.

Results: The mean length of Proc. styloideus was 28.27 mm in males and 26.58 mm in females on the right side and 27.9 mm in males and 26.91 mm in females on the left side. Although there were differences in the mean

values of proc. styloideus length measurements between genders, they were not statistically significant (p>0.05). There was a positive correlation between the coronal angle of the proc. styloideus on the left side and age (p<0.05). In this context, it was observed that the degree of the angle increased with increasing age. There was no significant correlation between the length and sagittal angle of the proc. styloideus and age (p>0.05).

Conclusion: According to our analysis, the increase in the coronal angle of the proc. styloideus on the left side with age was thought to be related to the pulling of the muscles attached to this structure. This was thought to be related to overuse of the neck and upper extremity. We think that our study will shed light on forensic medicine physicians and researchers working in the field of anthropometry.

Keywords: Processus styloideus, Morphometry, Computed tomography

Artificial Intelligence in Psychotherapy: Ethical Issues

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The aim of our study is to address the ethical problems that arise in the use of artificial intelligence in psychotherapy and to present the issues that need to be taken into consideration to prevent these ethical problems. Our study is a review. Our review study, which uses the method of examining the findings of existing research, examined the current situation. In this study, the literature was scanned and 10 academic studies were selected. As the common point of these studies, different ethical problems such as security, confidentiality, deception (failure to meet emotional and intimacy expectations despite appearing human) have been identified. The rapid integration of artificial intelligence into psychotherapy has offered new opportunities in diagnosis and treatment. In this context, the increasing functionality of artificial intelligence in therapy has created some ethical problems. These ethical issues are what professionals need to pay attention to. Based on this, in this review study, it was examined how ethical issues such as competence, informed consent, security and privacy are in an environment where artificial intelligence and psychotherapy are intertwined, through the studies in the literature, and it was seen that more research on this subject should be contributed to the field. The rapid integration of artificial intelligence into psychotherapy has offered new opportunities in diagnosis and treatment. In this context, the increasing functionality of artificial intelligence in therapy has created some ethical problems. Based on this, in this review study, it was examined how ethical issues such as competence, informed consent, security and privacy are in an environment where artificial intelligence and psychotherapy are intertwined, through the studies in the literature, and it was seen that more research on this subject should be contributed to the field.

Keywords: Artificial intelligence, mental health, ethics

In Patients with Benign Paroxysmal Positional Vertigo Investigating the Effects of Dynamic Neuromuscular Stabilization Training on Balance and Quality of Life: Preliminary Study

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Aim: This study was planned to investigate the effect of dynamic neuromuscular stabilization (DNS) training organized according to developmental kinesiology principles, in addition to repositioning maneuvers applied in ear, nose and throat outpatient clinics, in patients with benign paroxysmal positional vertigo (BPPV) on balance problems and quality of life, which are other symptoms of the disease.

Materials and Methods: A total of 15 patients with benign paroxysmal positional vertigo, diagnosed by an ear, nose and throat specialist, and who underwent routine repositioning maneuvers, were included in the study. Patients were given DNS training 3 days a week for 6 weeks. Evaluations regarding balance were evaluated with the Berg Balance test, and parameters related to quality of life were evaluated with the SF-36.

Results: 13 of the patients were female and 2 were male. While there was an improvement in balance-related parameters in 10 of the 15 patients included in the study, no change was detected in 5 of them. An improvement in parameters related to quality of life was observed in 9 patients.

Conclusion: In the literature, Cawthorne-Cooksey exercises are frequently applied to patients diagnosed with BPPV. DNS training can also be considered as an alternative treatment in the treatment of BPPV. We believe that DNS training can be applied to reduce the symptoms of the disease. Studies that include two different groups in which DNS training and Cawthorne-Cooksey exercises are applied may contribute more to the literature. Work in progress.

Keywords: Dynamic neuromuscular stabilization, vestubular rehabilitation, benign paroxysmal positional vertigo

Evaluation of Sleep Habits in Children with Cerebral Palsy

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Aim: Cerebralpalsy (CP) is a non-progressive neuromuscular disorder that affects the development of brain tissues in fetuses or newborns, leading to postural abnormalities and movement restrictions. CP is often accompanied by cognitive, sensory, perceptual impairments, communication and behavioral disorders, epilepsy, secondary musculoskeletal issues, and sleep problems. This study aims to assess sleep problems in children diagnosed with CP.

Material and Methods: A total of 30 children with CP, including 18 (60%) females and 12 (40%) males, receiving treatment at a Special Education and Rehabilitation Center, were included in the study. Data were collected using the "Children's Sleep Habits Questionnaire" (CSHQ), consisting of 10 questions. The questionnaire was distributed to the children's families via Google Forms, and they were asked to respond.

Results: The average age of the included children was 10.66±4.04, with no statistical difference between genders (females 10.44±4.54 and males 11.00±3.33, p=0.671). It was observed that 43.3% of children woke up feeling unwell in the morning, 26.7% fell asleep more comfortably in a parent or sibling's bed, and 23.3% woke up from sleep more than once at night. Additionally, 16.7% were restless and moved a lot during sleep, while another 16.7% were reported to wet their bed often, and 20% occasionally.

Conclusion: The study reveals a significantly low sleep quality in children with CP. It is also suggested that there is a need for education and further research to help families cope with sleep issues in these children.

Keywords: Questionnaire, cerebral palsy, sleep

A Case of an Advanced Age Patient Diagnosed with Acute Mesenteric Ischemia

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Acute mesenteric ischemia is a seriously life-threatening disease that can cause acute abdomen. Early diagnosis and treatment is very important. This clinical condition may be fatal in patients with delayed diagnosis. The data of the patient who underwent surgery at Midyat state hospital was taken from the database in the hospital information management system (HBYS). An 88 year-old patient who applied to the emergency department due to sudden onset abdominal pain had hypertension and coronary artery disease. In the physical examination of the patient, there was rebound in the upper abdominal quadrants. There was an elevated white blood cell in laboratory tests and elevated lactate in blood gas test. No pathology was observed in the abdomen in the ultrasonography performed by the radiologist. No embolism was seen in the mesenteric arteries on CT (Computed tomography) angiography. The patient was taken into surgery due to acute abdomen. There was ischemia in approximately 20 cm of bowel loop in the jejunum. However, intestinal peristalsis was partially present. Resection was not performed considering the patient's age and additional diseases. The surgery was terminated. The patient was given Heparin infusion for 24 hours. The patient was taken into surgery again for Second-look. At the second surgery, it was observed that the bowel color and bowel peristaltism were completely normal. No bowel resection was required. Acute mesenteric ischemia is a serious disease that affects the small intestine and colon and can be fatal in people of advanced age and with coronary disease. We believe that good and early preoperative evaluation and intraoperative treatment management will reduce mortality.

Keywords: Mesenteric ischemia, mortality, jejunum

Ultrasonographically Investigation of the Sternocleidomastoid, Masseter and Temporalis Muscles in Patients with TMJ Pain

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Aim: The aim of this study was to perform ultrasonography examination of the right and left sternocleidomastoid, temporalis and masseter muscles in individuals with painful temporomandibular joint (TMJ) disorders.

Material-Methods: VAS (Visual Analog Scale) was used in 30 patients included in the study to evaluate TMJ pain. Bilateral ultrasound examination of sternocleidomastoid, masseter and temporalis muscle thickness was performed.

Results: Statistically significant difference was observed between right and left sternocleidomastoid muscle thickness and VAS ($p \leq 0.05$), right and left masseter muscle thickness and VAS ($p \leq 0.05$), as well as right and left temporalis muscle thickness and VAS ($p \leq 00.05$). There was no statistically significant correlation between muscle thickness and pain ($p > 0.05$), and also no significant difference was found between muscle thickness of the painful side and VAS ($p > 0.05$).

Conclusion: Ultrasonography is a reliable method for bilateral examination of muscle thicknesses associated with chewing in terms of temporomandibular joint pain.

Keywords: Masseter, sternocleidomastoid, temporalis, tmj, ultrasonography

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